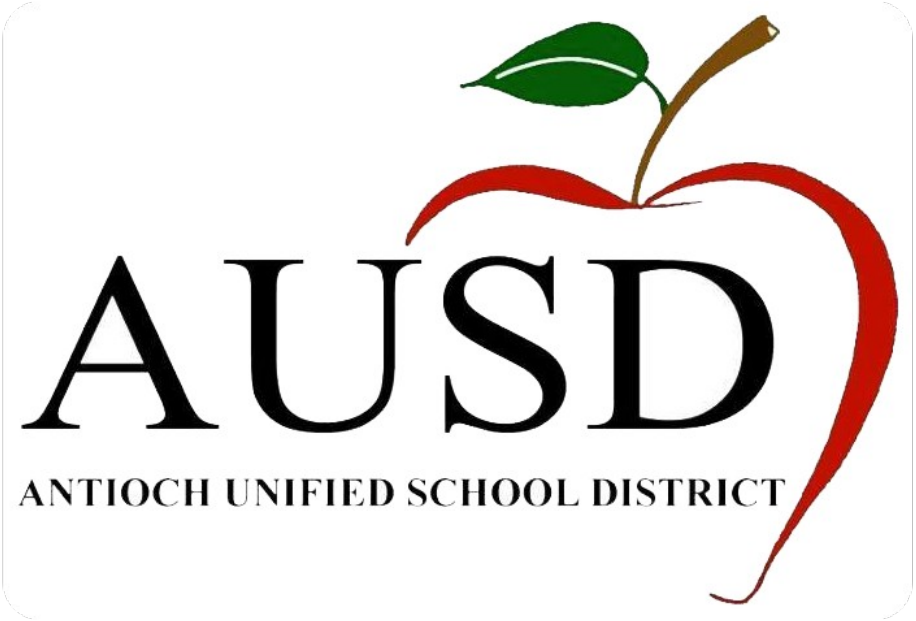


SHORT FORM BID DOCUMENTS

FOR

UPPER PLAYGROUND REPLACEMENT & REFRESH PROJECT

AT

MARSH ELEMENTARY SCHOOL

2304 G ST, ANTIOCH CA 94509

Bid No. 26-27-02

ANTIOCH UNIFIED SCHOOL DISTRICT

510 G Street
Antioch, CA 94509
PH #925-779-7500

THIS PAGE INTENTIONALLY LEFT BLANK FOR PRINTING PURPOSES

TABLE OF CONTENTS

PAGE

NOTICE INVITING BIDS.....1

INSTRUCTIONS TO BIDDERS.....3

CHEKLIST OF MANDATORY BID FORMS……...8

PRE-BID CLARIFICATION FORM……..9

DESIGNATION OF SUBCONTRACTORS.....10

DESIGNATION OF SUBCONTRACTORS FORM.....11

BID FORM..... 13

CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION FORM..... 18

NON-COLLUSION DECLARATION.....19

BID GUARANTEE FORM.....20

BID BOND FORM.....21

PREVAILING WAGE AND LABOR REQUIREMENTS CERTIFICATION……...23

ACKNOWLEDGMENT OF BIDDING PRACTICES REGARDING INDEMNITY FORM..... 24

CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE.....25

CONTRACTOR'S CERTIFICATE REGARDING ALCOHOLIC BEVERAGE AND TABACCO-CAMPUS POLICY.....26

AGREEMENT FORM.....28

PAYMENT BOND.....31

PERFORMANCE BOND.....34

GUARANTEE..... 38

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION.....39

CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS.....42

ARTICLE 1 DEFINITIONS....44
1.1 BASIC DEFINITIONS....44
1.2 EXECUTION, CORRELATION AND INTENT....49
1.3 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS....53

ARTICLE 2 DISTRICT....54
2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT....54
2.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK DUE TO PARTIAL DEFAULT IN A SPECIFIC SEGREGATED AREA OF WORK (48 HOUR NOTICE TO CURE AND CORRECT)....55

ARTICLE 3 THE CONTRACTOR....58
3.1 SUPERVISION AND CONSTRUCTION PROCEDURES....58
3.2 SUPERVISION....59
3.3 LABOR AND MATERIALS....60
3.4 WARRANTY....65
3.5 TAXES....65
3.6 PERMITS, FEES AND NOTICES....65
3.7 SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT....66
3.8 DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE....67
3.9 SUBMITTALS INCLUDING SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES....67
3.10 SUBSTITUTIONS....73
3.11 INTEGRATION OF WORK....75
3.12 CLEANING UP....75
3.13 ACCESS TO WORK....77
3.14 ROYALTIES AND PATENTS....77
3.15 INDEMNIFICATION....78
3.16 SUBMISSION OF DAILY REPORTS....78
3.17 AS-BUILT DRAWINGS AND ANNOTATED SPECIFICATIONS....79
3.18 EQUIPMENT MANUALS....80
3.19 DIR REGISTRATION....80

ARTICLE 4 ADMINISTRATION OF THE CONTRACT AND CLAIMS....82
4.1 CONSTRUCTION MANAGER....82
4.2 CONSTRUCTION MANAGER'S ADMINISTRATION OF THE CONTRACT....82
4.3 PROJECT INSPECTOR....84
4.4 STOP WORK ORDER....85
4.5 RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE DISTRICT FOR PROFESSIONAL SERVICES....85
4.6 DISPUTES AND CLAIMS....86

ARTICLE 5 SUBCONTRACTORS....96

5.1 DEFINITIONS....96

ARTICLE 6 CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS....98

6.1 DISTRICT'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS....98
6.2 CONSTRUCTIVE OWNERSHIP OF PROJECT SITE AND MATERIAL....100
6.3 DISTRICT'S RIGHT TO CLEAN UP....100

ARTICLE 7 CHANGES IN THE WORK....101

7.1 CHANGES....101
7.2 CHANGE ORDERS ("CO")....102
7.3 CONSTRUCTION CHANGE DOCUMENT (CCD Category A, and CCD Category B) and IMMEDIATE CHANGE DIRECTIVE (ICD)....102
7.4 REQUEST FOR INFORMATION ("RFI")....103
7.5 REQUEST FOR PROPOSAL ("RFP")....104
7.6 CHANGE ORDER REQUEST ("COR")....105
7.7 COST OF CHANGE ORDERS....105

ARTICLE 8 TIME AND SCHEDULE....112

8.1 DEFINITIONS....112
8.2 HOURS OF WORK....114
8.3 PROGRESS AND COMPLETION....114
8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES....118

ARTICLE 9 PAYMENTS AND COMPLETION....122

9.1 CONTRACT SUM....122
9.2 COST BREAKDOWN....122
9.3 PROGRESS PAYMENTS....123
9.4 APPLICATIONS FOR PROGRESS PAYMENTS....125
9.5 STOP NOTICE CLAIMS AND WARRANTY OF TITLE....128
9.6 DECISIONS TO WITHHOLD PAYMENT....128
9.7 NONCONFORMING WORK....130
9.8 SUBCONTRACTOR PAYMENTS....130
9.9 COMPLETION OF THE WORK....131
9.10 PARTIAL OCCUPANCY OR USE....135
9.11 COMPLETION AND FINAL PAYMENT....136
9.12 SUBSTITUTION OF SECURITIES....139

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY....140

10.1 SAFETY PRECAUTIONS AND PROGRAMS....140
10.2 SAFETY OF PERSONS AND PROPERTY....142
10.3 EMERGENCIES....145
10.4 HAZARDOUS MATERIALS....145
10.5 SITE SAFETY PLAN....146

ARTICLE 11 INSURANCE AND BONDS....147

11.1 CONTRACTOR'S LIABILITY INSURANCE....147
11.2 WORKERS' COMPENSATION INSURANCE....149
11.3 BUILDER'S RISK/ "ALL RISK" INSURANCE....149
11.4 FIRE INSURANCE....150
11.5 AUTOMOBILE LIABILITY....150
11.6 OTHER INSURANCE....151
11.7 PROOF OF INSURANCE....151
11.8 COMPLIANCE....151
11.9 WAIVER OF SUBROGATION....151
11.10 PERFORMANCE AND PAYMENT BONDS....152

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK....153

12.1 COMPLIANCE WITH TITLE 24 INSTALLATION REQUIREMENTS....153
12.2 SPECIAL NOTICE OF AMERICAN'S WITH DISABILITIES ACT....153
12.3 UNCOVERING OF WORK....154
12.4 CORRECTION OF WORK....154

ARTICLE 13 MISCELLANEOUS PROVISIONS....156

13.1 GOVERNING LAW....156
13.2 SUCCESSORS AND ASSIGNS....156
13.3 WRITTEN NOTICE....156
13.4 RIGHTS AND REMEDIES....156
13.5 TESTS AND INSPECTIONS....156
13.6 TRENCH EXCAVATION....157
13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE....158
13.8 RECORDS OF WAGES PAID....160
13.9 APPRENTICES....162
13.10 ASSIGNMENT OF ANTITRUST CLAIMS....164
13.11 STATE AND DISTRICT CONDUCTED AUDITS....164
13.12 STORM WATER POLLUTION PREVENTION....165

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT....170

14.1 TERMINATION BY THE CONTRACTOR FOR CAUSE....170
14.2 TERMINATION BY THE DISTRICT FOR CAUSE....170
14.3 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)....172
14.4 REMEDIES OTHER THAN TERMINATION....173

ARTICLE 15 DEBARMENT....174

15.1 DEBARMENT MEANS THERE HAS BEEN A FINDING THAT THE CONTRACTOR IS NOT RESPONSIBLE....174
15.2 BOARD FINDING....174
15.3 HEARING AND PRESENTATION OF EVIDENCE....174

SUPPLEMENTARY CONDITIONS
REQUEST FOR SUBSTITUTION FORM....176

EXHIBIT A: SCOPE OF WORK
EXHIBIT B: SCHEDULE OF VALUES
EXHIBIT C: EXISTING CONDITION PHOTOS
EXHIBIT D: RENDERINGS AND DRAWINGS
EXHIBIT E: SPECIFICATIONS
EXHIBIT F: INSTALLATION, MAINTENANCE AND WARRANTIES
EXHIBIT G: SCHEDULE
EXHIBIT I: PLAYCRAFT INSTALLER CERTIFICATE

-END OF DOCUMENT-

NOTICE INVITING BIDS

ANTIOCH UNIFIED SCHOOL DISTRICT

NOTICE IS HEREBY GIVEN that the Antioch Unified School District of Contra Costa County, California, acting by and through its Governing Board, hereinafter referred to as the "Owner" or "District", will receive prior to **2:00 PM on the 10th day of September, 2026** sealed bids for the award of a Contract for the following:

BID NO. 26-27-02

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

All bids shall be made and presented only on the forms presented by the Owner. Bids shall be received in the Facilities Office of the District located at 701 W 18th Street, Antioch, CA 94509 and shall be opened and publicly read aloud at the above stated time and place. Any bids received after the time specified above or after any extensions due to material changes shall be returned unopened.

The Contract Time is (26) Calendar Days.

CONTRACTOR should consult the General Conditions, Supplementary Conditions, and General Requirements regarding Milestones and Liquidated Damages.

Miscellaneous Information

There will be a **non-mandatory** Pre-Bid Conference **2:00 PM, September 2, 2026** for the purpose of acquainting all prospective bidders with the bid documents and work site. The pre-bid conference(s) will begin at the front of the Marsh Elementary School campus (2304 G St, Antioch, CA 94509) and move onto the project site.

Each bidder shall be a licensed contractor pursuant to the California Business and Professions Code, and be licensed to perform the work called for in the Contract Documents. The successful bidder must possess a valid and active Class A and/or Class B and/or Class C61/D34 License at the time of bid and throughout the duration of this Contract. The Contractor's California State License number shall be clearly stated on the bidder's proposal

Subcontractors shall be licensed pursuant to California law for the trades necessary to perform the Work called for in the Contract Documents.

Each bid must strictly conform with and be responsive to the Contract Documents as defined in the General Conditions.

In accordance with California Public Contract Code Section 22300, the Owner will permit the substitution of securities for any moneys withheld by the Owner to ensure performance under the Contract.

Prevailing wages are applicable to the Project. These per diem rates, including holiday and overtime work, as well as employer payments for health and welfare, pension, vacation, and similar purposes, are available from the Director of the Department of Industrial Relations. Pursuant to California Labor Code Sections 1720 et seq., it shall be mandatory upon the Contractor to whom the Contract is awarded, and upon any subcontractor under such Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in the Labor Code, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

All payroll records as detailed in Labor Code §1776 of the Contractor and all Subcontractors shall be certified and furnished directly to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3) once every thirty (30) days while Work is being performed on the Project and within thirty (30) days after the final day of Work performed on the Project (or more frequently if required by the District or the Labor Commissioner). The Contractor and all Subcontractors shall submit their own payroll records to the Labor Commissioner on the internet website of the Department of Industrial Relations and such payroll records shall be in an electronic format and manner prescribed by the Labor Commissioner.

Separate payment and performance bonds, each in an amount equal to 100% of the total Contract amount issued by a California admitted surety as defined in California Code of Civil Procedure Section 995.120, are required, and shall be provided to the Owner prior to execution of the Contract and shall be in the form set forth in the Contract Documents.

Where applicable (including projects receiving funding under the State School Facilities Program), bidders must meet the requirements set forth in Public Contract Code Section 10115 et seq., Military and Veterans Code Section 999 et seq. and California Code of Regulations, Title 2, Section 1896.60 et seq. regarding Disabled Veteran Business Enterprise ("DVBE") Programs.

It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

Bidding Documents may be obtained from the Construction Manager or the Districts website:

Lathrop Construction Associates, Inc.

Via email at bids@lathropconstruction.com

Phone: 707-746-8000

AUSD Website

https://www.antiochschools.net/o/ausd/page/bids

INSTRUCTIONS TO BIDDERS

1. Preparation of Bid Form and Bidding Procedures. Proposals under these specifications shall be submitted on the blank forms furnished herewith including, but not limited to, the forms in the Special Conditions, at the time and place stated in the Notice Calling for Bids. Each bidder shall review and comply with all bidding instructions and requirements set forth in the Special Conditions. All blanks in the Bid Form must be appropriately filled in, and all proposed prices must be stated clearly and legibly in both words and numerals. All bids must be signed by the bidder in permanent ink and submitted in sealed envelopes, bearing on the outside, the bidder's name, address, telephone number, and California Contractor's License number, and the name of the Project for which the bid is submitted. The Owner reserves the right to reject any bid if all of the above information is not furnished. It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

2. Bid Security. Each bid must be accompanied by one of the following forms of bidder's security: (1) cash; (2) a cashier's check made payable to the Owner; (3) a certified check made payable to the Owner; or (4) a bidder's bond executed by a California admitted surety as defined in Code of Civil Procedure Section 995.120, made payable to the Owner, in the form set forth in the Contract Documents. Such bidder's security must be in an amount not less than **ten percent (10%)** of the maximum amount of such bidder's bid as a guarantee that the bidder will enter into the Contract, if the same is awarded to such bidder, and will provide the required Performance and Payment Bonds, insurance certificates and any other required documents. In the event that a bidder is awarded the Contract and such bidder fails to enter into said Contract or provide the surety bond or bonds within five (5) calendar days after award of the Contract to bidder, said security will be forfeited.

3. Signature. The bid form, all bonds, all designations of subcontractors, the Contractor's Certificate, the Agreement, and all Guarantees must be signed in permanent ink in the name of the bidder and must bear the signature in longhand of the person or persons duly authorized to sign the bid.

If bidder is a corporation, the legal name of the corporation shall first be set forth, together with two signatures: one from the President and one from the Secretary or Assistant Secretary. Alternatively, the signature of other authorized officers or agents may be affixed, if a certified copy of the resolution of the corporate board of directors authorizing them to do so is provided to the Owner. Such documents shall include the title of such signatories below the signature and shall bear the corporate seal.

If bidder is a partnership, the true name of the firm shall first be set forth, together with the names of all persons comprising the partnership or co-partnership. The bid must be signed by all partners comprising the partnership unless proof in the form of a certified copy of a statement of partnership acknowledging the signer to be a general partner is presented to the Owner, in which case the general partner may sign.

Bids submitted as joint ventures must so state and be signed by each joint venturer.

Bids submitted by individuals must be signed by the bidder unless an up to date power- of-attorney is on file in the Owner office, in which case, said person may sign for the individual.

The above rules also apply in the case of the use of a fictitious firm name. In addition, however, where a fictitious name is used, it must be so indicated in the signature.

4. Modifications. Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the Contract Documents may result in the Owner's rejection of the bid as not being responsive to the Notice Inviting Bids. **No oral or telephonic modification of any bid submitted will be considered**.

5. Erasures, Inconsistent or Illegible Bids. The bid submitted must not contain any erasures, interlineations, or other corrections unless each such correction creates no inconsistency and is suitably authenticated by affixing in the margin immediately opposite the correction the signature or signatures of the person or persons signing the bid. In the event of inconsistency between words and figures in the bid price, words shall control figures. In the event that the Owner determines that any bid is unintelligible, inconsistent, or ambiguous, the Owner may reject such bid as not being responsive to the Notice Inviting Bids.

6. Examination of Site and Contract Documents. Each bidder shall visit the site of the proposed work and become fully acquainted with the conditions relating to the construction and labor so that the facilities, difficulties, and restrictions attending the execution of the work under the Contract are fully understood. Bidders shall thoroughly examine and be familiar with the drawings, specifications and all others documents and requirements that are attached to and/or contained in the Exhibits. The failure or omission of any bidder to receive or examine any Contract Documents, Special Conditions, form, instrument, bid clarification, or other document or to visit the site and become acquainted with conditions there existing shall not relieve any bidder from obligations with respect to the bid or to the contract. The submission of a bid shall be taken as prima facie evidence of compliance with this section. Bidders shall not, at any time after submission of the bid, dispute, complain, or assert that there were any misunderstandings with regard to the nature or amount of work to be done.

7. Withdrawal of Bids. Any bid may be withdrawn, either personally or by written request, at any time prior to the scheduled closing time for receipt of bids. The bid security for bids withdrawn prior to the scheduled closing time for receipt of bids, in accordance with this paragraph, shall be returned upon demand therefore.

No bidder may withdraw any bid for a period of ninety (90) calendar days after the date set for the opening of bids.

8. Agreements and Bonds. The Agreement form which the successful bidder, as Contractor, will be required to execute, and the forms and amounts of surety bonds which will be required to be furnished at the time of execution of the Agreement, are included in the bid documents and should be carefully examined by the bidder. The number of executed copies of the Agreement, the Performance Bond, and the Payment Bond required is three (3). Payment and Performance bonds must be executed by an admitted surety insurer as defined in Code of Civil Procedure 995.120.

9. Interpretation of Plans and Documents/Pre-Bid Clarification. If any prospective bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in, or omissions, a written request for an interpretation or correction thereof may be submitted to the Owner. The bidder submitting the request shall be responsible for its prompt delivery. **Any interpretation or correction of the Contract Documents will only be made by Bid Clarification duly issued, and a copy of such Bid Clarification will be made available for each contractor receiving a set of the Contract Documents.** No person is authorized to make any oral interpretation of any provision in the Contract Documents, nor shall any oral interpretation be binding on the Owner. If discrepancies on drawings, specifications or elsewhere in the Contract Documents are not covered by bid clarifications, bidder shall include in their bid methods of construction and materials for the higher quality and complete assembly. Each request for clarification shall be submitted in writing, via email, to only the following people:

TO: Miguel Cruz, Antioch Unified School District, MiguelCruz@antiochschools.net

CC: Austin Gray, Lathrop Construction Associates, Austin.Gray@lathropconstruction.com

Each transmitted request shall contain the name of the person and/or firm filing the request, address, telephone and fax number, Specifications and/or Drawing number, and document title. Bidder is responsible for the legibility of hand written requests. Pre-bid clarification request shall be filed a minimum of **six (6)** days prior to bid opening. Requests received less than **six (6)** days before bid opening shall not be considered or responded to. A written response to timely pre-bid clarifications requests which materially affects the bidders price will be made by Bid Clarification issued by the School District not less than seventy-two (72) hours prior to bid opening.

10. Bidders Interested in More Than One Bid. No person, firm, or corporation shall be allowed to make, or file, or be interested in more than one prime bid for the same work unless alternate bids are specifically called for. A person, firm, or corporation that has submitted a proposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a proposal or quoting prices to other bidders or making a prime proposal.

11. Award of Contract. The Contract will be awarded to the lowest responsive responsible bidder by action of the governing Board pursuant to the terms and conditions of the Contract Documents including, but not limited to, the Special Conditions. The Owner reserves the right to reject any or all bids, or to waive any irregularities or informalities in any bids or in the bidding. In the event an award is made to bidder, and such bidder fails or refuses to execute the Contract and provide the required documents within five (5) calendar days after award of the Contract to bidder, the Owner may award the Contract to next lowest responsible and responsive bidder or release all bidders**. Each bid must conform and be responsive to the Contract Documents as defined in the General Conditions**.

12. Bid Protest Procedure. Any bidder may file a bid protest. The protest shall be filed in writing with the District's Director of Facilities not more than three (3) working days after the date of the bid opening. An e-mail address shall be provided and, by filing the protest, protesting bidder consents to receipt of e-mail notices for purposes of the Protest and Protest related questions and Protest Appeal, if applicable. The protest shall specify the reasons and facts upon which the protest is based.

a. Resolution of Bid Controversy: Once the bid protest is received, the apparent lowest responsible bidder will be notified of the protest and the evidence presented. If appropriate, the apparent low bidder will be given an opportunity to rebut the evidence and present evidence that the apparent low bidder should be allowed to perform the Work. If deemed appropriate by the Owner, an informal hearing will be held. Owner will issue a written decision within fifteen (15) days of receipt of the protest, unless factors beyond the Owner's reasonable control prevent such resolution. The Decision on the Bid Protest will be copied to all parties involved in the protest.

b. Finality. The decision concerning the Bid controversy will be final and not subject to any further Appeals.

c. Failure to comply with this Bid Protest Procedure shall constitute a waiver of the right to protest and shall constitute a failure to exhaust the protesting bidder's administrative remedies.

13. Alternates. If alternate bids are called for, the Contract may be awarded at the election of the Governing Board to the lowest responsible and responsive bidder using the method and procedures outlined in the Notice Inviting Bids and as specified in the section entitled Alternate/Deductive Bid Alternates.

14. Listing Subcontractors. Each bidder shall submit with his bid, on the form furnished with the Contract Documents, a list of the names, license numbers, scopes of work, locations of the places of business, contact information, and Department of Industrial Relations ("DIR") registration numbers of each subcontractor who will perform work or labor or render service to the bidder in or about the project, or a subcontractor who under subcontract to the bidder, specially fabricates and installs a portion of the work, in an amount in excess of one-half of 1 percent of the bidder's total bid as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code section 4100, et seq.) Pursuant to Labor Code section 1725.5, all subcontractors (of any tier) performing work on this Project must be properly registered with DIR.

15. Workers' Compensation. In accordance with the provisions of Labor Code Section 3700, the successful bidder as the Contractor shall secure payment of compensation to all employees. The Contractor shall sign and file with the Owner the following certificate prior to performing the work under this contract: "I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract." The form of such certificate is included as a part of the Bid Package.

16. Contractor's License. To perform the work required by this notice, the Contractor must possess the Contractor's License as specified in the Notice Inviting Bids, and the Contractor must maintain the license throughout the duration of the contract. If, at the time of bid, bidder is not licensed to perform the Project in accordance with Division 3, Chapter 9, of the Business and Professions Code for the State of California and the Notice to Contractors calling for bids, such bid will not be considered and the Contractor will forfeit its bid security to the Owner.

17. Preference for Materials and Substitutions.

a. One Product Specified. Unless the Plans and Specifications state that no Substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, construction, or any specific name, make, trade name, or catalog number, with or without the words, "or equal," such specification shall be read as if the language "or equal" is incorporated.

b. Request for Substitution. See Supplementary Conditions.

18. Disqualification of Bidders and Proposals. More than one proposal for the same work from any individual, firm, partnership, corporation, or association under the same or different names will not be accepted; and reasonable grounds for believing that any bidder is interested in more than one proposal for the work will be cause for rejecting all proposals in which such bidder is interested and the bidder will forfeit their bid security to the Owner.

19. Unbalanced or Altered Bids. Proposals in which the prices are obviously unbalanced, and those which are incomplete or show any alteration of form, or contain any additions or conditional or alternate bids that are not called for or otherwise permitted, may be rejected. A proposal on which the signature of the bidder has been omitted may be rejected. If, in the District's sole discretion, it determines any pricing, costs or other information submitted by a bidder may result in an unbalanced bid, the District may deem such bid non-responsive. A bid may be determined by the District to be unbalanced if the bid is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the District even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advanced payment.

20. Employment of Apprentices. The Contractor and all Subcontractors shall comply with the provisions of California Labor Code including, but not limited to sections 1777.5, 1777.6, and 1777.7 concerning the employment of apprentices. The Contractor and any Subcontractor under him shall comply with the requirements of said sections, including applicable portions of all subsequent amendments in the employment of apprentices; however, the Contractor shall have full responsibility for compliance with said Labor Code sections, for all apprenticeable occupations, regardless of any other contractual or employment relationships alleged to exist.

21. Non-Collusion Declaration. Public Contract Code Section 7106 requires bidders to submit declaration of non-collusion with their bids. This form is included with the bid documents and must be signed and dated by the bidder under penalty of perjury.

22. Wage Rates, Travel and Subsistence.

a. The Contractor and all subcontractors shall comply with the requirements set forth in Division 2, Part 7, Chapter 1 of the Labor Code. Pursuant to Labor Code Sections 1770 et. seq., the Owner has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the contract. Copies are available from the Owner to any interested party on request and are

also available from the Director of the Department of Industrial Relations. The Contractor shall obtain copies of the above-referenced prevailing wage sheets and post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

b. Any worker employed to perform work on the Project and such work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

c. Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

d. These per diem rates, including holiday and overtime work, and employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the administrative office of the Owner, located as noted above and are also available from the Director of the Department of Industrial Relations. It is the Contractor's responsibility to ensure the appropriate prevailing rates of per diem wages are paid for each classification. It shall be mandatory upon the Contractor to whom the Contract is awarded, and upon any subcontractor under such Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

23. DIR Registration of Contractor and Subcontractors. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

This Project is a public works project as defined in Labor Code section 1720. Each contractor bidding on this Project and all subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with DIR and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. For more information and up to date requirements, contractors are recommended to periodically review the DI's website at www.dir.ca.gov. Contractor shall be solely responsible for ensuring compliance with Labor Code section 1725.5 as well as any requirements implemented by DIR applicable to its services or its subcontractors throughout the term of the Agreement and in no event shall contractor be granted increased payment from the District or any time extensions to complete the Project as a result of contractor's efforts to maintain compliance with the Labor Code or any requirements implemented by the DIR. Failure to comply with these requirements shall be deemed a material breach of this Agreement and grounds for termination for cause. The contractor and all subcontractors shall furnish certified payroll records as required pursuant Labor Code section 1776 directly to the Labor Commissioner in accordance with Labor Code section 1771.4(a)(3) once every thirty (30) days while Work is being performed on the Project and within thirty (30) days after the final day of Work performed on the Project (or more frequently if required by the District or the Labor Commissioner). The Contractor and all Subcontractors shall submit their own payroll records to the Labor Commissioner on the internet website of the Department of Industrial Relations and such payroll records shall be in an electronic format prescribed by the Labor Commissioner. The District reserves the right to withhold contract payments if the District is notified, or determines as the result of its own investigation, that contractor is in violation of any of the requirements set forth in Labor Code section 1720 et seq. at no penalty or cost to the District. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE).

24. No Telephone or Facsimile Availability. No telephone or facsimile machine will be available to bidders on the Owner premises at any time.

25. Bidding Documents, may be obtained from the Construction Manager:

Lathrop Construction Associates, Inc.

Via email at bids@lathropconstruction.com

Phone: 707-746-8000

Bidder shall utilize a complete set of Bidding Documents in preparing a bid. The failure or omission of bidder to receive any Bidding Document, form, instrument, Bid Clarification, or other document shall not relieve bidder from any obligations with respect to the bid and/or Contract.

26. Bid Clarification. Clarification or any other notice of a change in the Bidding Documents will be issued only by the District and only in the form of a written Bid Clarification, transmitted by fax, e-mail, or available for pick up to all who are known

by the issuing office to have received a complete set of Bidding Documents. Any other purported Bid Clarification is void and unenforceable.

Bidder is responsible for ascertaining the disposition of all Bid Clarification issued regardless of Owner notification and to acknowledge all Bid Clarifications in the submitted sealed bid prior to the bid opening. Copies of Bid Clarifications will be made available for inspection wherever Bidding Documents are on file for inspection. Each Bid Clarification will be numbered, dated, and identified with the Project number. Oral statements or any instructions in any form, other than Bid Clarification as described above, shall be void and unenforceable. Any Bid Clarification issued by the Owner and not noted as being acknowledged by bidder as required in the Bid Form, may result in the bid being deemed non-responsive.

Checklist of Mandatory Bid Forms

(For Contractor's use and reference only. Additional documents may be required so bidders should carefully review all Contract Documents and Bid Documents)

- ❑ Designation of Subcontractors
- ❑ Bid Form
- ❑ Contractor's Certificate Regarding Workers Compensation
- ❑ Non-Collusion Declaration
- ❑ Bid Bond (or Bid Guarantee form if Security is other than Bid Bond)
- ❑ Wage Theft/Prevailing Wage & Related Labor Requirements Certification
- ❑ Acknowledgment of Bidding Practices Regarding Indemnity
- ❑ Contractor's Certificate Regarding Drug-Free Workplace
- ❑ Contractor's Certificate Regarding Alcoholic Beverage and Tobacco-Free Campus Policy
- ❑ Substitution Request Form (if Substitutions are being requested - If Substitution Request Form is not submitted then NO Substitutions will be allowed after the bids are opened)

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	Marsh Elementary School – Upper Playground Replacement & Refresh		
PROJECT NUMBER:	26-27-02		
TO:	Miguel Cruz & Austin Gray	EMAIL:	miguelcruz@antiochschools.net & austin.gray@lathropconstruction.com

DATE:			
FROM:		EMAIL:	
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	

REQUESTED CLARIFICATION:
RESPONSE TO CLARIFICATION:

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code Sections 4100 et. seq.,) and any amendments thereof, each Bidder shall set forth below: (a) the name, license number, and location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor, who will perform work or labor or work or improvement to be performed under this Contract, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvements according to detailed drawings contained in the Plans and Specifications in an amount in excess of one-half of one percent of the Contractor's total bid; and (b) the portion and description of the work which will be done by each subcontractor under this Act. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in this bid. All subcontractors shall be properly licensed by the California State Licensing Board.

If a Contractor fails to specify a subcontractor, or if a Contractor specifies more than one subcontractor for the same portion of work to be performed under the Contract in excess of one-half of one percent of the Contractor's total bid, the Contractor shall be deemed to have agreed that the Contractor is fully qualified to perform that portion, and that the Contractor alone shall perform that portion.

No Contractor whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow the relevant portion of the work to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the Contractor's total bid where the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act.

Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the Contractor's total bid where no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record, of the authority awarding this Contract setting forth the facts constituting the emergency or necessity.

All subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project.

NOTE: If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such Alternate.

DESIGNATION OF SUBCONTRACTORS FORM

Scope of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	DIR Registration Number	*E-Mail & Telephone**

Scope of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	DIR Registration Number	*E-Mail & Telephone**

* This information must be provided at the time of submission of bid or must be provided within 24 hours after the time set for the opening of bids. Bidders who choose to provide this information within 24 hours after the time set for the opening of bids are solely responsible to ensure the District receives this information in a timely manner. The District is not responsible for any problems or delays associated with emails, faxes, delivery, etc. Absent a verified fax or email receipt date and time by the District, the District's determination of whether the information was received timely shall govern and be determinative. Bidder shall not revise or amend any other information in this form submitted at the time of bid. The information submitted at the time of bid shall govern over any conflicts, discrepancies, ambiguities or other differences in any subsequent Subcontractor Designation Forms submitted by the bidder.

Proper Name of Bidder: _____

Date: _____

Name: _____

Signature of Bidder Representative: _____

Address: _____

Phone: _____

BID FORM

FOR

UPPER PLAYGROUND REPLACEMENT & REFRESH PROJECT

At MARSH ELEMENTARY SCHOOL

Bid No. 26-27-02

FOR

ANTIOCH UNIFIED SCHOOL DISTRICT

CONTRACTOR NAME: _____

ADDRESS: _____

_____

TELEPHONE: ( ) _____

FAX: ( ) _____

EMAIL _____

TO: Antioch Unified School District, acting by and through its Governing Board, herein called "Owner".

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract, the local conditions affecting the performance of the Contract, the cost of the work at the place where the work is to be done, with the Drawings and Specifications, and other Contract Documents, hereby proposes and agrees to perform within the time stipulated, the Contract, including all of its component parts, and everything required to be performed, including its acceptance by the Owner, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the Contract and complete all of the Work in a workmanlike manner required in connection with the construction of:

BID NO. 26-27-02

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH PROJECT

in the Owner described above, all in strict conformance with the drawings and other Contract Documents on file at the Owner Offices of said Owner for amounts set forth herein.

2. BIDDER ACKNOWLEDGES THE FOLLOWING BID CLARIFICATIONS:

Number	Number	Number	Number	Number	Number	Number	Number
_____	_____	_____	_____	_____	_____	_____	_____

Acknowledge the inclusion of all bid clarifications issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

3. TOTAL CASH PURCHASE PRICE IN WORDS & NUMBERS:

_____ DOLLARS

($ _____)

4. TIME FOR COMPLETION: The Owner may give a notice to proceed within ninety (90) days of the award of the bid by the Owner. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, and the requisite time to complete Punch List.

In the event that the Owner desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the Owner. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.

It is understood that the Owner reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that it may not withdraw this bid for a period of ninety (90) days after the date set for the opening of bids.

5. Attached is bid security in the amount of not less than ten percent (10%) of the bid:

Bid bond (10% of the Bid), certified check, or cashier's check (circle one)

6. The required items are filled out and attached hereto:

a. List of designated subcontractors

b. Worker's compensation certificate

c. Non-collusion declaration

d. Wage theft/prevailing wage & related labor requirements certificate

e. Acknowledgment of bidding practices regarding indemnity

f. Drug-free workplace certificate

g. Alcohol & tobacco-free workplace certificate

7. The Substitution Request Form, if applicable, is attached hereto.

8. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the Owner a Contract in the form attached hereto in accordance with the bid as accepted, and that he or she will also furnish and deliver to the Owner the Performance Bond and Payment Bond, all within five (5) calendar days after award of Contract, and that the work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, by the start date provided in the Owner's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents.

9. The names of all persons interested in the foregoing proposal as principals are as follows:

_____

_____

_____

_____

_____

_____

(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm; if bidder or other interested person is an individual, state the first and last names in full.)

10. PROTEST PROCEDURES. If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.

11. The undersigned bidder shall be licensed and shall provide the following California Contractor's license information:

License Number: _____

License Expiration Date: _____

Name on License: _____

Class of License: _____

DIR Registration Number: _____

If the bidder is a joint venture, each member of the joint venture must include the above information.

12. Time is of the essence regarding this Contract, therefore, in the event the bidder to whom the Contract is awarded fails or refuses to post the required bonds and return executed copies of the Agreement form within five (5) calendar days from the date of receiving the Notice of Award, the Owner may declare the bidder's bid deposit or bond forfeited as damages.

13. The bidder declares that he/she has carefully examined the location(s) of the proposed Project, that he/she has examined the Contract Documents, including the Plans, General Conditions, Supplemental Conditions, Special Conditions, Bid Clarifications, Specifications, and all other documents contained in the Project Manual, and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

I agree to receive service of notices at the e-mail address listed below.

I the below-indicated bidder, declare under penalty of perjury that the information provided and representations made in this bid are true and correct.

_____
Proper Name of Company

_____
Name of Bidder Representative

_____
Street Address

_____
City, State, and Zip

(_____) _____
Phone Number

(_____) _____
Fax Number

_____
E-Mail

By: _____ Date: _____
Signature of Bidder Representative

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

All signatures must be made in permanent blue ink.

(INTENTIONALLY LEFT BLANK)

CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION FORM

Labor Code Section 3700 in relevant part provides:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

1. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.

2. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to employees.

3. For any county, city, city and county, municipal corporation, public Owner, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

I am aware of the provisions of Labor Code Section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provision before commencing the performance of the work of this Contract.

_____
(Signature)

_____
(Print)

_____
(Date)

In accordance with Article 5 (commencing at section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and submitted with the Contractor's bid.

NON-COLLUSION DECLARATION

The undersigned declares:

I am the _____ [Title] of _____ [Name of Company], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [Date], at _____ [City], _____ [State].

Signed: _____

Typed Name: _____

BID GUARANTEE FORM
(Use only when not using a Bid Bond)

Accompanying this proposal is a cashier's check payable to the order of the Antioch Unified School District or a certified check payable to the order of the Antioch Unified School District in an amount equal to ten percent (10%) of the base bid and alternates ($_____).

The proceeds of this check shall become the property of said Owner, if, this proposal shall be accepted by the Owner through the Owner's Governing Board, and the undersigned fails to execute a Contract with and furnish the sureties required by the Owner within the required time; otherwise, said check is to be returned to the undersigned.

_____
Bidder

Note: Use this form, in lieu of Bid Bond form, when a cashier's check or certified check is accompanying the bid

BID BOND FORM

KNOW ALL MEN BY THESE PRESENT that we, the undersigned, (hereafter called "Principal"), and _____ (hereafter called "Surety"), are hereby held and firmly bound unto the Antioch Unified School District (hereafter called "Owner") in the sum of _____ ($_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

SIGNED this _____ day of _____, 20___.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of _____.

NOW, THEREFORE,

a. If said Bid is rejected, or

b. If said Bid is accepted and the Principal executes and delivers a Contract or the attached Agreement form within five (5) calendar days after acceptance (properly completed in accordance with said Bid), and furnishes bonds for his faithful performance of said Contract and for payment of all persons performing labor or furnishing materials in connection therewith,

Then this obligation shall be void; otherwise, the same shall remain in force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or the call for bids, or the work to be performed thereunder, or the specifications accompanying the same, shall in anyway affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of said Contract, or the call for bids, or the work, or to the specifications.

In the event suit is brought upon this bond by the Owner and judgment is recovered, the Surety shall pay all costs incurred by the Owner in such suit, including without limitation, attorneys' fees to be fixed by the court.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year first set forth above.

By _____

(Corporate Seal)

Principal's Signature

_____

Typed or Printed Name

_____

Principal's Title

By _____

(Corporate Seal)

Surety's Signature

_____

Typed or Printed Name

_____

Title

(Attached Attorney in Fact Certificate)

Surety's Name

Surety's Address

Surety's Phone Number

IMPORTANT:

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code Section 105, and if the work or project is financed, in whole or in part, with federal, grant, or loan funds, it must also appear on the Treasury Department's most current list (Circular 570 as amended).

THIS IS A REQUIRED FORM.

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of agent or representative for service of process in California if different from above)

(Telephone Number of Surety and agent or representative for service of process in California).

WAGE THEFT / PREVAILING WAGE AND RELATED LABOR REQUIREMENTS CERTIFICATION

PROJECT/CONTRACT NO.: 26-27-02 between Antioch Unified School District (the "AUSD" or the "Owner") and _____
(the "Contractor" or the "Bidder") (the "Contract" or the "Project").

I hereby certify that I will conform to the State of California Public Works Contract requirements regarding prevailing wages, benefits, on-site audits with 48-hours' notice, payroll records, and apprentice and trainee employment requirements, for all Work on the Project including, without limitation, the requirement that it and all of its Subcontractors are registered pursuant to Labor Code section 1771, et seq.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

Wage Theft:
The bidder certifies that the bidding company is not subject to a final non-appealable wage theft adjudication defined as (i) a final judgement against an employer arising from the employer's nonpayment of wage for work performed which remains unsatisfied for a period of 20 days after the time to appeal therefrom has expired and no appeal therefrom is pending; (ii) a final arbitration award where the time to file a petition for a trial de novo or a petition to vacate or correct the arbitration award has expired and no petition is pending. The Bidder acknowledge that notwithstanding any prior prequalification approval, a Bidder who is subject to a final non-appealable wage theft adjudication so defined does not meet the AUSD's minimum qualification as a Bidder, is not qualified to Bid and cannot submit a responsive Bid.

Failure to comply with any of the above may result in a determination of non-responsiveness. I declare under penalty of perjury under California law that the foregoing is true and correct.

_____
Signature

_____
Date

ACKNOWLEDGMENT OF BIDDING PRACTICES REGARDING INDEMNITY FORM

TO: Antioch Unified School District

RE: Informal Bid Number _____

Construction Contract for _____

Please be advised that with respect to the above-referenced Project the undersigned Contractor on behalf of itself and all subcontractors hereby waives the benefits and protection of Labor Code section 3864, which provides:

"If an action as provided in this chapter is prosecuted by the employee, the employer, or both jointly against the third person results in judgment against such third person, the employer shall have no liability to reimburse or hold such third person harmless on such judgment or settlement in the absence of a written agreement to do so executed prior to the injury."

This Agreement has been signed by an authorized representative of the contracting party and shall be binding upon its successors and assignees. The undersigned further agrees to promptly notify the District of any changes of ownership of the contracting party or any subcontractor while this Agreement is in force.

_____
Contracting Party

_____
Name of Agent/Title

CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE

This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by performing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination of the contract or grant, and the Contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

Pursuant to Government Code section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

1. Publishing a statement, notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace, and specifying actions which will be taken against employees for violations of the prohibition.

4. Establishing a drug-free awareness program to inform employees about all of the following:

   a. The dangers of drug abuse in the workplace;

   b. The person's or organization's policy of maintaining a drug-free workplace;

   c. The availability of drug counseling, rehabilitation and employee-assistance programs; and

   d. The penalties that may be imposed upon employees for drug abuse violations;

5. Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code section 8355 listed above and will (a) publish a statement notifying employees concerning the prohibition of controlled substance at the workplace, (b) establish a drug-free awareness program, and (c) require each employee engaged in the performance of the contact be given a copy of the statement required by section 8355(a) and require such employee agree to abide by the terms of that statement.

I also understand that if the Antioch Unified School District determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of Section 8355, that the contract awarded herein is subject to termination, suspension of payments, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Section 8350 et seq.

I acknowledge that I am aware of the provisions of Government Code section 8350 et seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

_____	_____	_____
Date	Contractor	Signature

CONTRACTOR'S CERTIFICATE REGARDING ALCOHOLIC BEVERAGE AND TOBACCO-FREE CAMPUS POLICY

The Contractor agrees that it will abide by and implement the District's Alcoholic Beverage and Tobacco-Free Campus Policy, which prohibits the use of alcoholic beverages and tobacco products, of any kind and at any time, in District-owned or leased buildings, on District property and in District vehicles. The Contractor shall procure signs stating "ALCOHOLIC BEVERAGE AND TOBACCO USE IS PROHIBITED" and shall ensure that these signs are prominently displayed in all entrances to school property at all times.

DATE:_____

_____
CONTRACTOR

By:_____
Signature

[End of Required Bid Documents to be Submitted with Bid]

AGREEMENT FORM

THIS AGREEMENT, entered into this____ day of_____, 20__ in the County of _____ of the State of California, by and between the Antioch Unified School District, hereinafter called the "Owner" or the "District", and _____, hereinafter called the "Contractor".

WITNESSETH that the Owner and the Contractor for the consideration stated herein agree as follows:

ARTICLE I - SCOPE OF WORK: The Contractor shall furnish all labor, materials, equipment, tools, and utility and transportation services, and perform and complete all work required in connection with _____("Project") in strict accordance with the Contract Documents enumerated in Article 7 below. The Contractor shall be liable to the District for any damages arising as a result of a failure to comply with that obligation, and the Contractor shall not be excused with respect to any failure to so comply by an act or omission of the Construction Manager, Engineer, Inspector, or representative of any of them, unless such act or omission actually prevents the Contractor from fully complying with the Contract Documents and the Contractor protests, in accordance with the Contract Documents, that the act or omission is preventing the Contractor from fully complying with the Contract Documents. Such protest shall not be effective unless reduced to writing and filed with the District office within seven (7) days of the date of occurrence of such act or omission preventing the Contractor from fully complying with the Contract Documents.

ARTICLE 2 - TIME OF COMPLETION: The Owner may give notice to proceed within ninety (90) days of the award of the bid by the Owner. Once the Contractor has received a notice to proceed, the Contractor shall reach Substantial Completion (See Article 1.1.46) of the Work within _____ (___) calendar days from receipt of the Notice to Proceed. This shall be called Contract Time. (See Article 8.1.1). It is expressly understood that time is of the essence.

Contractor has thoroughly studied the Project and has satisfied itself that the time period for this Project is adequate for the timely and proper completion of the Project within the Contract time.

In the event that the Owner desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the Owner. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the Owner's postponement of giving the notice to proceed.

If the Contractor believes that a postponement will cause hardship to it, the Contractor may terminate the Contract with written notice to the Owner within ten (10) days after receipt by the Contractor of the Owner's notice of postponement. It is further understood by the Contractor that in the event that the Contractor terminates the Contract as a result of postponement by the Owner, the Owner shall only be obligated to pay the Contractor for the work performed by the Contractor at the time of notification of postponement. Should the Contractor terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsible bidder.

ARTICLE 3 - LIQUIDATED DAMAGES: It being impracticable and infeasible to determine the amount of actual damage, it is agreed that the Contractor will pay the Owner the sum of Five hundred dollars and zero cents ($500.00) per calendar day for each and every day of delay beyond the Contract Time set forth in Article 2 of this Agreement as liquidated damages and not as a penalty or forfeiture. In the event Liquidated Damages are not paid, the Contractor further agrees that the Owner may deduct such amount thereof from any money due or that may become due the Contractor under the Contract (See Article 9.6 and 2.2 of the General Conditions).

ARTICLE 4 - CONTRACT PRICE: The Owner shall pay to the Contractor as full consideration for the faithful performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, the sum of _____ DOLLARS ($_____), said sum being the total amount stipulated in the Bid Contractor submitted. Payment shall be made as set forth in the General Conditions.

Should any Change Order result in an increase in the Contract Price, the cost of such Change Order shall be agreed to in advance by the Contractor and the Owner, subject to the monetary limitations set forth in Public Contract Code Section 20118.4. In the event that the Contractor proceeds with a Change in work without an agreement between the Owner and Contractor regarding the cost of a Change Order, the Contractor waives any Claim of additional compensation for such additional work.

ARTICLE 5 - HOLD HARMLESS AGREEMENT: Contractor shall defend, indemnify and hold harmless Owner, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from all liabilities, claims, actions, liens, judgments, demands, damages, losses, costs or expenses of any kind arising from death, personal injury, property damage or other cause based or asserted upon any act, omission, or breach connected with or arising from the progress of Work or performance of service under this Agreement or the Contract Documents. As part of this indemnity, Contractor shall protect and defend, at its own expense, Owner, Architect, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from any legal action including attorney's fees or other proceeding based upon such act, omission, breach or as otherwise required by this Article.

Furthermore, Contractor agrees to and does hereby defend, indemnify and hold harmless Owner, Architect, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from every claim or demand made, and every liability, loss, damage, expense or attorney's fees of any nature whatsoever, which may be incurred by reason of:

(a) Liability for (1) death or bodily injury to persons; (2) damage or injury to, loss (including theft), or loss of use of, any property; (3) any failure or alleged failure to comply with any provision of law or the Contract Documents; or (4) any other loss, damage or expense, sustained by any person, firm or corporation or in connection with the Work called for in this Agreement or the Contract Documents, except for liability resulting from the sole or active negligence, or the willful misconduct of the Owner.

(b) Any bodily injury to or death of persons or damage to property caused by any act, omission or breach of Contractor or any person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages or injury to or death of persons, loss (including theft) or loss of use of any property, sustained by any person, firm or corporation, including the Owner, arising out of or in any way connected with Work covered by this Agreement or the Contract Documents, whether said injury or damage occurs either on or off Owner property, but not for any loss, injury, death or damages caused by the sole or active negligence or willful misconduct of the Owner.

(c) Any dispute between Contractor and Contractor's subcontractors/supplies/ Sureties, including, but not limited to, any failure or alleged failure of the Contractor (or any person hired or employed directly or indirectly by the Contractor) to pay any Subcontractor or Materialman of any tier or any other person employed in connection with the Work and/or filing of any stop notice or mechanic's lien claims.

(d) Any claims, allegations, penalties, assessments, or liabilities to the extent caused by the Contractor's failure or the failure of any Subcontractor of any tier, to fully comply with the DIR registration requirements under Labor Code section 1725.5 at all times during the performance of any Work on the Project and shall reimburse the District for any penalties assessed against the District arising from any failure by the Contractor or any Subcontractor of any tier from complying with Labor Code sections 1725.5 and 1771.1. Nothing in this paragraph, however, shall require the Contractor or any Subcontractor to be liable to the District or indemnify the District for any penalties caused by the District in accordance with Labor Code section 1773.3 (g).

Contractor, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the Owner, its officers, agents or employees, on account of or founded upon any cause, damage, or injury identified herein Article 5 and shall pay or satisfy any judgment that may be rendered against the Owner, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

The Contractor's and Subcontractors' obligation to defend, indemnify and hold harmless the Owner, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors hereunder shall include, without limitation, any and all claims, damages, and costs for the following: (1) any damages or injury to or death of any person, and damage or injury to, loss (including theft), or loss of use of, any property; (2) breach of any warranty, express or implied; (3) failure of the Contractor or Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement; (4) products installed in or used in connection with the Work; and (5) any claims of violation of the Americans with Disabilities Act ("ADA").

ARTICLE 6 - PROVISIONS REQUIRED BY LAW: Each and every provision of law and clause required to be inserted in this Contract shall be deemed to be inserted herein, and this Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted or is not inserted correctly, then upon application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

ARTICLE 7 - COMPONENT PARTS OF THE CONTRACT: The Contract entered into by this Agreement consists of the following Contract Documents, all of which are component parts of the Contract as if herein set out in full or attached hereto:

Notice Inviting Bids
Instructions to Bidders
Designation of Subcontractors
Non-Collusion Declaration
Bid Bond
Bid Form
Contractor's Certificate Regarding Worker's Compensation
Agreement Form
Payment Bond
Performance Bond
Guarantee
Escrow Agreement for Security Deposit In Lieu of Retention
Workers' Compensation/Employers Liability Endorsement
General Liability Endorsement
Automobile Liability Endorsement
General Conditions

Supplementary and Special Conditions
Specifications
All Bid Clarifications as Issued
Drawings/Plans/Exhibits
Requirements, Reports and/or any other Documents in the Project Manual or Other Documents Issued to Bidders

All of the above named Contract Documents are intended to be complementary. Work required by one of the above named Contract Documents and not by others shall be done as if required by all.

ARTICLE 8 - PREVAILING WAGES: Wage rates for this Project shall be in accordance with the general prevailing rate of holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of work needed to execute the Contract as determined by the Director of the Department of Industrial Relations. Copies of schedules of rates so determined by the Director of the Department of Industrial Relations are on file at the administrative office of the Owner and are also available from the Director of the Department of Industrial Relations. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE).

The following are hereby referenced and made a part of this Agreement and Contractor stipulates to the provisions contained therein.

1. Chapter 1 of Part 7 of Division 2 of the Labor Code (Section 1720 et seq.)

2. California Code of Regulations, Title 8, Chapter 8, Subchapters 3 through 6 (Section 16000 et seq.)

ARTICLE 9 - RECORD AUDIT: In accordance with Government Code Section 8546.7(and Davis Bacon, if applicable) and Article 13.11 of the General Conditions, records of both the Owner and the Contractor shall be subject to examination and audit for a period of five (5) years after a Final Retention Payment or the Recording of a Notice of Completion, whichever occurs first.

ARTICLE 10 - CONTRACTOR'S LICENSE: The Contractor must possess throughout the Project a Class A and/or Class B and/or Class C61/D34 Contractor's License, issued by the State of California, which must be current and in good standing.

IN WITNESS WHEREOF, this Agreement has been duly executed by the above named parties, on the day and year first above written.

DISTRICT:	CONTRACTOR:
_____	_____
Typed or Printed Name	Typed or Printed Name
_____	_____
Title	Title
_____	_____
Signature	Signature
Dated: _____	_____
	Type or Printed Name
	_____
	Title (Authorized Officers or Agents)
	_____
	Signature
	(CORPORATE SEAL)

PAYMENT BOND

(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the ANTIOCH UNIFIED SCHOOL DISTRICT (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: _____ (hereinafter referred to as the "Public Work"); and

WHEREAS, said Contractor is required to furnish a bond in connection with said Contract, and pursuant to California Civil Code Section 9550;

NOW, THEREFORE, We, _____, the undersigned Contractor, as Principal; and _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the ANTIOCH UNIFIED SCHOOL DISTRICT and to any and all persons, companies, or corporations entitled by law to file stop notices under California Civil Code Section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of _____ Dollars ($_____), such sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code Section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then said Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Section 9550 et seq.

This bond shall inure to the benefit of any person named in Civil Code Section 9100 giving such person or his/her assigns a right of action in any suit brought upon this bond.

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no

circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Obligee and the Contractor or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code Section 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF this instrument has been duly executed by the Principal and Surety above named, on the_____ day of _____, 20___.

PRINCIPAL/CONTRACTOR:

_____

By: _____

SURETY:

_____

By: _____
Attorney-in-Fact

IMPORTANT: THIS IS A REQUIRED FORM.

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code Section 105, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to:

(Name and Address of Surety)	(Name and Address of agent or representative for service for service of process in California)
_____	_____
_____	_____
Telephone:_____	Telephone: _____

A notary public or other office completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss.
COUNTY OF)

On _____, before me, _____, personally appeared _____, who proved on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) as the Attorney-in-Fact of _____ (Surety) and acknowledged to me that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (SEAL)
Notary Public in and for said State

Commission expires:_____

NOTE: A copy of the power-of-attorney to local representatives of the bonding company must be attached hereto.

PERFORMANCE BOND

(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the ANTIOCH UNIFIED SCHOOL DISTRICT (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: _____ (hereinafter referred to as the "Public Work"); and

WHEREAS, the work to be performed by the Contractor is more particularly set forth in that certain contract for said Public Work dated _____ _____, (hereinafter referred to as the "Contract"), which Contract is incorporated herein by this reference; and

WHEREAS, the Contractor is required by said Contract to perform the terms thereof and to provide a bond both for the performance and guaranty thereof.

NOW, THEREFORE, we, _____, the undersigned Contractor, as Principal, and _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the ANTIOCH UNIFIED SCHOOL DISTRICT in the sum of _____ Dollars ($_____), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the bounded Contractor, his or her heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in said Contract and any alteration thereof made as therein provided, on his or her part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill guarantees of all materials and workmanship; and indemnify, defend and save harmless the Obligee, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any change, extension of time, alteration in or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same, nor by any change or modification to any terms of payment or extension of time for any payment pertaining or relating to any scheme of work of improvement under the contract. Surety also stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any overpayment or underpayment by the Obligee that is based upon estimates approved by the Construction Manager. The Surety stipulates and agrees that none of the aforementioned changes, modifications, alterations, additions, extension of time or actions shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, modifications, alterations, additions or extension of time to the terms of the contract, or to the work, or the specifications as well notice of any other actions that result in the foregoing.

Whenever Principal shall be, and is declared by the Obligee to be, in default under the Contract, the Surety shall promptly either remedy the default, or shall promptly take over and complete the Contract

through its agents or independent contractors, subject to acceptance and approval of such agents or independent contractors by Obligee as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages; or, at Obligee's sole discretion and election, Surety shall obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Obligee of the lowest responsible bidder, arrange for a contract between such bidder and the Obligee and make available as Work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the "balance of the Contract Price" (as hereinafter defined), and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable to Principal by the Obligee under the Contract and any modifications thereto, less the amount previously paid by the Obligee to the Principal, less any withholdings by the Obligee allowed under the Contract. Obligee shall not be required or obligated to accept a tender of a completion contractor from the Surety.

Surety expressly agrees that the Obligee may reject any agent or contractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal. Unless otherwise agreed by Obligee, in its sole discretion, Surety shall not utilize Principal in completing the Contract nor shall Surety accept a bid from Principal for completion of the work in the event of default by the Principal.

No final settlement between the Obligee and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

The Surety shall remain responsible and liable for all patent and latent defects that arise out of or relate to the Contractor's failure and/or inability to properly complete the Public Work as required by the Contract and the Contract Documents. The obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.

Contractor and Surety agree that if the Obligee is required to engage the services of an attorney in connection with enforcement of the bond, Contractor and Surety shall pay Obligee's reasonable attorneys' fees incurred, with or without suit, in addition to the above sum.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including reasonable attorneys' fees to be fixed by the Court.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20___.

PRINCIPAL/CONTRACTOR:

_____

By: _____

SURETY:

_____

By: _____
Attorney-in-Fact

The rate of premium on this bond is _____ per thousand.

The total amount of premium charged: $_____ (This must be filled in by a corporate surety).

IMPORTANT: **THIS IS A REQUIRED FORM.**

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code Section 105, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to:

(Name and Address of Surety)	(Name and Address of agent or representative for service for service of process in California)
_____	_____
_____	_____
Telephone:_____	Telephone: _____

A notary public or other office completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss.
COUNTY OF)

On _____, before me, _____, personally appeared _____, who proved on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) as the Attorney-in-Fact of _____ (Surety) and acknowledged to me that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (SEAL)
Notary Public in and for said State

Commission expires:_____

NOTE: A copy of the power-of-attorney to local representatives of the bonding company must be attached hereto.

GUARANTEE

Guarantee for _____. We hereby guarantee that the _____, which we have installed in _____ _____ has been done in accordance with the Contract Documents, including without limitation, the drawings and specifications, and that the work as installed will fulfill the requirements included in the bid documents. The undersigned and its surety agrees to repair or replace any or all such work, together with any other adjacent work, which may be displaced in connection with such replacement, that may prove to be defective in workmanship or material within a period of one year from the date of the Notice of Completion of the above-mentioned structure by the Antioch Unified School District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event the undersigned or its surety fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the Owner, but not later than ten (10) days after being notified in writing by the Owner or within forty-eight (48) hours in the case of an emergency or urgent matter, the undersigned and its surety authorizes the Owner to proceed to have said defects repaired and made good at the expense of the undersigned and its surety, who will pay the costs and charges therefor upon demand. The undersigned and its surety shall be jointly and severally liable for any costs arising from the Owner's enforcement of this Guarantee.

Countersigned

_____	_____
(Proper Name)	(Proper Name)
By: _____	By: _____
_____	_____
(Signature of Subcontract or Contractor)	(Signature of General Contractor if for Subcontractor)

Representatives to be contacted for service:

Name: _____

Address: _____

_____

Phone Number:_____

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between the Antioch Unified School District, whose address is 510 G Street, Antioch, California 94509, hereinafter called "Owner", and _____ whose address is _____, hereinafter called "Contractor", and _____ whose address is _____, hereinafter called "Escrow Agent".

For the consideration hereinafter set forth, the Owner, Contractor and Escrow Agent agree as follows:

1. Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for Retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for ____ _____in the amount of _____ dated _____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the Retention earnings directly to the escrow agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within ten (10) days of deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as Retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of the Owner, and shall designate the Contractor as beneficial owner.

2. The Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

3. When the Owner makes payments of Retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this Contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

7. The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven (7) days' written notice to the Escrow Agent from the Owner of the notice of default under Article **2.2**, Article **9.6** or Article 14, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the

Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payment of fees and charges.

9. Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

_____

Title

_____

Name

_____

Signature

_____

Address

On behalf of Contractor:

_____

Title

_____

Name

_____

Signature

_____

Address

On behalf of Agent:

_____

Title

Name

Signature

Address

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date set forth above.

OWNER	CONTRACTOR
Title	Title
Name	Name
Signature	Signature

CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS

_____ certifies that it has performed one of the following:

[Name of contractor/consultant]

❑ Pursuant to Education Code Section 45125.1, Contractor has conducted criminal background checks, through the California Department of Justice, of all employees providing services to the Antioch Unified School District, pursuant to the Contract/Purchase Order dated _____, and Contractor hereby certifies that none of the employees have been convicted of or have an arrest pending final adjudication for any serious or violent felonies, as specified in Penal Code Sections 1192.7(c) and 667.5(c), respectively.

As further required by Education Code Section 45125.1, attached hereto as Attachment "A" is a list of the names of the employees of the undersigned who may come in contact with pupils.

OR

❑ Pursuant to Education Code Section 45125.2, Contractor will ensure the safety of pupils by one or more of the following methods:

❑ 1. The installation of a physical barrier at the worksite to limit contact with pupils.

❑ 2. Continual supervision and monitoring of all employees of the entity by an employee of the entity whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Date_____, 20___

_____
[Name of Contractor/Consultant]

_____

By its:_____

ATTACHMENT A:

CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS

(INSERT NAMES OF EMPLOYEES WHO MAY COME IN CONTACT WITH PUPILS)

ARTICLE 1
DEFINITIONS

1.1 BASIC DEFINITIONS

NOTE: The following shall not be construed as a comprehensive list of all definitions in the Contract Documents and there may be other definitions set forth in the Contract Documents. Additionally, any references to any forms, documents or requirements shall be construed to incorporate any updates, supplements, or additions. The Contractor shall be required to meet the latest requirements applicable to the Project.

1.1.1 Action of the Governing Board is a vote of a majority of the District's Governing Board.

1.1.2 Approval means written authorization through action of the Governing Board.

1.1.3 Architect **NOT APPLICABLE TO THIS PROJECT**

1.1.4 As-Builts are a set of Plans and Specifications maintained by the Contractor clearly showing all changes, revisions, substitutions, field changes, final locations, and other significant features of the Project. The As-Builts shall be maintained continuously throughout the Work for the Project and is both a prerequisite to the issuance of Payment Application and a requirement for Contract Close-Out. (See Article 3.17)

1.1.5 Beneficial Occupancy is the point in time when a building (or buildings) is fit for occupancy and its intended use. Basic requirements are that the building is safe, at or near Substantial Completion, and all fire/life safety items are approved and operational. The fact that a building is occupied does not mean that the building is ready for Beneficial Occupancy if there are elements that are unsafe or if fire/life safety items are not approved and operational. Taking occupancy on a structure that is under a fire watch is not considered beneficial occupancy. Further, taking of Beneficial Occupancy is not a point in time when retention is due unless the entire Project has obtained a Certificate of Substantial Completion that meets the definition of 1.1.46.

1.1.6 Claims. A Claim is a request for payment, supported by back-up documentation which includes, invoices time sheets, or other documents substantiating legitimacy or entitlement that is submitted during the Project or immediately following the Project made prior to the Final Retention Payment Application and prior to Final Completion of the Project. A "Claim" means a separate demand by the Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the CONTRACT and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (3) and amount the payment of which is disputed by the District. (See Article 4.6)

1.1.7 Change Order (CO). A CO is a written instrument prepared by the Construction Manager and signed by the District (as authorized by the District's Governing Board), the Contractor, and the Construction Manager, stating their agreement upon (1) A description of a change in the Work, (2) The amount of the adjustment in the Contract Sum, if any; and (3) The extent of the adjustment in the Contract Time, if any. (See Article 7.2)

1.1.8 Change Order Request (COR). A COR is a written request supported by backup documentation prepared by the Contractor requesting that the District and the Construction Manager issue

a CO based upon a proposed change, or a change that results in an adjustment in cost, time or both, or arising from an RFP, CCD or ICD. (See Article 7.6)

1.1.9 Close-Out means the process for Final Completion of the Project (See Article 9.9)

1.1.10 Construction Change Document (CCD). A Construction Change Document is a term that is utilized to address changes to the approved Plans and Specifications.

1.1.11 Complete/ Completion/ Final Completion means that all Work in the Contract Documents is finished, the requirements of the Contract Documents have been met, the Project has been Closed Out, and all Work has ceased on the Project. This may also be referred to as Final Completion. In most cases, the recording of a Notice of Completion shall represent Completion of the Project. Beneficial Occupancy does not mean the Work is Complete.

1.1.12 Completion Date is the date when all Work for the Project shall be Substantially Complete and is the date assigned at the end of the Contract Time for the Project. (See Article 1.1.46

1.1.13 Construction Manager. The Construction Manager is a consultant to the District contracted to assist in Project planning, management and construction of the Project. If there is a Construction Manager, they may assist in various aspects of the Project including, but not limited to Monitoring the progress of the construction, reviewing and monitoring the schedule, progress of work, monitoring pay requests, facilitating communications, advising the District and its Board of Education on various aspects of the construction process, monitoring the RFI, COR, CCD, ICD, RFP, Claims, Disputes and other Project related processes.

1.1.14 Contract or Agreement when the terms are used in these General Conditions shall be references to the Contract Documents as defined herein.

1.1.15 Contract Documents (sometimes referred to as Construction Documents) consist of the Agreement between District and Contractor (hereinafter the Agreement or Contract), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Bid Clarifications issued prior to bid, instructions to bidders, notice to bidders, and the requirements contained in the Bid Documents, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is a written amendment to the Contract signed by parties, a Change Order, a Construction Change Document, or a written order for a minor change in the Work issued by the Construction Manager. The Contract Documents collectively form the Contract. The Contract represents the entire and integrated Agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Construction Manager and Contractor, between the District and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the District and the Contractor. The Construction Manager shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Construction Manager's duties.

1.1.16 Contract Time is the time period specified in the Contract Documents in which the Project shall be completed. This is sometimes referred to a Contract Duration, or "time in which the Contractor has to complete the Project". (See Article 8.1.1)

1.1.17 Contractor, District, and Construction Manager are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if they are of singular number and neuter gender. Any reference to "Owner" shall mean "District" or Antioch Unified School District.

1.1.18 Cure is the act of remedying a material failure to perform under the terms of the Contract Documents during the time provided to correct Contractor's Default. Specific time periods are provided to Cure and Correct a Contractor Default under Article 14 and for a Partial Default under Article 2.2 as well as elsewhere in the Contract Documents.

1.1.19 Days mean calendar days unless otherwise specifically stated.

1.1.20 Default is a material breach of Contract. A Termination for Cause under Article 14 is a declaration of Default of the Contract and shall act as a demand upon the Surety to perform under the terms of the Performance Bond. Partial Defaults may also be tendered to the Surety at District's discretion. (See Article 2.2)

1.1.21 Dispute. A dispute is a disagreement on terms or conditions of the Project where the Contractor's opinion of the Project, Payment, Change Order or Request for Proposal differs from that of the District or Construction Manager. A dispute only rises to the level of a claim once the dispute is assembled with back-up documentation and presented for evaluation. (See Article 4.6)

1.1.22 District Representative is the person designated by the District to represent the District during the Construction for the Project. This District Representative shall have the delegated authority as further defined in Article 1.1.2. This District Representative may be an employee of the District who may have the delegated authority as set forth in Article 1.1.3, and may also include Construction Managers. In some cases, the District and its Board may be assisted by a Construction Manager. When a Construction Manager is assisting the District, the Contractor, Architect, and Inspector shall have a primary contact with the District's Construction Manager who will advise the District.

1.1.23 Drawings/Plans are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including Plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Construction Manager. Sometimes Drawings will also be included in Bid Clarifications, Change Orders, and Specifications.

1.1.24 DSA is the Division of State Architect. **NOT APPLICABLE TO THIS PROJECT**

1.1.25 Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent threat to the continuation of school classes, a critical path delay that will result in not being able to occupy the school when students arrive to use the facility, danger from the facility or from outside the facility, Act of God, or other action which requires immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.

1.1.26 Float the total number of days an activity may be extended or delayed without delaying the Completion Date shown in the schedule. Float will fall into three categories: (1) Rain Days; (2) Governmental Delays; and, (3) Project Float. (See Article 8.1.4)

1.1.27 Immediate Change Directive. (ICD) A written order prepared by the Construction Manager and signed by the District and the Construction Manager, directing a change in the Work where the Work

must proceed immediately and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. (See Article 7.3)

1.1.28 Inspector of Record (IOR)/ Project Inspector (PI) is the individual retained by the District in accordance with Title 24 of the California Code of Regulations and who will be assigned to the Project

1.1.29 Notice of Non-Compliance is a document issued by the Inspector if there is a deviation from the approved Plans, Specifications, and Change Orders. (See Article 7.1.2)

1.1.30 Payment Application or Certificate of Payment is the Contractor's certified representation of the actual level of Work performed on the Project. Payment Applications are sometimes also called "Certificate of Payment", "Request for Payment", "Payment Application", or similar terms, and shall follow the Schedule of Values that are approved by the Construction Manager, Inspector and District. (See Article 9.3)

1.1.31 Project is the complete construction of the Work performed in accordance with the Contract Documents.

1.1.32 Project Manual is the volume assembled for the Work which may include, without limitation, the bidding requirements, sample forms, Conditions of the Contract, and Specifications.

1.1.33 Provide shall include "provide complete in place," that is "furnish and install complete."

1.1.34 Punch List/ Punch Item/ Incomplete Punch Item is a list of minor repair items, prepared after the issuance of a Certificate of Substantial Completion, by the Inspector and Construction Manager of Work required in order to complete the Contract Documents and ensure compliance with the Approved Plans so the Project may be Closed Out. Issuance of the Retention Payment is dependent of the proper completion of the Punch List. (See Article 9.9)

1.1.34.1 *Contractor's List of Punch Items* is a list of minor repair items the Contractor submits when the Contractor considers the Work Substantially Complete. Submission of this List of Incomplete Punch Items is the Contractor's representation that the Project is Substantially Complete. (See Article 9.9.1.1)

1.1.35 Request for Information (RFI) is a written request prepared by the Contractor requesting the Construction Manager to provide additional information necessary to clarify or amplify an item which the Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems which have arisen under field conditions. (See Article 7.4)

1.1.36 Request for Proposal (RFP) is a written request prepared by the Construction Manager (CM) requesting the Contractor to submit to an estimate of the effect of a proposed change on the Contract Price and (if applicable) the Contract Time. (See Article 7.5)

1.1.37 Safety Orders are those issued by any city, county, state or federal agency having jurisdiction over the Project.

1.1.38 Schedule is the Contractor's view of the practical way in which the Work will be accomplished. In this Agreement there is a requirement for a Baseline Schedule and regular Schedule Updates that show all Work to be completed during the Contract Time and shall include all items listed under Article 8.3.2.9. See Article 8 of the General Conditions.

1.1.39 Schedule of Values is a detailed breakdown of the Contract Price for each Project, building, Phase of Work or Site as determined by the District. This Schedule of Values shall adequately detail the price for the Work so Progress Payments Applications can be meaningfully reviewed by the Inspector, Construction Manager of Record, Engineer of Record, and District. (See Article 9.2)

1.1.40 Separate Contracts are Contracts that the District may have with other Contractors, vendors, suppliers, or entities to perform Work on the Project. This may include, but is not limited to Multi-Prime Trade Contractors, furniture installers, testing agencies, clean-up contractors, or network or low voltage contractors. Contractor shall plan for certain other contractors that may also be working on the Project site and address these other contractors in Contractor's Schedule. (See Article 6)

1.1.41 Site refers to the grounds of the Project as defined in the Contract Documents and such adjacent lands as may be directly affected by the performance of the Work.

1.1.42 Specifications are that portion of the Contract Documents consisting of the written requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related services.

1.1.43 Standards, Rules, and Regulations referred to are recognized printed standards and shall be considered as one and a part of these Specifications within limits specified. Federal, state and local regulations are incorporated into the Contract Documents by reference.

1.1.44 Stop Work Order, or an Order to Comply, is issued when work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until the District withdraws the Stop Work Order. Pursuant to Education Code section 17307.5(b), the District shall not be held liable in any action filed against the District for any delays caused by compliance with the Stop Work Order

1.1.45 Subcontractor, as used herein, includes those having direct or indirect contracts with Contractor and ones who furnished labor, material or services for a special design according to Plans, Drawings, and Specifications of this Work.

1.1.46 Substantial Completion/ Substantially Complete(d) is not reached unless and until each of the following four (4) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch List Items (See Article 9.9.1.2); (2) All Fire/Life Safety Systems have been installed, and are working and signed off, and all building systems including mechanical, electrical and plumbing are all functioning; (3) all other items in the Exhibit A – scope of work have been approved and signed off; and (4) the Project is fit for occupancy and its intended use. For the purposes of this Contract, any references to Completion Date means Substantial Completion Date.

1.1.47 Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by the Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of Article 3.10.

1.1.48 Supplementary Conditions/ Supplementary General Conditions/ Special Conditions are terms that are sometimes used interchangeably and refer to any additional requirements or changes to the General Conditions as noted.

1.1.49 Surety is the person, firm, or corporation that executes as a bid bond, Payment Bond or Performance Bond guarantor on the Contractor's Bid, Contractor's Performance on the Contract and Payment of the Contractor's Subcontractors, material suppliers, vendors and labor on the Project. The Surety is bound to the same extent as the Contractor is bound once a Default occurs. A default includes a Termination for Substantial Failure to Perform under Article 14, but also includes any breach of Contract and is subject to the requirements and responsibilities as set forth in the Performance Bond.

1.1.50 Work shall include all labor, materials, services and equipment necessary for the Contractor to fulfill all of its obligations pursuant to the Contract Documents. It shall include the initial obligation of any Contractor or Subcontractor who performs any portion of the Work, to visit the Site of the proposed Work (a continuing obligation after the commencement of the Work), to fully acquaint and familiarize itself with the conditions as they exist and the character of the operations to be carried out under the Contract Documents, and make such investigation as it may see fit so that it shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract Documents. Each such Contractor and its Subcontractors shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated Contract Documents and bid documents before preparing and submitting any bid.

1.1.51 Workers include laborers, workers, and mechanics.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 Correlation and Intent

1.2.1.1 *Documents Complementary and Inclusive*. The Contract Documents are complementary and are intended to include all items required for the proper execution and completion of the Work. All Contract Documents form the Contractor's Contract with the District. Any item of Work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. The Contractor is bound to provide the Work complete and is under a legal duty to carefully study Plans and schedule operations well ahead of time and identify inconsistencies with the Plans and Specifications and call such inconsistencies to the attention of the Construction Manager or Registered Engineer through the Inspector under Section 4-343(b) of Title 24.

1.2.1.2 *Work to be Complete*. Contractor has thoroughly studied the Contract Documents and understands that the District contracted with Contractor to provide a complete Project which means complete systems and buildings. The entire set of Contract Documents shows a complete Project and Contractor agrees that there are multiple disciplines putting together a set of Contract Documents. Thus, if portions of a system are shown on some Drawings and not others, this does not mean the Contractor is to only provide part of a system. For example, if an air conditioning unit is shown on the mechanical Drawings, the plumbing for the air conditioning is shown on another Drawing, and the electrical shown on the electrical Drawings, the Contractor is to provide a complete and working air conditioning system. The only time when an item is supplied incomplete is if the system is shown specifically as incomplete since others will be completing the system. Work includes, but is not limited to materials, workmanship, and manufacture of fabrication of components for the Project.

1.2.1.3 *Coverage of the Drawings and Specifications*. The Drawings and Specifications generally describe the Work to be performed by Contractor. Generally, the Specifications describe Work which cannot be readily indicated on the Drawings and indicate types, qualities, and methods

of installation of the various materials and equipment required for the Work. It is not intended to mention every item of Work in the Specifications, which can be adequately shown on the Drawings, or to show on the Drawings all items of Work described or required by the Specifications even if they are of such nature that they could have been shown. All materials or labor for Work, which is shown on either the Drawings or the Specifications (or is reasonably inferable therefrom as being necessary to complete the Work), shall be provided by the Contractor. The Contractor is responsible for the whole Project as contractually set forth as the Contract Documents. It is intended that the Work be of sound, quality construction, and the Contractor shall be responsible for the inclusion of adequate amounts to cover installation of all items indicated, described, or implied in the portion of the Work to be performed by them.

1.2.1.4 *Conflicts*. In the event there is a discrepancy between the various Contract Documents, it is intended that the more stringent, higher quality, and greater quantity of Work shall apply.

1.2.1.5 *Conformance with Laws*. Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, even if through mistake or otherwise any such provision is not inserted, or is not correctly inserted. Contractor, all Subcontractors and any and all workers performing Work on this Project shall fully comply with all laws, ordinances, codes, rules and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents including, but not limited to, any existing and future order, regulations, guidelines or other requirements issued by any federal, state or local authority applicable to the Project. All workers shall comply with current recommendations and requirements related to COVID-19. All workers must fully comply with any current and future orders and recommendations issued by the County where the District is located including, but not limited to, the County Public Health Department, as well as other applicable guidelines and recommendations issued by OSHA and CDC. If there are any inconsistencies or conflicts with any guidelines or recommendations, the stricter and more stringent provisions shall apply and prevail.

Before commencing any portion of the Work, Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. Such checking shall include review of Title 24 of the California Code of Regulations, California Building Code, local utility, local water connection, local grading and all other applicable agencies. In the event Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with the Contract Documents, Contractor shall, within five (5) days, notify the Inspector, Construction Manager and District in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project. (See Title 24 Section 4-343)

The Contractor shall bear all expenses of correcting Work done contrary to said laws, ordinances, rules, and regulations if the Contractor performed same (1) without first consulting the Construction Manager for further instructions regarding said Work or (2) disregarded the Construction Manager's instructions regarding said Work.

1.2.1.6 *Ambiguity and Inconsistency.* Before commencing any portion of the Work, Contractor shall carefully examine all Drawings and Specifications and other information given to

Contractor as to materials and methods of construction and other Project requirements. Prior to commencing any portion of the Work, Contractor shall notify Construction Manager and District in writing of any perceived or alleged error, inconsistency, conflict, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If the Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Price or the time for performance. Contractor shall maintain an adequate inspection system and perform personal observations and review work and pre-plan the project to ensure the Work performed under the Contract conforms to Contract requirements. Contractor shall maintain records of such review and observation to ensure strict compliance with the terms of the Contract.

1.2.1.7 *Typical Parts and Sections.* Whenever typical parts or sections of the Work are completely detailed on the Drawings, and other parts or sections which are of the same construction are shown in outline only, the complete or more detailed shall apply to the Work which is shown in outline.

1.2.1.8 *Dimensions.* Dimensions of Work shall not be determined by scale or rule. Figured dimensions shall be followed at all times. If figured dimensions are lacking on Drawings, Construction Manager shall supply them on request. The Construction Manager's decisions on matters relating to aesthetic effect will be final.

1.2.2 Bid Clarifications and Deferred Approvals

1.2.2.1 *Bid Clarifications* are the changes in Specifications, Drawings, Contract Documents, and Plans which have been authorized in writing by the District or Construction Manager, and which alter, explain, or clarify the Contract Documents. Bid Clarifications shall govern over all other Contract Documents. Subsequent bid clarifications issued shall govern over prior bid clarifications unless otherwise specified in the bid clarification.

1.2.2.2 *Deferred Approvals*. **NOT APPLICABLE TO THIS PROJECT**

1.2.3 Specification Interpretation

1.2.3.1 *Titles*. The Specifications are separated into titled sections for convenience only and not to dictate or determine the trade or craft involved.

1.2.3.2 *As Shown, Etc*. Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Construction Manager is intended unless otherwise stated.

1.2.3.3 *General Conditions*. The General Conditions and Supplementary General Conditions are a part of the Contract Documents which further defines and refines the Contract entered between the Contractor and District.

1.2.3.4 *Abbreviations*. In the interest of brevity, the Specifications are written in an abbreviated form and may not include complete sentences. Omission of words or phrases such as "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Specifications are

mandatory. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings. In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.2.3.5 *Plural*. Words in the singular shall include the plural whenever applicable or the context so indicates.

1.2.3.6 *Metric*. The Specifications may indicate metric units of measurement as a supplement to U.S. customary units. When indicated thus: 1" (25 mm), the U. S. customary unit is specific, and the metric unit is nonspecific. When not shown with parentheses, the unit is specific. The metric units correspond to the "International System of Units" (SI) and generally follow ASTM E 380, "Standard for Metric Practice."

1.2.3.7 *Standard Specifications*. Any reference to standard specifications of any society, institute, association, or governmental authority is a reference to the organization's standard specifications, which are in effect at the date of the Contractor's proposal unless directed otherwise. If applicable specifications are revised prior to completion of any part of the Work, the Contractor may, if acceptable to Construction Manager, perform such Work in accordance with the revised specifications. The standard specifications, except as modified in the Specifications for the Project, shall have full force and effect as though printed in the Specifications. Construction Manager will furnish, upon request, information as to how copies of the standard specifications referred to may be obtained.

1.2.4 Rules of Document Interpretation

1.2.4.1 In the event of conflict within the Drawings, the following rules shall apply:

a. General Notes, when identified as such, shall be incorporated into other portions of Drawings.

b. Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as General Notes.

c. Larger scale Drawings shall take precedence over smaller scale Drawings.

d. At no time shall the Contractor base construction on scaled Drawings.

1.2.4.2 Specifications shall govern as to materials, workmanship, and installation procedures.

1.2.4.3 If Contractor observes that Drawings and Specifications are in conflict, Contractor shall, prior to commencing work, notify the Construction Manager in writing for the purposes of obtaining an interpretation of the Contact Documents.

1.2.4.4 In the case of conflict or inconsistencies, the order of precedence shall be as follows:

a. General Conditions take precedence over Drawings and Specifications.

b. Supplemental Conditions take precedence over General Conditions.

c. The Agreement Form shall take precedence over the Supplemental Conditions.

d. In the case of disagreement or conflict between or within Specifications, and Drawings, the more stringent, higher quality, and greater quantity of Work shall apply.

e. Bid clarifications shall take precedence over Drawings and Specifications.

f. General Conditions shall take precedence over Bid Clarifications.

g. Drawings and Specifications take precedence over the Soils Report.

1.3 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

The Drawings, Specifications, and other Contract Documents for the Project are the property of the District and/or Construction Manager pursuant Contract requirements between the District and Construction Manager. The Contractor may retain one Contract record set. Neither the Contractor nor any Subcontractor, or material or equipment supplier shall own or claim a Copyright in the Drawings, Specifications, and other documents prepared by the Construction Manager. All copies except the Contractor's record set, shall be returned or properly accounted for upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Construction Manager, and copies thereof furnished to the Contractor are not to be used by the Contractor or any Subcontractor, Sub-subcontractor, or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work. The District and/or Construction Manager hereby grants the Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings, Specifications, and other documents prepared for the Project in the execution of their Work under the Contract Documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the District's property interest or other reserved right.

ARTICLE 2
DISTRICT

2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT

2.1.1 Site Survey

The District will furnish, at its expense, a legal description of the Site and a land survey showing the boundaries of the Site. Contractor shall be responsible for all surveys regarding location of construction, grading and site work.

2.1.2 Soils

When required by the scope of the Project, the District will furnish, at its expense, the services of geotechnical engineers or consultants when reasonably required and deemed necessary by the Construction Manager or as required by local or state codes. Such services, with written reports and appropriate written professional recommendations, may include test boring, test pits, soil bearing values, percolation tests, air and water pollution tests, and ground corrosion and resistivity tests, including necessary operations for determining subsoil, air, and water conditions.

2.1.3 Soils Report Part of the Contract Documents: Reserved

2.1.4 Utilities

2.1.4.1 *Location of Point of Connection*. Reserved

2.1.4.2 *Regional Notification Center.* Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) business days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. See Government Code section 4216.3. No excavation shall be commenced and carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any Subcontractor of the Contractor and the District has been given the identification number by the Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Contractor. Contractor shall solely be responsible for any fines, penalties or damages for violation of this Article and Government Code section 4216.6 or 4216.7. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Contractor and shall not be considered for extension of time pursuant to Article 8.4.

2.1.4.3 *Utilities - Removal and Restoration.*

No excavations were made to verify the locations shown for underground utilities. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing work which could result in damage to such utilities. The Contractor shall immediately notify the District's representative as to any utility main or trunkline discovered by Contractor.

Contractor shall coordinate its Work with all utilities, including, but not limited to electricity, water, gas and telephone and meet with said utilities prior to the start of any work. Contractor shall show timing of all utility coordination activities under the Scheduling requirements of Article 8.

2.1.4.4 *Other Utilities.* In case it should be necessary to remove, relocate, or temporarily maintain a utility because of interference with the Work, the Contractor shall notify the Construction Manager and District to discuss how to proceed.

2.1.5 Existing Utility Lines; Removal, Relocation

2.1.5.1 *Main or Trunkline Facilities*. If the Contractor while performing the Contract work discovers utility facilities not identified in the Contract Documents, Contractor shall notify the District and utility in writing prior to commencing work.

The owner of the public utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

The Contractor shall exercise reasonable care and shall be compensated by the District for the actual verified field costs of locating, and removing, relocating, protecting or temporarily maintaining such main or trunkline utility facilities located in conflict with the project. This Work shall be performed in accordance with Article 7 of these General Conditions.

2.1.5.2 *Assessment*. Nothing in these subparagraphs shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Site and could be inferred from the Main or Trunklines.

2.1.5.3 *Notification*. If the Contractor, while performing Work under this Contract, discovers utility facilities not identified by the District in the Contract Documents. Contractor shall, within five (5) days, notify the District and the utility in writing. If Contractor fails to notify the District within forty eight hours after discovery of any utility facilities, Contractor waives all rights to be compensated for any extra Work or damages resulting from such discovered utilities.

2.1.6 Easements

District shall secure and pay for easements for permanent structures or permanent changes in existing facilities, if any, unless otherwise specified in the Contract Documents.

2.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK DUE TO PARTIAL DEFAULT IN A SPECIFIC SEGREGATED AREA OF WORK (48 HOUR NOTICE TO CURE AND CORRECT)

If the Contractor Defaults or neglects to carry out the Work in accordance with the Contract Documents, the District may provide forty-eight (48) hour written notice to cure (a shorter period of time in the case of Emergency or a critical path delay as defined in Article 2.2.1) Contractor's Partial Default in a specific segregated area of work. The District's right to issue a Partial Default of the Contractor's Work and take over that segregated area of Work includes, but is not limited to:

1. Failure to supply adequate workers on the entire Project or any part thereof;

2. Failure to supply a sufficient quantity of materials;

3. Failure to perform any provision of this Contract;

4. Failure to comply with safety requirements, or due to Contractor is creation of an unsafe condition;

5. Cases of bona fide emergency;

6. Failure to order materials in a timely manner;

7. Failure to prepare Deferred Approval items or Shop Drawings in a timely manner;

8. Failure to comply with Contractor's Baseline or Update Schedule, meet critical Milestones which would result in a delay to the critical path, or delay the Contract Time;

9. Failure to comply with the Subletting and Subcontracting Fair Practices, Public Contract Code section 4100, et seq.

10. Failure to meet the requirements of the Americans with Disabilities Act;

11. Failure to complete Punch List work;

12. Failure to proceed on an Immediate Change Directive

13. Failure to correct a Notice of Deviation

If during the forty eight (48) hour period, the Contractor fails to Cure and correct the deficiency noted in the 48 hour notice of Partial Default with diligence and promptness, the District may correct such deficiencies without prejudice to other remedies the District may have, including a Termination for Cause as set forth in Article 14. If there are inadequate funds remaining the Project balance or in the Retention Escrow to address at least 150% of the costs set forth in the Article 2.2 notice, the District may copy the Surety on the written notice of Partial Default. If a notice to the Surety is provided, except in the cases of emergency or critical path delay, the Surety has the option to take over and complete the Work described in the written notice if Surety personally delivers notice to District that it intends to perform such work. In the case where written notice has been provided, the District shall allow Surety seven (7) days to perform the Work.

2.2.1 Service of Notice of Partial Default with Right to Cure

A written notice of Partial Default and right to cure under Article 2.2 ("Article 2.2 Notice" or "Notice of Partial Default") shall be served by e-mail (with a copy provided by regular mail) to the e-mail address provided on the Bid submitted and copied to the Project Superintendent.

2.2.2 Shortened Time for Partial Default in the Case of Emergencies.

In an Emergency situation, the District may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies by providing service of written notice of Emergency requiring a shortened time for Partial Default specifying the time given to cure, if any.

2.2.3 Shortened Time for Partial Default in the Case of Critical Path Delay

In the case of critical path delay, the District may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies providing service of written notice of critical path delay to the Contractor with a specific description of the critical path delay items noting the line item or area of Work that is on the critical path and prescribe the length of shortened time to cure, if any.

2.2.4 Written Notice of Partial Default to be Deducted by Deductive Change Order

The District shall have the right to determine the reasonable value of the Article 2.2 Partial Default Work, or if there is an actual value for the Work, shall use that value and issue a Deductive Change Orders under Article 7.7.4

ARTICLE 3
THE CONTRACTOR

3.1 SUPERVISION AND CONSTRUCTION PROCEDURES

3.1.1 Contractor

The Contractor shall continually supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, procedures; and shall coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. The Contractor shall not perform the Work without utilizing the Contract Documents or, where required, approved Submittals, Shop Drawings, or samples for any such portion of the Work. If any of the Work is performed by contractors retained directly by the District, Contractor shall be responsible for the coordination and sequencing of the work of those other contractors so as to avoid any impact on the Project Schedule pursuant to the requirements of Article 6 and Article 8. Specific duties of the Contractor shall include those set out in Section 43 of Title 21 of the California Code of Regulations and Section 4-343 of Title 24 of the California Code of Regulations. These duties include, but are not limited to the following:

3.1.1.1 *Responsibilities*. It is the duty of the Contractor to complete the Work covered by his or her Contract in accordance with the approved Plans and Specifications. The Contractor in no way is relieved of any responsibility by the activities of the Construction Manager, Engineer or Inspector in the performance of their duties.

3.1.1.2 Performance of the Work. The Contractor shall carefully study the approved Plans, Specifications and Exhibits and shall plan its schedule of operations well ahead of time. If at any time it is discovered that work is being done which is not in accordance with the approved Plans and Specifications, the Contractor shall correct the Work immediately.

3.1.2 Contractor Responsibility to Study the Plans and Specifications

All inconsistencies or timing or sequences which appear to be in error in the Plans and Specifications shall promptly be called to the attention of Lathrop Construction Associates, for interpretation or correction. Local conditions which may affect the structure shall be brought to the District's attention at once. In no case, shall the instruction of the District be construed to cause work to be done which is not in conformity with the approved Plans, Specifications, change orders, construction change documents, and as required by law. (See Title 24, Section 4-343)

3.1.3 All Work Under the Direction of Inspector

Pursuant to Title 24 requirements, the Contractor shall not carry on Work except with the knowledge of the Inspector. (See Title 24 generally)

3.1.4 Contractor to Establish Timing and Protocol with Inspector

Contractor shall establish a protocol for requesting inspection with Inspector so as to not delay the Work and provide adequate time for the Inspector to perform inspection. Contractor is responsible for delays and for failure to plan.

For some Projects, there may be a need to incrementally install certain assemblies. It is up to Contractor to identify areas and assemblies that may be constructed incrementally. Contractor must identify and establish incremental areas of construction and establish protocols with Inspector.

3.1.5 Verified Reports

The Contractor shall make and submit to the office from time to time, verified reports as required in Title 24 Section 4-366. As part of the Close-Out of the Project (see Article 9.9), Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343.

Contractor shall fully comply with any and all reporting requirements of Education Code sections 17315, et seq., in the manner prescribed by Title 24, as applicable.

3.1.6 Contractor Responsibility

The Contractor shall be responsible to the District for acts and omissions of the Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with the Contractor or any of its Subcontractors.

3.1.7 Obligations not Changed by Construction Manager's Actions

The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager in the Construction Manager's administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Contractor.

3.1.8 Acceptance/Approval of Work

The Contractor shall be responsible to determine when any completed portions of the Work already performed under this Contract or provided pursuant to Article 6 are suitable to receive subsequent Work thereon.

3.2 SUPERVISION

3.2.1 Full Time Supervision

Unless personally present on the Project site where the Work is being performed, the Contractor shall keep on the Work at all times during its progress a competent, English speaking construction Superintendent satisfactory to the District. The Superintendent shall be present on a full-time basis, shall be dedicated exclusively to the Project and shall not share superintendency duties with another project or job. The Superintendent shall not be replaced except with written consent of the District. The Superintendent shall represent the Contractor in its absence and shall be fully authorized to receive and fulfill any instruction from the Inspector, the District or any other District Representative (including CM in the cases where the District has a CM representative). All Requests for Information shall be originated by the Superintendent and responses thereto shall be given to the Superintendent. No Work shall begin on any day by any Subcontractor or other person on the Project site until the Superintendent has arrived, or shall any Work continue during the day after the Superintendent has departed from the Project site. The Superintendent shall have authority to bind Contractor through the Superintendent's acts. The

Superintendent shall represent the Contractor, and communications given to the Superintendent shall be binding on the Contractor. Before commencing the Work, Contractor shall give written notice to District (and CM representative) the name and a Statement of Qualifications of such superintendent. Superintendent shall not be changed except with written consent of District, unless a superintendent proves to be unsatisfactory to Contractor and ceases to be in its employ, in which case, Contractor shall notify District and Construction Manager in writing. Contractor shall provide a replacement superintendent approved by the District prior to performing additional work.

3.2.2 Staff

Notwithstanding other requirements of the Contract Documents, the Contractor and each Subcontractor shall: (1) furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work; (2) organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and (3) keep an adequate force of skilled and fit workers on the job to complete the Work in accordance with all requirements of the Contract Documents.

3.2.3 Right to Remove

District shall have the right, but not the obligation, to require the removal from the Project of any superintendent, staff member, agent, or employee of any Contractor, Subcontractor, material or equipment supplier.

3.3 LABOR AND MATERIALS

3.3.1 Contractor to Provide

Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, water, heat, air conditioning, utilities, transportation, and other facilities, services and permits necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

3.3.2 Quality

Unless otherwise specified, all materials and equipment to be permanently installed in the Project shall be new and shall be of the highest quality or as specifically stated in the Contract Documents. The Contractor shall, if requested, furnish satisfactory evidence as to kind and quality of all materials and equipment within ten (10) days of a written request by the District, including furnishing the District with bona fide copies of invoices for materials or services provided on the Project. All labor shall be performed by workers skilled in their respective trades, and shall be of the same or higher quality as with the standards of other school construction.

3.3.3 Replacement

Any work, materials, or equipment, which do not conform to these requirements or the standards set forth in the Contract Documents, may be disapproved by the District, in which case, they shall be removed and replaced by the Contractor at no additional cost or extension of time to the District.

3.3.4 Discipline

The Contractor shall enforce strict discipline and good order among the Contractor's and Subcontractor's employees, and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. As used in this subsection, "unfit" includes any person who the District concludes is improperly skilled for the task assigned to that person, who fails to comply with the requirements of this article, or who creates safety hazards which jeopardize other persons and/or property.

3.3.5 Fingerprinting (Applicable at the time Project is Occupied and on all Projects where Workers will come in Contact with Pupils, such as Modernization Projects)

If applicable, Contractor shall comply with the applicable provisions of Education Code section 45125.1 in a method as determined by the District. Pursuant to Education Code section 45125.1, Contractor shall either conduct criminal background checks of all employees of Contractor assigned to the Project site, and shall certify that no employees who have been convicted of or who have an arrest pending final adjudication for any serious or violent felonies, as specified in Education Code section 45125.1, will have contact with pupils, by utilizing the Contractor Certification Regarding Background Checks and the corresponding Attachment "A" as found in the Contract Documents or shall be separated by a physical barrier from students.

If it is determined that Contractor must provide certification of employees, as part of such certification, Contractor must provide the District with a list of all employees providing services pursuant to this Agreement, and designate which sites such employees will be assigned. In performing the services set forth in this Agreement, Contractor shall not utilize any employees who are not included on the above-referenced list.

Contractor's failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at District's sole discretion, without any further compensation to Contractor.

In the case of new construction Projects where there are no students, if the Project Schedule provides for Beneficial Occupancy or portions of the Project or if the Project should be delayed, then Contractor, at no additional costs, shall meet the requirements of either fingerprinting or providing a physical barrier as required by the District.

3.3.6 Noise, Drugs, Tobacco, and Alcohol

Contractor shall take all steps necessary to insure that employees of Contractor or any of its Subcontractors' employees do not use, consume, or work under the influence of any alcohol, tobacco or illegal drugs while on the Project. Contractor shall further prevent any of its employees or its Subcontractor employees from playing any recorded music devices or radios or wearing any radio headphone devices for entertainment while working on the Project. Likewise, Contractor shall prevent its employees or Subcontractor's employees from bringing any animal onto the Project. Contractors shall not violate any written school policies.

3.3.7 Delivery of Material

Contractor shall place orders for materials or equipment so that the Work may be completed in accordance with the Construction schedule for the Work as set forth in Article 8 of this Agreement. Contractor shall, upon demand from the District, furnish to the District documentary evidence including, but not limited to purchase orders, invoices, bills of materials, work orders and bills of lading, showing that orders have been placed. Contractor shall have a system to receive materials and to ensure that the proper materials are being delivered, including in the case of critical materials to the Project, checking the delivery against Shop Drawings and ensuring that the materials meet the requirements of not only the Plans, Specifications and Exhibits, but also the approved Shop Drawings and Submittals and in conformance with Contractor's plan for delivery of materials (including but not limited to Contractor's representations in the Schedules for the Project and Contractor's equipment and materials schedule under Article 3.7.2.2). Contractor shall be responsible for all costs of accepting non-conforming materials delivered to the Project given Contractor's responsibilities and system for acceptance of deliveries. Contractor shall notify Inspector and District Representative (including CM) as early as possible, in writing, of the delivery of materials for the Project. The deliveries shall include documentation identifying the shipment sufficiently so that the Inspector or District Representative (including CM) may review the materials that are received. Under no circumstances shall materials be delivered to the Project site that are meant for another Project.

3.3.8 Liens and Other Security Interests of Subcontractors and Material Suppliers

No material, supplies, or equipment for the Work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with all improvements and appurtenances constructed or placed thereon by it, to District free from any claims, security interests, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any Work covered by this Contract shall have any right to place a lien upon the premises or any improvement or appurtenance thereof, except that Contractor may install metering devices or other equipment of a utility company or political subdivision, title to which is commonly retained by the utility company or political subdivision. In event of installation of any such metering device or equipment, Contractor shall advise District as to its owner within five (5) days of such installation in writing, prior to making the installation.

Contractor agrees to indemnify, defend and hold the District harmless from any liens, stop notices, or assertion of security interests, including judgments and levies. If after written notice Contractor fails to address the lien, stop notice, or other security interest, the District may proceed to address the lien, stop notice or claim and seek reimbursement from Contractor.

3.3.9 Title to Materials

The title to new materials or equipment for the Work of this Contract shall remain with Contractor until incorporated in the Work of this Contract until final acceptance of the Project; no part of said materials shall be removed from its place of storage, and Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the District or its authorized representative. Responsibility for materials remains with Contractor and Contractor shall replace materials in case of loss. District similarly may pay for materials stored off site, but Contractor shall remain responsible for the materials that are stored off site.

3.3.10 Assemblies

For all material and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary, (including engineering as specifically required with Shop Drawings or Deferred Approvals) for complete assemblies and complete working systems. Incidental items not indicated on the Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the Work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized in the Contract Documents in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and Specifications.

3.3.11 Noise Control

The Contractor shall be responsible for the installation of noise reducing devices on construction equipment. Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction equipment noise is subject to the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). If school is in session at any point during the progress of the Project, and, in the District's reasonable discretion, the noise from such Work disrupts or disturbs the students or faculty or the normal operation of the school, at the District's request, the Contractor shall schedule the performance of all such Work around normal school hours or make other arrangements so that the Work does not cause such disruption or disturbance. There are specific periods of testing at operational schools and it is critical that Contractor control noise during periods of testing. In no event shall Contractor have a right to receive additional compensation or an extension to the Contract time as a result of any such rescheduling or the making of such arrangements. These controls shall be implemented during site preparation and construction. All noise related issues, including school operations, and noise during testing should be detailed in the Schedule provided pursuant to Article 8.

3.3.12 Prevention and Reporting of Workplace Violence

3.3.12.1 *Statutory Requirements*. Each employer required by Labor Code Section 6401.7 to have in effect an Injury and Illness Prevention Plan ("IIPP") must also establish, implement and maintain a written Workplace Violence Prevention Plan in accordance with Labor Code Section 6401.9 ("WVPP"). The WVPP may be incorporated as a stand-alone section of the IIPP, or may be a separate document. As described in Subdivision (b)(2) of Section 6401.9, certain employers, employees, and places of employment may be exempt from the WVPP requirements. However, in accordance with Subdivision (b)(3) of Section 6401.9, and notwithstanding an applicable exemption, the California Department of Industrial Relations, Division of Occupational Safety and Health ("Cal OSHA") may issue special orders requiring compliance with WVPP requirements.

3.3.12.2 *Project WVPP.* Not later than five (5) days following receipt of the Notice of Award, and as a condition precedent to commencing any work or services on or at the Project Site, the Contractor shall provide to the District: (i) a complete and accurate copy of the Contractor's WVPP applicable to the Project ("Project WVPP"); and (ii) the name, position, and telephone number of each person having responsibility for implementing the Project WVPP and receiving reports of workplace violence, if and to the extent that information is not conspicuously specified in the Project WVPP. Notwithstanding the District's receipt of the Project WVPP and related information, and subject to coordination requirements specified in Section 3.3.12.3 herein, the Contractor shall at all times retain sole responsibility for: (i) implementing and maintaining the Project WVPP; and (ii) ensuring compliance with Project WVPP requirements by each subcontractor, consultant, supplier, and other entity under contract

with or otherwise subject to the Contractor's control that, for any length of time, will be present on or at the Project Site (each an "Other Employer").

3.3.12.3 *Coordination Requirements*. The Contractor shall implement procedures to effectively coordinate the Project Work Violence Prevention Plan (WVPP) with the District and all Other Employers, to ensure that they and their employees understand their respective roles in connection with the Project WVPP. Such procedures shall ensure that: (i) all employees are trained in regard to workplace violence prevention; (ii) each workplace violence incident involving any employee is reported, investigated, and recorded; and (iii) if any employee experiences a workplace violence incident, the Contractor shall record the information in a violent incident log and shall provide a copy of that log to the District upon request. In addition, and without limiting the foregoing, the Contractor, during weekly safety meetings conducted at the Project Site, shall reiterate the requirements of the Project WVPP and the procedures for reporting and logging workplace violent incidents, and for otherwise complying with requirements of the Project WVPP. The Contractor shall require that all employees who will be on or at the Project Site in connection with the Project (whether employed by the Contractor or any Other Employer) attend (and sign an attendance sheet for) the weekly safety meetings. If attendance at any weekly safety meeting reasonably is not possible with respect to any particular Other Employer (e.g., a supplier whose employee(s) will only temporarily be at the Project Site), the Contractor shall provide and describe directly to each such Other Employer and its applicable employee(s) the requirements of the Project WVPP and the procedures for reporting and logging workplace violent incidents, and for otherwise complying with requirements of the Project WVPP.

3.3.12.4 *Compliance and Indemnification*. In connection with the Project, and without limiting anything else in the Contract, the Contractor shall: (i) fully comply with all applicable requirements of the Project WVPP, Labor Code Section 6401.7, and Labor Code Section 6401.9 (collectively, the "IIPP and WVPP Requirements"); and (ii) ensure that all Other Employers fully comply with all applicable IIPP and WVPP Requirements. With respect to any and each failure by the Contractor or any of the Other Employers to full comply with all appliable IIPP and WVPP Requirements, and in accordance with Section 3.3.12 of these General Conditions, the Contractor shall indemnify, defend, and hold-harmless the District, the District's governing board and each individual member thereof, and the District's other officers, employees, agents and representatives, and each of them.

3.3.13 California Air Resources Board ("CARB")

3.3.13.1 Contractor shall comply, and shall ensure all subcontractors comply, with all applicable requirements of the most current version of the regulations imposed by the California Air Resources Board ("CARB") including, without limitation, all applicable terms of Title 13, California Code of Regulations Division 3, Chapter 9 and all pending amendments ("Fleet Regulation").

3.3.13.2 Throughout the Project, and for three (3) years thereafter, Contractor shall make available for inspection and copying any and all documents or information associated with Contractor's and its subcontractors' fleets including, without limitation, the Certificates of Reported Compliance ("CRCs"), fuel/refueling records, maintenance records, emissions records, and any other information the Contractor is required to produce, keep or maintain pursuant to the Fleet Regulation upon two (2) calendar days' notice from the District.

3.3.13.3 Contractor shall be solely liable for any and all costs associated with compliance with the Fleet Regulation as well as for any and all penalties, fines, damages, or costs associated with any and all violations, or failures to comply with the Fleet Regulation. Contractor shall defend,

indemnify and hold harmless the District, its officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Fleet Regulation.

3.4 WARRANTY

The Contractor warrants to the District that material and equipment furnished under the Contract will be of the highest quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Contractor's warranty to District includes, but is not limited to, the following representations:

3.4.1 In addition to any other warranties provided elsewhere, Contractor shall, and hereby does, warrant all Work after the date of Notice of Completion of Work by District and shall repair or replace any or all such Work, together with any other Work, which may be displaced in so doing that may prove defective in workmanship or materials within a one (1) year period from date of Final Completion which shall be no later than the final date of Punch List as noted at Article 9.11) without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects with reasonable promptness. Contractor shall notify District upon completion of repairs.

3.4.2 In the event of failure of Contractor to comply with above mentioned conditions within one week after being notified in writing, District is hereby authorized to proceed to have defects repaired and made good at expense of Contractor who hereby agrees to pay costs and charges therefore immediately on demand.

3.4.3 If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District, the District will attempt to give the notice required by this Article. If the Contractor cannot be contacted or does not comply with the District's requirements for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this article, proceed to make such correction or attention which shall be charged against Contractor. Such action by the District will not relieve the Contractor of the guarantee provided in this Article or elsewhere in this Contract.

3.4.4 This Article does not in any way limit the guarantee on any items for which a longer warranty is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish District all appropriate guarantee or warranty certificates upon completion of the project.

3.5 TAXES

Contractor will pay all applicable Federal, State, and local taxes on all materials, labor, or services furnished by it, and all taxes arising out of its operations under the Contract Documents. District is exempt from Federal Excise Tax, and a Certificate of Exemption shall be provided upon request.

3.6 PERMITS, FEES AND NOTICES

3.6.1 Payment

The Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work which are necessary after execution of the Contract and are legally required by any authority having jurisdiction over the Project.

3.6.1.1 *DSA Fees*. **NOT APPLICABLE TO THIS PROJECT**

3.6.2 Compliance

The Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work. There will be local governmental oversight from City, County or both. Finally, Regional Water Quality Control Board, State Fire Marshall, local fire marshal, Department of Industrial Relations, Department of Labor Standards Enforcement, and Air Quality Management District (Local and State) are some of the agencies that provide oversight and may require specific permits, fees, or provide oversight over the Project. Contractor represents understanding and specialized knowledge of the rules governing school districts and Contractor shall maintain compliance over the applicable rules and will file all documents required in order to ensure compliance with State, local, and other rules that apply to the Project.

3.6.3 Responsibility

The Contractor shall perform all Work in conformance with every law, statute, ordinance, building code, rule, regulation or order. The Contractor shall assume full responsibility for such Work and shall bear the attributable cost of correction or project delay.

Pursuant to Title 24 Section 4-343(b):

> "Contractor shall carefully study the approved Plans and Specifications and shall plan a schedule of operations well ahead of time.... All inconsistencies or items which appear to be in error in the Plans and Specifications shall be promptly called to the attention of the Construction Manager or registered engineer, through the inspector, for interpretation or correction."

3.7 SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT

3.7.1 Requirements Within Ten (10) Calendar Days

Within ten (10) calendar days after Notice to Proceed, Contract shall submit the following:

3.7.1.1 Detailed Schedule of Values (See Article 9.2)

3.7.1.2 Submittal Listing and Schedule for Submittals

3.7.1.3 Critical Path Baseline Schedule (See Article 8)

3.7.2 Requirements Within Thirty-Five (35) Calendar Days

Within thirty-five (15) calendar days after Notice to Proceed, Contractor shall submit the following:

3.7.2.1 *All Submittals for the Project* except those specifically agreed upon by District, in writing, and shall be specifically incorporated into the Submittal section of the Schedule so as to not delay the Work. The agreement to allow a later Submittal does not mean that Article 3.3.7 is waived. Contractor shall order materials and ensure prices are honored and secured for the Project.

3.7.2.2 *Exceptions to Submittal Within Thirty-Five (15) Days by Written Agreement*. A written request detailing the specific reasons for a submission later than 15 days due to complexity of design or non-critical path status of the Submittal shall be submitted at the time the Baseline Schedule is submitted. The Baseline Schedule shall not include a delayed Submittal until written agreement is provided. In addition to the request for providing a Submittal after the fifteen (15) day period, a copy of the Contract with the Subcontractor who shall be performing the Submittal, a written statement from the Subcontractor verifying that work has commenced on the Submittal and providing Subcontractor's own schedule of Milestones and completion dates, and a corresponding Submittal designation in the Schedule as required under Article 8. Approval of a delayed Submittal shall not result in any increase in the Contract Price or result in an extension of time for the completion of the Project.

3.7.2.3 *Piecemeal Submissions of Submittals*. Piecemeal Submittals mean providing portions of Shop Drawings or Submittals as they are being completed. The submission of piecemeal Submittals results in the appearance of a submission when there is inadequate information for the District to adequately review a submission. Piecemeal differs from submission of complete buildings or phases of buildings or complete assemblies. The District may agree to allow submission of single buildings or areas as long as the Submittals are complete. .

3.8 DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE

The Contractor shall maintain at the Site for the District one current copy of the California Building Code, Titles 19 and 24 of the California Code of Regulations, any other documents required, and one record copy of the Drawings, Specifications, Bid Clarifications, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain at the Site approved Shop Drawings, Product Data, Samples, and similar required Submittals. These documents shall be available to the District and shall be delivered to the District upon completion of the Work.

Contractor shall have an operational computer with internet access so Contractor can review and post documents as required for the Project.

3.9 SUBMITTALS INCLUDING SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

3.9.1 Definitions

3.9.1.1 *Deferred Approvals*. **NOT APPLICABLE TO THE PROJECT**

3.9.1.2 *Shop Drawings.* The term "Shop Drawings" as used herein means Drawings, diagrams, equipment or product schedules, and other data, which are prepared by Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes: illustrations; fabrication, erection, layout and setting Drawings; manufacturer's standard Drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all other Drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to

show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents.

3.9.1.3 *Manufactured* applies to standard units usually mass-produced, and "Fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements. Shop Drawings shall: establish the actual detail of all manufactured or Fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3.9.1.4 *Submittals* is a term used interchangeably and sometimes refers to Shop Drawings, Product Data, and samples since all Subcontractor submissions are tracked in a Submittal Log and may include any of the noted items. However, generally, a Submittal is a manufacturer's product information and Product Data including description, characteristics, size, physical characteristics, and requirements to prepare the jobsite for receiving of the particular manufactured item.

3.9.1.5 *Samples*. The term "samples" as used herein are physical examples furnished by Contractor to illustrate materials, equipment, or quality and includes natural materials, Fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the Construction Manager to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, etc., proposed by the Contractor conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

3.9.2 Shop Drawings.

3.9.2.1 *When Shop Drawings Are Required.* Shop Drawings are required for prefabricated components and for installation and coordination of these prefabricated components into the Project. In addition, Shop Drawings, are prepared to address the actual size and installation of components from various Subcontractors and provides an opportunity for the Contractor to coordinate and address conflicts between the subcontracting trades. In some cases, each Subcontractor or trade will provide Shop Drawings in a BIM format or other format as agreed by District.

3.9.2.2 *Purpose for Shop Drawings.* Shop Drawings are the Contractor's manufacturer, Subcontractor, supplier, vendor or the Contractor's detailed drawings showing particularized method for assembly, specifics to a manufacturer, manufacturer component installation requirements, specifics as to a manufactured item, alterations to a manufactured, a custom created item, or drawn version of more detailed information expanding on the Construction Manager's design shown in the Contact Documents. The Shop Drawings address the appearance, performance, size, weight, characteristics and prescriptive descriptions associated with the Contractor or Contractor's Subcontractor's plan for installation or assembly based on the design in the Specifications and Contract Documents. The Shop Drawing often is more detailed than the information shown in the Contract Documents to give the Construction Manager and Engineer the opportunity to review the fabricator's version of the product (along with particulars specific to that particular product), prior to fabrication. References to the Contract Documents, Construction Documents, Drawings, Plans, and Specifications assist the Construction Manager and Engineer in their review of the Shop Drawings. Attachment of manufacturer's material Specifications, "catalog cut sheets," and other manufacturer's information may be provided to accompany Shop Drawings. Because Shop Drawings facilitate the Construction Manager's and Engineer's approval of the system, they should be as

clear and complete as possible so they may be reviewed by Construction Manager or Engineer for the Project.

3.9.2.3 *Shop Drawing Requirements.* The Contractor shall obtain and submit with Shop Drawings all seismic and other calculations and all Product Data from equipment manufacturers. "Product Data" as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.

3.9.2.4 *Not a Reproduction of Architectural or Engineering Drawings.* The Shop Drawings are not a reproduction of the architectural or engineering Drawings. Instead, they must show more detail than the Construction Documents and details the fabrication and/or installation of the items to the manufacturer's production crew or Contractor's installation crews.

3.9.2.5 *Shop Drawings Engineering Requirements*: Some Shop Drawings require an engineer stamp to be affixed on the Drawings and calculations. In such cases, a current and valid engineering stamp shall be affixed by a California registered engineer. No out of State engineers shall stamp Shop Drawings. In most cases, an engineer means California registered mechanical, structural, electrical or plumbing engineer. California Registered Civil Engineers will not be accepted for structural details unless specifically approved.

3.9.2.6 *DSA Approvals Required Prior to Work*: **NOT APPLICABLE TO THIS PROJECT**

3.9.2.7 *Shop Drawing Identification.* All Shop Drawings must be properly identified with the name of the Project and dated, and accompanied by a letter of transmittal referring to the name of the Project and to the Specification section number for identification of each item clearly stating in narrative form, as well as "clouding" all qualifications, departures, or deviations from the Contract Documents. Shop Drawings, for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through the Contractor. Each drawing shall have a clear space for the stamps of Construction Manager and Contractor.

3.9.3 Deferred Approvals: Not Applicable

3.9.4 Submittals and Samples

3.9.4.1 *Information Required With Submittals*: Manufacturer, trade name, model or type number and quantities: Information provided must be of sufficient detail to allow the District to compare the submitted item with the specified products and acceptable products listed, in the Specifications and Bid Clarifications.

3.9.4.2 *Description of Use and Performance Characteristics*: Information should be furnished describing the normal use and expected performance of the product. The District and Contractor review this information to confirm that the product is appropriate for the intended use.

3.9.4.3 *Size and Physical Characteristics:* The size and physical characteristics, such as adjustment capabilities, which is reviewed by both the Contractor and District. The Contractor has

the most available information for comparing adjoining materials and equipment. The Contractor also needs to know the size and weight of the equipment for lifting and handling considerations.

3.9.4.4 *Finish Characteristics:* The District reviews the available finishes and selects the appropriate finish, if the finish was not previously specified in the documents. The Contractor should confirm that finish requirements in the Specifications are being met by the product.

3.9.4.5 *Contractor Responsible for Jobsite Dimensions*: Some material is custom-Fabricated to job conditions, requiring dimensions from the jobsite. These jobsite dimensions are provided by the Contractor as part of the Contractor's responsibilities for the Project and shall be provided prior to release of the product for manufacture. Contractor shall not rely on the District to provide jobsite dimensions.

3.9.4.6 *Full Range of Samples Required (When Specific Items Not Specified).* Except in cases where the exact color and type of item is specified since the District is utilizing items Standardized or pre-selected by District, the full range of color, graining, texture, or other characteristics are anticipated for review in finished products, a sufficient number of samples of the specified materials shall be furnished by the Contractor to indicate the full range of characteristics which will be present in the finished products. Products delivered or erected without Submittal and approval without providing a full range of samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the various sections of the Specifications or Specification Section 1, samples shall be submitted in duplicate.

3.9.4.7 *Labeling of Samples.* All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted and the date.

3.9.4.8 *Transmittal letter.* All samples shall be accompanied by a letter of transmittal containing similar information, together with the Specification section number.

3.9.4.9 *Labels and Instructions.* All samples of materials shall be supplied with the manufacturer's descriptive labels and application instructions. Each tag or sticker shall have clear space for the review stamps of Contractor and the District.

3.9.4.10 *District's Review.* The District will review and, if appropriate, approve submissions and will return them to the Contractor with the District's stamp and signature applied thereto, indicating the timing for review and appropriate action in compliance with the District's standard procedures. In the cases where a CM is hired by the District, CM may be the party that receives and performance logging and initial processing of the Samples. CM may, in some cases, reject samples that are not in conformance with Contract requirements.

3.9.5 Submittal Submission Procedure

3.9.5.1 *Transmittal Letter and Other Requirements.* All Submittals must be properly identified with the name of the Project and dated, and each lot submitted must be accompanied by a letter of transmittal referring to the name of the Project and to the Specification section number for identification of each item clearly stating in narrative form, as well as "clouding" on the submissions, all qualifications, departures, or deviations from the Contract Documents. Shop Drawings, for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through the Contractor. Each drawing shall have

a clear space for the stamps of District and Contractor. Refer to Division 1. In the case where a CM is hired on the Project, the CM may be designated to receive the Submittals for the Project, log the Submittals, and in some cases reject Submittals that do not conform to Contract requirements. Submittal Procedures for further information.

3.9.5.2 *Copies Required.* Each Submittal shall include one (1) legible, reproducible (if electronic is available, electronic copies shall also be provided) and five (5) legible prints of each drawing or schedule, table, cut sheet, etc., including fabrication, erection, layout and setting drawings, and such other drawings as required under the various sections of the Specifications, until final acceptance thereof is obtained. Subcontractor shall submit copies, in an amount as requested by the Contractor, of: (1) manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities; (2) wiring diagrams and controls; (3) schedules; (4) all seismic calculations and other calculations; and (5) other pertinent information as required by the District. (See also Division 1)

3.9.5.3 *Corrections.* The Contractor shall make all corrections required by District or CM and shall resubmit, as required by District or CM, corrected copies of Shop Drawings or new samples until approved. Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections required by the District on previous submissions. Professional services required for more than one (1) re-review of required Submittals of Shop Drawings, Product Data, or samples are subject to charge to the Contractor pursuant to Article 4.5.

3.9.5.4 *Approval Prior to Commencement of Work*. No portion of the Work requiring a Shop Drawing or sample submission or other Submittal shall be commenced until the submission has been reviewed by Contractor and District (and CM, if applicable) and approved by District (and CM where applicable) unless specifically directed in writing by the District. All such portions of the Work shall be in accordance with approved Shop Drawings and samples.

3.9.5.5 *District's Property.* All Submittals, Shop Drawings, computer disks, BIM modeling information, clash checks, schedules, annotated Specifications, samples and other Submittals shall become the District's property upon receipt by the District.

3.9.6 Schedule Requirements for Submittals

Contractor shall obtain and shall submit all required Submittals (i.e. Shop Drawings, Deferred Approvals, Samples, etc.), in accordance with Contractor's "Schedule for Submission of Shop Drawings and Samples" as required in the scheduling portion of the General Conditions at Articles 8 and the Specifications (as long as the Specifications do not conflict with General Conditions. In the case of conflict, the conflicting provision shall be controlled by the General Conditions and the remaining Specifications sections shall be interpreted as if the general conditions language is inserted) with such promptness as to cause no delay in its own Work or in that of any other contractor or subcontractor but in no event later than thirty five (35) days after the Notice to Proceed is issued except in the specific cases noted as an exception under Article 3.7.2.1. No extensions of time will be granted to Contractor or any Subcontractor because of its failure to have Shop Drawings and samples submitted in accordance with Division 1 and the Schedule. Each Subcontractor shall submit all Shop Drawings, samples, and manufacturer's descriptive data for the review of the District, the Contractor, and the CM through the Contractor.

3.9.6.1 *Consideration of Schedule.* Contractor has considered lead times, or other agency governmental review times, District review times, manufacturing seasons, and specific long lead procurement concerns for all submittals for the Project.

3.9.7 General Submittal Requirements

3.9.7.1 *Contractor Submittal Representations and Coordination.* By submitting Shop Drawings, Product Data, samples, etc., the Contractor represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents, including the construction schedule.

3.9.7.2 *Contractor Coordination.* Contractor shall stamp, sign, and date each Submittal indicating its representation that the Submittal meets all of the requirements of the Contract Documents and evidence Contractor's review through execution of the following stamp to be placed on each Shop Drawings:

> "[Contractor] has reviewed and approved the field dimensions and the construction criteria, and has also made written notation regarding any information in the Shop Drawings and Submittals that does not conform to the Contract Documents. This Shop Drawing or Submittal has been coordinated with all other Shop Drawings and Submittals received to date by me as Contractor and this duty of coordination has not been delegated to Subcontractors, material suppliers, or others on this Project.
>
> _____
> Signature of Contractor and date

3.9.7.3 *No Deviation from Contract Documents.* The submission of the Shop Drawings, Product Data, samples, etc., shall not deviate from the *requirement*s of the Contract Documents including detailing and design intent which is specifically outlined in Contract Documents except as specifically authorized by the District or through an accepted substitution pursuant to Article 3.10.4. All deviations from the Contract Documents shall be narratively described in a transmittal accompanying the Shop Drawings. However, Shop Drawings shall not be used as a means of requesting a substitution, the procedure for which is defined in Article 3.10.4, "Substitutions."

3.9.7.4 *Contractor Responsibility for Shop Drawings Conformance to Contract Documents*. Review by District and shall not relieve the Contractor or any Subcontractor from its responsibility in preparing and submitting proper Shop Drawings in accordance with the Contract Documents.

3.9.7.5 *Incomplete Submittals.* Any submission, which in the District's opinion is incomplete, contains errors, or has been checked superficially, will be returned not reviewed by the District for resubmission by the Contractor. Refer to Submittal Procedures of the Specifications for additional information. The Contractor shall be responsible for any related delays and shall not be the basis for any Claim.

3.9.7.6 *Shop Drawings and Submittals Shall Not Be Used as a Method to Make a Substitution.* Shop Drawings and Submittals shall not be used as a means of requesting a substitution or to

make changes in the Contract Documents. If changes are made to the Contract Documents through the Shop Drawings, the District shall have the right to reject the Submittal. If the District does not note the deviation from the approved Plans and Specifications, the Contractor is still responsible for the change and the District may require the Shop Drawings be revised to properly reflect the approved Contract Documents. The District may also require that the Contractor bear all costs under Article 4.5 and consequential damages associated with a CCD to revise Plans and Specifications to accommodate the deviation from approved Plans and Specifications.

3.9.7.7 Extent of Review. In reviewing Shop Drawings, the District will not verify dimensions and field conditions. The District will review and approve Shop Drawings, Product Data, samples, etc., for aesthetics and for conformance with the design concept of the Work and the information in the Contract Documents. The District's review shall neither be construed as a complete check which relieves the Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract Documents unless the Contractor has, in writing, called the District's attention to the deviations at the time of submission. The District's review shall not relieve the Contractor or Subcontractors from responsibility for errors of any sort in Shop Drawings or schedules, for proper fitting of the Work, coordination of the differing Subcontractor trades and Shop Drawings and Work which is not indicated on the Shop Drawings at the time of submission of Shop Drawings. Contractor and Subcontractors shall be solely responsible for any quantities which may be shown on the Submittals or Contract Documents.

3.10 SUBSTITUTIONS

3.10.1 Definition

A Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by the Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of this Article.

3.10.2 One Product Specified

Unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction or any specific name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words "or equal." Subject to the requirements of properly submitting a Substitution Request for as Addressed in Article 3.10.4, the Contractor may, unless otherwise stated, offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Documents.

3.10.3 Products Specified Which Are Commercially Unavailable

If the Contractor fails to make a request for substitutions for products, prior to the submission of its bid, and such products subsequently become commercially unavailable, the Contractor may request a substitution for such commercially unavailable item. The decision to grant this request is solely at the District's discretion. The written approval of the District, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. The District may condition

its approval of the substitution upon the delivery to District of an extended warranty or other assurances of adequate performance of the substitution as well as an equitable deduction in the Contract Price should the substituted item cost less than the Specified Item. All risks of delay due the approval of a requested substitution by any other governmental agency having jurisdiction, shall be on the requesting party. All additional costs, all procurement and construction delays, and all costs for review by the District or its consultants shall be the responsibility of the Contractor and will be deducted from Contractor's pay request.

3.10.4 Substitution Request Form

Requests for substitutions of products, materials, or processes in place of a Specified Item must be in writing on the District's Substitution Request Form ("Request Form") at the time of submitting bids to the District, except as provided for in Article 3.10.3.

The Request Form must be accompanied by evidence as to whether the proposed substitution:

a. Is equal in quality/service/ability to the Specified Item;

b. Will entail no changes in detail, construction, and scheduling of related work;

c. Will be acceptable in consideration of the required design and artistic effect;

d. Will provide no cost disadvantage to the District;

e. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and

f. Will required no change of the construction schedule.

In completing the Request Form, the bidder must state, with respect to each requested substitution, whether the bidder will agree to provide the Specified Item in the event that the District denies the bidder's request for such requested substitution. In the event that the bidder has agreed in the Request Form to provide the Specified Item and the District denies the bidder's requested substitution for a Specified Item, the bidder shall provide the Specified Item without any additional cost or charge to the District.

After bids are opened, the apparent lowest bidder shall provide, within five (5) days of opening such bids, any and all Drawing, Specifications, samples, performance data, calculations, and other information, as may be required to assist the CM and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

After the District's receipt of such evidence by the bidder, the District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be at the sole discretion of the District. Any request for substitution that is granted by the District shall be documented and processed though a Change Order. Contractor must submit a complete Submittal of the requested substitution and a Shop Drawing showing configuration, dimensions, and other critical information associated with the substitution that meets the requirements of Article 3.9. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of

adequate performance of the substitution. Any and all risks of delay due to approval by any governmental agency having jurisdiction shall be on the bidder.

If the District accept a proposed substitution, the Contractor agrees to pay for all engineering and design services, including, without limitation, compensation to the District and affected engineers for their required time to process such substitution through the Division of the State Architect, if required, and to make all changes and adjustments in materials or the work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

3.10.5 Substitution Requests After Bid

The District, in its sole discretion, may accept a request for substitution by the Contractor or may request Contractor substitute a specified item. Any substitutions requested after bids are opened shall be subject to the same conditions and requirements set forth in Article 3.10.4 above. If any substitutions, that in the District's determination, results in a credit to the District, the credit amount shall be agreed upon in writing, otherwise, the request for substitution shall be deemed denied.

3.11 INTEGRATION OF WORK

3.11.1 Scope

The Contractor shall be responsible for cutting, fitting, or patching to complete the Work and to make all parts fit together properly. Contractor shall be responsible for ensuring that all trades are coordinated and scheduled so as to ensure the timely and proper execution of the work. When modifying existing work or installing new Work adjacent to existing work, Contractor shall match, as closely as conditions of Site and materials will allow, the finishes, textures, and colors of the original work, refinishing existing work at no additional cost to District. All cost caused by defective or ill-timed work shall be borne by Contractor. Contractor shall be solely responsible for protecting existing work on adjacent properties and shall obtain all required permits for shoring and excavations near property lines.

3.11.2 Structural Members

New or existing structural members and elements, including reinforcing bars and seismic bracing, shall not be cut, bored, or drilled except by written authority of the District. Work done contrary to such authority is at the Contractor's risk and subject to replacement at its own expense without reimbursement under the Contract. Schedule delays resulting from Agency approvals for unauthorized work shall be the Contractor's responsibility.

3.11.3 Subsequent Removal

Permission to patch any areas or items of the Work shall not constitute a waiver of the District's right to require complete removal and replacement of the areas of items of the Work if, in the opinion of the District, the patching does not satisfactorily restore quality and appearance of the Work or does not otherwise conform to the Contract Documents.

3.12 CLEANING UP

3.12.1 Contractor's Responsibility to Clean Up

Contractor at all times shall keep premises free from debris such as waste, dust, excess water, storm water runoffs, rubbish, and excess materials and equipment. Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises and dispose of it in a lawful manner. Disposal receipts or dump tickets shall be furnished to the District within five (5) days of request.

Contractor shall remove rubbish and debris resulting from the Work on a daily basis. Contractor shall maintain the structures and Site in a clean and orderly condition at all times until acceptance of the Project by the District. Contractor shall keep its access driveways and adjacent streets, sidewalks, gutters and drains free of rubbish, debris and excess water by cleaning and removal each day. All concrete, sidewalks, and paths of travel shall be broom cleaned daily.

3.12.2 General Final Clean-Up

Upon completion of Work, Contractor shall employ experience workers or professional cleaners for final cleaning. Contractor shall clean each surface to the condition expected in a normal, commercial, building cleaning and maintenance program including, but not limited to, the performance of the following:

a. Clean interior and exterior of buildings, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected, so surfaces are free from foreign material or discoloration;

b. Clean the Project site. The grounds should be cleared of any Contractor equipment, raked clean of debris and trash removed. Sweep paved areas broom clean;

c. Repair or replace any damaged materials. Replace any chipped or broken glass;

d. Remove any and all stains;

e. Remove labels that aren't permanent labels;

f. Clean and polish all glass, plumbing fixtures, equipment, finish hardware and similar finish surfaces. Remove any glazing compounds;

g. Remove temporary utilities, fencing, barricades, planking, sanitary facilities and similar temporary facilities from Site;

h. Remove temporary film that remains on any hardware, doors or other surfaces; and

i. Seal the bottom and tops of all doors.

3.12.3 Special Clean-Up.

In addition to the general cleaning, the following special cleaning shall be done at the completion of the Work in accordance with the Specifications including, but not limited to:

a. Remove putty stains from glazing, then wash and polish glazing;

b. Remove marks, stains, fingerprints and other soil or dirt from painted, stained or decorated work;

c. Remove temporary protection and clean and polish floors and waxed surfaces;

d. Clean and polish hardware and plumbing trim; remove stains, dust, dirt, plaster and paint;

e. Wipe surfaces of mechanical and electrical equipment;

f. Remove spots, soil, plaster and paint from tile work, and wash tile;

g. Clean all fixtures and equipment, remove excess lubrication, clean light fixtures and lamps, polish metal surfaces;

h. Vacuum-clean carpeted surfaces; and

i. Remove debris from roofs, down spout and drainage system.

3.12.4 Failure to Cleanup

If the Contractor fails to clean up as provided in the Contract Documents, the District may do so, and the cost thereof shall be the responsibility of the Contractor pursuant to Article 2.2 and seek a Deductive Change Order.

3.13 ACCESS TO WORK

The Contractor shall provide the District, the CM, and the Inspector of Record, access to the Work in preparation and progress wherever located. Contractor shall provide safe and proper facilities for such access so that District's representatives may perform their functions.

CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT INTO SEVERAL PHASES AS ADDRESSED IN ARTICLE 6.

3.13.1 Special Inspection, Inspections or Tests Out of State, Out of Country or Remote from Project

If Contractor has a Subcontractor or supplier that requires in plant or special inspections or inspections or tests that are out of the country, out of the state, or a distance of more than 200 miles from the Project site, the Special Inspector or Inspector shall be provided access so the special inspection or inspection may occur in the remote location. In some cases, the Inspector may also require access in addition to Special Inspectors and individuals performing tests. Inspections/tests shall occur during normal work hours. (See also Article 4.3.6)

3.14 ROYALTIES AND PATENTS

3.14.1 Payment and Indemnity for Infringement

Contractor shall hold and save the District and its officers, agents, and employees, and the Construction Manager harmless from liability of any nature or kind, including cost and expense, for or on account of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the District, unless otherwise specifically provided in the Contract Documents, and unless such liability arises from the sole negligence, or active negligence, or willful misconduct of the District or the Construction Manager.

3.14.2 Review

The review by the District of any method of construction, invention, appliance, process, article, device, or material of any kind shall be for its adequacy for the Work and shall not be an approval for the use by the Contractor in violation of any patent or other rights of any person or entity.

3.15 INDEMNIFICATION

3.15.1 Contractor

See Agreement Form. Contractor shall ensure that its contract with each of its Subcontractors contains provisions requiring the Subcontractors to defend, indemnify and hold harmless the District, Inspector, the State of California to a minimum level as set forth in this Article and consistent with the indemnity and hold harmless language in the Agreement Form.

3.16 SUBMISSION OF DAILY REPORTS

3.16.1 General

By 10:00 a.m. on the following business day, the Contractor shall submit a Daily Report to the Inspector and copy the District for the previous day's Work. If there is a Construction Manager, the original Daily Report is to be provided to the Construction Manager and copies sent to the District and the Inspector. Daily Reports shall be prepared on forms approved by the District, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day. The District reserves the right to note inconsistencies or inaccuracies in the Daily Reports. In such cases, pertinent notes shall be entered by each party to explain points which cannot be resolved that day. Each party shall retain a signed copy of the report. Daily Reports by Subcontractors or others shall be submitted through the Contractor.

3.16.2 Labor

The Daily Report shall show names of workers, classifications, hours worked and hourly rate. The locations where work occurred shall also be identified in the Daily Report. Project superintendent expenses are not allowed.

3.16.3 Materials

The Daily Report required shall describe and list quantities of materials used and unit costs.

3.16.4 Equipment

The Daily Report required shall show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, and hourly/daily cost. Move-on and move-off fees shall be noted.

3.16.5 Other Services and Expenditures

Other services and expenditures shall be described in the Daily Report in detail as the District requires.

3.16.6 Failure to Submit Daily Report

If Contractor does not submit its Daily Report by 10 am the next business day, the Inspector of Record shall prepare a Daily Report addressing each of the above items. The cost for the Inspector's services to prepare the Daily Report shall be addressed through a Deductive Change Order under Article 7.7.4.

3.17 AS-BUILT DRAWINGS AND ANNOTATED SPECIFICATIONS

Throughout the duration of the Project, Contractor shall maintain on a current basis an accurate and complete set of As-Built Drawings (and Annotated Specifications) clearly showing all changes, revisions to Specifications and substitutions during construction, including, without limitation, field changes and the final location of all electrical and mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features. In case a Specification allows Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the Contractor has furnished. The Contractor will update the As-Built Drawings and Annotated Specifications as often as necessary to keep them current, but no less often than weekly.

Contractor shall update As-Built Drawings with complete information on an area of Work at or near the time when the Work is being performed and prior to any work being covered.

The As-Built Drawings and Annotated Specifications shall be kept at the Site and available for review and inspection by the District and the Construction Manager. Failure to maintain and update the As-Built Drawings is a basis to withhold Progress Payments pursuant to Article 9.6.

3.17.1 Upon Beneficial Occupancy

Contractor shall obtain and pay for reproducible Plans upon Beneficial Occupancy. Contractor shall deliver Plans to District Representative (Construction Manager if one is hired for the Project).

3.17.2 As-Builts at Completion of Work

Upon completion of the Work and prior to and as a condition precedent to Application for Retention Payment, the Contractor will provide one neatly prepared and complete set of As-Built Drawings and Annotated Specifications to the District. Contractor shall certify the As-Builts as a complete and accurate reflection of the actual construction conditions of the Work by affixing a stamp indicating the Drawings are As-Builts and certifying accuracy on the final set of As-Builts. Failure to deliver a complete As-Built set of Drawings may result in significant withholdings to ensure Work is properly documented. (See Article 9.9.2)

3.17.3 Log of Control and Survey Documentation

Contractor shall complete and maintain an accurate log or all control and survey documentation for the Project as the Work progresses. All reference and control points shall be recorded on the As-Built Drawings. The basis of elevations shall be one of the established benchmarks that must be maintained on the As-Builts.

3.17.4 Record Coordinates for Key Items

Contractor shall record, by coordinates, all utilities on-site with top of pipe elevations, major grade and alignment changes, rim, grate or top of curb and flow line elevations of all drainage structures and sewer manholes. Contractor shall update record information at or near the time when work is occurring in an area and prior to covering the Work.

3.17.5 BIM As-Built Drawings

If BIM is utilized for the Project, then an electronic version of such As-Built Drawings and Annotated Specifications will be delivered to District (in an acceptable format to District).

3.18 EQUIPMENT MANUALS

Contractor shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various sections of the Specifications for each division of the Work. The manuals shall be arranged in logical, sequential order, labeled, indexed, and placed in three-ring binders. At the completion of its Work, the Contractor shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of Contractor's Application for Retention Payment, and as a further condition to its approval by the District, each Subcontractor shall deliver the manuals, arranged in logical, sequential order, labeled, indexed, endorsed, and placed in three-ring binders, to the Contractor, who shall assemble these manuals for all divisions of the Work, review them for completeness, and submit them to the District.

3.19 DIR REGISTRATION

Strict compliance with all DIR registration requirements in accordance with Labor Code sections 1725.5 and 1771.1 is a material obligation of the Contractor and all of its subcontractors (of any tier) under the Contract Documents. The foregoing includes, without limitation, compliance with DIR registration requirements at all times during performance of the Work by the Contractor and all of its subcontractors of any tier. The failure of the Contractor and all subcontractors of any tier to be properly registered with DIR at all times during performance of the Work is a material breach of the Contract and subject to termination for cause.

An affirmative and ongoing obligation of the Contractor under the Contract Documents is the verification that all subcontractors of any tier are at all times during performance of the Work are in full and strict compliance with the DIR registration requirements. The Contractor shall not permit or allow any subcontractor of any tier to perform any Work without the Contractor's verification that all subcontractors are in full and strict compliance with the DIR registration requirements. Any subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1. Contractor

or its subcontractors of any tier shall not be entitled to any additional costs or time arising from or in any way related to compliance with the DIR registration requirements.

ARTICLE 4
ADMINISTRATION OF THE CONTRACT AND CLAIMS

4.1 CONSTRUCTION MANAGER

4.1.1 Replacement of Construction Manger (CM)

In the case of the termination of the CM, the District may appoint a CM or another construction professional or may perform such functions with its own licensed professional personnel. The status of the replacement CM under the Contract Documents shall be the same as that of the former CM.

4.2 CONSTRUCTION MANAGER'S ADMINISTRATION OF THE CONTRACT

4.2.1 Status

Pursuant to Titles 2 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 17280 et seq., the CM will provide administration of the Contract Documents and the Work, and will be the District's representative during construction, as well as during the one (1) year period following the commencement of any warranties. The CM will have authority to act on behalf of the District only to the extent provided in the Contract Documents.

4.2.2 Site Visits

The CM will visit the Site at intervals necessary in the judgment of the CM to become generally familiar with the progress and quality of the Work and to determine in general if the Work is being performed in accordance with the Contract Documents.

4.2.3 Limitations of Construction Responsibility

The District and CM shall not have control over, charge of, or be responsible for construction means, methods, techniques, schedules, sequences or procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility under the Contract Documents. The District and CM shall not be responsible for the Contractor's, Subcontractors', material or equipment suppliers', or any other person's schedules or failure to carry out the Work in accordance with the Contract Documents. The District and CM shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, their agents or employees, or any other persons or entities performing or supplying portions of the Work. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the District or CM in the District or CM's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than the Contractor.

4.2.4 Communications Facilitating Contract Administration

In the cases where a CM is hired for the Project, all communication shall be through the CM (unless otherwise directed) with copies to the District and Inspector. Where direct communication is necessary between the District and the Contractor, the District's communication shall be through the District's authorized designated person. The CM shall be promptly informed, and shall receive copies of all written communications. Contractor shall not rely upon any communications from the District that is not from the District's Representative. Communications by and with Subcontractors and material or

equipment suppliers shall be through the Contractor. In the case where a CM is hired for the Project, the CM shall be the main point of contact for communication of information. Copies should be sent to the District and Inspector.

4.2.5 Payment Applications

The CM will review and make recommendations to the District regarding the amounts due the Contractor on the Certificates for Payment pursuant to Article 9.3.4 and subject to the Inspector's review (if applicable). This review of Payment Applications is sometimes called a "Pencil Draft." Return of a Pencil Draft shall constitute the District's dispute of the Payment Application that has been submitted. Contractor shall promptly respond to Pencil Drafts or Contractor's Payment Applications may be delayed. Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the Prompt Payment of a Request for Payment or Request for Retention.

4.2.6 Rejection of Work

In addition to the rights, duties, and obligations of the Inspector under this Article, the CM may recommend to the District that the District reject Work which does not conform to the Contract Documents. Whenever the CM considers it necessary or advisable to achieve the intent of the Contract Documents, the CM may recommend to the District that the District require additional inspection or testing of the Work in accordance with Article 13.5, whether or not such Work is Fabricated, installed, or completed. District may have Non-conforming Work removed and replaced pursuant to Article 9.7. However, neither this authority of the CM nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the CM to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

Contractor shall, without charge, replace or correct Work found by the District to not be in conformance to Contract requirements. Contractor shall promptly segregate and remove rejected materials from the Project site.

This section is does not address a Notice of Non-Compliance and the remedies associated with a Notice of Non-Compliance which are addressed at Article 7.1.2

4.2.7 Warranties upon Completion

The CM in conjunction with the Inspector will conduct field reviews of the Work to determine the date of Substantial Completion and of Final Completion, shall receive and forward to the District for the District's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment when the District believes the Work has been completed in compliance with the requirements of the Contract Documents (See Article 9.11 for Close-Out). The handling by the CM of such warranties, maintenance manuals, or similar documents shall not diminish or transfer to the District any responsibilities or liabilities required by the Contract Documents of the Contractor or other entities, parties, or persons performing or supplying the Work.

On some Projects, the District will take a phased occupancy of the Project. In those cases, the District may commence the running of warranties on the buildings, or phases that are accepted after Punch List is completed and the District has accepted Completion of the separate phase. A separate Notice of Completion may be filed for the separate building or phase of work and warranties shall commence for

the separate phase only to the extent that warranties do not require coordination or connection to other buildings or other parts of the site and only if the warranted item is completed to its entirety in the segregated building or phased area.

If written warranties are not provided at the time the Punch List is nearing completion, District (with recommendations from the CM and Inspector) shall determine the dollar value of the warranties and shall make recommendation for withholdings necessary to effectuate the transfer of such warranties to the District for future use as part of the Punch List for the Project pursuant to Article 9.6.

Warranties are not commenced through utilizing of equipment for testing and operation as necessary to acclimate buildings or where necessary to test systems.

4.2.8 Interpretation

The District will interpret and decide matters concerning performance and requirements of the Contract Documents. District shall make clarifications as necessary to interpret the Contract Documents.

4.3 PROJECT INSPECTOR

4.3.1 General

One or more Project Inspectors employed by the District will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector(s) duties are as specifically defined in Title 24 Section 4-333 and 4-342.

4.3.2 Inspector's Duties and Noted Timelines for Inspection

All Work shall be under the observation of the Inspector. Contractor shall establish a protocol for requesting inspection with Inspector so as to not delay the Work and provide adequate time for the Inspector to perform inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance. The Inspector shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the Drawings or Specifications nor shall the Inspector's approval of the Work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

Inspector may collaborate with Contractor about approval of areas that may be constructed and approved incrementally Inspector's Authority to Reject or Stop Work

The Inspector shall have the authority to reject Work whenever provisions of the Contract Documents are not being complied with, and Contractor shall instruct its Subcontractors and employees accordingly. In addition, the Inspector may stop any Work that poses a probable risk of harm to persons or property. The Contractor shall instruct its employees, Subcontractors, material and equipment suppliers, etc., accordingly. The absence of any Stop Work Order or rejection of any portion of the Work shall not relieve the Contractor from any of its obligations pursuant to the Contract Documents.

4.3.3 Inspector's Facilities: Not applicable

4.3.4 Testing Times

The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall provide adequate time for inspections so as to not delay the Work. An advanced timing protocol may be established pursuant to Article 4.3.2. If the Contractor is behind Schedule then it is incumbent on the Contractor to provide advance forecast through look ahead of the anticipated date for inspection so the Inspector may plan their activities so as to not delay the Project. Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day and for any retests caused by the Contractor.

It is the Contractor's responsibility to request special inspections with sufficient time so all testing may be timely completed and posted so work may proceed. Failure to plan and pay (if applicable) for quicker delivery of Special Inspections may be counted as Float, but is not considered Governmental Delay Float under Article 8.1.4.

4.3.5 Special Inspections, Inspections or Tests Out of State, Out of Country or Remote from Project

If Contractor has a Subcontractor or supplier that requires in plant or special inspections, inspections or tests that are out of the country, out of the state or a distance of more than 200 miles from the Project Site, the District shall provide the Special Inspector or individual performing tests time for inspection and testing during normal work hours. Contractor, however, is responsible for the cost of travel, housing, food, out of area premiums that may be in the Inspector/Testing Agreement with District, or other expenses necessary to ensure proper inspection, special inspection or testing is provided by a Certified Inspector, Special Inspector, or individual performing tests. Arrangements for inspection and/or testing shall be made far enough in advance so as to not delay the Work.

4.4 STOP WORK ORDER

The District may issue a Stop Work Order, or an Order to Comply, when either (1) the Work proceeds without approval; (2) the Work proceeds without a submittals, or (3) where the District determines that the Work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until the District withdraws the Stop Work Order. Pursuant to Education Code section 17307.5(b), the District shall not be held liable in any action filed against the District for any delays caused by compliance with the Stop Work Order, except to the extent that an error or omission by the District is the basis for the issuance of the Stop Work Order.

4.5 RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE DISTRICT FOR PROFESSIONAL SERVICES

If at any time prior to the completion of the requirements under the Contract Documents, the District is required to provide or secure additional professional services (including CM, Inspection, Architect, Engineering and Special Consultant Services) for any reason by any act of the Contractor, the District may seek a Deductive Change Order for any costs incurred for any such additional services, which

costs shall be deducted from the next progress payment. A Deductive Change Order shall be independent from any other District remedies and shall not be considered a waiver of any District rights or remedies. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the District. Additional services shall include, but shall not be limited to, the following:

a. Services made necessary by the default of the Contractor (Article 14 or Article 2.2).

b. Services made necessary due to the defects or deficiencies in the Work of the Contractor (Article 2.2 and Article 9.6).

c. Spurious or frivolous RFI's issued that do not conform to the requirements of Article 7.4. Issuance of the same RFI after receiving an answer from the District or Engineer

d. Review of Schedules that are provided by Contractor that do not Conform with the Requirements of Article 8.

e. Preparation of a CCD or ICD to correct a Contractor Deficiency, or Contractor Caused Notice of Non-Compliance (See Article 7.3).

f. Review of Incomplete Shop Drawings or Submittals, including the submission of Piecemeal Shop Drawings or Submittals unless piecemeal Submittals are specifically agreed upon by District (See Article 3.9)

g. Services required by failure of the Contractor to perform according to any provision of the Contract Documents.

h. Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors' proposed by the Contractor, and making subsequent revisions to Drawings, Specifications, obtaining approvals, CM costs for review of CCD's, other governmental agency review costs, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available). (See Article 3.10)

i. Services for evaluating and processing Claims or Disputes submitted by the Contractor in connection with the Work outside the established Change Order process.

j. Services required by the failure of the Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.

k. Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.

l. Services in conjunction with more than one (1) re-review of Submittals of Shop Drawings, Product Data, samples, RFI's etc.

4.6 DISPUTES AND CLAIMS

4.6.1 Decision of District

"Disputes" or "Claims" as defined in Article 4.6.9.1 between District and Contractor involving money or time, including those alleging an error or omission by the CM shall be referred initially to the CM for action as provided in Article 4.6.2 within ten (10) days after Contractor's Article 7 request for Change is denied. A decision by the CM, as provided in Article 4.6.5, shall be required as a condition precedent to proceeding with remedies set forth in Article 4.6.9 as to all such matters arising prior to the date Retention Payment Application is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has reached Final Completion.

The condition precedent of a CM decision shall be waived if: (1) the position of CM is vacant; (2) the CMhas failed to take action required under Article 4.6.5 within the time periods required therein; or (3) the Dispute or Claim relates to a stop notice claim not arising from any extra Change Order or Immediate Change Directive for which approval has not been provided.

4.6.2 Construction Manager's Review

The CM will review the Dispute and take one or more of the following preliminary actions upon receipt of a Dispute: (1) request additional supporting data from the claimant; (2) submit a schedule to the parties indicating when the CM expects to take action; (3) reject the Dispute in whole or in part, stating reasons for rejection; (4) recommend approval of the Dispute; or (5) suggest a compromise. The CM may also, but is not obligated to, notify the Surety, if any, of the nature and amount of the Dispute.

4.6.2.1 *Construction Managers Immunity.* CM review of Disputes and Claims shall be impartial and meant to resolve Disputes and Claims. Pursuant to the case, Huber, Hunt & Nichols, Inc. v. Moore (1977) 67 Cal.App.3d 278, the CM is provided a quasi-judicial immunity for interpreting and deciding Disputes and Claims between the District and Contractor.

4.6.3 Documentation if Resolved

If a Dispute has been resolved, the CM will prepare a Change Order or obtain appropriate documentation to document the terms for Board approval.

4.6.4 Actions if Not Resolved

If a Dispute has not been resolved and all documentation requested pursuant to Article 4.6.2 has been provided, the Contractor shall, within ten (10) days after the CM's initial response, assemble all the documents involved in the Dispute including copies of all back-up documentation of costs and the basis for the Dispute and take one or more of the following actions: (1) modify the initial Dispute; (2) notify the CM that the initial Dispute stands; or (3) supplement with additional supporting data and re-submit to the CM under Article 4.6.2.

4.6.5 Construction Manager's Written Decision

If a Dispute has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the CM, the CM shall provide a written decision twenty (20) days after compliance with Article 4.6.4. Upon expiration of such time period, the CM will render to the parties its written decision relative to the Dispute, including any change in the Contract Sum or Contract Time or both. The CM may also request reasonable additional time to complete CM's written decision.

If the resolution of the Dispute by the CM is not satisfactory to the Contractor and copies of all back-up documentation of costs and the basis for the Dispute is fully articulated in a package of material that is complete, the Contractor may then submit a Claim to the District under Article 4.6.9.

4.6.6 Continuing Contract Performance

Pending final resolution of a Dispute or Claim, including, negotiation, mediation, arbitration, or litigation, the Contractor shall proceed diligently with performance of the Contract, and the District shall continue to make any undisputed payments in accordance with the Contract (less any withholdings or offsets). If the Claim is not resolved, Contractor agrees it will neither rescind the Contract nor stop the progress of the work, but Contractor's sole remedy shall be to submit such controversy to determination by a court of competent jurisdiction in the county where the Project is located, after the Project has been completed, and not before.

4.6.6.1 *District's Option to Submit Individual Disputes to Arbitration during Claims and Disputes Process*. At the District's sole option, in order to more efficiently resolve Claims during the Project and prior to the completion of the Claims Process, pursuant to Government Code section 9201, the District may submit individual Disputes or Claims for binding arbitration and Contractor agrees to the resolution of for each individual Dispute or Claim by an Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual Disputes or Claims, such resolution is full and final as to that particular Dispute or Claim. THIS INDIVIDUAL DISPUTE ARBITRATION PROCESS IS NOT AN ARBITRATION CLAUSE AND SHALL NOT BE CONSTRUED AS AN AGREEMENT TO ARBITRATE. THIS INDIVIDUAL DISPUTES ARBITRATION PROCESS IS FOR THE SOLE PURPOSE OF STREAMLINING AND RESOLVING DISPUTES OR CLAIMS DURING CONSTRUCTION AND SHALL BE REQUESTED ON SPECIFIC INDIVIDUAL ITEMS BY THE DISTRICT PRIOR TO RETENTION PAYMENT (EVEN IF THERE ARE DEDUCTIONS MADE FROM RETENTION PAYMENT) WHICH REPRESENTS THE FINAL COMPLETION OF THE PROJECT.

a. If there is no Retention remaining on the Project, individual Disputes initiated prior to Project Final Completion shall continue until a final disposition of the Arbitration or resolution of the individual Claim or Dispute.

b. No Tolling. The Arbitration process shall not toll the Disputes or Claims process under Article 4.6 or the requirement to submit Claims to Court under Article 4.6.9.5.

4.6.7 Claims for Concealed Trenches or Excavations Greater Than Four Feet Below the Surface

When any excavation or trenching extends greater than four feet below the surface or if any condition involving hazardous substances are encountered:

a. Immediately upon discovery, The Contractor shall promptly, and before the following conditions are disturbed, notify the District, by telephone and in writing, of the condition except:

4.6.7.1.1.1 If such condition is a hazardous waste condition, Contractor's bid includes removal or disposal of hazardous substances. Material that the Contractor believes may be a material

that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law. In such case, the notice bulletin procedures of Article 7 apply.

4.6.7.1.1.2 Subsurface or latent physical conditions at the Site differing from those indicated in the Drawings, Specifications, Soils Report, and from Contractor's own investigation under Article 2.1.

4.6.7.1.1.3 Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

b. The District shall investigate the conditions, and if District finds that the conditions do materially so differ, do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work shall issue a Change Order or Construction Change Document under the procedures described in the Contract.

c. In the event that a dispute arises between the public entity or District and the Contractor whether the conditions materially differ, involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any scheduled Completion Date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

4.6.8 Dispute Concerning Extension of Time.

If Contractor and District cannot agree upon an extension of time, whether compensable or not, then Contractor must have first completed the procedures set forth in Article 8.4. Upon completion of the procedures set forth under Article 8.4, Contractor must then comply with the requirements in this Article including those set forth under Article 4.6.9.

4.6.9 Claims Procedures

Pursuant to the remedies under Public Contract Code section 9201 and Government Code section 930.2, Contractor, through execution of this Agreement, also agrees to comply with the Claims requirements of Article 4.6 to quickly and efficiently resolve Disputes and Claims. Further, to provide a level of accuracy to the records submitted, the District shall have the right to audit books and records pursuant to Article 13.11 based on the actual costs incurred and to reduce the uncertainty in resolving Disputes and Claims with limited information.

4.6.9.1 *Procedure Applicable to All Claims*

a. Definition of Claim: A "Claim" is where a Dispute between the parties rises to the level where backup documentation is assembled and provided

to the District as a separate demand by the Contractor for: (1) a time extension, including, without limitation, for relief from damages or penalties for delay assessed by the District under the Contract; (2) payment by the District of money or damages arising from Work done by, or on behalf of, the Contractor pursuant to the Contract and payment for which is not otherwise expressly provided for or to which the Contractor is not otherwise entitled to; or (3) an amount of payment disputed by the District. If the Claim is for damages associated with a Stop Work Order, the Contractor shall not be entitled to a request for Compensation, but shall be entitled to utilize Governmental Delay Float (See Article 8.1.4.1.)

b. Filing Claim Is Not Basis to Discontinue Work: The Contractor shall promptly comply with Work under the Contract or Work requested by the District even though a written Claim has been filed. The Contractor and the District shall make good faith efforts to resolve any and all Claims that may arise during the performance of the Work covered by this Contract.

c. Claim Notification: The Contractor shall within seven (7) calendar days after the written decision of the CM, or if the time period for CM's decision has passed under Article 4.6.5, submit a notification in writing sent by registered mail or certified mail with return receipt requested, with the District (and the District's CM) stating clearly the basis for the Claim and including all relevant and required documents. If the notification is not submitted within seven (7) days after the written decision of the CM or the passage of time under Article 4.6.5, the Contractor shall be deemed to have waived all right to assert the Claim, and the Claim shall be denied. Claims submitted after the Retention Payment date shall also be considered null and void by the District. All Claims shall be reviewed pursuant to Articles 4.6.1 through 4.6.5.

The Formal Notification of Claim must be presented as follows:

4.6.9.1.3.1.1 The term "Claim" must be at the top of the page in no smaller than 20 point writing.

(2) All documentation submitted pursuant to Article 4.6 to the CM shall be submitted with the "Claim."

(3) A stack of documents, copy of all Project documents, or the submission of random documents shall not constitute an adequate reference to supporting documentation.

(4) Any additional or supporting documentation that Contractor believes is relevant should be submitted at this time.

d. Reasonable Documents to Support Claim: The Contractor shall furnish reasonable documentation to support the Claim. The Contractor shall provide all written detailed documentation which supports the Claim,

including but not limited to: arguments, justifications, cost, estimates, Schedule analysis and detailed documentation. The format of the required reasonable documentation to support the Claim shall include, without limitation:

4.6.9.1.4.1.1.1 Cover letter.

4.6.9.1.4.1.1.2 Summary of factual basis of Claim and amount of Claim.

4.6.9.1.4.1.1.3 Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made.

4.6.9.1.4.1.1.4 Documents relating to the Claim, including:

a. Specifications sections in question.
b. Relevant portions of the Drawings
c. Applicable Clarifications (RFI's)
d. Other relevant information, including responses that were received.
e. Contractor Analysis of Claim merit.
   4..9.1.5.1.1.1.1 Contractor's analysis of any Subcontractor vendor Claims that are being passed through.
   4..9.1.5.1.1.1.2 Any analysis performed by outside consultants
   4..9.1.5.1.1.1.3 Any legal analysis that Contractor deems relevant
f. Break down of all costs associated with the Claim.
g. For Claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path in conformance with the requirements of Article 8.4 chronology of events and related correspondence.
h. Applicable Daily Reports and logs.
   4..9.1.8.1.1.1.1 If the Daily Reports or Logs are not available, lost or destroyed, there shall be a presumption that the lost documentation was unfavorable to the Contractor. See California Civil Jury Instruction 204.
i. For Claims involving overhead, cost escalation, acceleration, disruption or increased costs, a full version of job costs reports organized by category of work or Schedule of Values with budget information tracked

against actual costs. Any and all supporting back-up data, including the original bid (and associated original unaltered metadata).

4..9.1.9.1.1.1.1 The metadata and bid information shall be provided confidentially and subject to a protective order to prevent dissemination to other contractors or to the public. However, the bid documentation should remain intact and available for review and inspection in case of this type of increased cost Claim.

4..9.1.9.1.1.1.2 This data on the bid shall be made available to any District attorneys or experts and shall also be utilized as evidence for any legal proceedings.

4..9.1.9.1.1.1.3 If the bid documentation is not available, lost or destroyed, there shall be a presumption that the lost bid documentation was unfavorable to the Contractor. See California Civil Jury Instruction 204.

e. Certification: The Contractor (and Subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:

4.6.9.1.5.1 That the Contractor has reviewed the Claim and that such Claim is made in good faith;

4.6.9.1.5.2 Supporting data are accurate and complete to the best of the Contractor's knowledge and belief;

4.6.9.1.5.3 The amount requested accurately reflects the amount of compensation for which the Contractor believes the District is liable.

4.6.9.1.5.4 That the Contractor is familiar with Government Code sections 12650 et seq. and Penal Code section 72 and that false claims can lead to substantial fines and/or imprisonment.

f. Signature of Certification: If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

g. Upon receipt of a Claim and all supporting documents as required above, the District shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide the Contractor a written

statement identifying what portion of the Claim is disputed and what portion is undisputed. Upon receipt of a Claim, the District and Contractor may, by mutual agreement, extend the time period provided in this paragraph.

h. If the District needs approval from its governing Board to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim, and the governing Board does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the District shall have up to three days following the next duly publicly noticed meeting of the governing Board after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

i. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement. If the District fails to issue a written statement, paragraph o below shall apply.

j. If the Contractor disputes the District's written response, or if the District fails to respond to a Claim issued pursuant to this Article 4.6.9 within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the District shall schedule a meet and confer conference within 30 days for settlement of the Claim.

k. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the District shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement. Any disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the District and the Contractor sharing the associated costs equally. The District and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to applicable procedures in Article 4.6.9.5.

l. For purposes of this Article 4.6.9, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute

review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

m. Unless otherwise agreed to by the District and the Contractor in writing, the mediation conducted pursuant to this Article 4.6.9 shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

n. This Claims process does not preclude the District from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this Article 4.6.9 does not resolve the parties' Claim. This Claims process does not preclude the District from submitting individual Disputes or Claims to binding arbitration pursuant to Article 4.6.9.4 below.

o. Failure by the District to respond to a Claim from the Contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this Article 4.6.9 shall result in the Claim being deemed rejected in its entirety. A Claim that is denied by reason of the District's failure to have responded to a Claim, or its failure to otherwise meet the time requirements of this Article 4.6.9, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Contractor.

p. If a subcontractor or a lower tier subcontractor lacks legal standing to assert a Claim against a District because privity of contract does not exist, the Contractor may present to the District a Claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Contractor present a Claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the Claim be presented to the District shall furnish reasonable documentation to support the Claim. Within 45 days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented the Claim to the District and, if the Contractor did not present the Claim, provide the subcontractor with a statement of the reasons for not having done so.

q. Upon receipt of a Claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable.

r. The Contractor's Claim shall be denied if it fails to follow the requirements of this Article.

4.6.9.2 *District (through CM or District's Agent or Attorney) May Request Additional Information*. Within thirty (30) days of receipt of the Claim and the information under this Article, the District may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim which the District may assert. If additional documents are required, the time in which the Claim is evaluated may be extended by a reasonable time so the Claim and additional documents may be reviewed.

4.6.9.3 *Claims Procedures in Addition to Government Code Claim.* Nothing in the Claims procedures set forth in this Article 4 of the General Conditions shall act to waive or relieve the Contractor from meeting the requirements set forth in Government Code section 900 et seq.

4.6.9.4 *Binding Arbitration of Individual Claim Issues.* To expedite resolution of Claims pursuant to Public Contract Code section 9201, at the District's sole option, the District may submit individual Claims to Arbitration prior to Retention Payment consistent with the requirements of Article 4.6.6.1.

4.6.9.5 *Resolution of Claims in Court of Competent Jurisdiction.* If Claims are not resolved under the procedure set forth and pursuant to Article 4.6.9, such Claim or controversy shall be submitted to a court in the County of the location of the Project after the Project has been completed, and not before.

4.6.9.6 *Warranties, Guarantees and Obligations.* The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon Contractor by the General Conditions and amendments thereto; and all of the rights and remedies available to District and CM thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this Article will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

ARTICLE 5
SUBCONTRACTORS

5.1 DEFINITIONS

5.1.1 Subcontractual Relations Bound to Same Contract Terms at General Contractor

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the same obligations and responsibilities, assumed by Contractor pursuant to the Contract Documents. Each subcontract agreement shall preserve and protect the rights of the District and the Construction Manager (CM) under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound. Upon written request of the Subcontractor, the Contractor shall identify to the Subcontractor the terms and conditions of the proposed subcontract agreement, which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

5.1.2 Subcontractor Licenses and DIR Registration

All Subcontractors shall be properly licensed by the California State Licensing Board. All Subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. No portion of the Work is permitted to be performed by a Subcontractor of any tier unless the subcontractor is properly registered with DIR. Any Subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1.

5.1.3 Substitution of Subcontractor

Substitution of Subcontractors shall be permitted only as authorized under Public Contract Code §§ 4107 et seq. Any substitutions of Subcontractors shall not result in any increase in the Contract Price or result in the granting of any extension of time for the completion of the Project.

5.1.4 Contingent Assignment of Subcontracts and Other Contracts

Each subcontract, purchase order, vendor contract or agreement for any portion of the Work is hereby assigned by the Contractor to the District provided that:

a. Such assignment is effective only after Termination of this Contract with the Contractor by the District as provided under Article 14 and only for those subcontracts and other contracts and agreements that the District accepts by notifying the Subcontractor or Materialman (as may be applicable) in writing; and

b. Such assignment is subject to the prior rights of the Surety(ies) obligated under the Payment Bond and Performance Bond.

c. The Contractor shall include adequate provisions for this contingent assignment of subcontracts and other contracts and agreements in each such document.

ARTICLE 6
CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS

6.1 DISTRICT'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

6.1.1 Separate Contracts.

6.1.1.1 District reserves the right to let other contracts in connection with this Work. Contractor shall afford other contractors reasonable opportunity for (1) introduction and storage of their materials; (2) access to the Work; and (3) execution of their work. Contractor shall properly connect and coordinate its work with that of other Contractors.

6.1.1.2 If any part of Contractor's Work depends on proper execution or results of any other contractor, the Contractor shall inspect and within seven (7) days or less, report to CM, in writing, any defects in such work that render it unsuitable for proper execution of Contractor's Work. Contractor will be held accountable for damages to District for that Work which it failed to inspect or should have inspected. Contractor's failure to inspect and report shall constitute its acceptance of other contractors' Work as fit and proper for reception of its Work, except as to defects which may develop in other contractors' work after execution of Contractor's work.

6.1.1.3 To ensure proper execution of its subsequent Work, Contractor shall measure and inspect Work already in place and shall at once report to the CM in writing any discrepancy between executed Work as built and the Contract Documents.

6.1.1.4 Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by District in prosecution of the Project and the potential impact of such Work on the Baseline Schedule or Schedule updates.

6.1.1.5 Nothing herein contained shall be interpreted as granting to Contractor the exclusive occupancy at the site of Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project Site. If execution of any contract by the District is likely to cause interference with Contractor's performance of this Contract, once Contractor provides District timely written notice and identifies the Schedule Conflict, District shall decide which contractor shall cease work temporarily and which contractor shall continue, or whether Work can be coordinated so that contractors may proceed simultaneously.

6.1.1.6 District shall not be responsible for any damages suffered or extra costs incurred by Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project necessary for the performance of the Project (examples include Electrical Utility Contractor, separate offsite contractor, a separate grading contractor, furniture installation etc.)

CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT INTO SEVERAL PHASES BASED ON DOCUMENTATION PROVIDED WITH THIS BID OR DISCUSSED AT THE JOB WALK. CONTRACTOR HAS MADE ALLOWANCE FOR ANY DELAYS OR DAMAGES WHICH MAY ARISE FROM COORDINATION WITH CONTRACTORS REQUIRED FOR OTHER PHASES. IF ANY DELAYS SHOULD ARISE FROM ANOTHER CONTRACTOR

WORKING ON A DIFFERENT PHASE, CONTRACTOR'S SOLE REMEDY FOR DAMAGES, INCLUDING DELAY DAMAGES, SHALL BE AGAINST THE CONTRACTOR WHO CAUSED SUCH DAMAGE AND NOT THE DISTRICT. CONTRACTOR SHALL PROVIDE ACCESS TO OTHER CONTRACTORS FOR OTHER PHASES AS NECESSARY TO PREVENT DELAYS AND DAMAGES TO OTHER CONTRACTORS WORKING ON OTHER PHASES OF CONSTRUCTION.

6.1.2 District's Right to Carry Out the Work

(See Article 2.2)

6.1.3 Designation as Contractor

When separate contracts are awarded to contractors on the Project Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate District/Contractor Agreement.

6.1.4 District Notice to the Contractor of Other Contractors

The Contractor shall have overall responsibility to reasonably coordinate and schedule Contractor's activities with the activities of the District's forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the District in reviewing their construction schedules when:

a. Notice is provided in the Contract Documents of other scope of Work,

b. In the case where there is known Work to be performed by other Contractors

c. For outside contractors hired by utilities

d. Where the Contract Document provides "Work by Others" or "By Others"

e. Where specifically noted during the Pre-Bid Conference

f. Where specifically noted in the Mandatory Job Walk

g. By CO or ICD,

h. With respect to the installation of :
   - 6.1.4.1.8.1 Furniture,
   - 6.1.4.1.8.2 Electronics and networking equipment,
   - 6.1.4.1.8.3 Cabling,
   - 6.1.4.1.8.4 Low voltage,
   - 6.1.4.1.8.5 Off-site work,
   - 6.1.4.1.8.6 Grading (when by a separate contractor),

6.1.4.1.8.7 Environmental remediation when excluded by the Contract Documents (i.e. asbestos, lead or other hazardous waste removal)
6.1.4.1.8.8 Deep cleaning crews,
6.1.4.1.8.9 Commissioning and testing,
6.1.4.1.8.10 Keying and re-keying,
6.1.4.1.8.11 Programming

6.1.4.1 Exception where no Coordination is Required on the Part of the Contractor for Turn Key Operations. If the Contractor has specifically outlined a "Turn Key" or "Complete Delivery" of a final completed operational school in writing as part of the Baseline Schedule..

6.1.4.2 The Contractor shall make any revisions to the Baseline Schedule (or Schedule Update) and Contract Sum deemed necessary after a joint review and mutual agreement. The Baseline Schedule (or Schedule Update) shall then constitute the Schedules to be used by the Contractor, separate contractors, and the District until subsequently revised. Additionally, Contractor shall coordinate with CM, District, and Inspector to ensure timely and proper progress of Work.

6.2 CONSTRUCTIVE OWNERSHIP OF PROJECT SITE AND MATERIAL

Upon commencement of Work, the Contractor becomes the constructive owner of the entire site, improvements, material and equipment on Project site. Contractor must ensure proper safety and storage of all materials and assumes responsibility as if Contractor was the owner of the Project site. All risk of loss or damage shall be borne by Contractor during the Work until the date of Completion. As constructive owner of the Project site, Contractor must carry adequate insurance in case of calamity and is not entitled to rely on the insurance requirements as set forth in this Agreement as being adequate coverage in case of calamity.

6.3 DISTRICT'S RIGHT TO CLEAN UP

If a dispute arises among the Contractor, separate contractors, and the District as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Article 3.12, the District may clean up and allocate the cost among those it deems responsible.

ARTICLE 7
CHANGES IN THE WORK

7.1 CHANGES

7.1.1 No Changes Without Authorization

There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order, Change Order Request, Immediate Change Directive, or order by the Construction Manager (CM) for a minor change in the Work as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the District's Governing Board or designated representative with delegated authority (subject to Board ratification) has authorized the same and the cost thereof approved in writing by Change Order or executed Construction Change Document. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications. Notwithstanding anything to the contrary in this Article 7, all Change Orders shall be prepared and issued by the CM and shall become effective when executed by the District's Governing Board, the CM, and the Contractor.

Should any Change Order result in an increase in the Contract Price, the cost of such Change Order shall be agreed to, in writing, in advance by Contractor and District and be subject to the monetary limitations set forth in Public Contract Code section 20118.4 (Please check with the District since there are different interpretations of the limitations of Public Contract Code section 20118.4 depending on the County the Project is located). In the event that Contractor proceeds with any change in Work without first notifying District and obtaining the CM's and District's consent to a Change Order, Contractor waives any Claim of additional compensation for such additional work and Contractor takes the risk that a Notice of Non-Compliance may issue, a critical path Project delay may occur, and the Contractor will also be responsible for the cost of preparation and CCD review fees for a corrective approved Construction Change Document.

CONTRACTOR UNDERSTANDS, ACKNOWLEDGES, AND AGREES THAT THE REASON FOR THIS NOTICE REQUIREMENT IS SO THAT DISTRICT MAY HAVE AN OPPORTUNITY TO ANALYZE THE WORK AND DECIDE WHETHER THE DISTRICT SHALL PROCEED WITH THE CHANGE ORDER OR ALTER THE PROJECT SO THAT SUCH CHANGE IN WORK BECOMES UNNECESSARY AND TO AVOID THE POSSIBLE DELAYS ASSOCIATED WITH THE ISSUANCE OF A NOTICE OF NON-COMPLIANCE.

7.1.2 Notices of Non-Compliance

Contractor deviation or changes from approved Plans and Specifications may result in the issuance of a Notice of Non-Compliance. Contractor is specifically notified that deviations from the Plans and Specifications, whether major or minor, may result in the requirement to obtain a Construction Change Document to correct the Notice of Non-Compliance. (See Article 7.3.1 for Definition of CCD). In some cases, the lack of an approved CCD AND verification from the Inspector that a Notice of Non-Compliance has been corrected may result in a critical path delay to the next stage of Work on the Project. Any delays

that are caused by the Contractor's deviation from approved Plans and Specifications shall be the Contractor's responsibility.

7.1.3 Construction Manager Authority

The Construction Manager will have authority to order minor changes in the Work that do not involve DSA Approval not involving any adjustment in the Contract Sum, or an extension of the Contract Time.

7.2 CHANGE ORDERS ("CO")

A CO is a written instrument prepared by the CM and signed by the District (as authorized by the District's Governing Board), the Contractor, and the CM stating their agreement upon all of the following:

a. A description of a change in the Work;

b. The amount of the adjustment in the Contract Sum, if any; and

c. The extent of the adjustment in the Contract Time, if any.

A CO may be comprised of ICD's, Response to RFP's and COR's

7.3 CONSTRUCTION CHANGE DOCUMENT (CCD Category A, and CCD Category B) and IMMEDIATE CHANGE DIRECTIVE (ICD)

7.3.1 Definitions

7.3.1.1 *Construction Change Document (CCD)*. A Construction Change Document is a term that is utilized to address changes to the approved Plans and Specifications.

7.3.1.2 *Immediate Change Directive (ICD)*. An Immediate Change Directive is a written order to the Contractor prepared by the CM and signed by the District, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly.

In the case of an Immediate Change Directive being issued, Contractor must commence Work immediately or delays from failure to perform the ICD shall be the responsibility of Contractor and the failure to move forward with Work immediately shall also be grounds for Termination under Article 14.

An ICD does not automatically trigger an Article 7.6 Dispute or Claim. Contractor must timely follow the procedures outlined at Article 7.6 and 4.6 where applicable.

Refer to Division 1 and Supplementary General Conditions for a copy of the proposed Immediate Change Directive form.

7.3.2 Use to Direct Change

An ICD shall be used to move work forward immediately and to avoid delay. In some cases, an ICD shall be issued in the absence of agreement on the terms of a CO, COR, or RFP. A copy of an ICD form is provided in the Supplementary General Conditions and Division 1. The anticipated not to exceed price for the Work will be inserted into the ICD. In the case of an ICD issued to correct Contractor Deficiencies or to correct a Contractor caused Notice of Non-Compliance, the ICD may be issued with $0 and no additional time. Contract may prepare a COR associated with the ICD pursuant to Article 7. However, Contractor shall proceed with all Work required under an Approved ICD immediately upon issuance. Failure to proceed with the Work under an ICD shall be grounds for Termination for Cause under Article 14 or take over the Work under Article 2.2.

If adequate time exists, an ICD may be subject of an RFP for pricing and determination if any time that may be required. However, if an RFP is not completed, Contractor shall immediately commence Work when an ICD is issued. If the RFP is incomplete, it may still be completed to be submitted for pricing purposes as long as the RFP is submitted within the timeline provided by the RFP, or within 10 days following issuance of the ICD.

7.3.3 ICD Issued Over a Notice of Non-Compliance or to Cover Work Subject to Sign Off

In some cases, an ICD shall be for the purpose of proceeding with Work to keep the Project on Schedule and as an acknowledgement by the District that Contractor is proceeding with Work contrary to a Notice of Non-Compliance, prior to issuance of an approved CCD Category A, or to direct the covering of Work which has not yet received Approval to move forward.

7.3.3.1 *Contractor Compliance with all Aspects of an IC*D. Contractor is to undertake the ICD and comply with all aspects of the Work outlined in the ICD. Inspector is to inspect the Work pursuant to the ICD. Failure to follow the ICD may result in deduction of the ICD Work under Article 2.2 or Termination of the Contractor pursuant to Article 14.

7.3.3.2 *Exception in the Case of DSA Issued Stop Work Order.* **NOT APPLICABLE TO THIS PROJECT**

7.3.3.3 *ICD Due to Contractor Deficiency or Contractor Caused Notice of Non-Compliance.* If an ICD is issued to correct a Contractor Deficiency or a Contractor caused notice of Non-Compliance, Contractor specifically acknowledges responsibility for all consequential damages associated with the Contractor Deficiency or Contractor caused Notice of Non-Compliance and all consequential damages and costs incurred to correct the deficiency under Article 4.5

7.4 REQUEST FOR INFORMATION ("RFI")

7.4.1 Definition

A RFI is a written request prepared by the Contractor requesting the CM to provide additional information necessary to clarify or amplify an item which the Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems which have arisen under field conditions.

7.4.1.1 A RFI shall not be used as a vehicle to generate time extensions.

7.4.1.2 Resubmission of the same or similar RFI is not acceptable. RFI's that are similar should be addressed in Project meetings where the requestor (Contractor, Subcontractor or vendor) is able to address the particular issue with the CM or Engineer and a resolution addressed in the minutes.

7.4.1.3 A RFI response applicable to a specific area cannot be extended to other situations unless specifically addressed in writing within the RFI or in a separate RFI.

7.4.1.4 RFI's should provide a proposed solution and should adequately describe the problem that has arisen.

7.4.2 Scope

The RFI shall reference all the applicable Contract Documents including Specification section, detail, page numbers, Drawing numbers, and sheet numbers, etc. The Contractor shall make suggestions and interpretations of the issue raised by the RFI. An RFI cannot modify the Contract Cost, Contract Time, or the Contract Documents.

7.4.3 Response Time

The CM must respond to a RFI within a reasonable time after receiving such request. If the CM's response results in a change in the Work, then such change shall be effected by a written CO, COR RFP or ICD, if appropriate. If the CM cannot respond to the RFI within a reasonable time, the CM shall notify the Contractor, with a copy to the Inspector and the District, of the amount of time that will be required to respond.

7.4.4 Costs Incurred

The Contractor shall be responsible for any costs incurred for professional services as more fully set forth in Article 4.5, which shall be subject to a Deductive Change Order, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request. District, at its sole discretion, shall issue a Deductive Change Order to Contractor for all such professional services arising from this Article.

7.5 REQUEST FOR PROPOSAL ("RFP")

7.5.1 Definition

A RFP is a written request prepared by the CM requesting the Contractor to submit to the District and the CM an estimate of the effect of a proposed change on the Contract Price and (if applicable) the Contract Time. If CM issues a Bulletin, the Changed items in the Bulletin shall be addressed as an RFP and all responses shall be prepared to a Bulletin as addressed in this Article 7.5. A form RFP is included in the Division 1 documents.

7.5.2 Scope

A RFP shall contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required by Article 7.7. The Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.

7.5.3 Response Time

Contractor shall respond to an RFP within ten (10) days or the time period otherwise set forth in the RFP.

7.6 CHANGE ORDER REQUEST ("COR")

7.6.1 Definition

A COR is a written request prepared by the Contractor supported by backup documentation requesting that the District and the CM issue a CO based upon a proposed change, cost, time, or cost and time that may be incurred on the Project or arising from an RFP, ICD, or CCD.

7.6.2 Changes in Price

A COR shall include breakdowns per Article 7.7 to validate any change in Contract Price due to proposed change or Claim.

7.6.3 Changes in Time

A COR shall also include any additional time required to complete the Project only if the delay is a critical path delay. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in Article 8. A schedule fragnet showing the time delay must be submitted with the COR. Any changes in time will be granted only if there is an impact to the critical path. If Contractor fails to request a time extension in a COR, then the Contractor is thereafter precluded from requesting or claiming a delay.

7.7 COST OF CHANGE ORDERS

7.7.1 Scope

Within ten (10) days after a request is made for a change that impacts the Contract Sum as defined in Article 9.1, the critical path, or the Contract Time as defined in Article 8.1.1, the Contractor shall provide the District and the CM, with a written estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, and wage rates required for the change, and the effect upon the Contract Time of such CO. Changes may be made by District by an appropriate written CO, or, at the District's option, such changes shall be implemented immediately upon the Contractor's receipt of an appropriate written Construction Change Document.

District may, as provided by law and without affecting the validity of this Agreement, order changes, modification, deletions and extra work by issuance of written CO or CCD from time to time during the progress of the Project, Contract Sum being adjusted accordingly. All such Work shall be executed under conditions of the original Agreement except that any extension of time caused thereby shall be adjusted at time of ordering such change. District has discretion to order changes on a "time and material" basis with adjustments to time made after Contractor has justified through documentation the impact on the critical path of the Project.

7.7.1.1 *Time and Material Charges.* If the District orders Work on a "time and material" basis, timesheets shall be signed daily by the Inspector or District Representative at or near the time the Work is actually undertaken and shall show the hours worked, and the Work actually completed. No time sheets shall be signed the next day. A copy shall be provided to the Person signing the document at the time the document is signed, but not before 10 am the following day.

7.7.2 Determination of Cost

The amount of the increase or decrease in the Contract Price from a CO or COR, if any, shall be determined in one or more of the following ways as applicable to a specific situation:

a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. If an agreement cannot be reached within fifteen (15) days after submission and negotiation of Contractor's proposal, Contractor may submit pursuant to Article 7.7.3. Submission of sums which have no basis in fact are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 et seq.);

7.7.2.1.1.1 If the District objects to 7.7.2(a) as a method for submission due to inaccuracies in the submitted amount, overstatement of manpower or time required to perform the CO, or unreliability of the data provided, the District may either have the CM or a professional estimator determine the cost for the CO, and the applicable time extension, or the Contractor shall utilize Article 7.7.2(d) or 7.7.3.

7.7.2.1.1.2 Once the District provides a written objection to use of Article 7.7.2(a) due to unreliability of the estimated price, the Contractor shall no longer utilize mutual acceptance of a lump sum as a method for submission of CO's and shall provide a breakdown of estimated or actual costs pursuant to Article 7.7.2(d) or 7.7.3

b. By unit prices contained in Contractor's original bid and incorporated in the Project documents or fixed by subsequent agreement between District and Contractor;

c. Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee. However, in the case of disagreement, Contractor must utilize the procedure under Article 7.7.3; or

d. By cost of material and labor and percentage of overhead and profit. If the value is determined by this method the following requirements shall apply:

7.7.2.1.4.1 Basis for Establishing Costs

7.7.2.1.4.1.1 Lab or will be the cost for wages prevailing locally for each craft or type of workers at the time the extra Work is done, plus

employer payments of payroll taxes and workers compensation insurance (exclude insurance costs as part of the overhead and profit mark-up), health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. In no case shall the total labor costs exceed the applicable prevailing wage rate for that particular classification. The use of a labor classification which would increase the extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

7.7.2.1.4.1.2 Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery. The District reserves the right to approve materials and sources of supply or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the District.

7.7.2.1.4.1.3 Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of $250 or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the Work is performed. Rates applied shall be appropriate based on actual equipment need and usage. Monthly, weekly or other extended use rates that results in the lowest cost shall be applied if equipment is used on site for extended periods.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the extra Work shall be included. If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the District than holding it at the Work Site, it shall be returned unless the Contractor elects to keep it at the Work Site at no expense to the District.

All equipment shall be acceptable to the Inspector, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and modifications shall be used to classify equipment, and equipment shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

If tool and equipment charges are part of a Dispute or Claim, the District reserves the right to utilize actual costs for tools and equipment or a depreciation rate for equipment based on audit finding under Article 13.11 and deduct any rental charges that exceed actual or depreciated costs.

e. Other Items. The District may authorize other items which may be required on the extra work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from the Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.

f. Invoices. Vendors' invoices for material, equipment rental, and other expenditures shall be submitted with the COR. If the request for payment is not substantiated by invoices or other documentation, the District may establish the cost of the item involved at the lowest price which was current at the time of the Daily Report.

g. Overhead. Overhead, including direct and indirect costs, shall be submitted with the COR and include: field overhead, home office overhead, off-site supervision, CO preparation/negotiation/research, time delays, Project interference and disruption, additional guaranty and warranty durations, on-site supervision, additional temporary protection, additional temporary utilities, additional material handling costs, liability and property damage insurance, and additional safety equipment costs.

7.7.3 Format for COR or CO's

The following format shall be used as applicable by the District and the Contractor to communicate proposed additions to the Contract. All costs submitted shall be actual costs and labor shall be unburdened labor. Refer to Division 1 for a copy of the Construction Change Order form.

		EXTRA	CREDIT
(a)	Material (attach itemized quantity and unit cost plus sales tax)		
(b)	Labor Not to Exceed Applicable Prevailing Wage Rates (attach itemized hours and rates)		
(c)	Equipment (attach invoices)		

		EXTRA	CREDIT
(d)	Subtotal		
(e)	If Subcontractor performed work, add Subcontractor's overhead and profit to portions performed by Subcontractor, not to exceed 10% of item (d).		
(f)	Subtotal		
(g)	Contractor's Overhead and Profit: Not to exceed 10% of Item (d) if Contractor performed the work. No more than 5% of Item (d) if Subcontractor performed the work. If work was performed by Contractor and Subcontractors, portions performed by Contractor shall not exceed 10% of Item (d), and portions performed by Subcontractor shall not exceed 10% of Item (d).		
(h)	Subtotal		
(i)	Bond not to exceed one percent (1%) of Item (h)		
(k)	TOTAL		
(l)	Time/ Days		

The undersigned Contractor approves the foregoing Change Order or Immediate Change Directive as to the changes, if any, and the Contract price specified for each item and as to the extension of time allowed, if any, for completion of the entire Work on account of said Change Order or Immediate Change Directive, and agrees to furnish all labor, materials and service and perform all Work necessary to complete any additional Work specified therein, for the consideration stated herein. It is understood that said Change Order or Immediate Change Directive shall be effective when approved by the Governing Board of the District.

It is expressly understood that the value of such extra Work or changes, as determined by any of the aforementioned methods, expressly includes any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages or time extensions not included are deemed waived.

The Contractor expressly acknowledges and agrees that any change in the Work performed shall not be deemed to constitute a delay or other basis for claiming additional compensation based on theories including, but not limited to, acceleration, suspension or disruption to the Project.

7.7.3.1 *Adjustment for Time and Compensable Delay*. A CO shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in Article 8 of the General Contract. A schedule fragnet showing the time delay must be submitted with the CO. Any changes in time will be granted only if there is an impact to the critical path. If Contractor fails to request a time extension in a CO, then the Contractor is thereafter precluded from requesting or claiming a delay.

7.7.4 Deductive Change Orders

All Deductive Change Order(s) must be prepared utilizing the form under Article 7.7.3 (a) – (d) only, setting forth the actual costs incurred. Except in the case of an Article 2.2 or 9.6 Deductive Change Order where no mark-up shall be allowed, Contractor will be allowed a maximum of 5% total profit and overhead.

For unilateral Deductive Change Orders, or where credits are due from Contractor for Allowances, Deductive Items, Inspection, Damage, CCD review costs, CM or Inspector costs for after hours or corrective services, Work removed from the Agreement under Article 2.2 or Article 9.6, there shall be no mark-up.

District may, any time after a Deductive Change Order is presented to Contractor by District for items under Article 2.2 or Article 9.6 or if there is disagreement as to the Deductive Change Order, issue a unilateral Deductive Change Order on the Project and deduct the Deductive Change Order from a Progress Payment, Final Payment, or Retention.

7.7.5 Discounts, Rebates, and Refunds

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Contractor, and the Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of the Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein. All CO's are subject to Audit under Article 13.11 for discounts, rebates and refunds.

7.7.6 Accounting Records

With respect to portions of the Work performed by CO's and CCD's on a time-and-materials, unit-cost, or similar basis, the Contractor shall keep and maintain cost-accounting records in a format consistent with accepted accounting standards and satisfactory to the District, which shall be available to the District on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents.

Any time and material charges shall require Inspector's signature on time and material cards showing the hours worked and the Work actually completed. (See Article 7.7.1.1)

7.7.7 Notice Required

If the Contractor desires to initiate a Dispute or Claim for an increase in the Contract Price, or any extension in the Contract Time for completion, Contractor shall notify the applicable party responsible for addressing the Dispute or Claim pursuant to Article 4.6. No Claim or Dispute shall be considered unless made in accordance with this subparagraph. Contractor shall proceed to execute the Work even though the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such Claim shall be authorized by a CO.

7.7.8 Applicability to Subcontractors

Any requirements under this Article 7 shall be equally applicable to CO's, COR's or ICD's issued to Subcontractors by the Contractor to the same extent required by the Contractor.

7.7.9 Alteration to Change Order Language

Contractor shall not alter or reserve time in COR's, CO's or ICD's. Contractor shall execute finalized CO's and proceed under Article 7.7.7 and Article 4.6 with proper notice. If Contractor intends to reserve time without an approved CPM schedule prepared pursuant to Article 8 or without submitting a fragnet showing delay to critical path, then Contractor may be prosecuted pursuant to the False Claim Act.

ARTICLE 8
TIME AND SCHEDULE

8.1 DEFINITIONS

8.1.1 Contract Time

Contractor shall perform and reach Substantial Completion (See Article 1.1.46) within the time specified in the Agreement Form. Moreover, Contractor shall perform its Work in strict accordance with the Project Milestones in the Contract Documents and shall proceed on a properly developed and approved Baseline Schedule, which represents the Contractor's view of the practical way in which the Work will be accomplished. Note that Contract Time includes and incorporates all Float and other Baseline inclusions as noted in Article 8.3.2.1 and as otherwise specifically noted in Article 8.

8.1.2 Notice to Proceed

District may give a Notice to Proceed within ninety (90) days of the award of the bid by District. Once Contractor has received the notice to proceed, Contractor shall complete the Work in the period of time referenced in the Contract Documents.

In the event that District desires to postpone the giving of the Notice to Proceed beyond this three-month period, it is expressly understood that with reasonable notice to the Contractor, the giving of the date to proceed may be postponed by District. It is further expressly understood by Contractor, that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the giving of the notice to proceed

If the Contractor believes that a postponement will cause a hardship to Contractor, Contractor may terminate the Contract with written notice to the Construction Manager (CM) within 10 days after receipt by Contractor of District's notice of postponement. It is further understood by Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement and the grounds for notification and hardship shall be subject to Audit pursuant to Article 13.11. Should Contractor terminate the Contract as a result of a notice of postponement, District may award the Contract to the next lowest responsible bidder.

8.1.3 Computation of Time

The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

8.1.4 Float

Float is time the total number of days an activity may be extended or delayed without delaying the Completion Date shown in the schedule. Float will fall into three categories: (1) Rain Days; (2) Governmental Delays; and, (3) Project Float. Project Float and Rain Days are owned by the Project and may be utilized as necessary for critical path delays once the days become available for consumption (i.e. the Rain Day arrives and is not utilized since rain did not occur or Work was performed on the interior of a building). However, Governmental Delay float shall not be utilized for purposes other than to address critical path delays that arise due to approvals, Inspector approvals or verifications on governmental forms.

8.1.4.1 *Governmental Delay Float*. It is anticipated that there will be governmental generated delays. Specific to approvals, it is anticipated that no less than twelve (12) days per calendar year shall be set aside as Governmental Float to be utilized on critical path delays. A pro-rated number of days shall be calculated based on length of Contract Time. (For example, a two (2) year Contract Time shall require twenty-four (24) days of Governmental Float. If the Contract Time is 182 days, then the Contract Time shall require six (6) days of Governmental Float) This Governmental Delay float must be incorporated into the schedule and should be incorporated in each critical activity as Contractor deems fit. Specifically, major categories of Work under the Project Inspection Card should be allocated Governmental Delay Float at the Contractor's discretion. Governmental Delay Float on the Project may exceed 12 days per one (1) year period, but Contractor is required to include not be less than 12 days of Governmental Delay Float during each one (1) year period.

Contractor's failure to establish a protocol for requesting inspections is not grounds to utilize Governmental Delay Float. As noted in Article 3.1.4, 48 hours advance notice of commencing Work on a new area is required under PR 13-01 Special Inspection reports are not required to be posted until at least 14 days after the Work was inspected. Failure to plan, and pay (if applicable) for quicker delivery of Special Inspections is not Governmental Delay Float under Article 8.1.4.1. If Governmental Delay Float is not utilized, this float is carried through to other categories of inspection and consumed over the course of the Project

Governmental Delay Float may be utilized for a Stop Work Order regardless of fault as defined under Education Code section 17307.5(b).

8.1.4.2 *Inclement Weather (Rain Days)*. The Contractor will only be allowed a time extension for unusually severe weather if it results in precipitation or other conditions which in the amount, frequency, or duration is in excess of the norm at the location and time of year in question as established by NOAA weather data. No less than 22 calendar days for each calendar year for Southern California will be allotted for in the Contractor's schedule for each winter weather period or carried at the end of the schedule as Rain Float. Float for weather days in other geographical regions shall be adjusted based on NOAA weather data for the geographical location. Contractor has anticipated all the days it takes to dry out and re-prepare areas that may be affected by weather delays which extend beyond the actual weather days. The weather days shall be shown on the schedule and if not used will become float for the Project's use. The Contractor will not be allowed a day-for-day weather delay for periods noted as float in the Schedule. The Contractor is expected to work seven (7) days per week (if necessary, irrespective of inclement weather), to maintain access, and to protect the Work under construction from the effects of inclement weather. Additional days beyond the NOAA shall be considered under the same criteria that weather days are granted below.

A Rain Day shall be granted by CM if the weather prevents the Contractor from beginning Work at the usual daily starting time, or prevents the Contractor from proceeding with seventy-five (75%) of the normal labor and equipment force towards completion of the day's current controlling item on the accepted schedule for a period of at least five hours, and the crew is dismissed as a result thereof, the CM will designate such time as unavoidable delay and grant one (1) critical path activity calendar-day extension if there is no available float for the calendar year.

8.1.4.3 *Project Float*. The Contractor may determine some activities require a lesser duration than allocated and may set aside float in the Project Schedule. There shall be no early completion. Instead, to the extent float is either addressed at the end of the Project or throughout each category of critical path work, Project float may be used as necessary during the course of the Project and allocated on a first,

come first serve basis. However, the use of float does not extend to Governmental Delay Float, which shall only be used for Governmental Delays.

8.2 HOURS OF WORK

8.2.1 Sufficient Forces

Contractors and Subcontractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

8.2.2 Performance During Working Hours

Work shall be performed during regular working hours as permitted by the appropriate governmental agency except that in the event of an emergency, or when required to complete the Work in accordance with job progress, Work may be performed outside of regular working hours with the advance written consent of the District and approval of any required governmental agencies.

8.2.3 Costs for After Hours Inspections

If the Work done after hours is required by the Contract Documents, a Recovery Schedule, or as a result of the Contractor's failure to plan, and inspection must be conducted outside the Inspector's regular working hours, the costs of any after hour inspections, shall be borne by the Contractor.

If the District allows the Contractor to do Work outside regular working hours for the Contractor's convenience, the costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the District and a Deductive Change Order shall be issued from the next Progress Payment.

If the Contractor elects to perform Work outside the Inspector's regular working hours, costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the District and a Deductive Change Order from the next Progress Payment as a Deductive Change Order.

8.3 PROGRESS AND COMPLETION

8.3.1 Time of the Essence

Time limits stated in the Contract Documents are of the essence to the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

8.3.2 Baseline Schedule Requirements

8.3.2.1 *Timing*: Within ten (10) calendar days after Notice to Proceed, Contractor shall submit a practical schedule showing the order in which the Contractor proposes to perform the Work, and the dates on which the Contractor contemplates starting and completing the salient categories of the Work. This first schedule which outlines the Contractor's view of the practical way in which the Work will be accomplished is the Baseline Schedule. If the Contractor Fails to submit the Baseline Schedule within the ten (10) days noted, then District may withhold processing and approval of progress payments pursuant to Article 9.4 and 9.6.

8.3.2.2 *District Review and Approval:* District, and CM will review both a paper and electronic copy of Baseline Schedule and may provide comments as noted in this Article and either approve or disapprove the Baseline Schedule. All Schedules shall be prepared using an electronic scheduling program acceptable to District. All Schedules shall be delivered in an electronic format usable by the District. All logic ties and electronic information shall be included in the electronic copy of the Baseline Schedule that is delivered to the District.

8.3.2.3 *Schedule Must Be Within the Given Contract Time.* The Baseline Schedule shall not exceed time limits set forth in the Contract Documents and shall comply with all of the scheduling requirements as set forth in the Specifications and Contract Documents.

8.3.2.4 *Submittals Must Be Incorporated (See Articles 3.7 and 3.9)*: Contractor shall include Submittals as line items in the Baseline Schedule as required under Article 3.7.2 and 3.9.6. Submittals shall not delay the Work, Milestones, or the Completion Date. Failure to include Submittals in the Baseline Schedule shall be deemed a material breach by the Contractor.

8.3.2.5 *Float Must Be Incorporated*. The Baseline Schedule must indicate the beginning and completion of all phases of construction and shall use the "critical path method" (commonly called CPM) for the value reporting, planning and scheduling, of all Work required under the Contract Documents. The Baseline Schedule must incorporate all Milestones in the Project and apply Governmental Float at each Milestone in the Contractor's discretion. The Baseline Schedule shall incorporate any Schedule provided by the District as part of the bid and shall note durations that will not be adequate or should be shortened based on Contractor's review. These changes shall be identified and incorporated into Contractor's Baseline Schedule as long as requested changes are made within 10 days after the District chooses to move forward with the Project. Scheduling is necessary for the District's adequate monitoring of the progress of the Work and shall be prepared in accordance with the time frame described in this Article 8. The CM may disapprove of any Schedule or require modification to it if, in the opinion of the CM or District, adherence to the any Schedule prepared by the Contractor will not cause the Work to be completed in accordance with the Agreement.

8.3.2.6 *No Early Completion.* Contractor shall not submit any Schedule showing early completion without indicating float time through the date set for Project completion by District. Contractor's Baseline Schedule shall account for all days past early completion as float which belongs to the Project. Usage of float shall not entitle Contractor to any delay Claim or damages due to delay.

8.3.2.7 *Use of Schedule Provided in Bid Documents.* In some cases, the bid will include a preliminary schedule indicating Milestones and construction sequences for the Project along with general timing for the Project. The preliminary schedule is not intended to serve as the Baseline Schedule utilized for construction. It is up to the Contractor to study and develop a Baseline Schedule to address the actual durations and sequences of Work that is anticipated while maintaining the Milestones provided by the District. Contractor shall obtain information from Contractor's Subcontractors and vendors on the planning, progress, delivery of equipment, coordination, and timing of availability of Subcontractors so a practical plan of Work is fully developed and represented in the Baseline Schedule.

8.3.2.8 *Incorrect Logic, Durations, Sequences, or Critical Path.* The District may reject or indicate durations, sequences, critical path or logic are not acceptable and request changes. The electronic copy of the Baseline Schedule shall have adequate information so logic ties, duration, sequences and critical path may be reviewed electronically. Contractor is to diligently rebuild and resubmit the Baseline Schedule to represent the Contractor's plan to complete the Work and maintain Milestones at the

next progress meeting, or before the next progress meeting. If Contractor is not able to build a Baseline Schedule that is acceptable to the District or CM, the District reserves the right to utilize the unapproved originally submitted Baseline Schedule (See Article 8.3.2.12) and the comments submitted to hold Contractor accountable for timely delivery of Work and maintenance of Milestones. Furthermore, Contractor's representations in the Baseline Schedule, if unacceptable, may also be used as a basis for termination of the Contract under Article 14 if Contractor fails to adequately maintain the Schedule and falls significantly behind without undertaking the efforts to either submit and follow a Recovery Schedule or fail to submit a Recovery Schedule and make no effort toward recovery on the Project.

8.3.2.9 *Contractor Responsibility Even if Schedule Issues Are Not Discovered.* Failure on the Part of the District to discover errors or omissions in any Schedules submitted shall not be construed to be an approval of the error or omission and any flawed Schedule is not grounds for a time extension.

8.3.2.9 Inclusions in Baseline Schedule. In addition to scheduling requirements set forth at Article 8.3.2, Contractor is specifically directed to include (broken out separately) in Contractor's Baseline Schedule and all Schedule updates, the following items required pursuant to these General Conditions, including but not limited to:

8.3.2.9.1.1 Rain Day Float (excluding inclement weather) as required under Article 8.1.4.2. For example, if the NOAA provides 22 days of Rain Days, all 22 days must be incorporated and noted in the Baseline Schedule. Further, any days required to clean-up or dry out shall be included for operations that are likely to require a clean-up or dry out period. Days that are not utilized shall be considered float owned by the Project.

8.3.2.9.1.2 Governmental Delay Float under Article 8.1.4.1. This Governmental Delay Float shall only be utilized for Governmental Delays and shall not be considered available float owned by the Project. This float shall only be distributed to the Project upon the completion of the Project and shall be used to offset Liquidated Damages and shall not generate compensable delays.

8.3.2.9.1.3 Submittal and Shop Drawing schedule under Article 3.9.

8.3.2.9.1.4 Deferred Approvals under Article 3.9.

8.3.2.9.1.5 Time for separate contractors, including furniture installation and start up activities, under Article 6.1.

8.3.2.9.1.6 Coordination and timing of any Drawings, approvals, notifications, permitting, connection, and testing for all utilities for the Project. (See Article 2.1.4).

8.3.2.9.1.7 Testing, special events, or school activities

8.3.2.10 *Failure to include Mandatory Schedule Items*. District may withhold payment pursuant to Articles 9.3, 9.4 and 9.6. In lieu of withholding payment for failure to include Mandatory Schedule Items, after the District or CM has notified the Contractor of failure to meet the Baseline Schedule or Updated Schedule requirements and provided a written notification of this failure and provided a written notice of Schedule preparation errors, and the Contractor fails to correct the noted deficiencies or the Contractor does not provide an updated Baseline Schedule correcting the deficiencies, then Contractor shall not be granted an extension of time for failure to obtain necessary items and approvals under Article 8.3.2 and for the time required for failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Contractor shall maintain all required Article 8.3.2 Schedule items in the Baseline Schedule and indicate any days that have been used as allowed in Article 8. If Contractor fails to include all Article 8.3.2items in its Baseline Schedule or Schedule Updates and the District either utilizes an Unapproved Schedule under Article 8.3.2.12 or does not object to the inclusion of required scheduling items, then all mandatory Schedule inclusions, including float, shall be utilized in the District's discretion. If the Contract Time is exceeded, then Contractor shall be subject to the assessment of Liquidated Damages pursuant to Article 8.4.

8.3.2.11 *Failure to Meet Requirements*. Failure of the Contractor to provide proper Schedules as required by this Article and Article 9 is a material breach of the Contract and grounds for Termination pursuant to Article 14. The District, at its sole discretion, may choose, instead, to withhold, in whole or in part, any Progress Payments or Retention amounts otherwise payable to the Contractor.

8.3.2.12 *Use of an Unapproved Baseline Schedule*. If the Baseline Schedule submitted by the Contractor is unacceptable to the District (i.e. failing to meet the requirements of Article 8.3.2) and Contractor does not incorporate or address the written comments to the Baseline Schedule and a Baseline Schedule is not approved, but due to extreme necessity, the District moves forward without an approved Baseline Schedule, Contractor shall diligently revise and meet Schedule update requirements of Article 8 and incorporate all Article 8.3.2 comments in all updates). However, for purposes of Termination pursuant to Article 14, the unapproved Baseline Schedule initially submitted shall be treated as the Baseline Schedule with durations shortened or revised to accommodate all float, all mandatory Schedule requirements under Article 8.3.2, any requirements in the Contract Documents, and all revisions by the District or CM.

8.3.3 Update Schedules

8.3.3.1 *Updates Shall Be Based on Approved Baseline Schedule*. Except in the case where there has not been agreement as to a Baseline Schedule, the approved Baseline Schedule shall be used to build future Schedule updates. Schedule updates shall be a CPM based Schedule consistent with the Baseline Schedule requirements of 8.3.2

In the case that no Baseline has been approved, Schedule updates shall be provided monthly and each update shall incorporate all comments and revisions noted as not complying with the requirements of Article 8.3.2. Contractor shall be held to the Article 8.3.2.12 unapproved Baseline Schedule, inclusive of all Milestones, float, comments and revisions by the District and CM, all required Baseline Schedule Inclusions under Article 8.3.2, and any requirements in the Contract Documents.

8.3.3.2 *Schedule Updates*. Contractor shall update the approved Schedule each month to address actual start dates and durations, the percent complete on activities, actual completion dates, estimated remaining duration for the Work in progress, estimated start dates for Work scheduled to start at future times and changes in duration of Work items

8.3.3.3 *Listing of Items Causing Delays*. Schedule updates shall provide a listing of activities which are causing delay in the progress of Work and a narrative shall be provided showing a description of problem areas, anticipated delays, and impacts on the Construction Schedule. Simply stating "District Delay" or "CM Delay" shall be an inadequate listing. Delays shall only be listed if they meet the requirements of Article 8.4.

8.3.3.4 *Recovery Schedule*. In addition to providing a schedule update every thirty (30) days, the Contractor, if requested by the CM or District, shall take the steps necessary to improve Contractor's progress and demonstrate to the District and CM that the Contractor has seriously considered how the lost time, the Completion Date, or the Milestones that are required to be met within the terms of the Contract. Contractor shall immediately provide a Recovery Schedule showing how Milestones and the Completion Date will be met. In no case, shall a Recovery Schedule be provided later than ten (10) days following the request for a Recovery Schedule from the CM or District.

a. Failure to Provide a Recovery Schedule. Shall subject Contractor to the assessment of Liquidated Damages for failure to meet the Contract Time. Refusal or failure to provide a Recovery Schedule shall be considered a substantial failure of performance and a material breach of Contract and may result in Termination of the Contract pursuant to Article 14.

b. Recovery Schedule Acceleration without Additional Cost. The District may require Contractor prepare a Recovery Schedule showing how the Project shall be accelerated, without any additional cost to the District. The District may order, without additional cost, the following:

8.3.3.4.2.1 Increase the number of shifts;

8.3.3.4.2.2 Utilize overtime to recover the approved Schedule; and/or

8.3.3.4.2.3 Increase the days when Work occurs, including weekends, at the Project and at any manufacturer's plant.

c. Recovery Schedule Acceleration without Additional Cost. If Contractor disputes that the Recovery Schedule acceleration shall be issued without additional costs, the Contractor shall submit concurrent with Recovery Schedule acceleration notice pursuant to Articles 8.4.3 and 8.4.4.

8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES

8.4.1 Liquidated Damages

CONTRACTOR AND DISTRICT HEREBY AGREE THAT THE EXACT AMOUNT OF DAMAGES FOR FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED IS EXTREMELY DIFFICULT OR IMPOSSIBLE TO DETERMINE. IF THE WORK IS NOT SUBSTANTIALLY COMPLETED IN THE TIME SET FORTH IN THE AGREEMENT, IT IS UNDERSTOOD THAT THE DISTRICT WILL SUFFER DAMAGES. IT BEING IMPRACTICAL AND UNFEASIBLE TO DETERMINE THE AMOUNT OF ACTUAL DAMAGE, IT IS AGREED THE CONTRACTOR SHALL PAY TO THE DISTRICT THE AMOUNT LIQUIDATED DAMAGES SET

FORTH IN THE AGREEMENT, FOR EACH CALENDAR DAY OF DELAY IN REACHING SUBSTANTIAL COMPLETION (SEE ARTICLE 1.1.46). CONTRACTOR AND ITS SURETY SHALL BE LIABLE FOR THE AMOUNT THEREOF PURSUANT TO GOVERNMENT CODE SECTION 53069.85.

8.4.2 Delay

Except and only to the extent provided under Article 7 and Article 8, by signing the Agreement, Contractor agrees to bear the risk of delays to Completion of the Work and that Contractor's bid for the Project was made with full knowledge of this risk.

In agreeing to bear the risk of delays to complete the Work, Contractor understands that, except and only to the extent provided otherwise in Article 7 and 8, the occurrence of events that delay the Work shall not excuse Contractor from its obligation to achieve Completion of the Project within the Contract Time, and shall not entitle the Contractor to an adjustment to the Contract time.

8.4.3 Excusable Delay

Contractor shall not be charged for Liquidated Damages because of any delays in completion of Work which are not the fault or negligence of Contractor or its Subcontractors, arising from Rain Float or Project Float, including acts of God, as defined in Public Contract Code section 7105, acts of enemy, epidemics and quarantine restrictions. Any approved delays caused by acts of God, as defined in Public Contract Code section 7105, acts of enemy, epidemics, pandemics, and quarantine restrictions (collectively, "Force Majeure Events") shall be deemed non-compensable excusable delays. Contractor shall within five (5) calendar days of beginning of any such delay notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay and grant extension of time for completing Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected. An extension of time may only be granted after proper compliance with Article 8.3 requiring preparation and submission of a properly prepared CPM schedule.

8.4.3.1 *Excusable Delay Is Not Compensable*. No extended overhead, general conditions costs, impact costs, out-of-sequence costs or any other type of compensation, by any name or characterization, shall be paid to the Contractor for any delay to any activity not designated as a critical path item on the latest approved Project schedule or if caused by Force Majeure Events.

8.4.3.2 *Notification*. The Contractor shall notify the CM in writing of any anticipated delay and its cause, in order that the CM may take immediate steps to prevent, if possible, the occurrence or continuance of delay, and may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.

8.4.3.3 *Extension Request*. In the event the Contractor requests an extension of Contract time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work (See Article 7). When requesting time, i.e., extensions, for proposed Change Orders, they must be submitted with the proposed Change Order with full justification and documentation. If the Contractor fails to submit justification with the proposed Change Order it waives its right to a time extension at a later date. Such justification must be based on the official Contract schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope

of Work. Blanket or general claims for extra days without specific detailed information as required herein or a blanket or general reservation of rights do not fulfill the requirements of this Article and shall be denied. The justification must include, but is not limited to, the following information:

a. The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform these activities within the stated duration.

b. Logical ties to the official Baseline Schedule or Approved Updated Schedule for the proposed changes and/or delay showing the activity/activities in the schedule whose start or completion dates are affected by the change and/or delay. (A fragnet of any delay of over ten (10) days must be provided.)

The Contractor and District understand and expressly agree that insofar as Public Contract Code section 7102 may apply to changes in the Work or delays under this Contract, the actual delays and damages, if any, and time extensions are intended to, and shall provide, the exclusive and full method of compensation for changes in the Work and construction delays.

8.4.4 Notice by Contractor Required

The Contractor shall within five (5) calendar days of beginning of any such delay notify the District in writing of causes of delay with justification and supporting documentation. In the case of a Recovery Schedule pursuant to Article 8.3.3.4, Contractor shall submit written notice concurrent with the Recovery Schedule. District will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected.

Claims relating to time extensions shall be made in accordance with applicable provisions of Article 7.

8.4.4.1 *Adjustment for Compensable Delays*. The Schedule may be adjusted for a delay if, and only if, Contractor undertakes the following:

a. Contractor submits a timely COR or CO pursuant to the requirements of Article 7.

b. Contractor submits a fragnet showing the critical path delay caused by the COR, CO, Changed Condition, CCD, or ICD

c. Contractor has addressed all required float days in the Fragnet.

d. Contractor submits a complete breakdown of all costs incurred utilizing the format of Article 7.7.3

8.4.5 No Additional Compensation for Coordinating Governmental Submittals and the Resulting Work

CONTRACTOR HAS PLANNED ITS WORK AHEAD OF TIME AND IS AWARE THAT GOVERNMENTAL AGENCIES, SUCH AS THE GAS COMPANIES, ELECTRICAL UTILITY COMPANIES, WATER DISTRICTS AND OTHER AGENCIES MAY HAVE TO APPROVE CONTRACTOR PREPARED DRAWINGS OR APPROVE A PROPOSED INSTALLATION. CONTRACTOR HAS INCLUDED DELAYS AND DAMAGES WHICH MAY BE CAUSED BY SUCH AGENCIES IN CONTRACTOR'S BID AND HAS INCLUDED ADEQUATE TIME IN THE CONTRACTOR'S BASELINE SCHEDULE. FAILURE TO ADEQUATELY PLAN AND SCHEDULE IS NOT A BASIS TO USE GOVERNMENTAL DELAY FLOAT.

8.4.6 District Right to Accelerate the Work

The District may direct the Contractor to meet schedule requirements when the Work has been delayed. The District shall compensate the Contractor for the additional costs incurred by acceleration to the extent that such costs are directly attributable to the acceleration and are incurred through no fault or negligence of the Contractor.

8.4.6.1 *Management of Acceleration*. Contractor acceleration shall not include Work that is part of the scope of Work detailed in the Plans and Specifications. Instead, the acceleration costs shall be premium or overtime and quantifiable additional work added to the Project meant to accelerate the Project. Contractor is directed to keep consistent crews on the Project so time can be tracked. If crews are circulated off the Project or crews brought in only for overtime, the District may be charged for Contract Work and not accelerated time. In such case, the District may object to the costs submitted.

8.4.6.2 *Costs for Acceleration*. Cost for Acceleration shall be supported by backup documentation, and time sheets signed by the Inspector for each day work has been performed, at or near the time when the Work was performed. A listing on the time sheet shall document all labor, materials and services utilized that day and provide areas of work, and amount of work performed. Contractor shall comply with submission requirements of Article 7.7.

ARTICLE 9
PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

The Contract Sum or Contract Price is stated in the Agreement and, including authorized adjustments, is the total amount payable by the District to the Contractor for performance of the Work under the Contract Documents.

9.2 COST BREAKDOWN

9.2.1 Required Information

Contractor shall furnish the following:

a. Within ten (10) days after Notice to Proceed, a detailed breakdown of the Contract Price (hereinafter "Schedule of Values") for each Project, Site, building, Milestone or other meaningful method to measure the level of Project Completion as determined by the District shall be submitted as a Submittal for the Project.;

b. Within ten (10) days after the date of the Notice to Proceed, a schedule of estimated monthly payment requests due the Contractor showing the values and construction time of the various portions of the Work to be performed by it and by its Subcontractors or material and equipment suppliers containing such supporting evidence as to its correctness as the District may require;

c. Within ten (10) days after the date of the Notice to Proceed, address, telephone number, telecopier number, California State Contractors License number, classification and monetary value of all subcontracts for parties furnishing labor, material, or equipment for completion of the Project.

9.2.2 Information and Preparation of Schedule of Values

9.2.2.1 *Break Down of Schedule of Values*. Schedule of Values shall be broken down by Project, site, building, Milestone, or other meaningful method to measure the level of Project Completion as determined by the District.

9.2.2.2 *Based on Contractor Bid Costs.* The Schedule of Values shall be based on the costs from Contractor's bid to the District. However, the submission of the Schedule of Values shall not be front loaded so the Contractor is paid a greater value than the value of the Work actually performed and shall not shift funds from parts of the Project that are later to Work that is performed earlier.

9.2.2.3 Largest Dollar Value for Each Line Item. Identify Subcontractors and materials suppliers proposed to provide portions of Work equal to or greater than ten thousand dollars ($10,000) or one-half of one percent (0.5%) of their Contract Price, whichever is less.

9.2.2.4 *Allowances*. Any Allowances provided for in the Contract shall be a line item in the Schedule of Values.

9.2.2.5 *Labor and Materials Shall Be Separate*. Labor and Materials shall be broken into two separate line items unless specifically agreed in writing by the District.

9.2.3 District Approval Required

The District shall review all submissions received pursuant to Article 9.2 in a timely manner. All submissions must be approved by the District and Construction Manager (CM) before becoming the basis of any payment.

9.3 PROGRESS PAYMENTS

9.3.1 Payments to Contractor

Unless there is a resolution indicating that the Work for the Project is substantially complex, within thirty-five (35) days after approval of the Request for Payment, Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as certified by CM and Inspector and verified by Contractor) up to the last day of the previous month, less the aggregate of previous payments. In the case of a Project designated substantially complex, the sum paid to the Contractor shall be equal to ninety percent (90%) of the value of the Work performed (as certified by the CM and Inspector and verified by Contractor). The value of the Work completed shall be the Contractor's best estimate. Work completed as estimated shall be an approximation or estimate only and no mistake, inaccuracy, error or falsification in said any approved estimate shall operate to release the Contractor, or any Surety upon any bond, from damages arising from such Work, or from the District's enforcement of each and every provision of this Contract including but not limited to the Performance Bond and Payment Bond. The District shall have the right to subsequently to correct any mistake, inaccuracy, error or falsification made or otherwise set forth in any approved Request for Payment and such correction may occur in any future Payment Application or in the Retention Payment to the Contractor. No Surety upon any bond shall be relieved, released or exonerated of its obligations under this Contract or any applicable bond when the District is unable to correct an overpayment to the Contractor due to any abandonment by the Contractor or termination by the District.

The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.

Notwithstanding anything to the contrary stated above, the Contractor may include in its Request for Payment the value of any structural steel, glue laminated beams, trusses, bleachers and other such custom-made materials prepared specifically for the Project and unique to the Project so long as all of the following requirements are satisfied:

a. The aggregate cost of materials stored off-site shall not exceed Twenty Five Thousand Dollars ($25,000) at any time or as otherwise agreed to be District in writing;

b. Title to such materials shall be vested in the District as evidenced by documentation satisfactory in form and substance to the District, including, without limitation, recorded financing statements, UCC filings and UCC searches;

c. With each Contractor Request for Payment, the Contractor shall submit to the District a written list identifying each location where materials are stored off-site (which must be a bonded warehouse) and the value of the materials at each location. The Contractor shall procure insurance satisfactory to the District (in its reasonable discretion) for materials stored off-site in an amount not less than the total value thereof;

d. The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off-site;

e. Representatives of the District shall have the right to make inspections of the storage areas at any time; and

f. Such materials shall be: (1) protected from diversion, destruction, theft and damage to the reasonable satisfaction of the District; (2) specifically marked for use on the Project; and (3) segregated from other materials at the storage facility.

9.3.2 Purchase of Materials and Equipment and Cost Fluctuations

The Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from District to assure that there will be no delays. Contractor understands that materials fluctuate in value and shall have adequately addressed market fluctuations through agreements with Contractor vendors or by other means. Contractor further understands and incorporates into Contractor's bid cost any wage rate increases during the Project for the Contractor's labor force as well as all other Subcontractor and vendor labor forces. District shall not be responsible for market fluctuations in costs or labor rate increases during the Project. Contractor further has incorporated any and all cost increases in areas of Work where there may be schedule variations so that cost increases are not passed through to the District.

9.3.3 No Waiver

No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the Work. Contractor specifically understands that Title 24 Section 4-343 which states:

> "It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved Plans and Specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the CM, Engineer or Inspector in the performance of such duties... In no case, however, shall the instruction of the CM or registered Engineer be construed to cause work to be done with is not in conformity with the approved Plans, Specifications, and change orders..."

Notwithstanding any payment, the District may enforce each and every provision of this Contract which includes, but is not limited to, the Performance Bond and Payment Bond. The District may correct any error subsequent to any payment. In no event shall the Contractor or the Surety be released or exonerated from performance under this Contract when the District overpays the Contractor based upon any mistake, inaccuracy, error or falsification in any estimate that is included in any Request for Payment.

9.3.4 Issuance of Certificate of Payment

The CM shall, within seven (7) days after receipt of the Contractor's Application for Payment, either approve such payment or notify the Contractor in writing of the CM's reasons for withholding approval in whole or in part as provided in Article 9.6. The review of the Contractor's Application for Payment by the CM is based on the CM's observations at the Project and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the CM's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. In some cases, the CM may act upon or rely on the evaluation of the Work by the Inspector. This review of Payment Applications is sometimes called a "Pencil Draft." District's return of a Pencil Draft shall constitute the District's dispute of the Payment Application that has been submitted. Contractor shall promptly respond to Pencil Drafts or Contractor's Payment Applications may be delayed. Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the prompt payment of a Request for Payment or Request for Retention. The foregoing representations are subject to: (1) an evaluation of the Work for conformance with the Contract Documents, (2) results of subsequent tests and inspections, (3) minor deviations from the Contract Documents correctable prior to completion, and (4) specific qualifications expressed by the CM. The issuance of a Certificate for Payment will further constitute the Contractor's verified representation that the Contractor is entitled to payment in the amount certified.

9.3.5 Payment of Undisputed Contract Payments

In accordance with Public Contract Code section 7100, payments by the District to the Contractor for any and all undisputed amounts (including all Progress Payments, Final Payments or Retention Payment) is contingent upon submission of a proper and accurate Payment Application and the Contractor furnishing the District with a release of all Claims against the District related to such undisputed amounts. Disputed Contract Claims in stated amounts may be specifically excluded by the Contractor from the operation of the release. If, however, the Contractor specifically excludes any Claims, the Contractor shall provide details such as a specific number of disputed days or costs of any such exclusion in accordance with Articles 4.6 and 7.7.

9.4 APPLICATIONS FOR PROGRESS PAYMENTS

9.4.1 Procedure

9.4.1.1 *Application for Progress.* On or before the fifth (5th) day of each calendar month during the progress of the Work, Contractor shall submit to the CM an itemized Application for Progress Payment for operations completed. Such application shall be notarized, if required, and supported by the following or such portion thereof as CM requires:

9.4.1.1.1.1 The amount paid to the date of the Payment Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;

9.4.1.1.1.2 The amount being requested under the Payment Application by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;

9.4.1.1.1.3 The balance that will be due to each of such entities after said payment is made;

9.4.1.1.1.4 A certification that the As-Built Drawings and Annotated Specifications are current;

9.4.1.1.1.5 Itemized breakdown of Work done for the purpose of requesting partial payment;

9.4.1.1.1.6 An updated or approved Baseline Schedule or other Schedule updates in conformance with Article 8;

9.4.1.1.1.7 Failure to submit an updated Schedule for the month or any previous month;

9.4.1.1.1.8 The additions to and subtractions from the Contract Price and Contract Time;

9.4.1.1.1.9 A summary of the Retention held;

9.4.1.1.1.10 Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require from time to time;

9.4.1.1.1.11 The percentage of completion of the Contractor's Work by line item;

9.4.1.1.1.12 An updated Schedule of Values from the preceding Application for Payment;

9.4.1.1.1.13 Prerequisites for Progress Payments; and

9.4.1.1.1.14 Any other information or documents reasonably requested by the District, Inspector or CM (if applicable).

9.4.1.2 *First Payment Request.* The following items, if applicable, must be completed before the first payment request will be accepted for processing:

9.4.1.2.1.1 Installation of the Project sign;

9.4.1.2.1.2 Receipt by CM of Submittals;

9.4.1.2.1.3 Installation of field office;

9.4.1.2.1.4 Installation of temporary facilities and fencing;

9.4.1.2.1.5 Submission of documents listed in the Article 9.2 relating to Contract Price breakdown;

9.4.1.2.1.6 Preliminary schedule analysis, due within 10 days after Notice to Proceed;

9.4.1.2.1.7 Contractor's Baseline Schedule (to be CPM based in conformance with Article 8);

9.4.1.2.1.8 Schedule of unit prices, if applicable;

9.4.1.2.1.9 Submittal Schedule;

9.4.1.2.1.10 Copies of necessary permits;

9.4.1.2.1.11 Copies of authorizations and licenses from governing authorities;

9.4.1.2.1.12 Initial progress report;

9.4.1.2.1.13 Surveyor qualifications;

9.4.1.2.1.14 Written acceptance of District's survey of rough grading, if applicable;

9.4.1.2.1.15 List of all Subcontractors, with names, license numbers, telephone numbers, and scope of work;

9.4.1.2.1.16 All bonds and insurance endorsements; and

9.4.1.2.1.17 Resumes of General Contractor's Project Manager, and if applicable, job site secretary, record documents recorder, and job site Superintendent.

9.4.1.3 *Second Payment Request.* The second payment request will not be processed until all Submittals and Shop Drawings have been accepted for review by the CM.

9.4.1.4 *All Payment Requests.* No payment requests will be processed unless Contractor has submitted copies of the certified payroll records for the Work which correlates to the payment request and a proper CPM schedule pursuant to Article 8 is submitted.

9.4.1.5 *Final Payment Application (90% or 95%).* See Article 9.11.1

9.4.1.6 *Final Payment Application (100%).* See Article 9.11.3

9.5 STOP NOTICE CLAIMS AND WARRANTY OF TITLE

The Contractor warrants title to all Work. The Contractor further warrants that all Work is free and clear of liens, claims, security interests, stop notices, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work. Failure to keep work free of liens, stop notices, claims, security interests or encumbrances is grounds to make a claim against Contractor's Payment and Performance Bond to immediately remedy and defend.

If a lien or stop notice of any nature should at any time be filed against the Work or any District property, by any entity which has supplied material or services at the request of the Contractor, Contractor and Contractor's Surety shall promptly, on demand by District and at Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or stop notice to be released or discharged immediately therefrom.

If the Contractor fails to furnish to the District within ten (10) calendar days after written demand by the District, satisfactory evidence that a lien or stop notice has been so released, discharged, or secured, then District may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by District from any sum payable to Contractor under the Contract. In addition, any liens, stop notices, claims, security interests or encumbrances shall trigger the indemnification requirements under Article 3.15 and the Agreement Form, and shall act as a trigger under Civil Code section 2778 and 2779 requiring reimbursement for any and all costs following the District's written demand has been made. Any withholdings by the District for stop notices in accordance with Civil Code section 9358 shall not be a basis by the Contractor to make a Claim for interest penalties under Public Contract Code sections 7107 or 20104.50.

9.6 DECISIONS TO WITHHOLD PAYMENT

9.6.1 Reasons to Withhold Payment

The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District's opinion, the representations to the District required by Article 9.4 cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

a. Defective Work not remedied;

b. Stop notices served upon the District;

c. Liquidated Damages assessed against the Contractor;

d. The cost of Completion of the Contract if there exists reasonable doubt that the Work can be Completed for the unpaid balance of any Contract Price or by the completion date;

e. Damage to the District or other contractor;

f. Unsatisfactory prosecution of the Work by the Contractor;

g. Failure to store and properly secure materials;

h. Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, acceptable monthly progress schedules, Shop Drawings, Submittal schedules, Schedule of Values, Product Data and samples, proposed product lists, executed Change Order, Construction Change Documents, and verified reports;

i. Failure of the Contractor to maintain As-Built Drawings;

j. Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Payment Application;

k. Unauthorized deviations from the Contract Documents (including but not limited to Unresolved Notices of Deviations

l. Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.

m. Failure to properly pay prevailing wages as defined in Labor Code section 1720, et seq.;

n. Failure to properly maintain or clean up the Site;

o. Payments to indemnify, defend, or hold harmless the District;

p. Any payments due to the District including but not limited to payments for failed tests, or utilities changes or permits;

q. Failure to submit an acceptable Baseline Schedule or any Schedule or Schedule update in accordance with Article 8;

r. Failure to pay Subcontractor or suppliers as required by Article 9.8.1

s. Failure to secure warranties, including the cost to pay for warranties;

t. Failure to provide releases from material suppliers or Subcontractors when requested to do so;

u. Items deducted pursuant to Article 2.2;

v. Incomplete Punch List items under Article 9.9.1.1 which have gone through the Article 2.2 process; or

w. Allowances that have not been used.

9.6.2 Reallocation of Withheld Amounts

District may, in its discretion, apply any withheld amount to payment of outstanding claims or obligations as defined in Article 9.6.1 and 9.5. In so doing, District shall make such payments on behalf of Contractor. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Contractor and District shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligation. District will render Contractor an accounting of such funds disbursed on behalf of Contractor.

If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision thereof, District may, after ten (10) calendar days written notice to the Contractor and without prejudice to any other remedy make good such deficiencies. The District shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work which is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract Price (of at least 150% of the estimated reasonable value of the nonconforming Work) shall be made therefor.

9.6.3 Payment After Cure

When the grounds for declining approval are removed, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Contractor to perform in accordance with the terms and conditions of the Contract Documents.

9.7 NONCONFORMING WORK

Contractor shall promptly remove from premises all Work identified by District as failing to conform to the Contract whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the Contract without additional expense to District and shall bear the expense of making good all Work of other contractors destroyed or damaged by such removal or replacement.

If Contractor does not remove such Work which has been identified by District as failing to conform to the Contract Documents within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal within ten (10) calendar days' time thereafter, District may, upon ten (10) calendar days' written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

9.8 SUBCONTRACTOR PAYMENTS

9.8.1 Payments to Subcontractors

No later than ten (10) days after receipt, or pursuant to Business and Professions Code section 7108.5, the Contractor shall pay to each Subcontractor, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

9.8.2 No Obligation of District for Subcontractor Payment

The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

9.8.3 Payment Not Constituting Approval or Acceptance

An approved Request for Payment, a progress payment, a Certificate of Substantial Completion, or partial or entire use or occupancy of the Project by the District shall not constitute acceptance of Work that is not in accordance with the Contract Documents.

9.8.4 Joint Checks

District shall have the right, if necessary for the protection of the District, to issue joint checks made payable to the Contractor and Subcontractors and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, any obligation from the District to such Subcontractor, or rights in such Subcontractor against the District. The District may choose to issue joint checks at District's sole discretion and only after all the requirements of that particular school district and county are specifically met. Some school districts cannot issue joint checks, so the ability to issue joint checks depends on the school district and the specific circumstances.

9.9 COMPLETION OF THE WORK

9.9.1 Close-Out Procedures

9.9.1.1 *Incomplete Punch Items.* When the Contractor considers the Work Substantially Complete (See Article 1.1.46 for definition of Substantially Complete), the Contractor shall prepare and submit to the District a comprehensive list of minor items to be completed or corrected (hereinafter "Incomplete Punch Items" or "Punch List"). The Contractor and/or its Subcontractors shall proceed promptly to complete and correct the Incomplete Punch Items listed. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Contractor is aware that Title 24 Section 4-343(a) provides:

> "RESPONSIBILITIES. IT IS THE DUTY OF THE CONTRACTOR TO COMPLETE THE WORK COVERED BY HIS OR HER CONTRACT IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS THEREFOR. THE CONTRACTOR IN NO WAY IS RELIEVED OF ANY RESPONSIBILITY BY THE ACTIVITIES OF THE CONSTRUCTION MANAGER, ENGINEER OR INSPECTOR IN THE PERFORMANCE OF SUCH DUTIES.

9.9.1.2 *Punch List Is Prepared Only After the Project Is Substantially Complete.* If any of the conditions noted in Article 1.1.46 as defining Substantial Completion are not met, the Inspector, CM or District may reject Contractor's Incomplete Punch Items as premature. If the CM and Inspector commence review of Incomplete Punch Items, all rights are reserved until the Project actually meets the definition of Substantially Complete. Liquidated Damages, warranties, and other contractual rights are not affected by Incomplete Punch Items unless otherwise addressed in these General Conditions.

Once the Inspector and the CM determine the Project is Substantially Complete, a Certificate of Substantial Completion shall be issued. The Inspector and CM shall prepare a Punch List of items which is an inspection report of the Work, if any, required in order to complete the Contract Documents and ensure compliance with the Approved Plans so the Project may be Completed by the Contractor and a final Close-Out is approved. When all Work for the Project is Complete, including Punch

Lists and all Work complies with the approved Contract Documents and Change Orders, the Project has reached Final Completion.

9.9.1.3 *Time for Completion of Punch List.* Contractor shall only be given a period of no more than thirty (30) days to complete the Punch List for the Project. During the Punch List period, the Contractor's Superintendent and Project Manager shall remain engaged in the Project and shall not be removed or replaced. If the Punch List is not completed at the end of the Punch List time then Contractor shall issue a valued Punch List within 5 days after the date the Punch List time ends. If Contractor does not issue such a list, the District or CM may issue a valued Punch List to the Contractor and withhold up to 150% of the value of the Punch List Work pursuant to Article 2.2 of this Agreement.

Failure to issue a timely written request for additional time to complete Punch List shall result in the deletion of the remaining Punch List Work pursuant to Article 2.2 and the issuance of a Deductive Change Order.

a. Extension of Time to Complete Punch List. If Contractor cannot finish the Punch List Work during the time period allotted under Article 9.9.1.3, the Contractor may make a written request for a Non-Compensable Punch List time extension accompanied by an estimate of the number of additional days it will take to complete the Punch List Work for a written consent from the District to allow continued Punch List Work. Punch List time extensions are a maximum of thirty (30) days for each request and must be accompanied by an itemized valued Punch List.

b. If there is no valued Punch List accompanying any request or if Contractor intends to undertake Punch List without the continued support and supervision of its Superintendent and Project Manager (as required under Article 3.2), the District, Construction Manager may issue a valued Punch List, reject the Punch List Time Extension and deduct 150% of the valued Punch List pursuant to Article 2.2 and proceed to Close-Out the Project. Contractor shall cease work on the Project and proceed to complete Contractor's Retention Payment Application and complete the Work for the Project required pursuant to Article 9.11.3.

9.9.1.4 *District Rejection of Written Request for Punch List Time Extensions*. Following sixty (60) Days of Punch List under Article 9.9.1.3, the District has the option of rejecting Punch List Time Extension requests. The District may proceed under Article 2.2 and deduct the value of remaining Punch List Work pursuant to Article 2.2. If the District rejects the Punch List Time Extension request then Contractor shall cease Work on the Project and proceed to Final Inspection pursuant to Article 9.11.2.

9.9.1.5 *Punch List Liquidated Damages to Compensate for Added District Project Costs.* If the total time utilized for Punch List exceeds sixty (60) days [the thirty (30) day period under Article 9.9.1.3 plus an additional thirty (30) day period that has been requested in writing], and the District grants an additional written Punch List Time Extension that exceeds sixty (60) days of Punch List, then Contactor shall be charged Liquidated Damages of at least $750 per day for continued Punch List Work to partially compensate the Inspector and Construction Manager's extended time on the Project. This Punch List Liquidated Damage number is based on anticipated cost for an Inspector on site and additional costs for the Construction Manager to reinspect Punch List items and perform the administration of the Close-out.

Contractor received thirty (30) days without any charges for Punch List Liquidated Damages and is placed on notice pursuant to this Article 9.9.1.5 that $750 is due for each day of Punch List that exceeds sixty (60) days at $750, a cost much lower than typical (and actual) costs for Inspection, and Construction Manager time required during Punch List. Starting at ninety (90) days of Punch List (an excessive number of days to complete Punch List), the District shall be entitled to adjust Punch List Liquidated Damages to an estimate of the actual costs incurred to oversee, monitor and inspect the Punch List. If costs exceed $750 per day, the anticipated extended contract charges for Inspection, Construction Manager, and any other costs that will be incurred due to the extended Punch List shall be itemized and a daily rate of Punch List Liquidated Damages shall be presented in writing to the Contractor within five (5) days following the receipt of a written request for Punch List Time Extension by the Contractor that extends the Punch List time beyond ninety (90) days. This written notice of actual Punch List Liquidated Damages may be provided to the Contractor at any time following the first written request for Punch List Time extension requested under Article 9.9.1.3. The adjusted actual Punch List Liquidated Damage amount shall be applicable as Punch List Liquidated Damages commencing on the ninetieth (90th) day of Punch List.

9.9.2 Close-Out Requirements for Final Completion of the Project

a. Utility Connections. Buildings shall be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections shall be made and existing services reconnected

b. As-Builts Up to Date and Complete. The intent of this procedure is to obtain an exact "As-Built" record of the Work upon completion of the project. The following information shall be carefully and correctly drawn on the prints and all items shall be accurately located and dimensioned from finished surfaces of building walls on all As-Built Drawings

9.9.2.1.2.1 The exact location and elevations of all covered utilities, including valves, cleanouts, etc. must be shown on As-Built Drawings

9.9.2.1.2.2 Contractor is liable and responsible for inaccuracies in As-Built Drawings, even though they become evident at some future date.

9.9.2.1.2.3 Upon completion of the Work and as a condition precedent to approval of Retention Payment, Contractor shall obtain the Inspector's approval of the "As-Built" information. When completed, Contractor shall deliver corrected sepias and/or a Diskette with an electronic file in a format acceptable to the District.

9.9.2.1.2.4 District may withhold the cost to hire a draftsman and potholing and testing service to complete Record As-Built Drawings at substantial cost if the Contractor does not deliver a complete set of Record As-Built Drawings. This shall result in withholding of between $10,000 to $20,000 per building that does not have a corresponding Record As Built Drawing.

c. Any Work not installed as originally indicated on Drawings

d. All DSA Close-Out requirements **NOT APPLICABLE TO THIS PROJECT**

e. Submission of Form 6-C. **NOT APPLICABLE TO THIS PROJECT**

f. ADA Work that must be corrected to receive certification. See Article 12.2.

g. Maintenance Manuals. At least thirty (30) days prior to final inspection, three (3) copies of complete operations and maintenance manuals, repair parts lists, service instructions for all electrical and mechanical equipment, and equipment warranties shall be submitted. All installation, operating, and maintenance information and Drawings shall be bound in 8½" x 11" binders. Provide a table of contents in front and all items shall be indexed with tabs. Each manual shall also contain a list of Subcontractors, with their addresses and the names of persons to contact in cases of emergency. Identifying labels shall provide names of manufactures, their addresses, ratings, and capacities of equipment and machinery.

9.9.2.1.7.1 Maintenance manuals shall also be delivered in electronic media for the Project. Any demonstration videos shall also be provided on electronic media.

h. Inspection Requirements. Before calling for final inspection, Contractor shall determine that the following Work has been performed:

9.9.2.1.8.1 The Work has been completed;

9.9.2.1.8.2 All fire/ life safety items are completed and in working order;

9.9.2.1.8.3 Mechanical and electrical Work complete, fixtures in place, connected and tested;

9.9.2.1.8.4 Electrical circuits scheduled in panels and disconnect switches labeled;

9.9.2.1.8.5 Painting and special finishes complete;

9.9.2.1.8.6 Doors complete with hardware, cleaned of protective film relieved of sticking or binding and in working order;

9.9.2.1.8.7 Tops and bottoms of doors sealed;

9.9.2.1.8.8 Floors waxed and polished as specified;

9.9.2.1.8.9 Broken glass replaced and glass cleaned;

9.9.2.1.8.10 Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site;

9.9.2.1.8.11 Work cleaned, free of stains, scratches, and other foreign matter, replacement of damaged and broken material;

9.9.2.1.8.12 Finished and decorative work shall have marks, dirt and superfluous labels removed;

9.9.2.1.8.13 Final cleanup, as in Article 3.12;

9.9.2.1.8.14 All Work pursuant to Article 9.11.2; and

9.9.2.1.8.15 Furnish a letter to District stating that the District's Representative or other designated person or persons have been instructed in working characteristics of mechanical and electrical equipment.

9.9.3 Costs of Multiple Inspections

More than two (2) requests of the District to make inspections required under Article 9.9.1 shall be considered an additional service of CM, Inspector, Engineer or other consultants shall be the Contractor's responsibility pursuant to Article 4.5 and all subsequent costs will be prepared as a Deductive Change Order.

9.10 PARTIAL OCCUPANCY OR USE

9.10.1 District's Rights

The District may occupy or use any completed or partially completed portion of the Work at any stage. The District and the Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. If District and Contractor cannot agree as to responsibilities such disagreement shall be resolved pursuant to Article 4.6. When the Contractor considers a portion complete, the Contractor shall prepare and submit a Punch List to the District as provided under Article 9.9.1.

9.10.2 Inspection Prior to Occupancy or Use

Immediately prior to such partial occupancy or use, the District, the Contractor, and the CM shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.10.3 No Waiver

Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

9.11 COMPLETION AND FINAL PAYMENT

9.11.1 Final Payment (90% Billing if Substantially Complex Finding and 95% Billing If No Finding Is Made)

The following items must be completed before the Final Payment Application will be accepted for processing at Substantial Completion of the Project:

a. Inspector sign-off of each item;

b. The Project has reached the Punch List items under Article 9.9.1.2 and the Project has been determined to be Substantially Complete under Article 1.1.46;

c. Removal of temporary facilities and services;

d. Testing, adjusting and balance records are complete;

e. Removal of surplus materials, rubbish, and similar elements;

f. Changeover of door locks;

g. Deductive items pursuant to Article 9.6 and Article 2.2; and

h. Completion and submission of all final Change Orders for the Project.

9.11.2 Final Inspection (Punch List Completion)

Contractor shall comply with Punch List procedures under Article 9.9.1.1, and maintain the presence of Project Superintendent and Project Manager (not replacement project superintendent or project manager) until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List.

Upon completion of the Work under Article 9.9.1, the Contractor shall notify the District and CM, who shall again inspect such Work. If the CM and the District find the Work contained in the Punch List acceptable under the Contract Documents, the Work shall have reached Final Completion. CM shall notify Contractor, who shall then submit to the CM its Application for Retention Payment. This Application for Retention Payment shall contain any deductions under Article 9.6, including but not limited to incomplete Punch List items under Article 9.9.1.

Upon receipt and approval of Application for Retention Payment, the CM shall issue a Form 6 stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the CM in connection with the Work, such Work has been completed in accordance with the Contract Documents. The District shall thereupon inspect such Work and either accept the Work as complete or notify the CM and the Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Contractor as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and the Contractor shall, upon receipt of payment from the District, pay the amounts due Subcontractors.

If the CM and the District find that the Work contained in the Punch List is unacceptable, then Contractor shall issue a valued Punch List within 5 days after the date the Punch List time ends. If Contractor does not issue such a list, the District or CM may issue a valued Punch List to the Contractor and withhold up to 150% of the value of the Punch List Work pursuant to Article 2.2 of this Agreement.

9.11.3 Retainage (100% Billing for the Entire Project)

The retainage, less any amounts disputed by the District or which the District has the right to withhold pursuant to the Contract Documents (including but not limited to incomplete Punch List items under Article 9.9.1), shall be paid after approval by the District of the Application for Retention Payment, after the satisfaction of the conditions set forth in Article 9, the Final Inspection under Article 9.11.2 is completed, and after thirty-five (35) days after the acceptance of the Work and recording of the Notice of Completion by District. No interest shall be paid on any retainage, or on any amounts withheld due to a failure of the Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any escrow agreement between the District and the Contractor.

a. Procedures for Application for Retention Payment. The following conditions must be fulfilled prior to release of Retention Payment:

9.11.3.1.1.1 A full and final waiver or release of all stop notices in connection with the Work shall be submitted by Contractor, including a release of stop notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all Stop Notice rights.

9.11.3.1.1.2 The Contractor shall have made all corrections, including all Punch List Items, to the Work which are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District required under the Contract Documents.

9.11.3.1.1.3 Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, releases from the Surety and warranty bonds (if applicable) required by the Contract Documents for its portion of the Work.

9.11.3.1.1.4 Contractor must have completed all requirements set forth in Article 9.9

9.11.3.1.1.5 Contractor must have issued a Form 6C for the Project.

9.11.3.1.1.6 The Contractor shall have delivered to the District all manuals and materials required by the Contract Documents.

9.11.3.1.1.7 The Contractor shall have completed final clean up as required by Article 3.12

9.11.3.1.1.8 Contractor shall have all deductive items under Article 9.6 and Article 2.2 submitted as part of the Retention Payment.

9.11.4 Recording of a Notice of Completion After Punch List Period and Final Inspection.

When the Work, or designated portion thereof, is complete or the District has completed the Article 9.6and/or the Article 2.2 process, whichever occurs first, the District will file either a Notice of Completion or a Notice of Completion noting valued Punch List items. Valued Punch List items will be deducted from the Retention Payment.

During the time when Work is being performed on the Punch List, the Project does not meet the definition of "Complete" under Public Contract Code section 7107(c)(1) even if there is "beneficial occupancy" of the Project since that has been no "cessation of labor" on the Project. Completion of Punch List under this Article is not "testing, startup, or commissioning by the public entity or its agent." In other words, the continuing Punch List Work is Contractor labor on the Project until each and every item of Punch List Work is complete or the time periods under Article 9.9.1 have expired.

9.11.5 Warranties

Warranties required by the Contract Documents shall commence on the date of Completion of the entire Work. Warranty periods DO NOT commence at Substantial Completion or when a particular Subcontractor work is complete. No additional charges, extras, Change Orders, or Claims may be sought for warranties commencing from the Notice of Completion.

District shall have the right to utilize equipment, test, and operate as necessary for acclimation, or testing without voiding or starting warranties. Taking beneficial occupancy shall not start warranties except in the case where the District agrees, in writing, that warranties shall commence running or where the District is taking phased occupancy of specific buildings or areas and completes separate Punch Lists as further addressed in Article 4.2.7.

9.11.6 Time for Submission of Application for Final Payment and Retention Payment (Unilateral Processing of Final and Retention Payment Application).

If Contractor submits a Final Payment Application which fails to include deductive items under Article 9.6, the District or CM shall note this defective request for Final Payment Application. The Contractor shall be notified that specific deductive items shall be included in the Final Payment Application. If Contractor either continues to submit the Final Payment Application without deductive items under Article 9.6, or a period of 14 calendar days passes after Contractor is provided written notice of deductive items for inclusion in Final Payment Application, then District may either alter the Final Payment Application and recalculate the math on the Final Payment Application to address the Article 9.6 deductive items or process a unilateral Final Payment Application.

9.11.7 Unilateral Release of Retention

After the recordation of the Notice of Completion, or within sixty (60) days following the completion of the Punch List or the expiration of the time for completion of Punch List under Article 9.9.1, if Contractor does not make an Application for Release of Retention, the District may unilaterally release retention less any deducts under Article 9.6 and/or Article 2.2, withholds due to stop notices, or withholdings due to other defective Work on the Project. District may also choose to unilaterally release Retention after deduction of 150% of any disputed items, which may also include items under Article 9.6 and 2.2. If a deduction pursuant to Article 9.6 is made from Retention, a letter deducting specific valued items shall be considered a notice of Default under the terms of the Escrow Agreement.

9.12 SUBSTITUTION OF SECURITIES

The District will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300 as set forth in the form contained in the Bid Documents.

ARTICLE 10
PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 Contractor Responsibility

The Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the District. All Work shall be solely at the Contractor's risk, with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code section 7105(b)(2).

Contractor shall take, and require Subcontractor to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, state, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Contractor shall furnish, erect and properly maintain at all times, as directed by District or CM or required by conditions and progress of Work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created by such features in the course of construction. Contractor shall designate a responsible member of its organization on the Work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. The name and position of person so designated shall be reported to District by Contractor. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

10.1.2 Subcontractor Responsibility

Contractor shall require that Subcontractors participate in, and enforce, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the Contractor and its Subcontractors. Each Subcontractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

10.1.3 Cooperation

All Subcontractors and material or equipment suppliers shall cooperate fully with Contractor, the District, and all insurance carriers and loss prevention engineers.

10.1.4 Accident Reports

Subcontractors shall immediately, within two (2) days, report in writing to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or

off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported within four (4) days by telephone or messenger. Contractor shall thereafter immediately, within two (2) days, report the facts in writing to the District and the Construction Manger (CM) giving full details of the accident.

10.1.5 First-Aid Supplies at Site

The Contractor will provide and maintain at the Site first-aid supplies which complies with the current Occupational Safety and Health Regulations.

10.1.6 Material Safety Data Sheets and Compliance with Proposition 65

Contractor is required to have material safety data sheets available in a readily accessible place at the job site for any material requiring a material safety data sheet per the Federal "hazard communication" standard, or employees' "right-to-know law." The Contractor is also required to properly label any substance brought into the job site, and require that any person working with the material, or within the general area of the material, is informed of the hazards of the substance and follows proper handling and protection procedures.

Contractor is required to comply with the provisions of California Health and Safety Code section 25249, et seq., which requires the posting and giving of notice to persons who may be exposed to any chemical known to the State of California to cause cancer. The Contractor agrees to familiarize itself with the provisions of this Section, and to comply fully with its requirements.

10.1.7 Non-Utilization of Asbestos Material

NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE USED IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysotile, amosite, anthophyllite, tremolite, and antinolite.

Any or all material containing greater than one-tenth of one percent (>.1%) asbestos shall be defined as asbestos-containing material.

All Work or materials found to contain asbestos or Work or material installed with asbestos-containing equipment will be immediately rejected and this Work will be removed at no additional cost to the District.

Decontamination and removal of Work found to contain asbestos or Work installed with asbestos-containing equipment shall be done only under supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency.

The asbestos removal contractor shall be an EPA accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the asbestos consultant, who shall have sole discretion and final determination in this matter.

The asbestos consultant shall be chosen and approved by the District, who shall have sole discretion and final determination in this matter.

The Work will not be accepted until asbestos contamination is reduced to levels deemed acceptable by the asbestos consultant.

Interface of Work under this Contract with Work containing asbestos shall be executed by the Contractor at his risk and at his discretion, with full knowledge of the currently accepted standards, hazards, risks, and liabilities associated with asbestos work and asbestos-containing products. By execution of this Contract, the Contractor acknowledges the above and agrees to hold harmless District and its assigns for all asbestos liability which may be associated with this work and agrees to instruct his employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor

The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

a. Employees on the Work and other persons who may be affected thereby;

b. The Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and

c. Other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

Contractor is constructive owner of Project site as more fully discussed in Article 6.2.

10.2.2 Contractor Notices

The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

10.2.3 Safety Barriers and Safeguards

The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

10.2.4 Use or Storage of Hazardous Material

When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on

such activities under supervision of properly qualified personnel. The Contractor shall notify the District any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the District and local fire authorities.

10.2.5 Protection of Work

The Contractor and Subcontractors shall continuously protect the Work, the District's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. The Contractor and Subcontractors, at their own expense, shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the District.

The Contractor, at Contractor's expense, will remove all mud, water, or other elements as may be required for the proper protection and prosecution of its Work.

Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair Work shall be obtained and paid for by Contractor.

10.2.6 Requirements for Existing Sites

Contractor shall (unless waived by the District in writing):

a. When performing construction on existing sites, become informed and take into specific account the maturity of the students on the Site; and perform Work which may interfere with school routine before or after school hours, enclose working area with a substantial barricade, and arrange Work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities. The Contractor shall comply with Specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with school functioning.

b. Avoid performing any Work that will disturb students during testing.

c. Provide substantial barricades around any shrubs or trees indicated to be preserved.

d. Deliver materials to building area over route designated by CM.

e. Take preventive measures to eliminate objectionable dust, noise, or other disturbances.

f. Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of CM; and not interfere with the Work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of District and CM regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on the Project site.

g. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Contractor.

h. Provide District on request with Contractor's written safety program and safety plan for each site.

10.2.7 Shoring and Structural Loading

The Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of the Contractor. All such items shall conform with the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. The Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel Work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by the Contractor at no cost to the District.

10.2.8 Conformance within Established Limits

The Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the District or the Contractor, and shall not unreasonably encumber the premises with construction equipment or materials.

10.2.9 Subcontractor Enforcement of Rules

Subcontractors shall enforce the District's and the Contractor's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Site.

10.2.10 Site Access

The Contractor and the Subcontractors shall use only those ingress and egress routes designated by the District, observe the boundaries of the Site designated by the District, park only in those areas designated by the District, which areas may be on or off the Site, and comply with any parking control program established by the District, such as furnishing license plate information and placing identifying stickers on vehicles.

10.2.11 Security Services.

The Contractor shall be responsible for providing security services for the Site as needed for the protection of the Site and as determined in the District's sole discretion.

10.3 EMERGENCIES

10.3.1 Emergency Action

In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7.

10.3.2 Accident Reports

The Contractor shall promptly report in writing to the District all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses in conformance with Article 10.1.4. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported in accordance with Article 10.1.4, immediately by telephone or messenger to the District.

10.4 HAZARDOUS MATERIALS

10.4.1 Discovery of Hazardous Materials

In the event the Contractor encounters or suspects the presence on the job site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by § 25249.5 of the California Health and Safety Code, which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the District and the Construction Manager in writing, whether or not such material was generated by the Contractor or the District. The Work in the affected area shall not thereafter be resumed, except by written agreement of the District and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous material, and has not been rendered harmless. The Work in the affected area shall be resumed only in the absence of asbestos, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the District and the Contractor.

10.4.2 Hazardous Material Work Limitations

In the event that the presence of hazardous materials is suspected or discovered on the Site (except in cases where asbestos and other hazardous material Work in the Contractor's responsibility), the District shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Contractor shall not be required pursuant to Article 7 to perform without consent any Work in the affected area of the Site relating to asbestos, polychlorinated biphenyl (PCB), or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by District, as certified by an independent testing laboratory and approved by the appropriate government agency.

10.4.3 Indemnification by Contractor for Hazardous Material Caused by Contractor

In the event the hazardous materials on the Project Site is caused by the Contractor, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the District for any additional costs incurred as a result of Contractor's generation of hazardous material on the Project Site. In addition, the Contractor shall defend, indemnify and hold harmless District and its agents, officers, and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site.

10.4.4 Terms of Hazardous Material Provision

The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of this Contract.

10.5 SITE SAFETY PLAN

10.5.1 Requirements

A condition precedent of receiving the Notice to Proceed (NTP), the Contractor must submit to the District a Site Safety Plan (SSP) in compliance with DSA Bulletin BU 24-05. At a minimum, the SSP shall include the following information required in California Fire Code (CFC) Section 3303.1.1

- Name and contact information of site safety director.
- Documentation of training of the site safety director and fire watch personnel.
- Procedures for reporting emergencies.
- Fire department vehicle access routes.
- Locations of fire protection equipment, including portable fire extinguishers, standpipes, fire department connections and fire hydrants.
- Smoking and cooking policies, designated areas to be used where approved, and signage locations in accordance with CFC Section 3305.8.
- Location and safety considerations for temporary heating equipment.
- Hot work (welding, roofing, etc.) plan.
- Plans for control of combustible waste.
- Locations and methods for storage and use of flammable and combustible liquids and other hazardous materials.
- Provisions of site security.
- Changes that affect this plan.
- Other site-specific information requested by the local fire authority (LFA).

ARTICLE 11
INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.1 Insurance Requirements

Before the commencement of the Work, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California with a financial rating of at least an A-VIII status as rated in the most recent edition of Best's Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Contractor's Work under the Contract and for which the Contractor may be legally liable, whether such Work are by the Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Any required insurance shall not contain any exclusion that applies to the type of work performed by the Contractor under the Contract Documents.

a. Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim;

b. Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor or by another person;

c. Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;

d. Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work;

e. Claims involving contractual liability applicable to the Contractor's obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors;

f. Claims involving Completed Operations, Independent Contractors' coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating (XCU); and

g. Claims involving sudden or accidental discharge of contaminants or pollutants.

11.1.2 Specific Insurance Requirements

Contractor shall take out and maintain and shall require all Subcontractors, if any, whether primary or secondary, to take out and maintain:

Commercial General Liability Insurance with a combined single limit per occurrence of not less than $2,000,000.00 or Commercial General Liability Insurance which provides limits of not less than:

(a)	Per occurrence (combined single limit)	$2,000,000.00
(b)	Project Specific Aggregate (for this Project only)	$2,000,000.00
(c)	Products and Completed Operations (aggregate)	$2,000,000.00
(d)	Personal and Advertising Injury Limit	$1,000,000.00

Insurance Covering Special Hazards

The following Special hazards shall be covered by separate policies or endorsements/riders to the above mentioned commercial general liability insurance or property damage insurance policy or policies of insurance, in amounts as follows:

(a)	Automotive and truck where operated in amounts	$1,000,000.00
(b)	Material Hoist where used in amounts	$1,000,000.00
(c)	Explosion, Collapse and Underground (XCU coverage)	$1,000,000.00
(d)	Pollution Legal Liability	$1,000,000.00

In addition, provide Excess Liability Insurance coverage in the amount of Four Million Dollars ($4,000,000.00). Excess Insurance policies shall be "following form" of the underlying policy coverage, terms, conditions, and provisions and shall meet all of the insurance requirements stated in this document, including, but not limited to, the additional insured, contractual liability & "insured contract" definition for indemnity, occurrence, no limitation of prior work coverage, and primary & non-contributory insurance requirements stated therein. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor's primary and excess liability policies are exhausted.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader coverage and/or the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage above shall be available to the District.

11.1.3 Subcontractor Insurance Requirements

The Contractor shall require its Subcontractors to take out and maintain commercial general liability insurance and property damage insurance required under Article 11.1 in like amounts. A "claims made" or modified "occurrence" policy shall not satisfy the requirements of Article 11.1 without prior written approval of the District.

11.1.4 Additional Insured Endorsement Requirements

The Contractor shall name, on any policy of insurance required under Article 11.1, the District, CM, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. Subcontractors shall name the Contractor, the District, Construction Manager, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be ISO CG 20 10 (04/13) and ISO CG 20 37 (04/13), or their equivalent as determined by the District in its sole discretion, and must state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor pursuant to 11.1 must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer's liability shall not be reduced by the existence of such other insurance. Contractor shall provide an endorsement indicating a primary coverage, non-contributing on all general liability policies by ISO CG 20 01 (04/13) or an equivalent endorsement as determined by the District in its sole discretion. Each policy of insurance required by this Article 11.1 shall state that not less than thirty (30) days' written notice shall be given to the District prior to cancellation.

11.2 WORKERS' COMPENSATION INSURANCE

During the term of this Contract, the Contractor shall provide workers' compensation and employer's liability insurance for all of the Contractor's employees engaged in Work under this Contract on or at the Site of the Project and, in case any of the Contractor's Work is subcontracted, the Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in Work under this Contract on or at the Site of the Project is not protected under the Workers' Compensation laws, the Contractor shall provide or cause a Subcontractor to provide insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the District certificates of insurance as required under Article 11.6 and in compliance with Labor Code § 3700.

Workers' compensation limits shall be in accordance with and as required by the California Labor Code (in no event less than $1,000,000) and employers' liability limits shall be $1,000,000 per accident for bodily injury or disease.

11.3 BUILDER'S RISK/ "ALL RISK" INSURANCE

11.3.1 Course-of-Construction Insurance Requirements

The Contractor, during the progress of the Work and until final acceptance of the Work by District upon completion of the entire Contract, shall maintain Builder's Risk, Course of Construction or

similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable Work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind, lightning, smoke and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the CM's and engineering services and expenses required as a result of any insured loss upon the Work and Project which is the subject of the Contract Documents, including completed Work and Work in progress, to the full insurable value thereof. Such insurance shall include the District as additional named insureds, and any other person with an insurable interest as designated by the District.

The Contractor shall submit to the District for its approval all items deemed to be uninsurable. The risk of the damage to the Work due to the perils covered by the "Builder's Risk/All Risk" Insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the Surety, and no Claims for such loss or damage shall be recognized by the District nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

11.4 FIRE INSURANCE

Before the commencement of the Work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor's expense, fire insurance on all Work subject to loss or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the District. This requirement may be waived upon confirmation by the District that such coverage is provided under the Builder's Risk Insurance being provided.

11.5 AUTOMOBILE LIABILITY

11.5.1 The District and Construction Manager, Inspectors, their directors, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible. Such insurance coverage shall be primary and non-contributory insurance as respects the District, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it. The insurer shall agree to waive all rights of subrogation against the District, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy that arise from Work performed by the Contractor.

11.5.2 Insurance Services Office Business Auto Coverage Form Number CA 0001, Code 1 (any auto) is required. Comprehensive Automobile Liability insurance to include all autos, owned, non-owned, and hired, with limits of $1,000,000 per accident for bodily injury and property damage.

11.6 OTHER INSURANCE

The Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

11.7 PROOF OF INSURANCE

The Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

a. Certificates and insurance policies shall include the following clause:

> "This policy and any coverage shall not be suspended, voided, non-renewed, canceled, or reduced in required limits of liability or amounts of insurance or coverage until notice has been mailed via certified mail to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice."

b. Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.

c. Certificates of insurance shall clearly state that the District and the Construction Manager are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

d. The Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

e. Certificates of insurance will not be considered valid unless accompanied by all corresponding and necessary endorsement(s) as required by this Article 11.

11.8 COMPLIANCE

In the event of the failure of Contractor to furnish and maintain any insurance required by this Article 11, the Contractor shall be in default under the Contract. Compliance by Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve the Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the District and the Construction Manager.

11.9 WAIVER OF SUBROGATION

Contractor waives (to the extent permitted by law) any right to recover against the District for damages to the Work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

Contractor shall provide an endorsement indicating a waiver of subrogation on all general liability policies by ISO CG 24 04 (05/09) or an equivalent endorsement as determined by the District in its sole discretion. Contractor shall provide an endorsement indicating a waiver of subrogation on all workers' compensation policies by form WC 00 03 13 (04/84).

The provisions of this Article are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage and waive fully and for the benefit of each, any rights and/or claims which might give rise to a right of subrogation in any insurance carrier. The District and the Contractor shall each obtain in all policies of insurance carried by either of them, a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

11.10 PERFORMANCE AND PAYMENT BONDS

11.10.1 Bond Requirements

Unless otherwise specified in the Supplemental Conditions, prior to commencing any portion of the Work, the Contractor shall furnish separate Payment and Performance Bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate Surety authorized and admitted to transact business in California as sureties.

To the extent, if any, that the Contract Price is increased in accordance with the Contract Documents, the Contractor shall, upon request of the District, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the District. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Price, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor will release the Surety. If the Contractor fails to furnish the required bonds, the District may terminate the Contract for cause.

11.10.2 Surety Qualification

Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure § 995.120 shall be accepted. Surety must be a California-admitted Surety and listed by the U.S. Treasury with a bonding capacity in excess of the Project cost.

11.10.3 Alternate Surety Qualifications

If a California-admitted Surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with § 995.660 of the California Code of Civil Procedure and proof of such is provided to the District.

ARTICLE 12
UNCOVERING AND CORRECTION OF WORK

12.1 COMPLIANCE WITH TITLE 24 INSTALLATION REQUIREMENTS

Contractor is aware of the requirements governing Contractor's Work under title 24 Section 4-343 which provides, in pertinent part:

> **4-343. Duties of the Contractor.**
>
> (a) **Responsibilities**. It is the duty of the contractor to complete the Work covered by his or her contract in accordance with the approved Plans and Specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the Construction Manager, engineer or Inspector in the performance of such duties.
>
> (b) **Performance of the Work.** The contractor shall carefully study the approved Plans and Specifications and shall plan a schedule of operations well ahead of time. If at any time it is discovered that Work is being done which is not in accordance with the approved Plans and Specifications, the contractor shall correct the Work immediately. All inconsistencies or items which appear to be in error in the Plans and Specifications shall be promptly called to the attention of the Construction Manager or registered engineer, through the Inspector, for interpretation or correction. In no case, however, shall the instruction of the Construction Manager or registered engineer be construed to cause Work to be done which is not in conformity with the approved Plans, Specifications, and Change Orders. The contractor must notify the Project Inspector, in advance, of the commencement of construction of each and every aspect of the Work.

12.1.1 Issuance of Notices of Non-Compliance

The Inspector may issue a Notice of Non-Compliance on the Project indicating deviation from Plans and Specifications. It is Contractor's responsibility to correct all deviations from the approved Plans and Specifications unless the District has issued an Immediate Change Directive. In such case, the Contractor shall proceed with the Work with the understandings of the District as set forth in the ICD and as specifically noted in Article 7.3.

12.2 SPECIAL NOTICE OF AMERICAN'S WITH DISABILITIES ACT

Some of the requirements in the Plans and Specifications are meant to comply with the Americans with Disabilities Act ("ADA"). The requirements of the ADA are technical in nature and may appear to be minor in nature (i.e. whether a walkway or ramp has a 2% cross-slope). Contractor is warned that even the slightest deviation from the specific requirements from the ADA is considered a Civil Rights violation and subjects the District to fines of three times actual damages sustained by a handicap individual or up to $4,000 per violation and attorney's fees required to enforce the ADA violation. As a result of the significant liability and exposure associated with ADA aspects of the Contract, Contractor shall take special care to meet all ADA requirements detailed in the Plans and Specifications. Failure to comply with ADA rules that results in a Notice of Non-Compliance shall be repaired to meet ADA requirements promptly. In addition, any ADA violations that are not identified by Inspector or Construction Manager that are later identified shall be repaired and charged back to the Contractor through a Deductive Change Order.

12.2.1 Indemnification of ADA Claims

Contractor shall indemnify, hold harmless and defend the District from ADA claims arising from the failure to comply with the Plans and Specifications. Further, any withholdings for ADA violations under Article 9.6 shall include potential redesign costs and an accelerated repair costs due to the potential for ADA claims arising from ADA violations on the Project.

12.3 UNCOVERING OF WORK

12.3.1 Uncovering Work for Required Inspections

Work shall not be covered without the Inspector's review and the Construction Manager's knowledge that the Work conforms with the requirements of the approved Plans and Specifications (except in the case of an ICD under Article 7.3). Inspector must be timely notified of inspections and of new areas so Work can be inspected at least 48 hours before opening a new. An Inspector must comply with protocols for signing each category or phase of Work. Thus, if a portion of the Work is covered without inspection or Construction Manager approval, is subject to a Notice of Non-Compliance for being undertaken without inspection, or otherwise not in compliance with the Contract Documents, after issuance of a Written Notice of Non-Compliance or a written notice to uncover Work, Contractor shall promptly uncover all Work (which includes furnishing all necessary facilities, labor, and material) for the Inspector's or the Construction Manager's observation and such Work shall be replaced at the Contractor's expense without change in the Contract Sum or Time.

12.3.2 Costs for Inspections Not Required

If a portion of the Work has been covered is believed to be Non-Conforming to the Plans and Specifications, even if the Form 152 for the category of Work has been signed by the Inspector, the Inspector or the Construction Manager may request to see such Work, and it shall be promptly uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order and shall, be charged to the District. If such Work is not in accordance with Contract Documents, the Contractor shall be responsible for all costs to uncover the Work, delays incurred to uncover the Work, and Contractor shall pay all costs to correct the Non-Conforming construction condition unless the condition was caused by the District or a separate contractor, in which event the District shall be responsible for payment of such costs to the Contractor.

12.4 CORRECTION OF WORK

12.4.1 Correction of Rejected Work

The Contractor shall promptly correct the Work rejected by the Inspector or the District upon recommendation of the Construction Manager as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or not Fabricated, installed, or completed. The Contractor shall bear costs of correcting the rejected Work, including cost for delays that may be incurred by Contractor or Subcontractors, the cost for additional testing, inspections, and compensation for the Inspector's or the Construction Manager's services and expenses made necessary thereby (including costs for preparing a CCD, CCD review fees, and additional inspection and special inspection costs).

12.4.2 One-Year Warranty Corrections

If, within one (1) year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established under Article 9.9.1, or by the terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the District to do so unless the District has previously given the Contractor a written acceptance of such condition. This period of one (1) year shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation under this Article 12.4.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The District shall give such notice promptly after discovery of the condition.

12.4.3 District's Rights if Contractor Fails to Correct

If the Contractor fails to correct nonconforming Work within a reasonable time, the District may correct the Work and seek a Deductive Change Order, pursuant to Article 9.6 or Article 2.2.

ARTICLE 13
MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located.

13.2 SUCCESSORS AND ASSIGNS

The District and the Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and Obligations Cumulative

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 No Waiver

No action or failure to act by the Inspector, the District, or the Construction Manager shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS

13.5.1 Compliance

Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Division 1, Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 Independent Testing Laboratory

The District will select and pay an independent testing laboratory to conduct all tests and inspections. Selection of the materials required to be tested shall be made by the laboratory or the District's representative and not by the Contractor. See Articles 3.13.1 and 4.3.6 regarding costs or expenses of inspection or testing outside of the Project Site.

13.5.3 Advance Notice to Inspector

The Contractor shall notify the Inspector a sufficient time in advance of its readiness for required observation or inspection so that the Inspector may arrange for same. The Contractor shall notify the Inspector a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector may arrange for the testing of the material at the source of supply.

13.5.4 Testing Off-Site

Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.5 Additional Testing or Inspection

If the Inspector, the Construction Manager, the District, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Article 13.5.1, the Inspector will, upon written authorization from the District, make arrangements for such additional testing, inspection, or approval. The District shall bear such costs except as provided in Articles 13.5.6 and 13.5.7.

13.5.6 Costs for Retesting

If such procedures for testing, inspection, or approval under Articles 13.5.1 and 13.5.2reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Construction Manager's services and expenses. Any such costs shall be paid by the District, invoiced to the Contractor, and deducted from the next Progress Payment.

13.5.7 Costs for Premature Test

In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the District for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Inspector's and Construction Manager's fees and expenses, and the amount of the invoice shall be deducted from the next Progress Payment.

13.6 TRENCH EXCAVATION

13.6.1 Trenches Greater Than Five Feet

Pursuant to Labor Code section 6705, if the Contract Price exceeds $25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, submit to the District or a registered civil or structural engineer employed by the District or Construction Manager, a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

13.6.2 Excavation Safety

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the District or by the person to whom authority to accept has been delegated by the District.

13.6.3 No Tort Liability of District

Pursuant to Labor Code § 6705, nothing in this Article shall impose tort liability upon the District or any of its employees.

13.6.4 No Excavation without Permits

The Contractor shall not commence any excavation Work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE

13.7.1 Wage Rates

Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public works project is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations ("Director"). These rates are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

Any worker employed to perform Work on the Project, but such Work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

13.7.2 Holiday and Overtime Pay

Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations

or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

13.7.3 Wage Rates Not Affected by Subcontracts

The Contractor shall pay and shall cause to be paid each worker engaged in the execution of the Work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such workers.

13.7.4 Per Diem Wages

The Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including, but not limited to, employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

13.7.5 Forfeiture and Payments

Pursuant to Labor Code §1775, the Contractor shall forfeit to the District, not more than Two Hundred Dollars ($200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by the Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of: (1) whether the Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected upon being brought to the attention of the Contractor or Subcontractor; and (2) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations.

13.7.6 Monitoring and Enforcement by Labor Commissioner

Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE). The Contractor and all subcontractors shall be required to furnish, at least "monthly" as defined by Labor Code section 1771.4(a)(3)(A)(i), certified payroll records directly to the Labor Commissioner in accordance with Labor Code section 1771.4. All payroll records shall be furnished in an electronic format and in the manner required by the Labor Commissioner. The Contractor and all subcontractors must sign up for, and utilize, the Labor Commissioner's electronic certified payroll records submission system. The District will have direct and immediate access to all CPRs for the Project that are submitted through the Labor Commissioner's system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.

The Labor Commissioner/ DLSE may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with Labor Code section 226, and conducting random in-person inspections of the Project site ("On-Site Visits"). On-Site Visits may include inspections of records, inspections of the Work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the Labor Commissioner/DLSE to ensure compliance with prevailing wage requirements. The Labor Commissioner/DLSE shall have free access to any construction site or other place

of labor and may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner/DLSE.

Any lawful activities conducted or any requests made by the Labor Commissioner/DLSE shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by the Contractor. Contractor and all subcontractors shall cooperate and comply with any lawful requests by the Labor Commissioner/ DLSE. The failure of the Labor Commissioner, DLSE, or any other entity related to the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.

Prior to commencing any Work on the Project, the Contractor shall post the required notice/poster required under the California Code of Regulations and Labor Code section 1771.4 in both English and Spanish at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the Labor Commissioner's website.

13.8 RECORDS OF WAGES PAID

13.8.1 Payroll Records

a. Pursuant to §1776 of the Labor Code, the Contractor and each Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by him or her in connection with the Project.

b. All payroll records, as specified in Labor Code §1776, of the Contractor and all Subcontractors shall be certified and furnished directly to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3) once every thirty (30) days while Work is being performed on the Project and within thirty (30) days after the final day of Work performed on the Project (or more frequently if required by the District or the Labor Commissioner). The Contractor and all Subcontractors shall submit their own payroll records to the Labor Commissioner on the internet website of the Department of Industrial Relations and such payroll records shall be in an electronic format prescribed by the Labor Commissioner. Pursuant to Labor Code §1771.4(a)(3)(B), the Contractor and any Subcontractor who fails to furnish payroll records in accordance with Labor Code §1771.4(a)(3), relating to their own employees, shall be subject to a penalty by the Labor Commissioner. The amount of the penalty shall be One Hundred Dollars ($100.00) for each calendar day in which such party is in violation of Labor Code §1771.4(a)(3), not to exceed a total penalty of Five Thousand Dollars ($5,000.00) per project. Payroll records as specified in Labor Code §1776 shall also be certified and submitted to the District with each application for payment.

All payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

13.8.1.1.1.1 A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

13.8.1.1.1.2 A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of District, the Division of Labor Standards Enforcement or the Division of Apprenticeship Standards of the Department of Industrial Relations.

13.8.1.1.1.3 A certified copy of all payroll records shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs, according to law for the preparation by the Contractor, Subcontractor(s), and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.

c. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division of Labor Standards Enforcement.

d. The Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within 10 calendar days after receipt of a written request.

e. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided non-redacted copies of certified payroll records.

f. The Contractor shall inform the District of the location of all payroll records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

g. The Contractor or Subcontractor(s) shall have 10 calendar days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Contractor or Subcontractor(s) fails to comply within the 10-day period, the Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit One Hundred Dollars ($100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

Responsibility for compliance with this Article shall rest upon the Contractor.

13.8.2 Withholding of Contract Payments & Penalties

The District may withhold or delay contract payments to the Contractor and/or any Subcontractor if:

a. The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or

b. The Contractor or Subcontractor(s) fail to submit all required certified payroll records to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3); or

c. The Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or

d. The Contractor or Subcontractor(s) submit incomplete or inadequate payroll records; or

e. The Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or

f. The Contractor or Subcontractor(s) fail to comply with any applicable state laws governing workers on public works projects.

13.9 APPRENTICES

13.9.1 Apprentice Wages and Definitions

All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief

of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training, or in accordance with the rules and regulations of the California Apprenticeship Council.

13.9.2 Employment of Apprentices

Contractor agrees to comply with the requirements of Labor Code §1777.5. The Contractor awarded the Project, or any Subcontractor under him or her, when performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5. The Contractor or any Subcontractor must apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor upon the Contractor's or Subcontractor's request. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

13.9.3 Submission of Contract Information

Prior to commencing Work on the Project, the Contractor and Subcontractors shall submit contract award information to the applicable apprenticeship program(s) that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contact, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District if requested. Within 60 days after concluding Work on the Project, the Contractor and Subcontractors shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

13.9.4 Apprentice Fund

The Contractor or any Subcontractor under him or her, who, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the Director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. The Contractor and Subcontractors may take as a credit for payments to the California Apprenticeship Council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

13.9.5 Prime Contractor Compliance

The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7.

13.10 ASSIGNMENT OF ANTITRUST CLAIMS

13.10.1 Application

Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders Retention Payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.10.2 Assignment of Claim

Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

13.11 STATE AND DISTRICT CONDUCTED AUDITS

Pursuant to and in accordance with the provisions of Government Code § 10532, or any amendments thereto, all books, records, and files of the District, the Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars ($10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of five (5) years after Retention Payment is made or a Notice of Completion is Recorded, whichever occurs first. Contractor shall preserve and cause to be preserved such books, records, hard drives, electronic media, and files for the audit period.

Pursuant to the remedies under Public Contract Code section 9201 and Government Code section 930.2, Contractor, through execution of this Agreement, also agrees the District shall have the right to review and audit, upon reasonable notice, the books and records of the Contractor concerning any monies associated with the Project. The purpose of this "Audit" is to quickly and efficiently resolve Disputes or Claims based on the actual costs incurred and to reduce the uncertainty in resolving Disputes or Claims with limited information. The District shall perform any audits at its own cost and any such audit shall be performed by an independent auditor, having no direct or indirect relationship with the functions or

activities being audited or with the business conducted by the Contractor or District. In the event the independent auditor determines that Change Orders, response to Request for Proposals, Disputes, Claims, or other requests for payment are in error, or have has any other concerns or questions, the Auditor shall report the results of the Audit findings to the District and provide a copy to the Contractor after giving the District Board the opportunity for at least 10 days review. If the Contractor disputes the findings of the independent auditor, such dispute shall be handled in the manner set forth under Article 4.6.2.

If Contractor having agreed to the terms of this Contract fails to produce books or records requested by Auditor, such failure to produce books or records that were required to be preserved for audit, it shall be presumed that the information contained in the withheld books or records were unfavorable to the Contractor and the Auditor shall note this refusal in the results of the Audit findings for further evaluation by the District and the District's Board. The refusal to release records that are concerning monies associated with the Project may be used as a grounds to debar the Contractor under Article 15 for failure to preserve records under Article 13.11 and the failure to produce required audit records may also be used as a grounds for a negative finding against the Contractor depending on the significance of the records that are withheld by Contractor. Failure to produce job cost data tied to job cost categories and budgets shall be presumed an intentional failure to produce key audit records. Similarly, failure to produce Daily Reports (prepared at or near the time of the Work actually took place (See Article 3.16) shall be presumed an intentional failure to produce key audited records.

If Contractor is seeking costs for inefficiency, home office overhead, or unanticipated increased costs due to delays or acceleration, Contractor shall also produce copies of the original bid tabulation utilized in submitting Contractor's bid for the Project. This document shall be considered confidential and shall not be subject to disclosure through a Public Records Act and shall not be distributed to anyone other than the District and the District's counsel. This bid tabulation shall only be used in litigation, arbitration, evaluation of Claims or Disputes, Audit, and trial. If the records for the bid tabulation are kept on a computer, the Contractor shall also produce all metadata (in native format) that accompanies the bid tabulation for inspection to prove the authenticity of the underlying bid tabulation. Failure to produce the bid tabulation for review of inefficiency, home office overhead, or unanticipated increased costs due to delays or accelerations shall be considered material evidence that the bid tabulation was not favorable to the Contractor. This evidence shall be entered as a jury instruction for trial that the bid tabulation was not produced and the bid tabulation information was unfavorable to the Contractor. The evidence may also be used in debarment proceedings, and noted as an exception to an Audit findings.

Upon notification of Contractor concerning the results of the audit and a reasonable time has passed for Contractor to respond to the Audit findings and if either there is no Dispute of the Audit findings under Article 4.6 or if the result after utilizing the Disputes Clause confirms the Audit findings, the District may seek reimbursement for overstated Disputes, Claims, or Change Orders and may also undertake debarment proceedings under Article 15 of these General Conditions.

13.12 STORM WATER POLLUTION PREVENTION

13.12.1 Application

This Section addresses the preparation, implementation and monitoring of a Storm Water Pollution Prevention Plan (SWPPP) for the purpose of preventing the discharge of pollutants from the construction site. This includes the elimination of pollution discharges such as improper dumping, spills or leakage from storage tanks or transfer areas. The District will not issue a Notice to Proceed until Contractor has prepared by a qualified individual and obtained approval of the Permit Registration

Documents ("PRDs") that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee and any additional required documents from all applicable Local Governing Agencies including the Regional Water Quality Control Board. The Contractor shall also secure a certification that the Project has met all of the conditions of the General Construction Activity Storm Water Permit (GCASP) and comply with all applicable local, state and federal regulations governing storm water pollution prevention.

13.12.2 References and Materials

- California Stormwater Quality Association New Development and Redevelopment Best Management Practice Handbook

- 2009 California Stormwater Quality Association Construction BMP Handbook .

- State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities. Available on-line at:

- http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.- Use materials of a class, grade and type needed to meet the performance described in the BMP Handbook.

13.12.3 Preparation and Approval

The Contractor shall prepare by a qualified individual the PRDs that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee and any additional required documents. The Contractor's Qualified SWPPP Developer ("QSD") shall prepare the Storm Water Pollution Prevention Plan (SWPPP) as required to comply with storm water pollution regulations for project sites with storm water discharges associated with construction activity such as clearing or demolition, grading, excavation and other land disturbances. The SWPPP shall apply to all areas that are directly related to construction activity, including but not limited to staging areas, storage yards, material borrow areas, and access roads.

13.12.3.1 The Contractor shall prepare and submit to the Local Governing Agencies and the District the SWPPP for review and approval if the project sites, new or existing, with land disturbance of 1 or more acres (or less than 1 acres if part of a common plan of development); the construction activity that results in land surface disturbances of less than one acre is part of a larger common plan of development or sale of one or more acres of disturbed land surface; or the construction activity associated with Linear Underground/Overhead Projects ("LUPs") including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

13.12.3.2 The Contractor shall also pay annual renewal fee(s) until the contract is completed and make all such checks payable to the State Water Resources Control Board. The Notice of Intent must be submitted at least two weeks prior to the commencement of construction activities.

13.12.3.3 The Contractor shall prepare the SWPPP by following the format in Sections 2, 3, 4 and Appendices A through F of the California Stormwater BMP Handbook - Construction, January 2009 edition, published by the California Stormwater Quality Association. The publication is available from:

California Stormwater
Quality Association
P.O. Box 2105
Menlo Park, CA 94026-2105
Phone: (650) 366-1042
E-mail: info@casqa.org

or

https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx

13.12.3.4 Where land disturbance is less than 1 acre, any BMPs indicated in the BMP Handbook needed to prevent or minimize storm water pollution shall be implemented at no extra cost to the District.

13.12.3.5 Within two weeks after Award of Contract by the District, the Contractor shall submit to the District's Civil Engineer one copy of the PRDs including the SWPPP for review. After the District's approval, the Contractor shall provide approved copies of the SWPPP as follows: one copy each to the Project Inspector, Construction Manager, Commissioned Architect and District's Civil Engineer.

13.12.4 Implementation

The Contractor shall implement the Storm Water Pollution Prevention Plan by doing the following:

a. Obtain a Waste Discharger Identification (WDID) number from the SWRCB before beginning construction. This number will be issued once your PRDs are administratively accepted and fee is received.

b. Keep the SWPPP, REAPs, monitoring data on the construction site.

c. Employ a Qualified SWPPP Practitioner (QSP) to implement the SWPPP during construction and develop Rain Event Action Plans ("REAPs").

d. Install, inspect, maintain and monitor BMPs required by the General Permit.

e. Install perimeter controls prior to starting other construction work at the site.

f. Contain on-site storm water at the jobsite. Do not drain on-site water directly into the storm drain.

g. Implement the SWPPP.

h. Provide SWPPP and BMP implementation training for those responsible for implementing the SWPPP.

i. Designate trained personnel for the proper implementation of the SWPPP.

j. Conduct monitoring, as required, and assess compliance with the Numeric Action Levels (NALs) or Numeric Effluent Limitations (NELs) appropriate to your project.

k. Report monitoring data:

13.12.4.1.11.1 Maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed.

13.12.4.1.11.2 Have a QSD revise the SWPPP as needed to reflect the phases of construction and to suit changing site conditions and instances when properly installed systems are ineffective.

13.12.4.1.11.3 Assist the District with entering any necessary data or information into the Stormwater Multi-Application and Reporting System ("SMARTS") system.

l. At the end of Construction Contract:

13.12.4.1.12.1 Submit Notice of Termination (NOT) into the SMARTS when construction is complete and conditions of termination listed in the NOT have been satisfied. A copy of the NOT can be found at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

13.12.4.1.12.2 Leave in place storm water pollution prevention controls needed for post-construction storm water management and remove those that are not needed as determined by the District. Thereafter, left-in-place controls will be maintained by the District.

13.12.4.1.12.3 Provide Site Monitoring Reports, SWPPP revisions, Compliance Certifications and related documents to the District. Post-construction storm water operation and management plan as mentioned in the compliance certifications are considered to be in place at the end of the Construction Contract.

13.12.5 Monitoring

The Contractor shall conduct examination of storm water pollution prevention controls as required by the State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General

Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities. This includes properly qualified personnel performing all required monitoring, testing, inspections and monitoring. The Contractor shall also conduct examination of storm water pollution prevention controls, as well as before and after each storm event in compliance with the State Water Resources Control Board Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities (General Permit) (SWRCB, 2009).and at least once each 24-hour period during extended storm events to identify BMP effectiveness and implement repairs or BMP changes as soon as feasible. All maintenance related to a storm event should be completed within 48 hours of the storm event. The Contactor shall also prepare and maintain, at the jobsite, a log of each inspection using Site Monitoring Report forms.

13.12.6 Liabilities and Penalties

a. Review of the SWPPP and inspection logs by the District shall not relieve the Contractor from liabilities arising from non-compliance with storm water pollution regulations.

b. Payment of penalties for non-compliance by the Contractor shall be the sole responsibility of the Contractor and will not be reimbursed by the District.

c. Compliance with the Clean Water Act pertaining to construction activity is the sole responsibility of the Contractor. For any fine(s) levied against the District due to non-compliance by the Contractor, the District will deduct from the final payment due the Contractor the total amount of the fine(s) levied on the District, plus legal and associated costs.

d. The Contractor shall submit to the District a completed NOI for change of information (Construction Site Information and Material Handling/Management Practices).

ARTICLE 14
TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR FOR CAUSE

14.1.1 Grounds for Termination

The Contractor may terminate the Contract if the Work is stopped for a period of thirty (30) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, for only the following reasons:

a. Issuance of an order of a court or other public authority having jurisdiction; or

b. An act of the United State or California government, such as a declaration of national emergency.

14.1.2 Notice of Termination

If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for Work executed and for reasonable costs verified by the Construction Manager with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

14.2 TERMINATION BY THE DISTRICT FOR CAUSE

14.2.1 Grounds for Termination

The District may terminate the Contractor and/or this Contract for the following reasons:

a. Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;

b. Persistently or repeatedly is absent, without excuse, from the job site;

c. Fails to make payment to Subcontractors, suppliers, materialmen, etc.;

d. Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction;

e. Fails to provide a schedule or fails or refuses to update schedules required under the Contract;

f. Falls behind on the Project and refuses or fails to undertake a Recovery Schedule;

g. If the Contractor has been debarred from performing Work

h. Becomes bankrupt or insolvent, including the filing of a general assignment for the benefit of creditors; or

i. Otherwise is in substantial breach of a provision of the Contract Documents.

14.2.2 Notification of Termination

When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Contractor and the Contractor's Surety written notice of seven (7) days, terminate the Contractor and/or this Contract and may, subject to any prior rights of the Surety:

a. Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

b. Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept;

c. Complete the Work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors; and,

d. Agree to accept a takeover and completion arrangement with Surety that is acceptable to the District Board.

14.2.3 Takeover and Completion of Work after Termination for Cause

A Termination for Cause is an urgent matter which requires immediate remediation since Project Work is open and incomplete, the site is subject to vandalism and theft, the Project site is considered a public nuisance, and there is a possibility of injury and deterioration of the Project Work and materials. Thus, the District shall be entitled to enter a takeover contract to either remediate the unfinished condition or complete the Work for this Project.

14.2.4 Payments Withheld

If the District terminates the Contract for one of the reasons stated in Article 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Contractor and/or its Surety.

14.2.5 Payments upon Completion

If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor and its Surety shall pay the difference to the District. The amount to be paid to the Contractor, or District, as the case may be, shall be certified by the Construction Manager upon application. This payment obligation shall survive completion of the Contract.

14.2.6 Conversion of Termination Upon Determination by Any Court or Other Tribunal

In the event the Contract or Contractor's performance of the Contract is terminated under Article 14.2, and it is finally determined by an arbitrator, court, jury or other tribunal having jurisdiction, for any reason, that the Contractor was not in default under the provisions hereof, or that the District's exercise of its rights under Article 14.2 was defective, deficient, ineffective, invalid or improper for any reason, the termination shall be deemed a Termination for Convenience by the District and thereupon, the rights and obligations of the District and the Contractor shall be determined in accordance with Article 14.3.1 hereof.

14.3 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)

14.3.1 Termination for Convenience

District may terminate the Contract upon fifteen (15) calendar days of written notice to the Contractor and use any reasonable method the District deems expedient to complete the Project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Contractor make it impossible or against the District's interest to complete the Project. In such a case, the Contractor shall have no Claims against the District except for: (1) the actual cost for approved labor, materials, and services performed in accordance with the Contract Documents which have not otherwise been previously paid for and which are supported and documented through timesheets, invoices, receipts, or otherwise; and (2) profit and overhead of ten percent (10%) of the approved costs in item (1); and (3) termination cost of five percent (5%) of the approved costs in item (1). Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept.

14.3.2 Non-Appropriation of Funds/ Insufficient Funds

In the event that sufficient funds are not appropriated to complete the Project or the District determines that sufficient funds are not available to complete the Project, District may terminate or suspend the completion of the Project at any time by giving written notice to the Contractor. In the event that the District exercises this option, the District shall pay for any and all work and materials completed or delivered onto the site for which value is received, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials not otherwise already paid for by the District up to the time of termination under this Paragraph shall include a factor of fifteen percent (15%) for the Contractor's overhead and profit and there shall be no other costs or expenses paid to Contractor. All work, materials and orders paid for pursuant to this provision shall become the property of the District. District may, without cause, order Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as District may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.

14.4 REMEDIES OTHER THAN TERMINATION

If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14.2, do any of the following:

a. Permit the Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Contractor to the District on demand;

b. If the workmanship performed by the Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Contractor to remove the faulty workmanship or defective materials and to replace the same with work or materials that conform to the Contract Documents, in which event the Contractor, at its sole costs and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to the Contractor; or

c. Initiate procedures to declare the Contractor a non-responsible bidder for a period of two (2) to five (5) years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Contractor shall replace the same with new work or materials approved by the Construction Manager and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Construction Manager and the District shall direct, all Work or material that is damaged, injured or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Article be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Contractor that the remedies set forth in this Article are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

ARTICLE 15
DEBARMENT

15.1 DEBARMENT MEANS THERE HAS BEEN A FINDING THAT THE CONTRACTOR IS NOT RESPONSIBLE.

During the course of the Project, or if it is determined through Change Orders, Claims, or Audit that a Contractor is not responsible, the District may, in addition to other remedies provided in the Contract, debar the Contractor from bidding or proposing on, or being awarded, and/or performing work on District contracts for a specified period of time, which generally will not exceed five (5) years, but may exceed five (5) years or be permanent if the circumstances warrant such debarment. In addition to the debarment proceeding, a finding that a Contractor is to be debarred shall result in the termination of any or all existing Contracts the Contractor may have with the District.

15.2 BOARD FINDING

The District may debar a Contractor if the Board, or the Board's delegatee, in its discretion, finds the Contractor has done any of the following:

15.2.1 Intentionally or with reckless disregard, violated any term of the Contract with the District

15.2.2 Committed an acts or omission which reflects on the Contractor's quality, fitness or capacity to perform Work for the District;

15.2.3 Committed an act or offense which indicates a lack of business integrity or business honesty; or,

15.2.4 Made or submitted a false claim against the District or any other public entity.

15.3 HEARING AND PRESENTATION OF EVIDENCE

If there is evidence that the Contractor may be subject to debarment, the District shall notify the Contractor in writing of the evidence which is the basis for the proposed debarment and shall advice the Contractor of the scheduled date for a debarment hearing before the District Board or its delegated designee.

The District Board, or designee, shall conduct a hearing where evidence on the proposed debarment is presented. The Contractor or the Contractor's representative shall be given an opportunity to submit evidence at the hearing. The Contractor shall be provided an adequate amount of time to prepare and object to evidence presented. A tentative proposed decision shall be issued as a tentative decision and the District shall be entitled to modify, deny or adopt the proposed decision. The proposed decision shall contain a recommendation regarding whether the Contractor should be debarred, and, if so, the appropriate length of time of the debarment. The Contractor and the District shall be provided an opportunity to object to the tentative proposed decision for a period of 15 days. If additional evidence is presented, the District shall evaluate this evidence and either issue an amended ruling, issue the same ruling, or call a further hearing.

If a Contractor has been debarred for a period of longer than five (5) years, that Contractor may after the debarment has been in effect for at least five (5) years, submit a written request for review of the debarment determination to reduce the period of debarment or terminate the debarment. The District may, in its discretion, reduce the period of debarment or terminate the debarment if it finds that the Contractor

has adequately demonstrated one or more of the following: (1) elimination of the grounds for which the debarment was imposed; (2) a bona fide change in ownership or management; (3) material evidence discovered after debarment was imposed; or (4) any other reason that is in the best interests of the District.

The District will consider a request for review of a debarment determination only where: (1) the Contractor has been debarred for a period longer than five (5) years; (2) the debarment has been in effect for at least five (5) years; and (3) the request is in writing, states one or more of the grounds for reduction of the debarment period or termination of the debarment, and includes supporting documentation. Upon receiving an appropriate request, the District will provide notice of the hearing on the request. At the hearing, the District shall review evidence on the proposed reduction of debarment period. This hearing shall be conducted and the request for review decided by the District pursuant to the same procedures as for a debarment hearing.

The District's proposed decision shall contain a recommendation on the request to reduce the period of debarment or terminate the debarment.

The terms shall also apply to Subcontractors of Contractor.

SUPPLEMENTARY CONDITIONS

REQUEST FOR SUBSTITUTION AT TIME OF BID

Pursuant to Public Contract Code Section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not "an/or equal" or is not accepted by District and I answer "no" I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods, or types of construction:

	Specification Section	Specified Item	Requested Substituted Item	Contractor Agrees to Provide Specified Item if request to Substitute is Denied[1] (circle one)	District Decision (circle one)
1.				Yes No	Grant Deny
2.				Yes No	Grant Deny
3.				Yes No	Grant Deny
4.				Yes No	Grant Deny
5.				Yes No	Grant Deny
6.				Yes No	Grant Deny
7.				Yes No	Grant Deny
8.				Yes No	Grant Deny
9.				Yes No	Grant Deny
10.				Yes No	Grant Deny
11.				Yes No	Grant Deny
12.				Yes No	Grant Deny

[1] Bidder must state whether bidder will provide the Specified Item in the event the Substitution request is evaluate and denied. If bidder states that bidder will not provide the Specified Item the denial of a request to Substitute shall result in the rejection of the bidder as non-responsive. However, if bidder states that bidder will provide the Specified Item in the event that bidder's request for Substitution is denied, bidder shall execute the Agreement and provide the Specified Item(s). If bidder refuses to execute the Agreement due to the District's decision to require the Specified Item(s) at no additional cost, bidder's Bid Bond shall be forfeited.

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Contractor agrees to pay for any Fees or other Governmental Plan check costs associated with this Substitution Request. (See General Conditions Section 3.6)

The undersigned states that the following paragraphs are correct:

11. The proposed Substitution does not affect the dimensions shown on the Drawings.

12. The undersigned will pay for changes to the building design, including Construction Manager, engineering, or other consultant design, detailing, plan check or other governmental plan check costs, and construction costs caused by the requested substitution.

13. The proposed substitution will have no adverse effect on other trades, the Contract Time, or specified warranty requirements.

14. Maintenance and service parts will be available locally for the proposed substitution.

15. In order for the Construction Manager to properly review the substitution request, within five (5) days following the opening of bids, the Contractor shall provide samples, test criteria, manufacturer information, and any other documents requested by Construction Manager or consultants, including the submissions that would ordinarily be required under Article **3.7** for Shop Drawings along with a document which provides a side by side comparison of key characteristics and performance criteria (often known as a CSI side by side comparison chart).

16. If Substitution Request is accepted by the District, Contractor is still required to provide a Submittal for the substituted item pursuant to Article **3.7** and shall provide required Schedule information (including schedule fragnets, if applicable) for the substituted item as required under Article **8.3.2.1**. The approval of the Construction Manager or District of the substitution request does not mean that the Contractor is relieved of Contractor's responsibilities for Submittals, Shop Drawings, and schedules under Article **3.7** and **8.3.2** if the Contractor is awarded the Project.

Name of Bidder: _____

By:_____

District: _____

By: _____

EXHIBIT A

SCOPE OF WORK

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

DETAILED SCOPE OF WORK FOLLOWS

EXHIBIT CONTENT

Detailed requirements for demolition, concrete curb modifications, site preparation, installation of District-furnished playground equipment, poured-in-place safety surfacing, cleanup, and project closeout.

SOURCE / RESPONSIBLE PARTY: **DISTRICT / CONSTRUCTION MANAGER**

SCOPE OF WORK

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

SCOPE INTENT — Provide all work necessary for a complete, safe, code-compliant, and fully operational playground replacement in Area A, including demolition of the existing structure and PIP surfacing, installation of District-furnished equipment and new PIP surfacing, curb work, and asphalt tapers at the existing openings, while protecting the Area B structure to remain. Final work shall conform to the Contract Documents and the playground and surfacing manufacturers' requirements when issued.

Work Areas (see attached site exhibit and provided details):

The overall playground footprint is approximately 128 feet by 53 feet (approximately 6,780 square feet), divided as follows. All dimensions and quantities are approximate and shall be field verified.

Area A — Existing play structure and existing PIP surfacing to be demolished; new District-furnished playground equipment and new PIP surfacing installed.

Area B — Existing play structure to remain in place and be protected, except for the two sets of monkey bars indicated for removal. Existing PIP surfacing in Area B remains under the Base Bid and is addressed only under the Add Alternates.

Existing Openings — Existing openings at the north edge, as indicated on the exhibit, to receive asphalt tapers.

Reference Details:

Detail — Existing Playground Openings (PIP flush at 4-inch concrete curb cap; 3/8-inch HMA overlay at approximately 5 percent slope), governing A-10 and A-11.

Detail 1 — Concrete Divider Curb Between PIP Playgrounds, governing A-9.

Abbreviations: OFCI = Owner Furnished, Contractor Installed. PIP = poured-in-place rubber safety surfacing. AC = asphalt concrete. V.I.F. = verify in field.

PART 1 — GENERAL

A-1 GENERAL REQUIREMENTS

The Contractor shall furnish all labor, supervision, project management, layout, tools, construction equipment, temporary facilities, permits or inspections assigned to the Contractor, hauling, disposal, consumable materials, and incidentals required to complete the Work. Playground-equipment installation shall be performed by, or under the direct on-site supervision of, an individual holding a current certification under the Playcraft Systems (PlayCore) Certified Installer Program. Submit the certificate, showing the individual's name, issuing authority, and unexpired expiration date, with the installer qualification submittal.

A-2 FIELD VERIFICATION AND EXISTING CONDITIONS

Before bidding and again before construction, verify dimensions, elevations, quantities, access routes, staging areas, drainage, utilities, clearances, use zones, fall heights, existing surfacing thickness and base composition, existing curb dimensions, and existing asphalt paving elevations, and all other existing conditions affecting the Work. All linear footages and square footages stated in this Scope of Work are approximate and are provided for bidding convenience only; the Contractor is responsible for verifying actual quantities. In Area B, verify the manufacturer, model, component heights, and critical fall height of the structure to remain.

A-3 SUBMITTALS, COORDINATION, AND SEQUENCING

Coordinate the Work with the District, Construction Manager, school administration, playground equipment manufacturer, and surfacing manufacturer. Submit required product data, installer qualifications, layouts, color selections, shop drawings, installation procedures, concrete mix designs, aggregate base and asphalt materials data, compaction test reports, safety data, schedules, and closeout information in sufficient time to maintain the Project schedule.

A-4 SITE ACCESS, PROTECTION, AND TEMPORARY CONTROLS

Maintain secure separation between construction operations and students, staff, and the public. Provide temporary construction fencing, gates, barriers, signage, dust and noise control, protection of occupied campus areas, and temporary restrooms and handwash facilities as required. Protect the adjacent asphalt paving, striping, play-court markings, and all existing PIP surfacing scheduled to remain from damage by equipment, staging, and material handling.

A-5 UTILITIES AND UNFORESEEN CONDITIONS

Identify and protect utilities within or adjacent to the work area before excavation, sawcutting, drilling, or demolition. Immediately stop work in the affected area and notify the District or Construction Manager if concealed utilities, unsuitable subgrade, undocumented obstructions, hazardous materials, or materially differing conditions are encountered.

PART 2 — BASE BID

A-6 DEMOLITION OF EXISTING STRUCTURE AND PIP — AREA A

Within Area A, completely remove the existing playground structure and associated components, including decks, slides, climbers, panels, rails, roofs, supports, anchors, concrete footings, and other embedded items. Remove the existing poured-in-place rubber safety surfacing and underlying materials to the depth necessary for the new base and surfacing system. Provide clean, straight limits of removal; remove adhesives, loose material, and debris. Legally haul away and dispose of demolished materials unless the District directs otherwise in writing.

A-7 CURB DEMOLITION — AREA A

Demolish approximately 45 linear feet of existing concrete curb in Area A, as indicated on the exhibit. The existing curb is approximately 1 foot 6 inches in height and approximately 1 foot in width; dimensions are approximate and shall be field verified.

Cut elevation. Remove the upper portion of the existing curb so that the top of the remaining curb is 2 inches above the top of the adjacent existing asphalt concrete paving. This cut elevation applies to all curb demolition performed under this Contract. Full-depth removal of the curb is not required except where specifically indicated.

Cut limits shall be clean and straight. Remove all demolished concrete and embedded items, backfill and compact any resulting voids, and legally haul away and dispose of demolished materials. The remaining curb shall be left sound, undamaged, and ready to receive the new concrete cap specified in A-10.

A-8 MONKEY BAR REMOVAL AND PIP PATCH — AREA B

Remove the two sets of monkey bars indicated on the exhibit, including bars, supports, connections, and hardware. Cut or remove the posts below grade and patch the resulting openings in the existing PIP surfacing. The area of patching is estimated at approximately 100 square feet.

Patch material shall match the existing surfacing system in thickness, composition, and, as closely as commercially available, color and texture. Patched areas shall be fully bonded to the existing surfacing, level with the surrounding surface, and free of lifted, exposed, or open edges. The District acknowledges that an exact color match to weathered existing surfacing cannot be guaranteed.

Install two (2) OFCI closer panels in Area B at the locations where the monkey bars were previously attached. Install in accordance with the equipment manufacturer's instructions so that no unprotected elevated opening, projection, entrapment, or fall hazard remains.

Except for the monkey bars identified above, the existing play structure in Area B shall remain in place and shall not be demolished, cut, loosened, relocated, or otherwise modified, and shall be protected throughout the Work. The structure and its footings shall not be struck, undermined, or otherwise disturbed by removal operations. Repair or replace any damage to the structure or surfacing to remain at no cost to the District.

A-9 DIVIDING CURB BETWEEN AREAS A AND B

Install approximately 50 linear feet of new concrete dividing curb between Area A and Area B, in accordance with Detail 1 — Concrete Divider Curb Between PIP Playgrounds. The curb shall be 6 inches wide and 1 foot 0 inches in total depth, installed flush, with PIP resilient surfacing on both sides. The section is symmetrical about the curb.

Reinforce the curb with #4 bars continuous top and bottom and #4 bars at 18 inches on center, with 3 inches clear cover typical. Set the curb on a minimum 5 inches of compacted Class II aggregate base, compacted to 95 percent relative compaction.

Where the new curb meets the existing PIP surfacing in Area B, the Contractor shall assume a PIP plug approximately 1 foot wide, the full length of the curb, tied into the existing surfacing. The plug shall be fully bonded to the existing surfacing and level with it, with a maximum vertical differential of 1/4 inch.

A-10 NEW FLUSH CURB — AREA A

Install approximately 50 linear feet of new flush concrete curb in Area A, in accordance with Detail — Existing Playground Openings.

Cap on existing curb. Where the new curb is constructed over existing curb cut in accordance with A-7, install a new 2-inch concrete cap on the remaining curb. The top of the finished cap shall be 4 inches above the top of the adjacent existing asphalt concrete paving, consisting of 2 inches of remaining existing curb and the 2-inch cap. Hold this dimension consistent along the full length of the curb.

Cap on new footing. Where no existing curb remains to receive the cap, provide a curb cap bearing on a continuous concrete footing extending 10 inches deep below the cap, footing width and bearing per plan, with the top of the cap set at the same 4 inches above the adjacent existing asphalt concrete paving.

Flush condition. Finish the new PIP surfacing flush with the top of the curb cap, with a maximum vertical differential of 1/4 inch. The completed cap shall be fully bonded to the curb below, uniform in width and finish, and free of cracking, spalling, and honeycombing.

A-11 ASPHALT TAPERS AT EXISTING PLAYGROUND OPENINGS

Install approximately 50 linear feet of asphalt concrete taper, 7 feet wide, at the existing playground openings as indicated on the exhibit and in accordance with Detail — Existing Playground Openings. Place hot mix asphalt using 3/8-inch maximum aggregate, flush at the top of the concrete curb cap specified in A-10 and sloped down at approximately 5 percent (4 inches over 7 feet 0 inches, V.I.F.) to match the existing asphalt concrete grade. The completed taper shall be fully bonded to the existing paving, with a smooth, uniform surface and no ponding at the joint.

The running slope shall not exceed 5.0 percent along the accessible route and the cross slope shall not exceed 2.0 percent. Field verify grades before paving and notify the District or Construction Manager if these tolerances cannot be achieved.

A-12 SUBGRADE, BACKFILL, BASE, AND DRAINAGE

Backfill all voids left by removed footings, anchors, curbs, posts, and demolished work with suitable material compacted to 95 percent relative compaction. Excavate and grade to receive the new base. Provide 4 inches of aggregate base beneath the new surfacing system, consisting of 3/4-inch Class II aggregate base, recycled or virgin, compacted to 95 percent relative compaction over a well-prepared subgrade. Provide additional base or manufacturer-required materials as necessary for the equipment foundations. Maintain positive drainage and match finish elevations at all perimeter transitions.

A-13 DISTRICT-FURNISHED PLAYGROUND EQUIPMENT

The new playground equipment and the closer panels identified in A-8 will be furnished by the District (OFCI). The Contractor shall coordinate delivery dates and access; receive, unload, inventory, stage, secure, store, and protect the District-furnished equipment; promptly document and report shortages or damage; and preserve all identification, hardware, instructions, and warranty materials.

A-14 PLAYGROUND EQUIPMENT INSTALLATION — AREA A

Install the new playground structure, foundations, anchors, posts, decks, slides, climbers, panels, rails, roofs, accessories, and related components in the locations and elevations shown in the final manufacturer documents. Concrete for playground equipment footings shall have a minimum compressive strength of 3,000 psi at 28 days. Maintain specified use zones and clearances, including required clearance to the structure remaining in Area B, verify plumb and level installation, properly torque and secure hardware, and protect completed equipment until acceptance.

A-15 NEW POURED-IN-PLACE SAFETY SURFACING — AREA A

Provide and install a new PIP rubber safety-surfacing system throughout Area A using qualified or manufacturer-approved installers. The system shall consist of a 1/2-inch TPV rubber wear course over an SBR cushion layer, with cushion layer depth and total system thickness as required to satisfy the critical fall height of the new equipment in accordance with ASTM F1292 and the project materials schedule. Provide 4 inches of aggregate base beneath the PIP as specified in A-12.

The Base Bid shall include a 50/50 color blend consisting of beige and one other standard color selected by the District. Set the finished surfacing flush with the top of the new dividing curb and flush curb and at all adjacent concrete and paving, with a maximum vertical differential of 1/4 inch.

PART 3 — ADD ALTERNATES

Each Alternate below shall be bid as a complete add or deduct to the Base Bid, including all labor, materials, and incidentals. Where an Alternate deletes Base Bid work, state the deduction separately.

A-16 ALTERNATE NO. 1 — SYNTHETIC TURF IN LIEU OF PIP, AREA A

In lieu of the new PIP surfacing specified in A-15, install synthetic turf safety surfacing throughout Area A in accordance with the turf specification provided by the District. The turf system, including its shock-attenuating layer, shall satisfy the critical fall height of the new playground equipment in accordance with ASTM F1292. All base preparation, curb work, and flush transitions specified in the Base Bid remain in effect.

A-17 ALTERNATE NO. 2 — REPLACE EXISTING PIP, AREA B

Remove the existing PIP surfacing throughout Area B and install a new PIP surfacing system matching the system and color blend specified in A-15. The structure to remain and its footings shall not be struck, undermined, or otherwise disturbed.

If this Alternate is accepted, the dividing curb specified in A-9, including its associated PIP plug, is deleted from the Base Bid; state this deduction separately. The PIP patch specified in A-8 is likewise superseded; state this deduction separately.

This Alternate shall include an asphalt ramp at the Area B opening, constructed to the requirements of A-11.

A-18 ALTERNATE NO. 3 — SYNTHETIC TURF IN LIEU OF PIP, AREA B

Remove the existing PIP surfacing throughout Area B and install synthetic turf safety surfacing in accordance with the turf specification provided by the District. The turf system, including its shock-attenuating layer, shall satisfy the critical fall height of the structure remaining in Area B in accordance with ASTM F1292. The structure to remain and its footings shall not be struck, undermined, or otherwise disturbed.

If this Alternate is accepted, the dividing curb specified in A-9, including its associated PIP plug, is deleted from the Base Bid; state this deduction separately. The PIP patch specified in A-8 is likewise superseded; state this deduction separately.

This Alternate shall include an asphalt ramp at the Area B opening, constructed to the requirements of A-11.

Note: Alternate No. 2 and Alternate No. 3 are mutually exclusive. Only one may be accepted.

PART 4 — SCHEDULE, QUALITY, AND CLOSEOUT

A-19 SCHEDULE AND SCHOOL OPERATIONS

Plan and complete the Work within the construction period of September 28 through October 23, 2026. Schedule demolition, concrete cutting, heavy compaction, and other loud or vibration-producing work for the school-not-in-session window of September 28 through October 2, 2026, unless the District approves otherwise in writing. Alternates, if accepted, shall be performed within the same construction period.

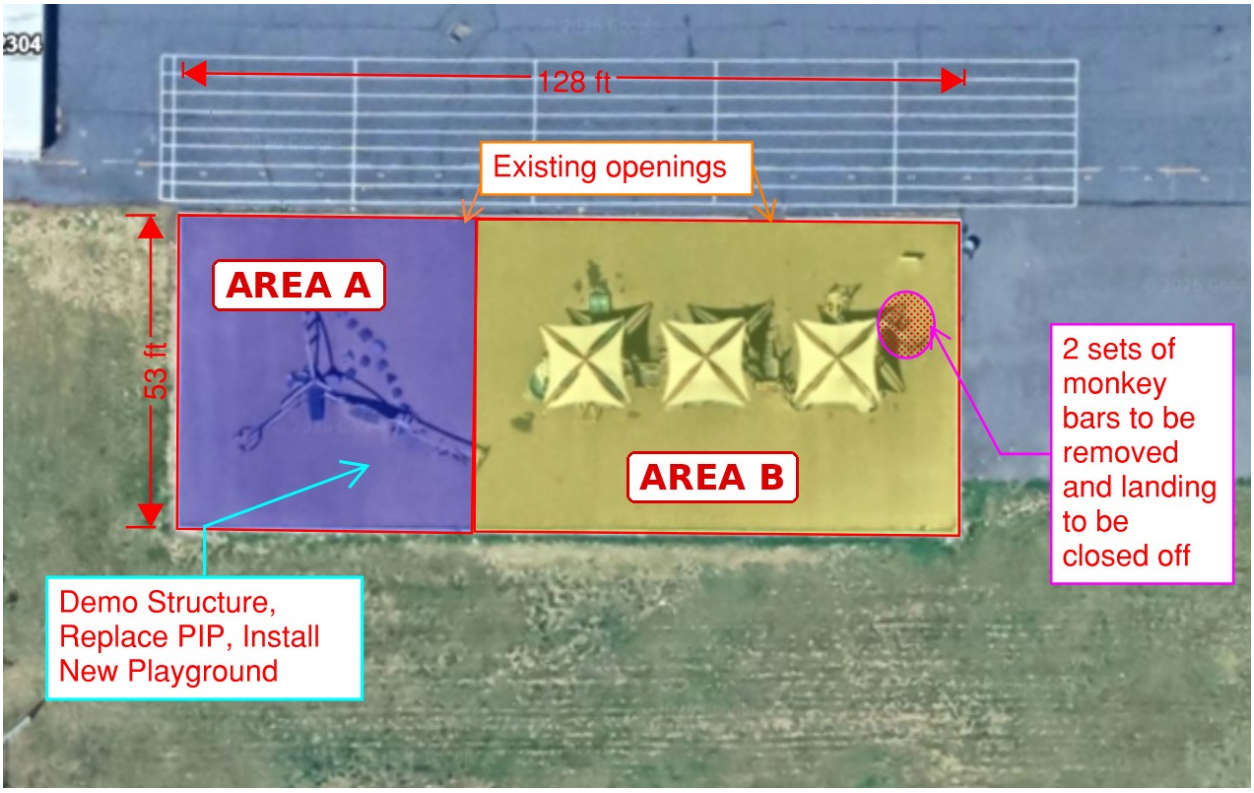
A-20 QUALITY CONTROL, INSPECTIONS, WARRANTIES, AND CLOSEOUT

Comply with applicable manufacturer requirements and accepted playground-equipment and impact-attenuating-surfacing standards identified in the Contract Documents, including ASTM F1292 for impact attenuation. At completion, submit equipment and surfacing warranties, installer certifications, compaction and material test records, inspection or test records, maintenance information, and other manufacturer closeout documentation required for District acceptance.

A-21 CLEANUP, RESTORATION, AND ACCEPTANCE

Continuously remove debris and maintain a safe site. At completion, remove temporary facilities and protections; clean the playground and surrounding areas; restore access routes, paving, striping, fencing, landscaping, and other areas damaged or disturbed by the Work; complete punch-list corrections; and deliver the site ready for District use.

Attachment 1 — Site Exhibit (Areas A and B)

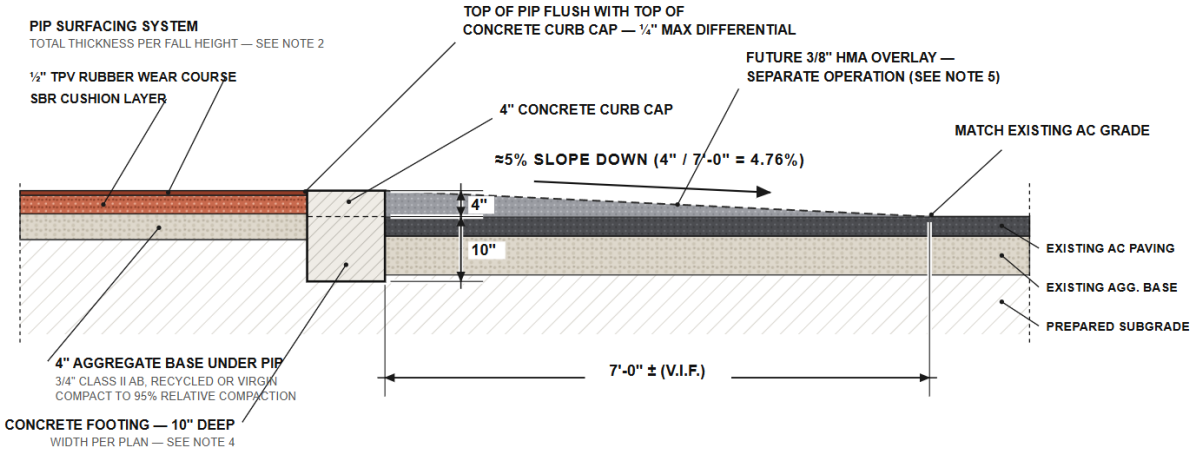


Attachment 2 — Detail: Existing Playground Openings

DETAIL — EXISTING PLAYGROUND OPENINGS

PIP FLUSH AT 4" CONCRETE CURB CAP — FUTURE 3/8" HMA OVERLAY AT ≈5% SLOPE

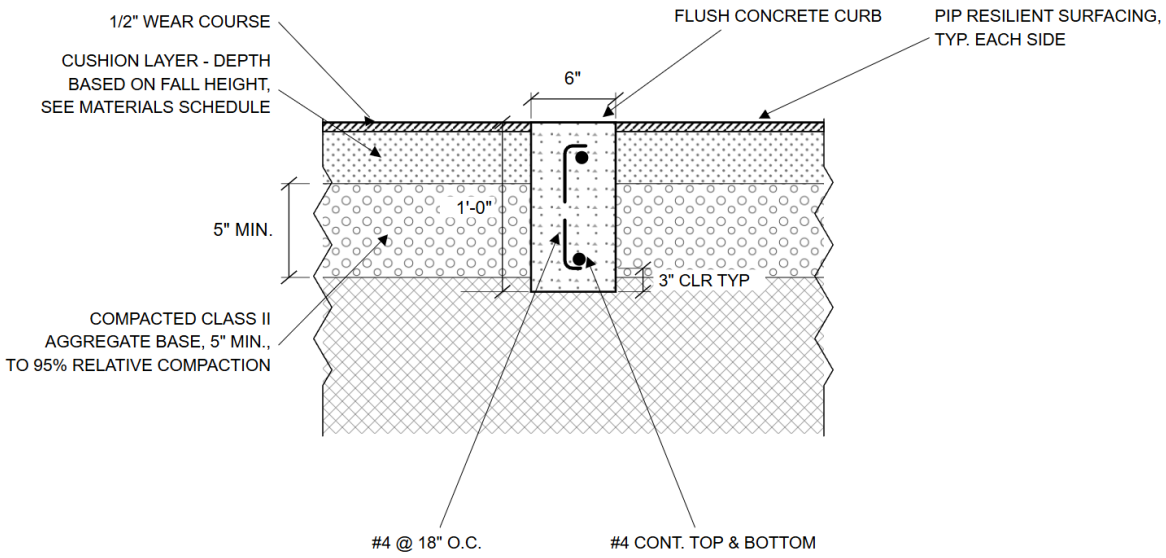
SCALE: NTS — DIMENSIONS GOVERN



GENERAL NOTES

1. PIP SAFETY SURFACING TO FINISH FLUSH WITH TOP OF CONCRETE CURB CAP. MAX. VERTICAL DIFFERENTIAL AT TRANSITION: ¼".
2. PIP SYSTEM = ½" TPV WEAR COURSE OVER SBR CUSHION LAYER. TOTAL THICKNESS PER CRITICAL FALL HEIGHT (ASTM F1292).
3. SET TOP OF CONCRETE CURB CAP 4" ABOVE TOP OF EXISTING AC PAVING. HOLD CONSISTENT ALONG FULL LENGTH OF CURB.
4. CURB CAP TO BEAR ON CONTINUOUS CONCRETE FOOTING, 10" DEEP BELOW CAP. FOOTING WIDTH & BEARING PER PLAN.
5. FUTURE OVERLAY TO BE 3/8" MAX. AGGREGATE HOT MIX ASPHALT, PLACED FLUSH AT TOP OF CAP AND SLOPED DOWN ≈5% FOR 7'-0"±.
6. SLOPE NOT TO EXCEED 5.0% ALONG ACCESSIBLE ROUTE; 2.0% MAX CROSS SLOPE. FIELD VERIFY BEFORE PAVING.

Attachment 3 — Detail 1: Concrete Divider Curb Between PIP Playgrounds



NOTE: SECTION SYMMETRICAL ABOUT CURB - PIP RESILIENT SURFACING EACH SIDE, TYP.

1 CONCRETE DIVIDER CURB BETWEEN PIP PLAYGROUNDS

EXHIBIT B

SCHEDULE OF VALUES

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

OFFICIAL RESOURCES FOLLOW

EXHIBIT CONTENT

Contractor Schedule of Values requirements and links to official AIA G702/G703 resources. No District-created payment-form example is included. Submit after award; this exhibit is not due with the bid.

SOURCE / RESPONSIBLE PARTY: **CONTRACTOR AFTER AWARD**

EXHIBIT B

OFFICIAL RESOURCES AND SUBMITTAL REQUIREMENTS

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH
BID NO. 26-27-02

NOT DUE WITH THE BID
Submit after award, at Contract execution and before the first progress payment application, unless otherwise directed by the District.

REQUIRED SCHEDULE OF VALUES

The Contractor shall provide an itemized breakdown allocating the entire Contract Sum to the Work. The approved Schedule of Values will be used to review progress-payment applications.

- Break down the Work by trade, CSI division, major activity, and logical phase, with labor and material values sufficiently detailed for review.
- Separately identify receiving, unloading, storage, protection, layout, foundations, installation, and warranty obligations associated with District-furnished playground equipment.
- Reconcile the line-item total to the executed Contract Sum, including approved alternates and approved Change Orders, and apply retainage as required by the Contract Documents.

OFFICIAL AIA G702 / G703 RESOURCES

No District-created payment-form example is included. Obtain and use current, licensed AIA forms directly from AIA Contract Documents. The links below provide official instructions and access information.

- AIA G702-1992 - Application and Certificate for Payment: official instructions
- AIA G703-1992 - Continuation Sheet: official instructions
- AIA Contract Documents - purchase and licensing resources

AIA Contract Documents are copyrighted and licensed. Contractors are responsible for obtaining the proper forms and complying with the Contract Documents and District payment procedures.

SOURCE / RESPONSIBLE PARTY: **CONTRACTOR AFTER AWARD / AIA CONTRACT DOCUMENTS**

EXHIBIT C

EXISTING CONDITION PHOTOS

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

PHOTOGRAPHS C-01 THROUGH C-10

EXHIBIT CONTENT

Existing-condition photographs documenting the playground structure, poured-in-place surfacing, concrete curb enclosure, adjacent paving, and site access before construction.

SOURCE / RESPONSIBLE PARTY: **DISTRICT / CONSTRUCTION MANAGER**

EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-01



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-02



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-03



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-04



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-05



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-06



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-07



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-08



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-09



EXHIBIT C - EXISTING CONDITION PHOTOS

PHOTO C-10



EXHIBIT D

RENDERINGS AND DRAWINGS

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

CONTENT INCLUDED

EXHIBIT CONTENT

Manufacturer renderings, layout drawings, and compliance documentation for the playground equipment and surfacing selected for this Project.

SOURCE / RESPONSIBLE PARTY: **MANUFACTURER**

MARSH ES UPPER ADD ON OPT 3

TOP VIEW - 0

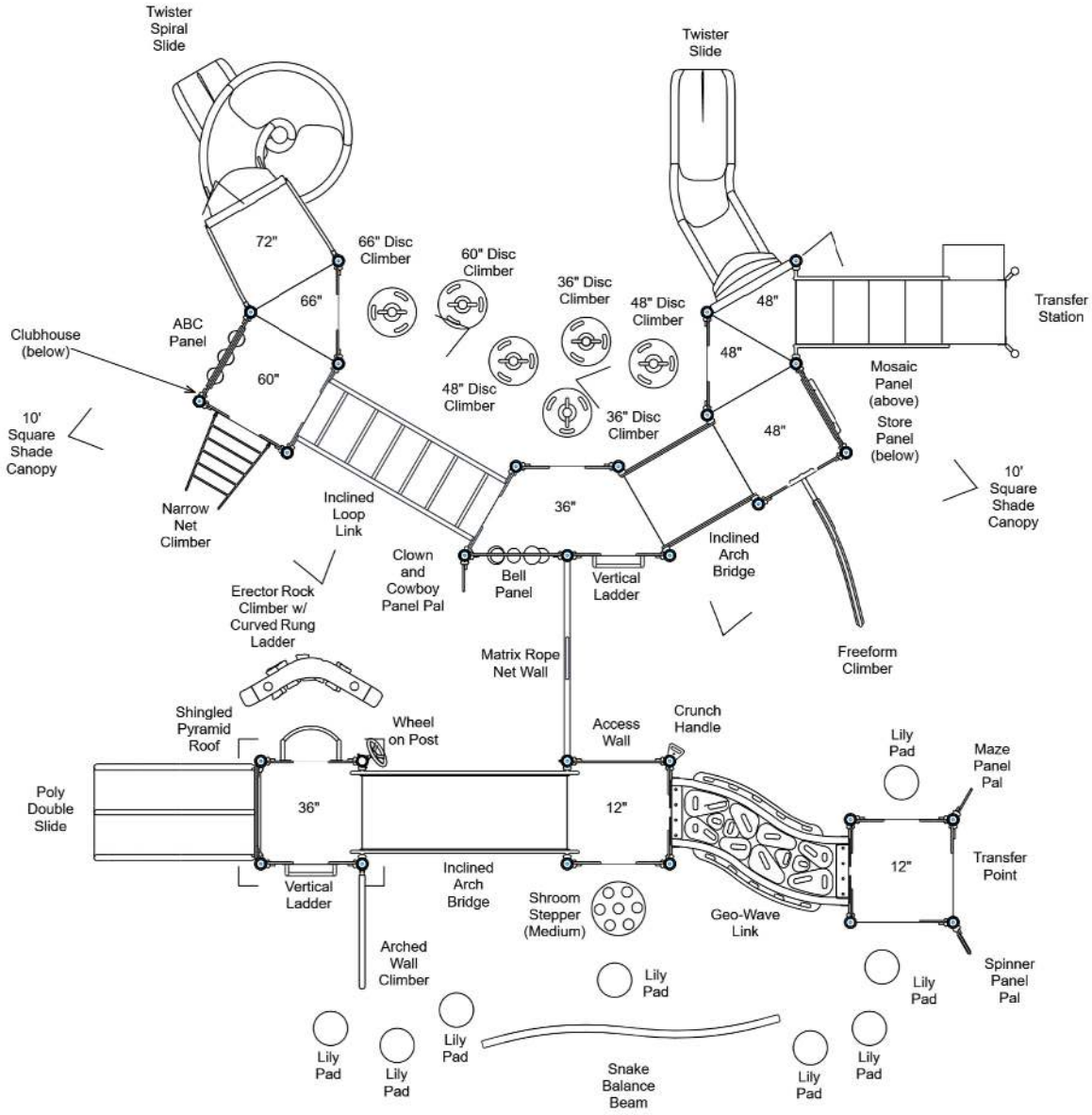
ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
16	14/8	0/0	8/5	4/3

CHILD CAPACITY 168 **MAX FALL HEIGHT** 84

R35

FOR KIDS AGES 5-12



GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.

STRUCTURE # R35E01A8C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

Park Planet

MIN. USE ZONE 44' x 47' (13.318m x 14.114m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

TOP VIEW - 0

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	5/0	3/0

CHILD CAPACITY 5 **MAX FALL HEIGHT** 0

R5

FOR KIDS AGES 5-12

GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.

Sensory
Play Wall
Dynamic



STRUCTURE # R507A481C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

Park Planet

MIN. USE ZONE 0' x 0' (0m x 0m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

TOP VIEW - 0

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	7/0	4/0

CHILD CAPACITY 9 **MAX FALL HEIGHT** 0

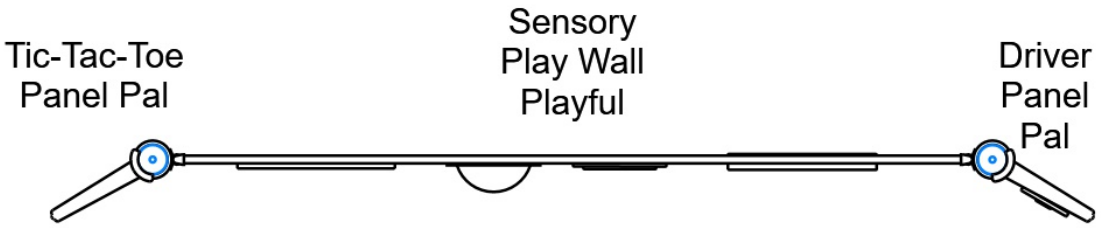
R5

FOR KIDS AGES 5-12

GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.



STRUCTURE # R504DF17C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

Park Planet

MIN. USE ZONE 0' x 0' (0m x 0m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

TOP VIEW - 0

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

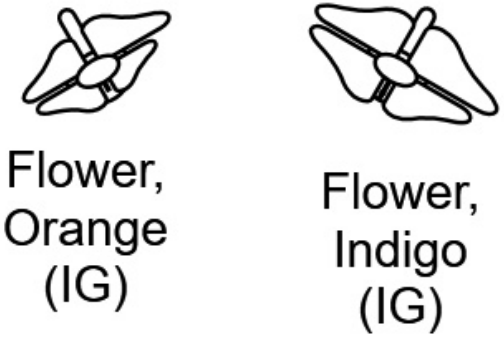
ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	0/0	0/0

CHILD CAPACITY 0 **MAX FALL HEIGHT** 0

GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.



STRUCTURE # FRE256DBA
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

Park Planet
MIN. USE ZONE 0' x 0' (0m x 0m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

TOP VIEW - 0

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	2/0	1/0

CHILD CAPACITY 4 **MAX FALL HEIGHT** 0

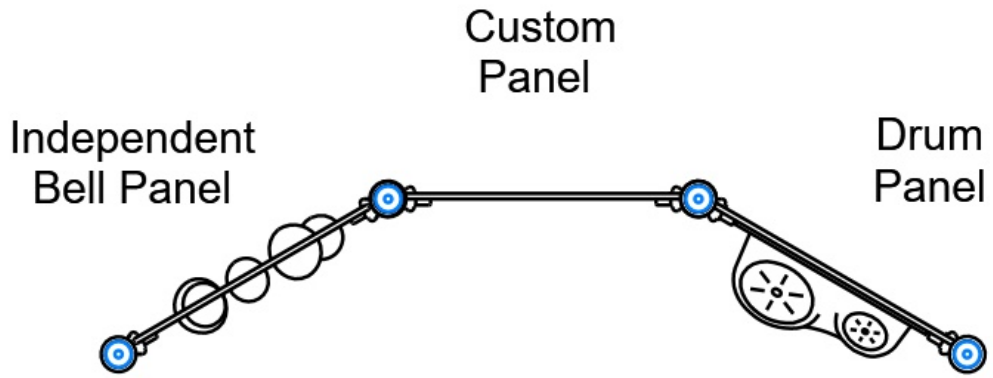
R35

FOR KIDS AGES 5-12

GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.



STRUCTURE # R3551C84C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

Park Planet

MIN. USE ZONE 0' x 0' (0m x 0m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

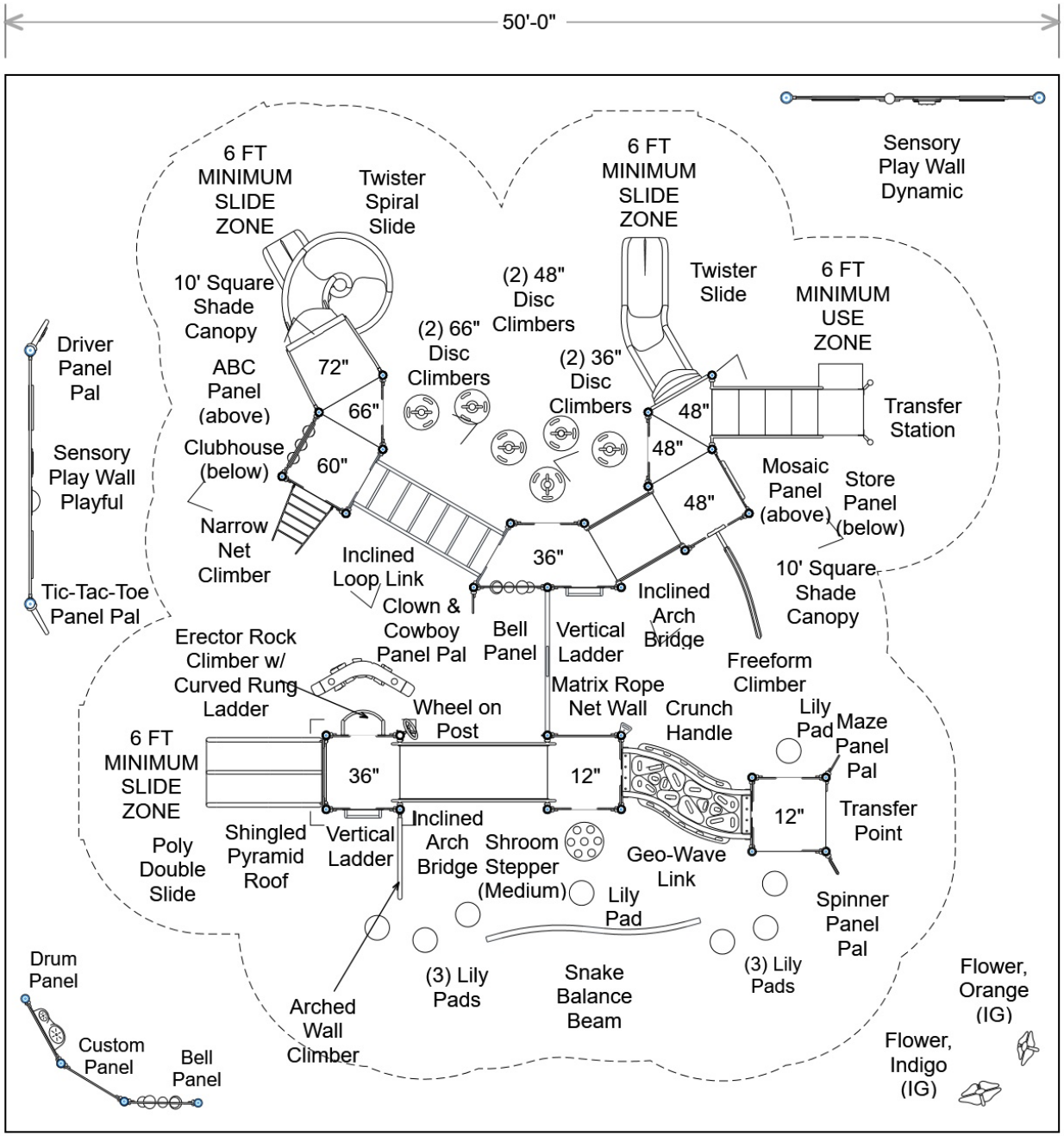
SITE PLAN

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
16	14/8	0/0	22/5	5/3

Mixed Types

FOR KIDS AGES 5-12



GENERAL NOTES

This Preliminary Site Plan is based on measurements that were provided in the initial planning phase. All dimensions must be verified prior to the submission of a purchase order. Playcraft Systems will not be held responsible for any discrepancies between actual dimensions and dimensions submitted in the planning phase.

The Minimum Use Zone for a play structure is based on the product design at the time of proposal. Components and structure designs may be subject to change which may affect dimensions. Therefore, before preparing the site, we strongly recommend obtaining final drawings from the factory (available after the order is placed and included in the Assembly Manual).

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.

PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

Park Planet

MIN. USE ZONE 44' x 47' (13.317m x 14.114m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

SITE PLAN (FOOTINGS)

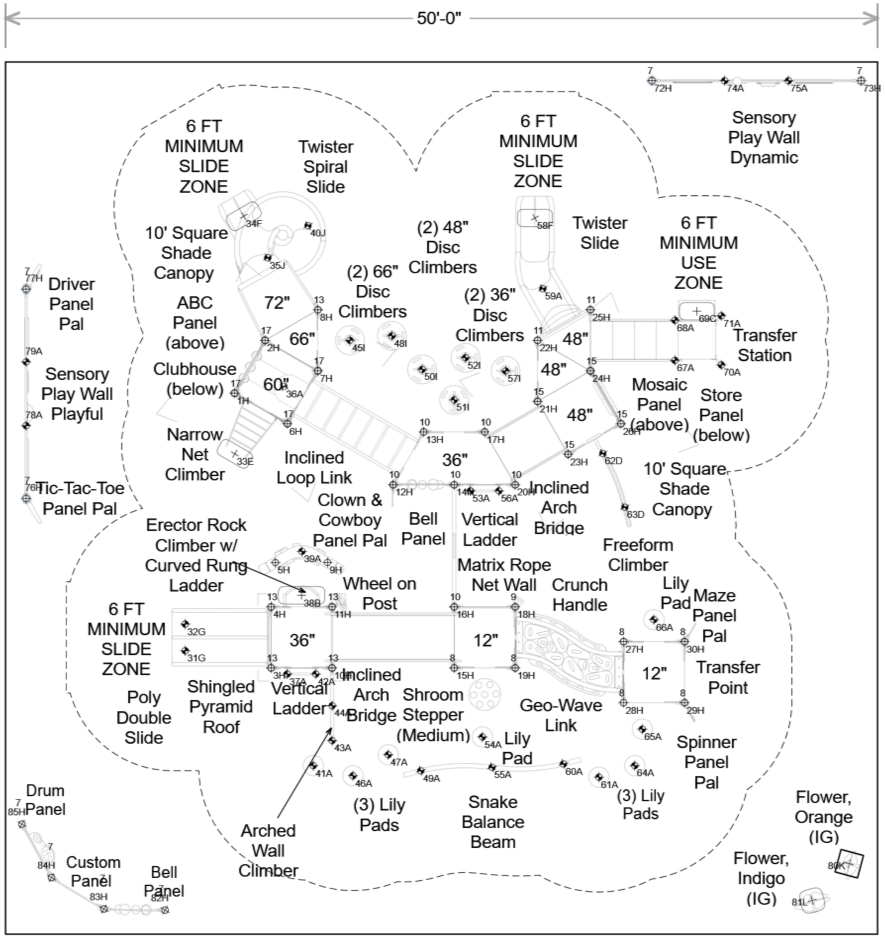
ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
14	13/7	0/0	28/5	27/3

Mixed Types

FOR KIDS AGES 5-12

Approx. 2500 SQFT
Approx. 200 LF



MOUNT ORDINATE TABLE XY→O

#	X	Y	DIAG
1	0'-0"	0'-0"	0'-0"
2	-1'-9"	3'-0"	3'-6"
3	-2'-1"	-15'-9"	15'-11"
4	-2'-1"	-12'-3"	12'-5"
5	-2'-4"	-9'-9"	10'-0"
6	-3'-1"	-1'-9"	3'-7"
7	-4'-10"	1'-3"	5'-0"
8	-4'-10"	4'-9"	6'-9"
9	-5'-4"	-9'-9"	11'-1"
10	-5'-7"	-15'-9"	16'-9"
11	-5'-7"	-12'-3"	13'-6"
12	-9'-1"	-5'-3"	10'-6"
13	-10'-10"	-2'-3"	11'-1"
14	-12'-7"	-5'-3"	13'-8"
15	-12'-7"	-15'-9"	20'-2"
16	-12'-7"	-12'-3"	17'-7"
17	-14'-4"	-2'-3"	14'-6"
18	-16'-1"	-12'-3"	20'-3"
19	-16'-1"	-15'-9"	22'-6"
20	-16'-1"	-5'-3"	16'-11"
21	-17'-5"	-0'-6"	17'-5"
22	-17'-5"	3'-0"	17'-8"
23	-19'-2"	-3'-6"	19'-6"
24	-20'-5"	1'-3"	20'-5"
25	-20'-5"	4'-9"	21'-0"
26	-22'-2"	-1'-9"	22'-3"
27	-22'-4"	-14'-3"	26'-6"
28	-22'-4"	-17'-9"	28'-6"
29	-25'-10"	-17'-9"	31'-4"
30	-25'-10"	-14'-3"	29'-6"
31	2'-10"	-14'-9"	15'-0"
32	2'-10"	-13'-3"	13'-7"
33	0'-0"	-3'-6"	3'-6"
34	-0'-7"	10'-2"	10'-2"
35	-1'-11"	7'-9"	8'-0"
36	-2'-10"	0'-4"	2'-10"
37	-3'-1"	-16'-1"	16'-5"
38	-3'-10"	-11'-7"	12'-2"
39	-3'-11"	-9'-1"	9'-11"
40	-4'-3"	9'-7"	10'-6"
41	-4'-6"	-21'-4"	21'-10"
42	-4'-8"	-16'-1"	16'-9"
43	-5'-7"	-19'-11"	20'-8"
44	-5'-8"	-17'-11"	18'-9"
45	-6'-8"	3'-0"	7'-4"
46	-6'-10"	-21'-11"	22'-11"
47	-8'-10"	-20'-9"	22'-7"
48	-9'-1"	3'-3"	9'-8"
49	-10'-8"	-21'-8"	24'-2"
50	-10'-9"	1'-4"	10'-10"
51	-12'-7"	-0'-5"	12'-7"
52	-13'-3"	2'-0"	13'-5"
53	-13'-7"	-5'-7"	14'-8"
54	-14'-3"	-19'-9"	24'-4"
55	-14'-10"	-21'-6"	26'-1"
56	-15'-2"	-5'-7"	16'-2"

MOUNT LOCATIONS TABLE

#	TYPE	SIZE/DEPTH	QTY
A	EF12	W:12" x L:12" x D:18"	28
B	EFO	W:12" x L:32" x D:18"	1
C	EFO	W:12" x L:24" x D:21.5"	1
D	EF12	W:12" x L:12" x D:30"	2
E	EFO	W:12" x L:24" x D:18"	1
F	EFO	W:12" x L:24" x D:25"	2
G	EF12	W:12" x L:12" x D:16.5"	2
H	PostFooting	W:18" x L:18" x D:30"	38
I	EF24	W:24" x L:24" x D:36"	6
J	EF18	W:18" x L:18" x D:30"	2
K	EFR	W:16" x L:16" x D:6"	1
L	EFO	W:16" x L:16" x D:6"	1

PROJECT # PPT26BD6E6C-3
DATE 8/11/2026

Park Planet

MIN. USE ZONE 44' x 47' (13.317m x 14.114m)

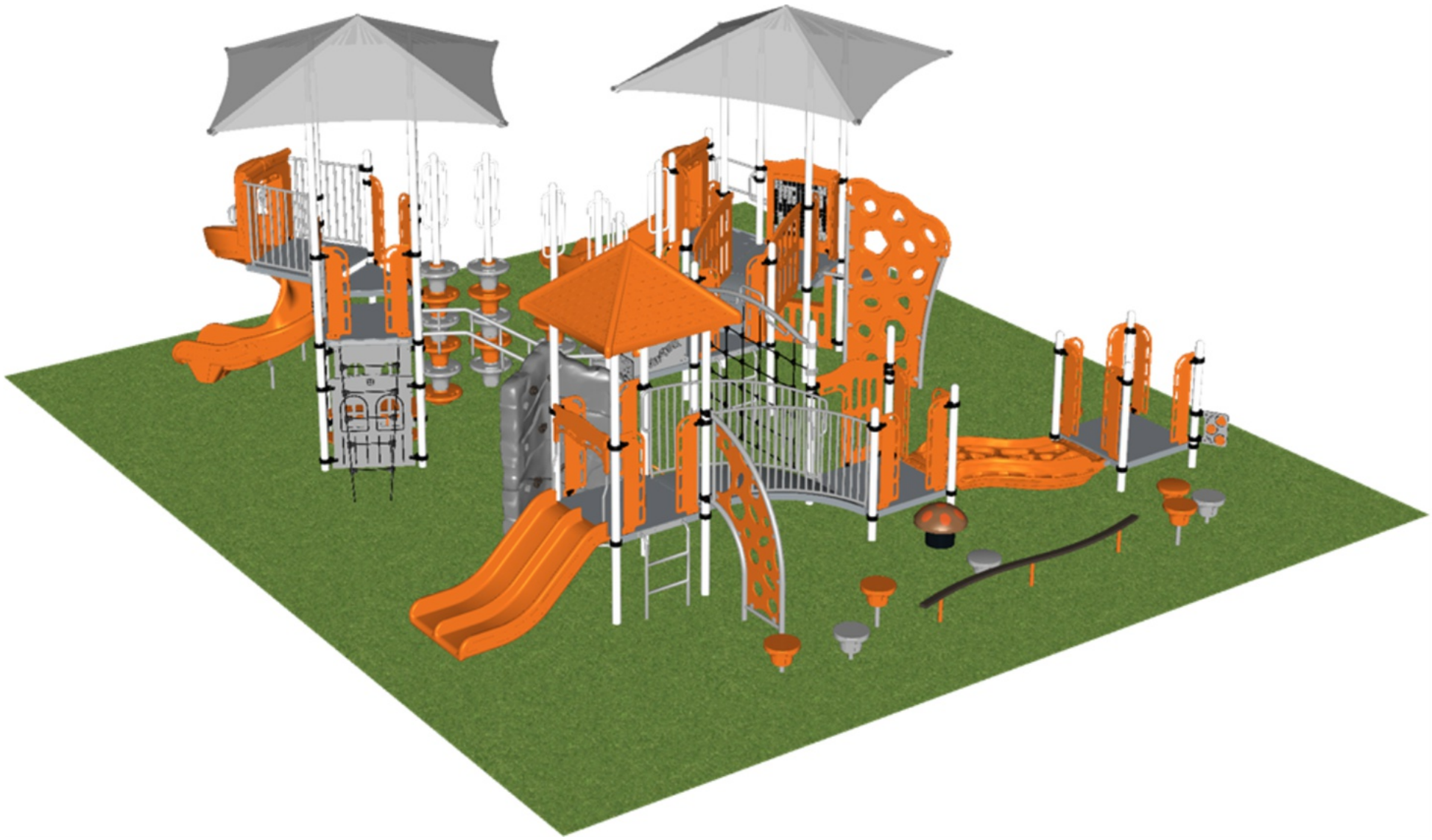
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

SW VIEW

R35

FOR KIDS
AGES
5-12



STRUCTURE # R35E01A8C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

NE VIEW

R35

FOR KIDS
AGES
5-12



STRUCTURE # R35E01A8C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

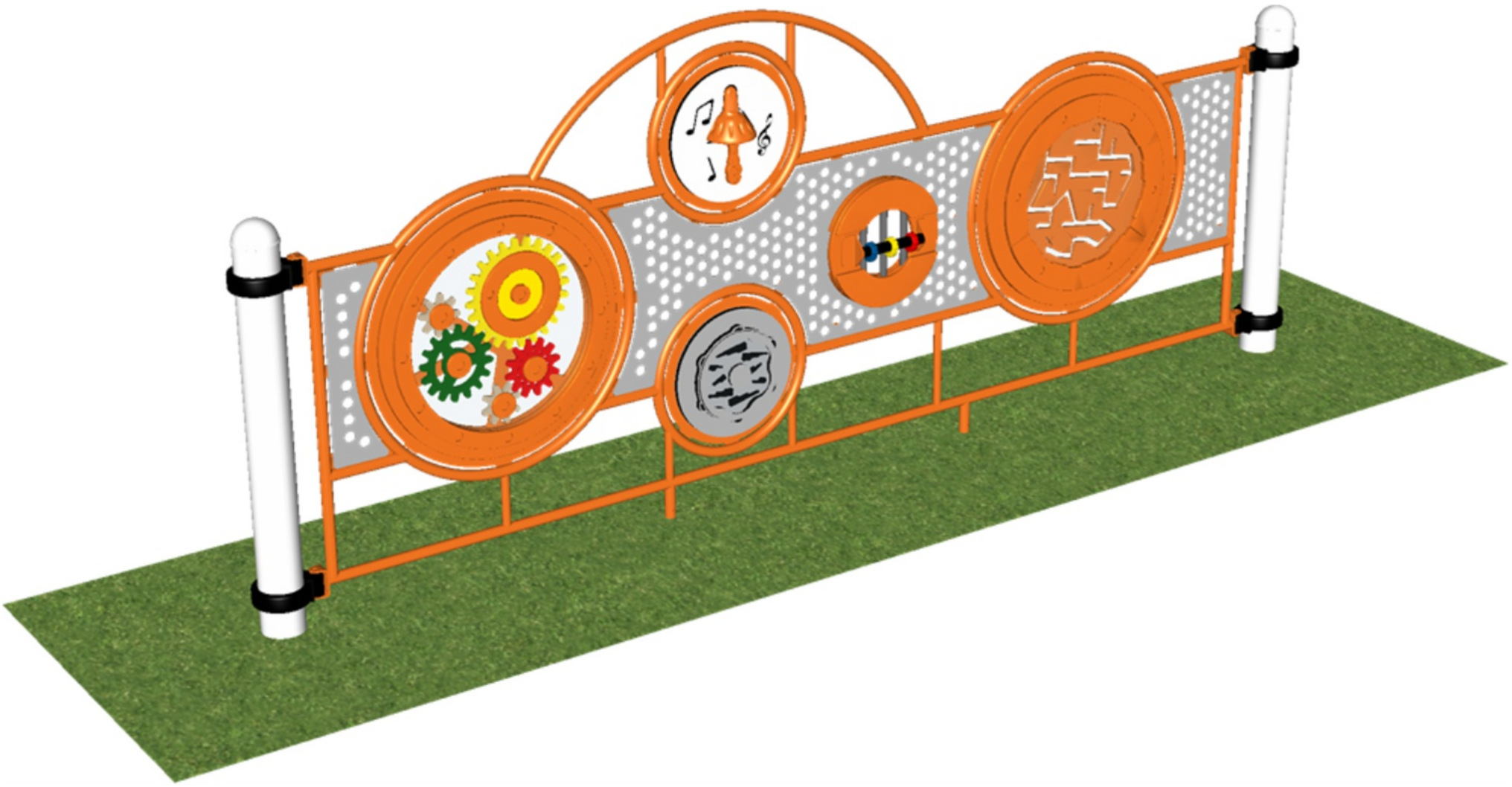
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

SW VIEW

R5

FOR KIDS
AGES
5-12



STRUCTURE # R507A481C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

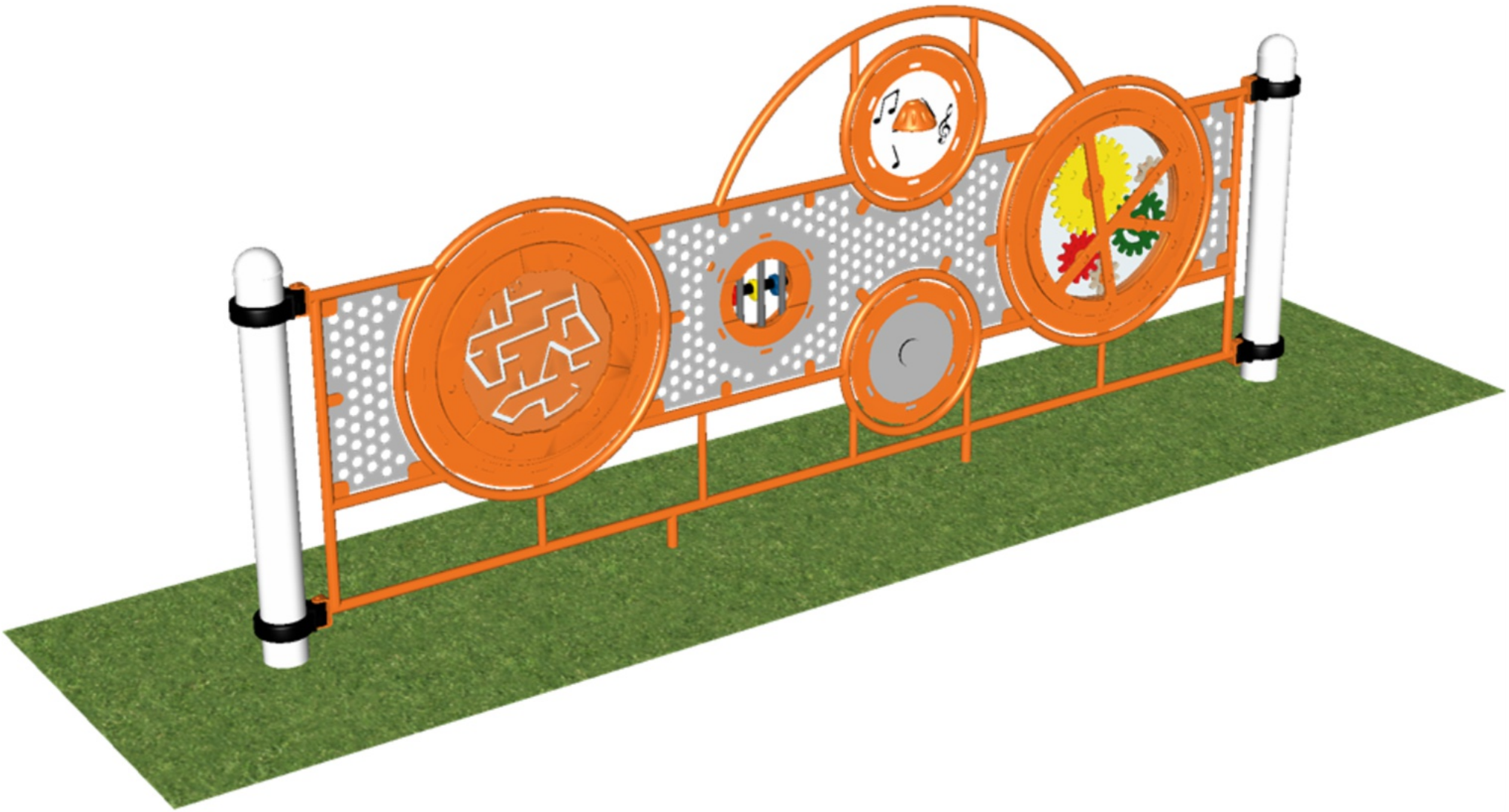
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

NE VIEW

R5

FOR KIDS
AGES
5-12



STRUCTURE # R507A481C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

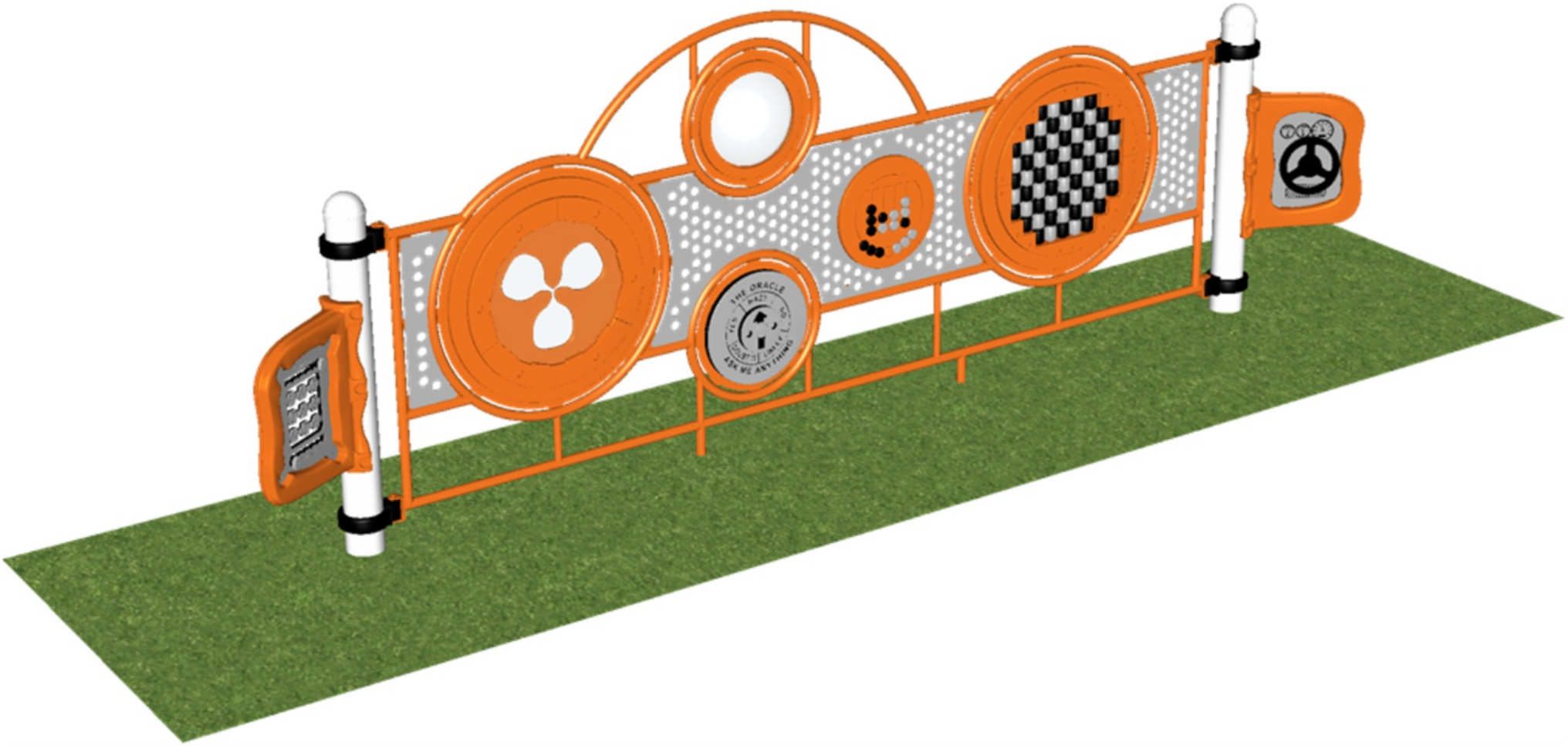
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

SW VIEW

R5

FOR KIDS
AGES
5-12



STRUCTURE # R504DF17C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

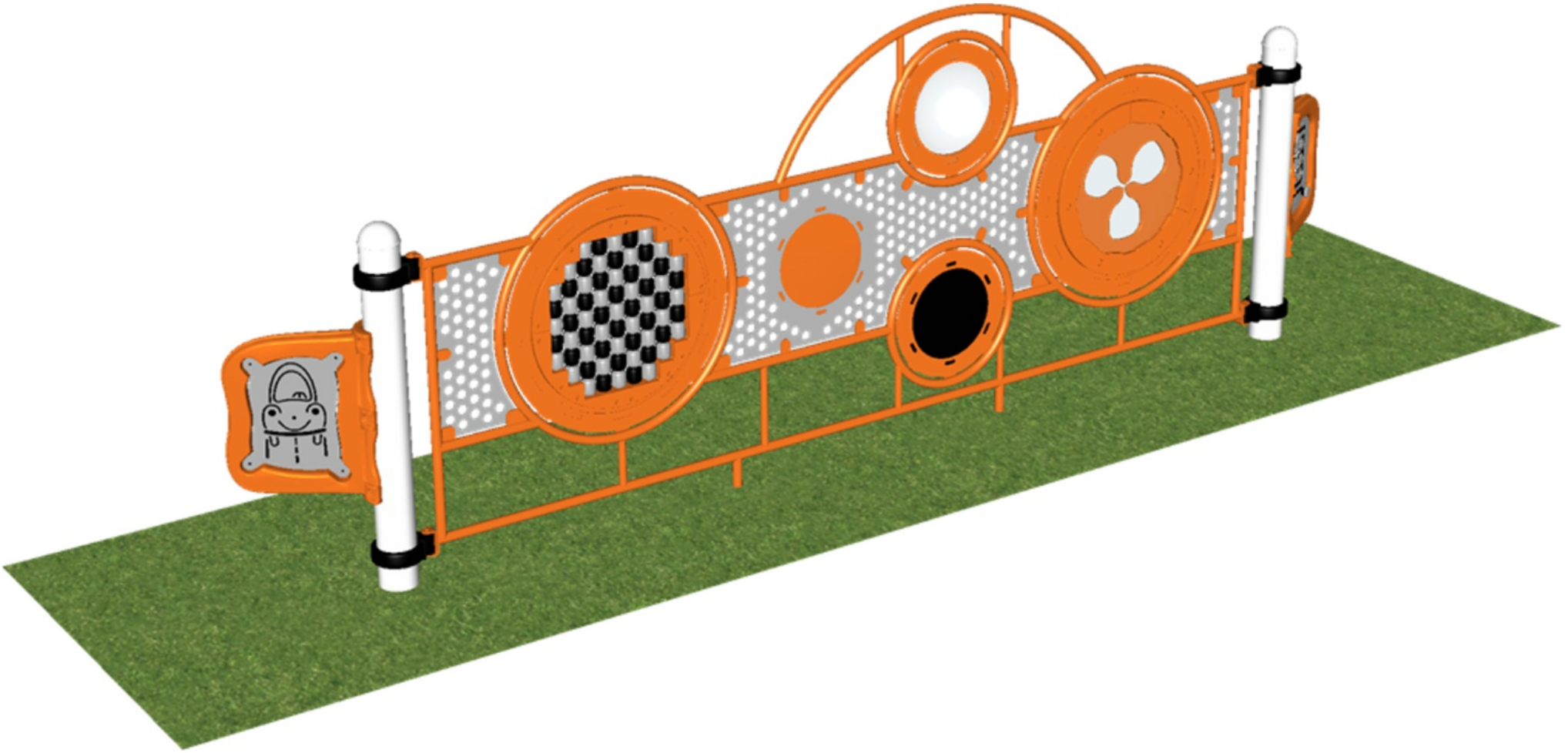
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

NE VIEW

R5

FOR KIDS
AGES
5-12

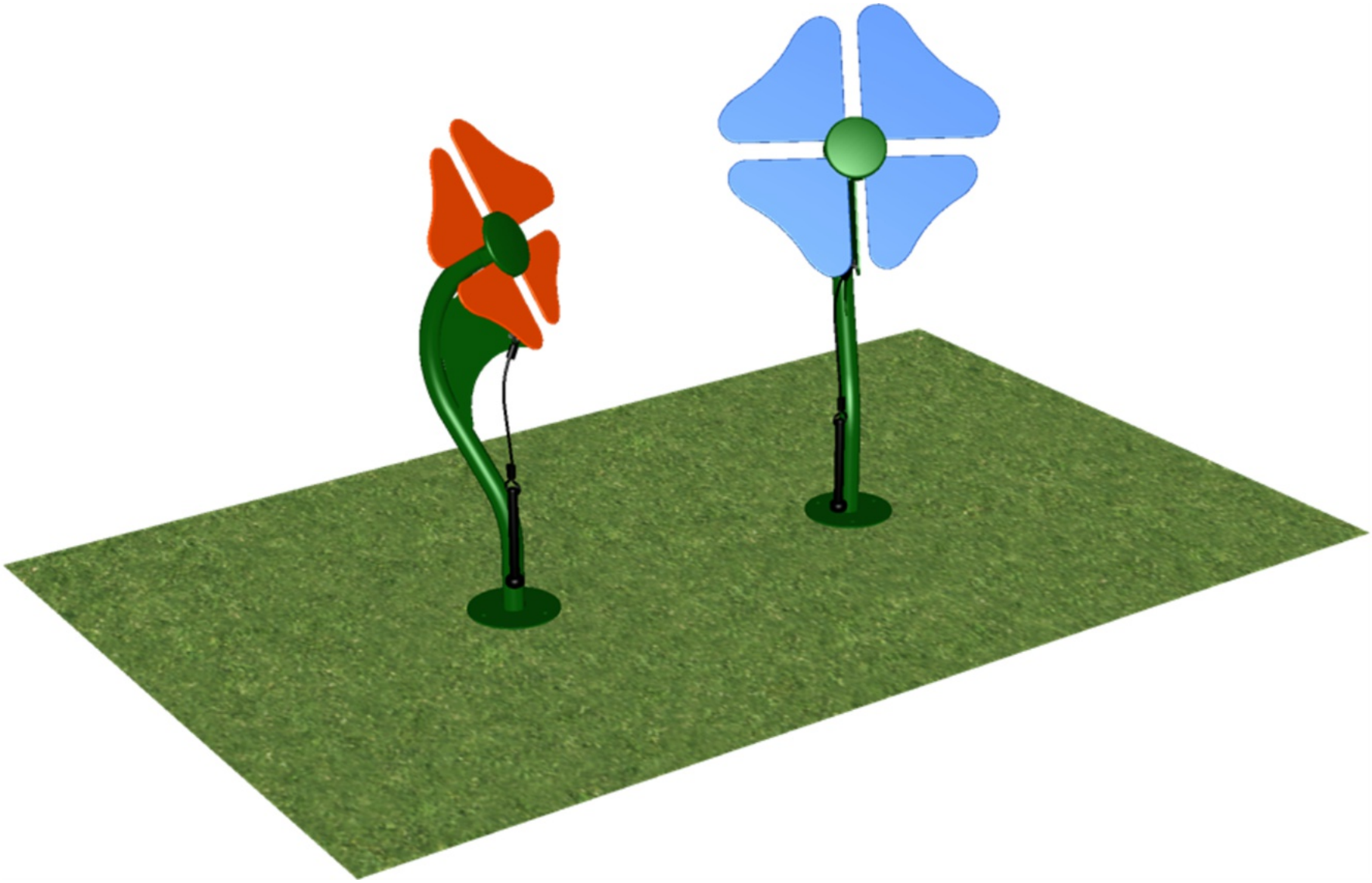


STRUCTURE # R504DF17C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

SW VIEW



STRUCTURE # FRE256DBA
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

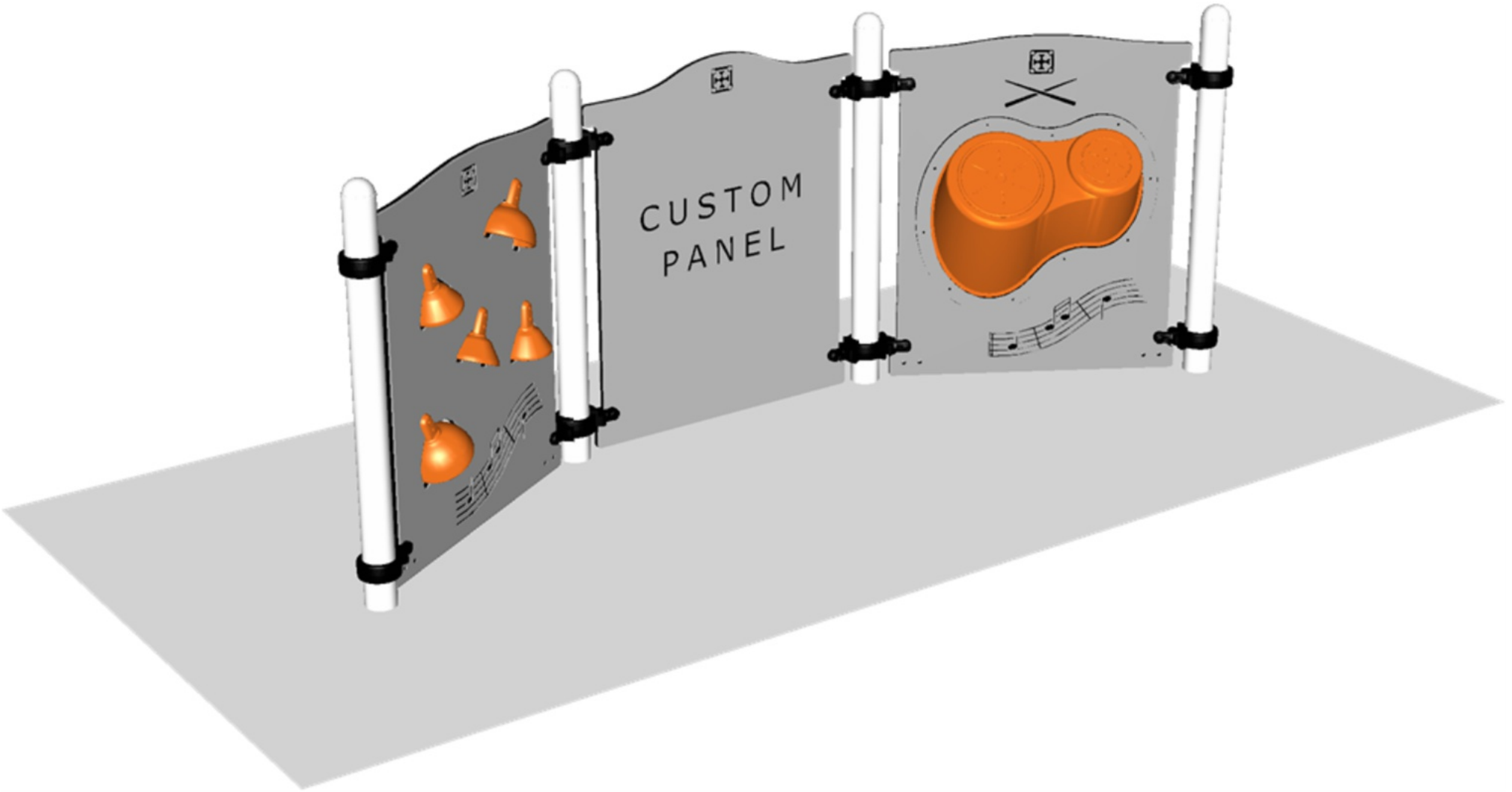
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

SW VIEW

R35

FOR KIDS
AGES
5-12



STRUCTURE # R3551C84C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

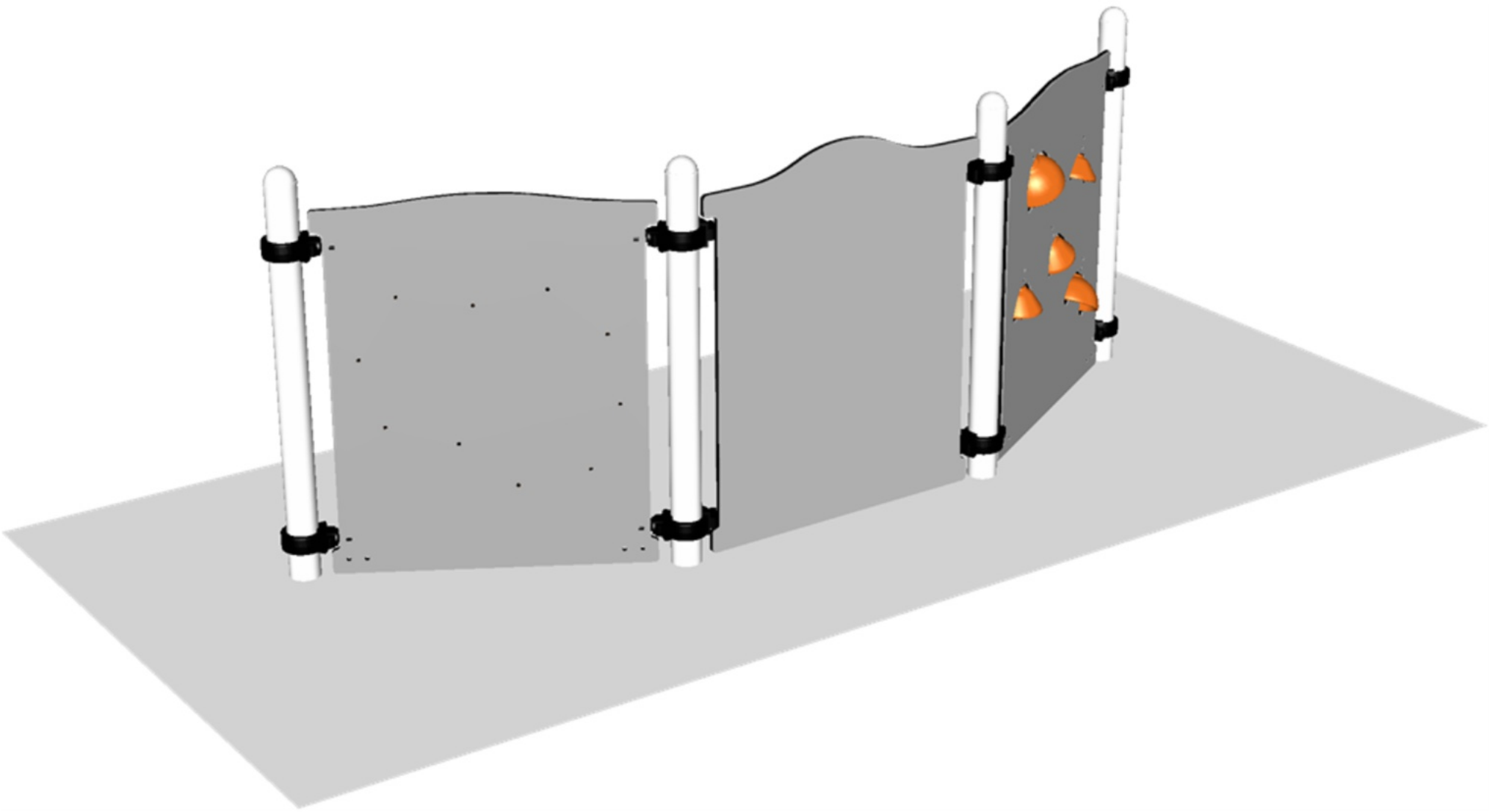
PLAYCRAFT SYSTEMS
A PLAYCORE Company

MARSH ES UPPER ADD ON OPT 3

NE VIEW

R35

FOR KIDS
AGES
5-12



STRUCTURE # R3551C84C
PROJECT # PPT26BD6E6C-3
DATE 7/8/2026

PLAYCRAFT SYSTEMS
A PLAYCORE Company

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bill of Materials

MARSH ES UPPER ADD ON OPT 3

Project # PPT26BD6E6C-3 **Date** 7/8/2026

Item / Part Number	Description	Qty
[R35E01A8C]		
HS-1004-R35	Collars	90
A2-2410	Balance Beam (Snake)	1
A2-2433	Shroom Stepper (Medium)	1
GG-8135	Dome Cap, R3.5	16
S-1008-R35-08ft	Post, 08ft R3.5	6
S-1009-R35-09ft	Post, 09ft R3.5	1
S-1010-R35-10ft	Post, 10ft R3.5	6
S-1011-R35-11ft	Post, 11ft R3.5	2
S-1013-R35-13ft	Post, 13ft R3.5	5
S-1015-R35-15ft	Post, 15ft R3.5	4
S-1017-R35-17ft	Post, 17ft R3.5	4
S-1101-R35	Square Deck	5
S-1102-R35	Tri-Deck	3
S-1103-R35	Hex Deck, Half (5 Post)	1
S-1209-36-R35	Transfer Station, 48in-R	1
S-1210-36	Climber, Vertical Ladder 30-36in	2
S-1233-3-HW	Climber, Disc 30-36in (w/ HW)	1
S-1233-3-MC	Climber, Disc 30-36in	1
S-1233-4-HW	Climber, Disc 42-48in (w/ HW)	1
S-1233-4-MC	Climber, Disc 42-48in	1
S-1233-5-MC	Climber, Disc 54-60in	1
S-1233-6-HW	Climber, Disc 66-72in (w/ HW)	1
S-1236-3-1282-3	Climber, Erector Rock Climber 36in	1
S-1238-4	Climber, Freeform 42-48in	1
S-12462	Climber, Narrow Net 54-60in	1
S-1249-DDH0R35	Geo-Wave Link (Horizontal, DTD Right)	1
S-1283-R35	Climber, Matrix Rope Net Wall	1
S-1286-R35	Climber, Arched Wall	1
S-1309-2-R35	Half Walls (Pair) R35	10
S-1309-R35-R	Transfer Point (Half Wall - Right)	1
S-1309-R35-R	Half Walls (Single, Right)	1
S-1314-R35R	Access Wall (Right)	1
S-1316-RE-R35	Roto Twister Entry Panel	1
S-1414	Lily Pad Step 12-18in	6
S-1414-6	Lily Pad Step 06in	2
S-1508-84R35	Link, Loop 84in (Inclined 24in)	1

Bill of Materials (Continued)

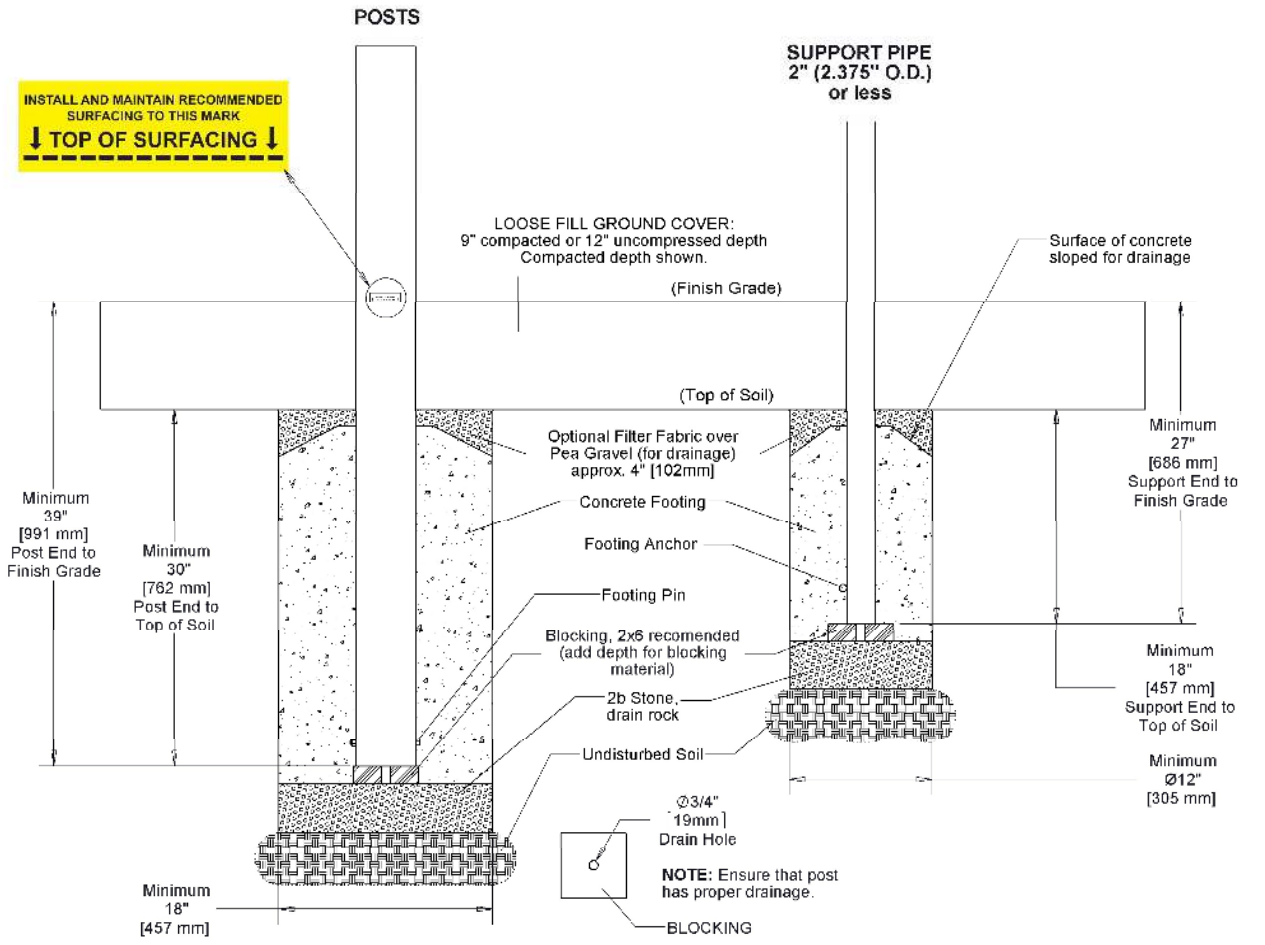
MARSH ES UPPER ADD ON OPT 3

Item / Part Number	Description	Qty
S-1514-84R35	Bridge, Inclined Arch (84in)	1
S-1514-R35	Bridge, Inclined Arch	1
S-1615-R35G	Store Panel	1
S-1619-R35	ABC Panel	1
S-1639-R35	Clubhouse (Left)	1
S-1660-R35	Panel Pal, Clown and Cowboy	1
S-1663-R35	Panel Pal, Maze	1
S-1666-R35	Panel Pal, Spinner	1
S-1679-R35	Bell Panel	1
S-1685-R35	Mosaic Panel	1
S-1702-3R35	Slide, Double 36in	1
S-1706-S6R-R35	Slide, Twister Spiral 72 (R)	1
S-1710-4-R	Slide, Twister 48in (R)	1
S-18021-10R35	Shade Canopy, 10ft Square	2
S-1807-R35	Roof, Square Pyramid (Shingled)	1
S-1812-R35	Driver Wheel (Post Mounted)	1
S-1937-R35	Crunch Handle	1
R507A481C		
HS-1004-R	Collars	4
GF-7002	Dome Cap, R5	2
S-1007-R5-07ft	Post, 07ft R5	2
S-1981-SWD	Sensory Play Wall (Dynamic)	1
R504DF17C		
HS-1004-R	Collars	4
GF-7002	Dome Cap, R5	2
S-1007-R5-07ft	Post, 07ft R5	2
S-1664-R5	Panel Pal, Tic-Tac-Toe	1
S-1667-R5	Panel Pal, Driver	1
S-1981-SWP	Sensory Play Wall (Playful)	1
FRE256DBA		
FWR-I-IG	Flower, Indigo (IG)	1
FWR-O-IG	Flower, Orange (IG)	1
R3551C84C		
HS-1004-R35	Collars	8
GG-8135	Dome Cap, R3.5	4
S-1007-R35-07ft	Post, 07ft R3.5	4
S-1600-CUST1-R35I	Custom Panel R35 (HDPE)	1
S-1658-R35I	Drum Panel	1
S-1679-R35I	Bell Panel	1

CONCRETE FOOTINGS

R5 – 06

IMPORTANT: The footing depth for support posts and other equipment must be adjusted to compensate for the depth/thickness requirements of the selected impact attenuating safety surfacing. (i.e. wood chips vs. rubber matting).

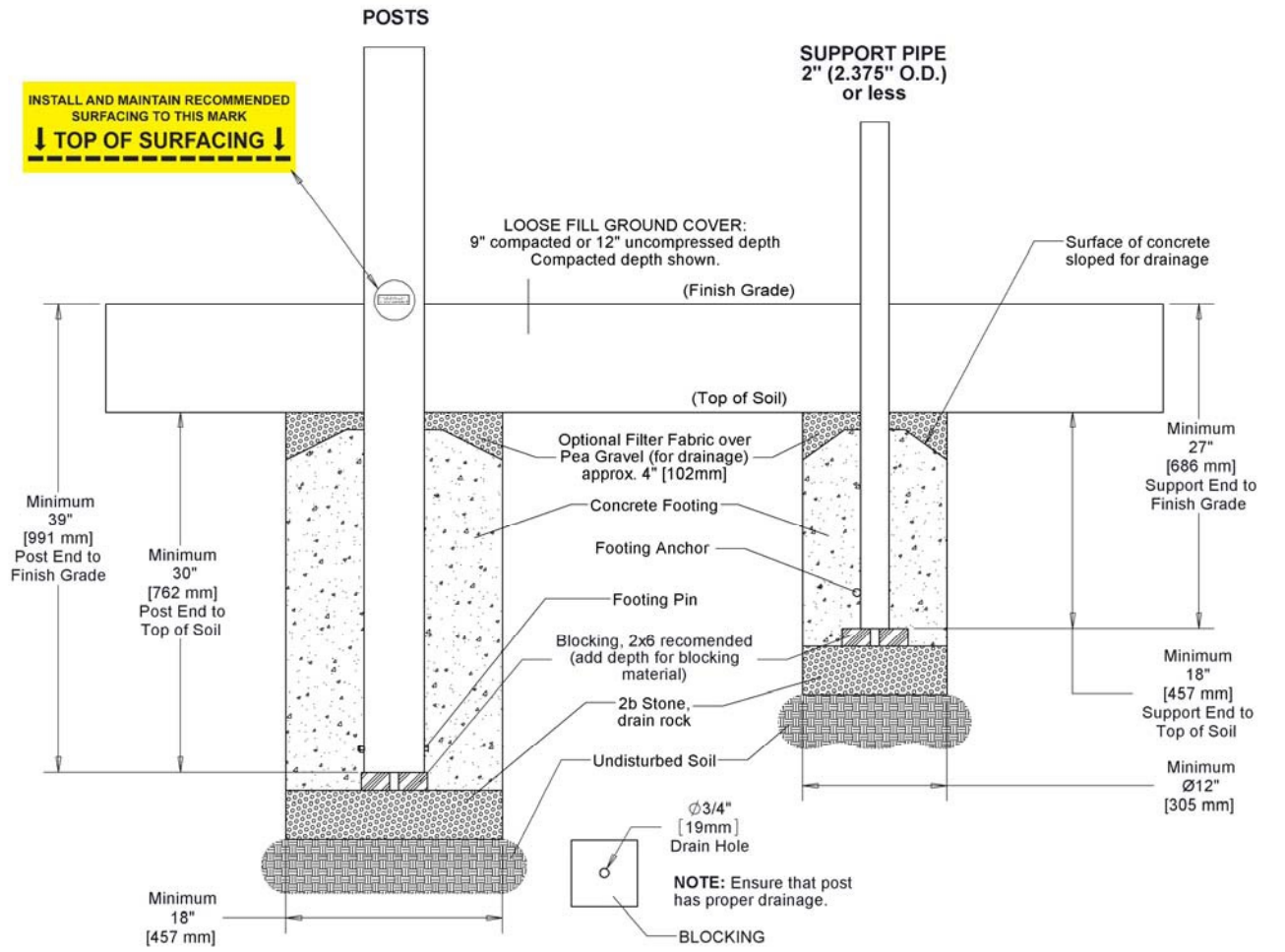


R5 - 06.1 IMPORTANT ITEMS	
1	Use more concrete as required for supporting activities with movement such as the Track Rides, Traverses, Chinning Bars and Swings.
2	See specific Swing Installation Instructions for swing post footings and ground cover requirements.
3	Larger footings (more concrete) may be required due to weather conditions and poor, unstable, loose or granitic soil. Before changing footing dimensions we recommend that the footings be reviewed and approved by a registered engineer.
4	Base of all footings must be below the frost line. Determine depth of frost line for your area and adjust footing depth (not post and support depth) as required.

CONCRETE FOOTINGS

R3.5 – 06

IMPORTANT: The footing depth for support posts and other equipment must be adjusted to compensate for the depth/thickness requirements of the selected impact attenuating safety surfacing. (i.e. wood chips vs. rubber matting).



R3.5 - 06.1 IMPORTANT ITEMS	
1	Use more concrete as required for supporting activities with movement such as the Track Rides, Traverses, Chinning Bars and Swings.
2	See specific Swing Installation Instructions for swing post footings and ground cover requirements.
3	Larger footings (more concrete) may be required due to weather conditions and poor, unstable, loose or granitic soil. Before changing footing dimensions we recommend that the footings be reviewed and approved by a registered engineer.
4	Base of all footings must be below the frost line. Determine depth of frost line for your area and adjust footing depth (not post and support depth) as required.

R3.5 - 06.1 IMPORTANT ITEMS (CONTINUED)	
5	Krauss Craft, Inc. recommends a loose fill material such as engineered wood fiber (as described in the CPSC) be installed at a depth of no less than 12 in. to allow for natural shrinkage, and compression during use. A minimum 9 in. depth of compressed loose fill material described above is required for equipment with fall heights up to 6 ft. Comparison of impact attenuating safety surfacing material is available in the "Public Playground Safety Handbook", Publication 325 published by CPSC. When choosing an appropriate impact attenuating safety surfacing material, check with material manufacturer for recommended depth/thickness.
6	Never install loose fill material over concrete or asphalt.
7	The depth of the post or support must be adjusted to compensate for the depth of impact attenuating safety surfacing material ranging from loose fill material to rubber matting.
8	This equipment is designed to be installed on a level site. Footings must be cast against undisturbed or compressed soil. Support posts and all attached decks and play components must be plumb and level.

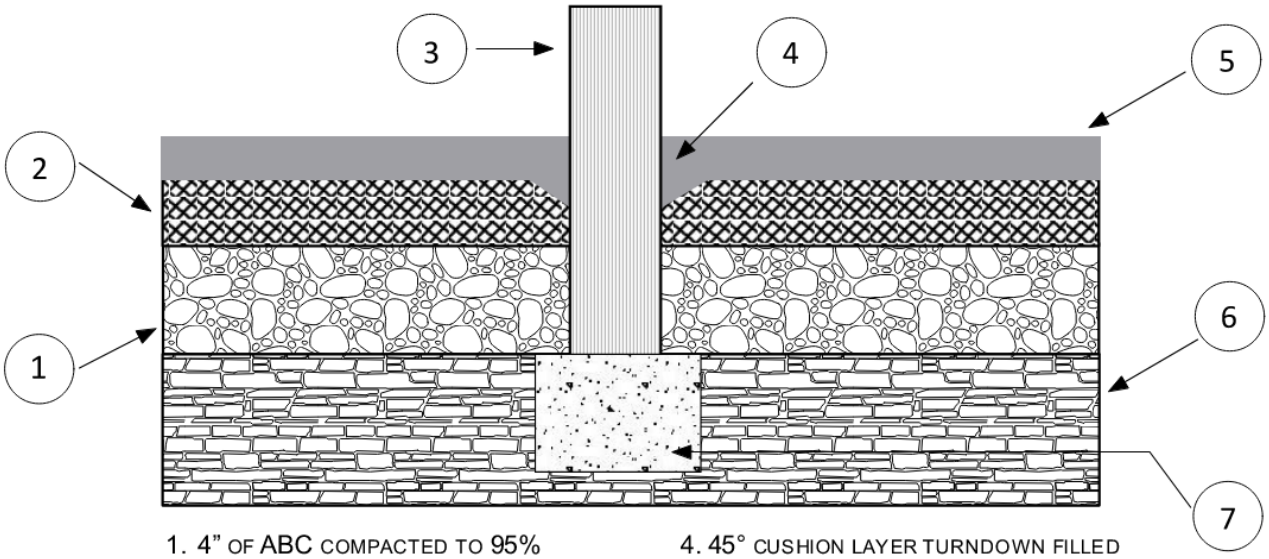
For more information, refer to the current publication of the USCPSC "Public Playground Safety Handbook"

For a copy, write to:
U.S. Consumer Product Safety Commission
Office of Information and Public Affairs
Washington, D.C. 20207
Or call
Toll-Free: 1-800-638-2772
Website: www.cpsc.gov

R3.5 - 06.2 INSTALLATION	
Step 1	In order to properly install the support posts on your play structure, refer to the Site Safety Recommendations in section R3.5 – 04 as well as the Top View and/or Site Plan drawings found in the Construction Drawings section R3.5 - 02. Mark footing hole location(s) and dig hole(s) as determined. Compact base of footing hole(s) with drain rock as specified at proper depth.
Step 2	Position the support block at the base of the footing hole. Place the support post in the footing hole at the determined depth. The support block helps to stabilize the post during assembly and while the concrete cures, especially in soft soil conditions.
Step 3	Plumb and square all support posts. Block and brace as required to prepare for final assembly and pouring of concrete.
Step 4	Do not pour concrete until the structure is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the structure (at least 72 hours).

INSTALLATION AT EQUIPMENT EDGE

NOTE: TOTAL THICKNESS OF SYSTEM IS BASED ON FALL HEIGHT OF EQUIPMENT
DRAWING NOT TO SCALE



1. 4" OF ABC COMPACTED TO 95% (CONCRETE OR ASPHALT ACCEPTABLE)
2. SBR CUSHION LAYER
3. EQUIPMENT POST
4. 45° CUSHION LAYER TURNDOWN FILLED WITH TPV
5. ½" (12.7MM) TPV RUBBER SURFACE
6. WELL PREPARED SUB GRADE
7. EQUIPMENT FOOTER

Detail 1

EXHIBIT E
SPECIFICATIONS

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

CONTENT INCLUDED

EXHIBIT CONTENT

Manufacturer specifications for the playground equipment and poured-in-place surfacing system selected for this Project.

SOURCE / RESPONSIBLE PARTY: MANUFACTURER

PLAYCRAFT SPECIFICATIONS

Playcraft Systems' commitment to craftsmanship and commitment extends throughout all product offerings. Utilizing superior materials and industry leading manufacturing techniques, our Round 5, Round 3.5, Revolution, and Freestanding Events are tested and validated to be in conformance with ASTM F1487 and CSA Z614-14 Standards.

SECTION 1 - GENERAL SPECIFICATIONS (Playground Equipment)

Hardware/Fasteners all metal hardware shall be stainless steel, zinc plated, or galvanized as required to resist rust and corrosion. Pinned tamper resistant hardware with thread lock patch shall be used for all principal connections. Hardware Caps shall be a UV-Stabilized, polypropylene based plastic consisting of two parts, a base and crown. Specified hardware is attached through the base to post support and finished with a crown to form a smooth tamper-resistant attachment point. All hardware shall be shipped in individual component-specific hardware packages.

Rotationally Molded Polyethylene shall be manufactured from hot compounded linear low-density polyethylene resins. Hot compounded polyethylene resins include UV inhibitors and anti-static additives providing superior performance, durability, fade resistance (tested to a long term UV16 rating), and a more uniform, colorfast appearance and thickness. All rotationally molded, low-density polyethylene plastic components shall be available in a variety of colors and have an average wall thickness of .250". All components shall comply with ASTM D 638-02 (minimum 2500 PSI tensile strength), ASTM D-790 (Flex Modulus Test), ASTM D-648 (Heat Distortion Temperature Test), ARM-STD (Low Temperature Impact Test).

High Density Polyethylene - (HDPE) Sheet Stock Parts All HDPE components shall be manufactured from 1", 3/4", and 1/2" thick, high-density, hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention. Components shall be cut or machined to size with routed design elements and available in a variety of solid or dual-colors. All HDPE components shall comply with ASTM D1505 (density of .955 g/cc), ASTM D638 (tensile strength of 4000 PSI), D790 (Flex Modulus Test), and D648 (Heat Distortion Temperature Test).

Powder Coating all steel, aluminum, and die cast components shall be thoroughly prepared prior to receiving final powder coat finish. Preparation includes quality inspection of every component and connection, grinding and hand filing of each weld to remove excess material and spatter, cleansing in a multi-step process which includes a hot phosphatizing bath and rinse followed by a non-chrome seal for added corrosion resistance. Components shall be preheated and fully dried prior to receiving a 3-5 mil thick electrostatically applied epoxy primer coating (covering entire component - not just welds) for superior powder adhesion and corrosion resistance. An 8-11 mil thick architectural grade Super Durable polyester TGIC powder shall be electrostatically applied and baked achieving a thickness of 11-16 mils. All polyester powder coatings shall comply with ASTM standards: D-522 (Flexibility Mandrel Test), D-2794 (Impact Resistance Test), B-117 (Salt Spray Weatherability Test), D-3363 (Pencil Hardness Test), D-2454 (Overbake Resistance Test), D-3359B (Adhesion Crosshatching Test). Powder coatings are available in a variety of colors.

PlayTuff™ Coating shall be applied to specific metal components with a 120-160 mil thickness. Prior to PlayTuff™ coating, components shall be thoroughly prepared and cleaned in a multi-stage phosphatizing wash, followed by a uniform application of Playcraft formulated primer. Upon preheating to a minimum of 350 degrees, components shall be dipped in a UV stabilized Polyvinyl Chloride liquid followed by a 400 degree salt cured bath. All Play-Tuff™ Coated Parts shall comply with ASTM D-624 (Tear Strength Test), ASTM D-412 (Tensile Strength Test). PlayTuff™ Coatings shall provide a slip resistant surface and are available a variety of colors.

Tubular Steel and Metal Components shall be heavy-gauge and pre-galvanized including internal corrosion protection. Tube shall be formed and/or fabricated into required components and finished as specified. All tubular steel components shall comply with ASTM standards: A-500/A-513 (Steel Tubing). Prior to receiving Powder Coating or PlayTuff™ Coating, all metal components shall be zinc plated, cadmium plated, or galvanized to resist rust and corrosion.

Steel Walls shall be fabricated using 1.029" O.D. 14 gauge tube steel welded vertically on 4" centers between vertical 1.315" O.D. 12 gauge tube steel balusters and horizontal 1.315" O.D. 12 gauge tube steel rails, top & bottom. Brackets may be welded to the ends of each rail and between the verticals to provide attachment points. Walls shall be finished with a multi-stage baked-on powder coat finish.

Vertical Deck Fillers shall be designed to eliminate the crawl space between decks at different elevations. All deck in-fills shall be made from 12 gauge sheet steel and powder coated after fabrication.

Punched Steel Surfaces steel decks, bridges, ramps, and steps shall be constructed using heavy duty, single piece 12-gauge low carbon sheet steel which shall be formed and fabricated into required designs. Below surface supporting gussets shall be fabricated utilizing 12 gauge sheet steel to insure structural integrity. All punched steel standing surfaces and steps shall receive slip-resistant PlayTuff™ coating with a thickness of 120-160 mils and a uniform 5/16" diameter hole pattern. Deck faces shall have up to 6 attachment slots to accommodate face mounting components. There shall be no unsupported area larger than 1.5 square feet on all deck surfaces. All sheet steel shall conform to ASTM A1011-02.

Post Caps shall be precision die-cast from high strength A-369.1 aluminum alloy and powder coated as specified. Post caps to include Playcraft Systems' exclusive self-sealing design with an overlapping lip (Factory installed and secured in place)

King Collars™ shall be precision die-cast from high strength A-369.1 aluminum alloy and powder coated as specified. King Collars™ to include Playcraft Systems' exclusive dove tail design and face to face connection eliminating string entanglements and extra hardware. King Collars™ shall exhibit a tensile strength of 47,000 PSI and a yield strength of 28,000 PSI.

Climbing Grips shall be precision die-cast from high strength A-369.1 aluminum alloy and coated in a functionalized polyethylene copolymer thermoplastic coating. All thermoplastic coatings shall comply with ASTM standards: ASTM B 2794 (Impact Resistance Test), B-117 (Salt Spray Weatherability Test), ASTM D-638 (Tensile Strength Test). A-369.1 aluminum alloy shall exhibit a tensile strength of 47,000 PSI and a yield strength of 28,000 PSI.

Chain Swings, Chain Nets, Chain Walks and Suspension Bridges shall be 4/0 and/or 5/0 galvanized steel. Chains shall be coated in PlayTuff™ coating coated as required.

Steel-reinforced ropes shall be manufactured with tightly woven, polyester-wrapped, six-stranded galvanized steel cable. Ropes are extremely durable, vandal and abrasion resistant, color stable, and available in a variety of colors.

ROUND-5 PLAY SYSTEM - General Specifications

SPECIFICATIONS:

Aluminum Post Mechanical Properties:	
Yield Strength (min):	35,000 PSI
Tensile Strength (min):	38,000 PSI
% Elongation in 2 Inches:	10
Modulus of Elasticity:	10 x 10^6 PSI

Round-5 Aluminum Posts shall be constructed of 5" O.D. round 6061-T6 aluminum tubing with a .125” wall thickness. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All post shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All aluminum posts shall exhibit the following mechanical properties: Tensile Strength of 38,000 PSI (minimum), Yield Strength of 35,000 PSI (minimum). All posts shall be available in a variety of colors.

Steel Post Mechanical Properties:	
Yield Strength (min):	50,000 PSI
Tensile Strength (min):	55,000 PSI
% Elongation in 2 Inches:	25
Modulus of Elasticity:	30 x 10^6 PSI

Round-5 Steel Posts shall be constructed of 5" O.D. round 11-gauge steel tubing and shall receive a galvanized Flo-Coat inside and out after rolling. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All posts shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All steel posts shall exhibit the following mechanical properties: Tensile Strength of 55,000 PSI (minimum), Yield Strength of 50,000 PSI (minimum). All posts shall be available in a variety of colors.

Round-5 Attachment Fittings (King Collars™ and Sockets) shall be two-part and precision die-cast from high strength 369.1 aluminum alloy with an ultimate tensile strength of 47,000 PSI and a yield strength of 28,000 PSI. Separate sockets when combined with collars form a unique and versatile method of component-to-post attachment, allowing multiple component attachment points for a cleaner, more balanced design. King Collars™ and Sockets shall be powder coated and available in a variety of colors.

Round-5 Play System Footing Requirements shall vary depending on deck heights, components, and events attached to the structure. Most Round-5 components and posts are available for surface or in-ground mounting.

ROUND-3.5 PLAY SYSTEM - General Specifications

SPECIFICATIONS:

Aluminum Post Mechanical Properties:	
Yield Strength (min):	35,000 PSI
Tensile Strength (min):	38,000 PSI
% Elongation in 2 Inches:	10
Modulus of Elasticity:	10 x 10^6 PSI

Round-3.5 Aluminum Posts shall be constructed of 3-1/2" O.D. round 6061-T6 aluminum tubing with a .125” wall thickness. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All post shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All aluminum posts shall exhibit the following mechanical properties: Tensile Strength of 38,000 PSI (minimum), Yield Strength of 35,000 PSI (minimum). All posts shall be available in a variety of colors.

Steel Post Mechanical Properties:	
Yield Strength (min):	50,000 PSI
Tensile Strength (min):	55,000 PSI
% Elongation in 2 Inches:	25
Modulus of Elasticity:	30 x 10^6 PSI

Round-3.5 Steel Posts shall be constructed of 3-1/2" O.D. round 11-gauge steel tubing and shall receive a galvanized Flo-Coat inside and out after rolling. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All posts shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All steel posts shall exhibit the following mechanical properties: Tensile Strength of 55,000 PSI (minimum), Yield Strength of 50,000 PSI (minimum). All posts shall be available in a variety of colors.

Round-3.5 Attachment Fittings (King Collars™ and Sockets) shall be two-part and precision die-cast from high strength 369.1 aluminum alloy with an ultimate tensile strength of 47,000 PSI and a yield strength of 28,000 PSI. Separate sockets when combined with collars form a unique and versatile method of component-to-post attachment, allowing multiple component attachment points for a cleaner, more balanced design. King Collars™ and Sockets shall be powder coated and available in a variety of colors.

Round-3.5 Play System Footing Requirements shall vary depending on deck heights, components, and events attached to the structure. Most Round-3.5 components and posts are available for surface or in-ground mounting.

REVOLUTION SYSTEM - General Specifications

SPECIFICATIONS:

Revolution Direct-Bolt Double-Wall Post System (Patent Pending). shall be constructed utilizing (4) primary components: Double-wall mounting sleeves, Core post, Top cap, and Bottom cap. Each mounting sleeve shall be precision die-cast from a high-strength A369.1 aluminum alloy specially formulated to withstand corrosion in harsh climates/environments. Die Cast Sleeves shall be 5” diameter and individually finished with a smooth machined surface. All mounting sleeves shall include factory drilled and threaded component attachment holes. Nylon Plugs shall be included for attachment holes not utilized during play structure assembly. Core post shall be constructed of 3-1/2" O.D. 11-gauge galvanized steel tubing exhibiting the following mechanical properties: Tensile Strength of 55,000 PSI and Yield Strength of 50,000 PSI. Top cap shall be precision die-cast from a high-strength A-369.1 aluminum alloy specially formulated to withstand corrosion in harsh climates/environments with a powder coated as specified. Post caps to include Playcraft Systems’ exclusive self-sealing design with an overlapping lip and are factory installed and secured in place with a self-sealing rivet. Post caps are available in a variety of colors. Bottom Cap shall be precision die-cast from a high-strength A-369.1 aluminum alloy specially formulated to withstand corrosion in harsh climates/environments with a powder coated as specified and factory installed.

Steel Post Mechanical Properties:	
Yield Strength (min):	50,000 PSI
Tensile Strength (min):	55,000 PSI
% Elongation in 2 Inches:	25
Modulus of Elasticity:	30 x 10^6 PSI

Tubular Steel and Metal Components shall be heavy-gauge and pre-galvanized including internal corrosion protection. Tube shall be formed and/or fabricated into required components and finished as specified. All tubular steel components shall comply with ASTM standards: A-500/A-513 (Steel Tubing). Prior to receiving Powder Coating or PlayTuff™ Coating, all metal components shall be zinc plated, cadmium plated, or galvanized to resist rust and corrosion.

Revolution Play System Footing Requirements shall vary depending on post heights, components, and events attached to the structure. Most Revolution components and posts are available for surface or in-ground mounting.

Poured In Place Safety Surfacing

PART 1 – GENERAL

1.01 Work Included

Provide all labor, materials, and tools necessary for the complete installation of a poured in place safety surfacing system as outlined in these specifications. The system should consist of, but not necessarily be limited to, the following:

A. Section includes: Resilient playground surfacing poured in place system.

B. Related work: Playground equipment and resilient playground surfacing subbase.

C. Quality Assurance: Manufacturer should have manufactured and installed playground poured in place safety surfaces for a minimum of 5 years, and meet current ASTM F-1292 Test Criteria.

1.02 Submittals

Prospective manufacturers and/or installers of the poured in place safety surfacing system should be required to comply with the following:

A. The manufacturer must be experienced in the manufacturing of a poured in place safety surfacing system and provide references of five (5) specific installations in the last three (3) years.

B. The installer must provide competent workmen skilled in this specific type of poured in place safety surfacing system installation. The designated supervisory personnel on the project must be competent in the installation of this material, including mixing, spreading and compacting the materials correctly.

C. Installation should be in accordance with ASTM F1292 for Impact Attenuation of surface system under and around playground equipment. The poured in place system to be installed in compliance with the Critical Fall Height as determined by the Playground Equipment.

D. IPEMA Certification specific to poured in place safety surfacing.

E. IPEMA certification specific to ½" layer of 1-4mm TPV over cushion layer .5mm TPV or EPDM IPEMA certification not acceptable.

F. Manufacturer should provide written instructions for recommended maintenance practices.

G. Manufacturer should submit color samples for customer verification. Color samples shall be 6" x 6" of ½" top wearcourse layer with aromatic or aliphatic binder – per client selection or specification; or 8 oz clear plastic jars with specified colored granules. Sample submittal format per client preference.

1.03 Definitions

A. EPDM granules: EPDM rubber (ethylene propylene diene monomer (M-class) rubber), a type of synthetic rubber, is an elastomer characterized by a wide range of applications. The M refers to its classification in ASTM standard D-1418; the M class includes rubbers having a saturated chain of the polymethylene type.

B. Critical Fall Height: A critical fall height (CFH) is the maximum height of fall from play equipment to the ground. It is important to note that safety surfaces do not prevent injury but aim to lessen the severity of any injury that may occur on falls from stated height(s).

C. Fall Height: Fall height is a measurement defined as the vertical distance between a designated play surface and the protective surfacing beneath it.

D. TPV: Thermoplastic Vulcanized Elastomer. Developed using resin and synthetic rubber with higher UV stabilization.

E. SBR: Styrene-butadiene or styrene-butadiene rubber (SBR) describe families of synthetic rubbers derived from styrene and butadiene.

1.04 ASTM Testing Standards

A. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.

B. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.

C. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester

D. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment

E. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment

F. ASTM C1028 Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method – This standard replaces ASTM D2047

G. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers- Tension

1.05 Warranty and Maintenance

The bidder and/or poured in place safety surfacing manufacturer must provide the following:

A. The poured in place safety surfacing manufacturer should provide a warranty to the owner that covers defects in materials and workmanship of the rubber for a period of FIVE (5) years from the date of Substantial Completion.

B. The manufacturer’s warranty should include general wear and tear. The warranty should specifically exclude vandalism, high heel punctures, acts of war or acts of nature beyond the control of the owner or the manufacturer.

C. All poured in place warranties should be limited to repair or replacement of the affected areas and should include all necessary materials, labor, transportation costs, etc. to complete said repairs.
D. The manufacturer should instruct the owner's personnel on proper maintenance and repair of the safety surface.
E. All warranties, expressed or implied, are contingent upon the following: 1. installation being performed by qualified installer, 2: Owner, at owner's expense, having a coating performed at 2 year intervals from date of substantial completion, and 3. Full payment by the owner of all pertinent invoices and adherence to any required maintenance procedures.

PART 2 – MATERIAL

The poured in place safety surfacing system should be in accordance with the following:

2.01 Manufacturers

A. FlexGround – EnduraFlex (Basis of Design)
B. Robertson Industries Inc. - TotTurf
C. Or Approved Equal

2.02 Product

A. A dual poured in place system with a wearing layer upper membrane and an underlying impact attenuation cushion layer. The finished surface should be porous and capable of being installed at varying thickness to comply with the Critical Fall Height requirements of the playground equipment.
B. Primer is a 100% solids urethane primer/sealer, designed with low viscosity and penetrating abilities.
C. The cushion layer should be a mixture of black recycled rubber mixed with a 100% solids moisture cured aromatic Polyurethane binder (100 pounds of rubberized cushion layer to 12 pounds of binder) installed at the appropriate thickness. The cushion layer should be porous.
D. The wearing surface should be manufactured from 1-4mm Thermoplastic Vulcanized (TPV) virgin colored rubber granules bonded by a binder, 100% solids moisture cured aliphatic or aromatic Polyurethane binder (110 pounds of TPV to 22 pounds of binder), and applied to a minimum thickness of ½" (12.7 mm) over the cushion layer.
E. System color to be selected from Manufacturer's Standard Color Chart by owner through the submittal process.

PART 3 – SITE PREPARATION AND BASE

The site preparation and base should be in accordance with the following:

A. The sub-base will have a slope of 2%.
B. The base aggregate should consist of a minimum of four inches (4") of ¾" Class 2 aggregate compacted to 95%. Finish slope of porous aggregate should be 2% from the centerline of the area to the perimeter, and the grade should not vary more than a quarter inch (¼") in ten feet (10').
C. The sub base should be installed in two inch (2") lifts to appropriate thickness.
D. The sub-base should be compacted using vibrating tamper, to approximately 95% Proctor density.
E. The sub-base should no longer have any vegetation.
F. Subgrade prior to aggregate installation: Sublevel grade is to be compacted prior to the ABC aggregate installation. Particular attention should be paid to areas of disturbed earth such as where footers for playground equipment enter the ground. Concrete used to fill said areas/footers should be poured to the top of sublevel surface.
G. The sub-base installer and architect will accept the aggregate base in writing prior to the installation of the poured in place system.
H. Any alterations must be agreed between all parties.
I. Hard Base Construction: For concrete surfaces, shot blast, acid etch or power scarify as required to obtain optimal bond of the Cushion Layer to the concrete. Remove sufficient material to provide a sound surface, free of glaze, efflorescence, or form release agents. Remove grease, oil, and other penetrating contaminants.
J. For concrete or asphalt surface that is not enclosed (i.e. a curb to curb pour), the concrete shall have keyway cuts 1.5" wide by 1.5" deep so that the system can be bull nosed down into the notch area.

PART 4 – EXECUTION AND INSTALLATION

The poured in place safety surfacing installer should strictly adhere to the installation procedures outlined under these sections. Any variance from these requirements should be accepted in writing by the manufacturer's onsite representative and submitted to the architect/owner, verifying that the changes do not in any way affect the warranty.

4.01 Primer

A. A urethane primer should be applied to concrete, asphalt, or wood surfaces at a rate of 200-250 square feet per gallon. The entire area does not need to be primed at

once, instead, prime about 700 square feet at a time in immediate advance of rubber installation. This procedure should be continued until all areas are complete.

B. The urethane primer should be applied to any playground equipment that will be surrounded by the poured in place safety surfacing system.

4.02 Cushion Layer

A. The components of the poured in place safety surfacing should be mixed on site in a mixer to ensure a comprehensive mix according to manufacturer's instructions.
B. The cushion layer comprised of SBR buffing's shall be mixed with the aromatic moisture cured polyurethane binder at a rate of 12% of the total weight of the material thoroughly so that the binder is evenly dispersed into the rubber base.
C. The cushion layer comprised of non-tire derived SBR & EPDM Chunk Rubber shall be mixed with the appropriate amount of urethane so that the binder is evenly dispersed into the rubber base.
D. The cushion layer mix should then be spread and troweled to the desired depth and allow to cure for 24 hours.

4.03 Wear Course Layer

A. The wear course layer should be mixed with 1-4mm TPV granules and urethane binder at a rate of 20% of the total weight of the materials so the granules are covered thoroughly and evenly.
B. The wear course layer mix should be spread and troweled to a depth of a half inch (½").
C. Application in cooler temperatures require a minimum ambient temperature to be 40 degrees F. or above and rising during install and no more than a 35-degree temperature change from daytime to nighttime.
D. Where seams are required due to color change, a step configuration with a 4" overlap will be constructed to maintain wear surface integrity.
E. The finished texture shall be slip resistant, smooth, and even.
F. The poured in place surface should be allowed to cure for 24-72 hours or until dry to the touch.

PART 5 – SITE (GENERAL)

A. Contractor will be responsible for transporting material to the job site. Coordination with the District is required for all deliveries and off haul. Contractor is responsible for any necessary traffic controls.
B. Crew is responsible for protecting the surface until acceptance by Owner.
C. Crew will leave site clean and shall remove all trash and debris.

EXHIBIT F

INSTALLATION, MAINTENANCE AND WARRANTIES

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

CONTENT INCLUDED

EXHIBIT CONTENT

Manufacturer installation instructions, maintenance requirements, and warranty documentation for the playground equipment and surfacing selected for this Project.

SOURCE / RESPONSIBLE PARTY: **MANUFACTURER**

PLAYCRAFT® SYSTEMS

A PLAYCORE Company

MAINTENANCE MANUAL

IMPORTANT! THIS MANUAL CONTAINS MAINTENANCE, SAFETY & REPAIR INFORMATION



WARNING: Read this manual thoroughly before installation. Improper assembled or maintained playground equipment can present a serious safety hazard. Impact attenuating surfacing is required under and around all playground equipment and must be maintained.

For replacement parts, additional maintenance supplies or information, please contact your Playcraft representative or customer service at:

Rev. 1.3d

PLAYCRAFT® SYSTEMS **1.800.333.8519** (USA) or **1.541.955.9199** (International)

IMPORTANT INFORMATION:

Please Save This Document. Do not Discard or Destroy. Keep all instructions, specifications, drawings, packing lists and bills of material, plusthese Maintenance Guidelines in a permanent file for future reference. Packing and parts lists will be required when ordering replacement parts.

Read This Document First
Prior to performing required maintenance on any play structures or play accessories supplied by Playcraft Systems, it is imperative that this document be read and fully understood by all persons responsible for maintaining your new playground equipment.

Introduction
You have purchased some of the finest commercial playground equipment available. It is built to exacting production standards using the finest materials available.

Playcraft Systems is ready to serve you when you need replacement parts and/or additional products. We welcome your input. Listening to our customers and specifiers has been instrumental in helping us set high industry standards and has contributed to our continually improving product lines.

Owner's Responsibility

The Site
Excellent playground equipment is only one part of the total playground equation – environment plus equipment equals a playground. The best equipment poorly sited, carelessly installed, or improperly maintained can result in an unsafe playground. Therefore, before you install your new playground equipment, we urge you to carefully review your plans for the site and consider the following important questions:

1. Will the equipment be visible and accessible to the public?
2. Will it be clearly separated from streets, bike paths and playing fields?
3. Will the area include benches to encourage adult supervision?
4. Will litter receptacles be close by so trash can be contained?

These and other factors that can impact the safety of the play experience are presented in this document.

Safety Surfacing

WARNING! You MUST install and maintain appropriate impact attenuating safety surfacing material under and around all playground equipment.

We sincerely mean exactly what this warning states. Do not consider placing any play equipment over unforgiving materials such as concrete, asphalt, grass, or compacted earth. No other single factor effects playground safety as does the correct selection, installation, and maintenance of energy absorbing playground surfacing materials.

Surfacing Material and Equipment Installation by Others
Playcraft Systems does not supply safety surfacing material nor do we provide equipment installation services. Whether installed by the owner or by an independent contractor, it is the owner's responsibility to insure that the site and surface are properly prepared, and that all equipment is correctly and safely installed.

Preventive Maintenance
The playground site, the safety surfacing, and the playground equipment itself will require conscientious periodic maintenance. A carefully planned and implemented preventative maintenance program will not only protect your investment and prolong equipment life, but also, and most important, it will reduce the potential for serious accidents and injuries.

Risk Management

Liability exposure concerns us all. Your role in decreasing this exposure begins with careful site selection, proper play surface preparation, and correct equipment installation. Once your playground is put into service your obligation continues with an ongoing maintenance program.

In-service training of your maintenance staff, a systematic and documented program for inspection of the site and equipment, procedures for immediate maintenance and repair, plus meaningful recordkeeping are indispensable steps in providing a safe playground environment for the users.

WARNING! If you feel for any reason that any part of your playground, equipment, or surfacing, is unsafe, do not allow access to the playground until your concern for safe play has been satisfied.

Safety Inspection Forms / Maintenance Checklist
If you do not have a systematic playground inspection program now in place, we encourage you to start one. You can use the suggested Playground Maintenance Safety Inspection Forms which accompany this manual as a basis, or you can develop your own. Later in this document we also provide examples of product specific maintenance check lists that should be included on your inspection forms.

Project: C & C Reference material on playground safety including performance standards for equipment and loose fill ground cover can be found in the following publications.

ASTM (These publications are not free)

The American Society for Testing and Materials (ASTM), has published two related voluntary standards.

Standard F-1292 is entitled Standard Specifications for Impact Attenuation Systems Under and Around Playground Equipment. Standard F-1487 is entitled Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
For copies of these publications contact:
ASTM Customer Service
1915 Race Street
Philadelphia, PA 19103
Telephone 215-299-5585

CPSC Handbook for Playground Safety (This publication is free)

U.S. Consumer Product Safety Commission Office of Information and Public Affairs
Washington, D.C. 20207

or Call Toll Free Hot-Line 1-800-638-2772
or Visit the CPSC web site at www.cpsc.gov

Scan for MSDS Info

Safety Surfacing

Falling onto a hard surface has always been the most frequent cause of severe playground injuries, and while the U.S. Consumer Product Safety Commission (CPSC) strongly supports safety surfacing, it has stopped short of banning unforgiving surfaces, The choice of surfacing materials is the primary factor in playground safety, and is solely the responsibility of the playground owner.

The CPSC Handbook includes an appendix entitled, “Summary Characteristics of Organic and Inorganic Loose Fill Materials, and Unitary Synthetic materials”. It presents an evaluation of the fall absorbing characteristics of several commonly used safety surfacing materials (i.e. wood chips, bark mulch, sand, pea gravel, shredded rubber, rubber matting, etc,).

This appendix also deals with the advantages and disadvantages of each surface material, including installation and maintenance requirements. All safety surfacing materials will require maintenance. We urge you to seek professional guidance in evaluating safety surfacing for your particular application.

Safety Surfacing (Continued)

Climate, supervision, budget, and maintenance considerations can each be a factor for choosing the correct material for your site. Safety surfacing materials must be maintained at a depth or thickness sufficient to meet ASTM Standard F-1292, "Standard Specification for Impact Attenuation Systems Under and Around Playground Equipment." This standard provides criteria for measuring the force absorbed by a playground surface when an object falls on it from a specified height.

If you select a loose-fill safety surfacing, be sure that the retaining walls or walkways are properly designed to keep the material in place and at the recommended depth. To avoid creating a tripping hazard, edging material should be made obviously visible to the user. Be aware that potholes at the base of slides and under swings may need to be filled on a daily basis.

Use Zones

The CPSC Handbook states that an appropriately wide and unobstructed safety perimeter, covered with forgiving material, must always surround all play equipment. The guidelines generally recommend a minimum six-foot fall zone around all sides of the equipment. Review your plans carefully. Be sure your site's fall zone is adequate; if in doubt, err on the side of safety. Eight to ten feet of unobstructed space between the equipment and the playground perimeter may not be excessive around high decks or moving equipment. Allow additional space around "to-fro" swings and such other accessories as Bouncers, Track Rides, Arch Climbers, and any equipment from which children might be tempted to leap. Swings and other stand-alone pieces should be installed away from primary traffic patterns. If your playground includes smaller-scaled equipment for preschool play, locate this equipment at a sufficient distance from the older children's play area to minimize potential social conflicts.

Concrete Footings

Verify that concrete footings are poured in such a way that they will not become exposed. All concrete footings should be a minimum of six inches below construction grade, and twelve to eighteen inches below the top of any loose safety surfacing material. Seek expert advice on footing designs, particularly if you are building the playground at a site affected by expansive or poor soil conditions, or by climatic extremes. For instance, in cold climates, footings must extend below the frost line to prevent the soil from heaving or twisting the structure.

Soil Drainage

Confirm the soil's drainage capacity. Sites with a history of drainage problems may require the installation of dry wells, French drains or leach lines.

Another option is to build the structure above grade (with low retaining walls containing the safety surfacing material) to ensure maximum drainage. To aid drainage and reduce the settlement of loose surfacing material, many playgrounds are installed over a construction grade base of compacted washed gravel laid beneath filter fabric and the safety surfacing.

Other Site Considerations

WARNING! Metal playing surfaces can become dangerously hot when exposed to direct sunlight. Owners/operators must warm users that serious thermal bums may result when bare skin comes in contact with hot metal.

Track the sun’s path over the apparatus in all seasons and keep in mind that hot metal surfaces are known to cause thermal bums in hot climates. Generally, in North America, to avoid the direct rays of the afternoon sun, orient non-shaded metal surfaces toward the North or East.

While a shaded playground is often desirable, always check the site for overhanging tree limbs that might invite climbing. Prune all dead wood out of the trees located in the vicinity of the playground.

Inspection After Installation

The following inspection steps should be taken immediately following the installation of play equipment.

- Check to see that each concrete footing meets all specifications.
- Compare the “as-built" structure with the manufacture’s drawings and specifications to verify that the installer did not deviate from the assembly and installation instructions.
- Make sure timber posts have been installed with the processed (incised ends down).
- Verify that all metal collars are correctly pinned and are firmly against the metal posts and that all connectors and bolts are in place and secure.
- Make sure that all S-hooks are tightly closed.
- Check all metal parts for sharp edges or burrs created during the installation process and smooth as required.
- Inspect all openings on play structure for potential entrapment hazard following U.S. CPSC Guidelines (i.e., no openings between 3-1/2" and 9").
- Observe initial play patterns to identify and rectify any player traffic conflicts which I could lead to future injury.
- Retain all documentation received with the equipment including installation instructions, drawings, packing lists, bills of material, invoice, and order confirmation, in permanent record. These will be required to receive future service from the factory.

Maintenance Overview

Training and Monitoring Staff

The following steps should be taken to ensure a quality maintenance program.

- Educate employees about the seriousness of playground safety.
- Use preprinted forms to ensure thoroughness of each inspection and to document your commitment to playground safety.
- After each inspection review the completed forms. Check and confirm that each item that was NOT checked "OK" was either fixed on the spot or that the problem was carefully documented for repair on a Work Order.
- Establish firm policies concerning the time frame allowed for Work Order repairs to be completed before requiring that play equipment be removed from service.
- Establish a method for reporting a hazardous condition and for quickly remedying the situation before an accident can occur.
- Provide a method of documenting the cause of any injury accident. Keep a permanent record of all playground injuries which have been reported.
- Develop a monitoring system to evaluate the equipment for misuse or unintended use.
- Investigate the frequency and nature of damage and/or vandalism and take corrective action.
- Provide periodic in-service training for all maintenance staff.
- Consider employing a knowledgeable independent expert to review the adequacy of the safety inspections, documentation procedures and the overall maintenance program.

Scheduling Maintenance

The following periodic steps should be taken to maintain a quality maintenance program.

- Assign a maintenance person to regularly visit the site to clean and monitor and report any safety problems, vandalism, or changes in the condition of the safety surfacing.
- Establish a schedule for periodic maintenance inspections. These detailed, systematic safety inspections should occur at least monthly, weekly, or even twice-weekly depending on the amount of usage. More frequent detailed inspections are appropriate at heavily used facilities and at peak activity periods.
- Signage with clearly marked applicable playground rules of use should be posted. This signage should also include a number and contact person for reporting any questions or concerns users may have at the site.
- Assign someone with a personal knowledge of the activity patterns at the playground to determine the most appropriate inspection frequency.

Scheduling Maintenance (Continued)

- Monitor changing patterns of use and/or changing site and equipment conditions. Be prepared to increase routine safety inspections as required. Expect the frequency of more detailed playground inspections to vary due to changes of season, climate, history of vandalism, intensity of use, type of equipment and behavioral patterns of the playground users.

Tools Required for Proper Maintenance

- Keep all tools needed to tighten bolts, screws and other connecting hardware and files readily accessible to the playground supervisor.
- Provide maintenance staff with appropriate tools for cleaning the safety surface, structures, and walkways.
- Provide a safe ladder for inspecting high placed items such as swing assemblies and roof structures.
- Furnish a lubricating gun and weather resistant lubricants for use in maintaining bearings in moving components on the playground.
- Store an adequate supply of safety surfacing material nearby for prompt replenishment of the playground site and for filling "pot-holes" as required.

Frequency of Playground Inspections

The optimum frequency of inspections for a specific playground will vary with intensity of usage, available supervision, age of the players, vandalism history, seasonal or weather changes and the age and condition of the play equipment. Only someone very familiar with the site should determine how often inspections should take place.

As a general rule, someone should be assigned to routinely (usually daily) inspect the playground looking for any obvious problems. Detailed inspections should be scheduled, periodically (every other day, twice a week, weekly, biweekly, or monthly) based upon the factors noted above and any historical patterns that have been observed.

Inspection & Repair Forms

Creating Safety inspection and Repair Work Order Forms

We have included with this manual a separate sheet illustrating sample Playground Maintenance Safety Inspection Forms. You may photocopy these forms for use by your maintenance staff in performing periodic inspections of your equipment. Or, you may wish to create your own forms. In either case, the playground owner should do the following:

- Establish a simple written form for daily maintenance inspections. Use the sample Daily Playground Maintenance Safety Inspection Form included with these guidelines as a starting point.
- Establish forms for periodic playground safety inspections (weekly, bi-weekly, or monthly). Select appropriate (product-specific) topics relating to your equipment from the Suggested Periodic Playground Maintenance Safety Inspection Points that are listed starting on page 7. Include inspection points for the site, the structure, and every accessory on the playground. If an accessory appears more than once (two Arch Climbers, for example), number the duplicate accessories and provide a space for the inspection of each item. When developing your forms, include other items that may be unique to your site or pertinent to local or state requirements.
- Establish a Playground Equipment Maintenance Work Order Form for your maintenance staff to till out if a problem is noted that cannot be fixed when discovered., The Work Order Form should be attached to either the daily or periodic inspection checklist for follow up maintenance.
- Instruct the playground inspector to deliver a copy of the Work Order Form to the appropriate maintenance manager or outside contractor.

WARNING: If you feel for any reason that any part of your playground, equipment, or surfacing, is unsafe, do not allow access to the playground until your concern for safe play has been satisfied.

Inspection Points

Suggested DAILY Playground Maintenance Safety Inspection Points

The Site

- The safety surfacing material is clean and free of debris and is suitable for play.
- If the safety surfacing material is loose fill, check for rocks, tree roots, animal feces, glass, nails, food containers and other trash above and below grade.
- Safety surfacing material is smooth and being maintained at its minimum required depth of inches. If safety matting is used, it is secure and free of voids.
- "Potholes" in loose Fill material at the end of slides and beneath swings have been filled.
- Area is free of standing water.
- Trees are pruned properly and cleared of dead wood.
- No insect or animal nests have been detected.
- Walkways around the play area have been swept.
- All litter is confined to containers.

The Structure

- Playing surfaces have been inspected for foreign objects such as razor blades, broken glass, needles, broken parts, damage from tire, removal of hardware or other vandalism.
- All rails, steps, rungs, seats and their respective attachment hardware are secure and intact.
- No ropes or strings have been attached to equipment.

Suggested PERIODIC Playground Maintenance Safety Inspection Points

The Site

- Daily maintenance has been adequate for keeping the surface clean and free of depressions ("pot holes") under high impact areas (slides, swings, etc.)
- Daily maintenance personnel are keeping safety surfacing replenished to maintain a constant, required depth.
- Nearby trees are cut back and pruned of dead wood.
- Site drainage is functioning properly.

The Structure

- The structure has been inspected for stability and overall integrity.
- All wood and metal post bottoms have been carefully inspected for integrity at the ground line or concrete footing contact points.
- The structure has been checked for deterioration, wear and vandalism.
- No component parts are missing or broken.
- All nuts, bolts and set screws were inspected and remain in place and secure.
- No nuts, bolts or screws are exposed.
- All caps and plugs are in place.
- No concrete footings are exposed.
- All socket and collar connections are intact and secure.

Metal Surfaces

- Metal surfaces are smooth, with no sharp protrusions.
- Metal shows no signs of unacceptable wear or vandalism.
- Water is not collecting on deck surface.
- Corrosion is not present.

Inspection Points (Continued)

Plastic Surfaces

- Plastic surfaces are smooth, with no sharp protrusions.
- Plastic shows no signs of unacceptable wear or vandalism.

Protective Barriers

Wire Mesh Wall Panels or Steel Pipe Walls

- Connecting hardware is secure and intact.
- All welded connections are sound.
- Corrosion is not present.

Graphic Panels

- Panel attachment hardware is in place and secure.

Mirror Panels

- Panel attachment hardware is in place and secure.
- Stainless steel mirror is firmly attached to panel.

Moving Accessories

Please note: Because moving accessories require more attention than stationary accessories, you may choose to incorporate items for a detailed inspection of moving equipment into a separate, more frequent schedule.

Belt and/or Toddler Swings

- Safety surfacing material around and beneath swing is acceptable.
- All connection hardware is in place and secure.
- Swing hanger bushings have been inspected for unacceptable wear and/or in good working order.
- Chain link bearing points have been inspected for integrity and contain at least 75% of original steel.
- Upper and lower S-hooks are tightly closed and have been inspected for integrity.
- Rubber seats are not split, and internal metal reinforcements are not exposed.
- Seats are at _____ inches elevation (proper elevations for each type of swing are specified in installation drawings) above safety surfacing material.
- Corrosion is not present.

Tire Swing

- Safety surfacing material around and beneath swing path is acceptable.
- All connection hardware is in place and secure.
- Mounting bracket has been inspected for unacceptable wear and is securely fastened.
- Tire when positioned and extended toward support posts, clears post by 30 inches or more. (Refer to CPSC guidelines)
- Bottom of tire is at 15 inches above safety surfacing material when tire is hanging freely.
- Swivel Assembly is fully lubricated with heavy-duty bearing grease.
- Swivel Assembly is in good working order and shows no signs of unacceptable wear.
- Rubber boot is intact and appropriately covers moving parts preventing exposure of bearings to dirt and dust.
- Upper chain connectors are secure and show no signs of unacceptable wear.
- Chain link bearing connection points have been inspected for integrity and contain at least 75% of original steel.
- Link connections to tire eye bolts are intact, secure and show no sign of unacceptable wear.
- Attachment hardware is tightly mounted to tire assembly.
- Tire and assembly are intact and in good condition.
- Corrosion is not present

Moving Accessories (Continued)

Track Ride

- Safety surfacing material around and beneath Track Ride path is acceptable.
- Supporting beam is firmly attached to structural supports.
- All attachment hardware is in place and secure.
- Track is free of obstructions and foreign objects and bearings of track assembly roll freely from one end of track to the other.
- Bearings of track assembly are fully lubricated with heavy-duty bearing grease and roll freely.
- Rubber bumpers located at each end of the track and track assembly are intact and working properly.
- Corrosion is not present.

Ring Traverse

- Safety surfacing material around and beneath Ring Traverse path is acceptable.
- All attachment hardware is in place and secure.
- Each of the hanger assemblies has been inspected and shows no signs of unacceptable wear.
- Bearing points have been inspected for integrity and unacceptable wear.
- "S" hooks remain tightly closed.

Suspension Bridge

- Safety surfacing material around and beneath bridge is acceptable.
- All attachment hardware is in place and secure.
- Bearing points have been inspected for integrity and unacceptable wear.
- Supporting bolts are secure.
- Hand railings are in place and secure.
- No corners or edges are sharp.

Arch Bridge

- Safety surfacing material around and beneath bridge is acceptable.
- All connecting hardware is in place and secure.
- Bridge has been inspected from beneath, and bearing points show no sign of unacceptable wear.
- Hand railings are in piece and secure. No corners or edges are sharp.

Climbing Wall

- Safety surfacing material around and beneath Climbing Wall is acceptable.
- All attachment hardware is in place and secure.
- Rope is free of cuts and/or unacceptable wear.
- PVC coated grips are in good shape and secure.
- Transition wall is in place and secure.
- No corners or edges are sharp.

Tic-Tac-Toe and Graphics Cylinders

- All connecting hardware is in place and secure.
- Plastic cylinders are smooth with no protrusions.
- Cylinders rotate freely.

Bouncer

- Safety surfacing material around and beneath Bouncer is acceptable.
- All connecting hardware is in place and secure.
- Concrete footing is not exposed.
- No corners or edges are sharp.

Stationary Accessories

Spiral Slide

- Safety surfacing material around and beneath Spiral Slide is acceptable.
- All connecting hardware is in place and secure.
- Bedway is smooth, clean, and free of foreign objects between sections and/or against support post.
- End cap of center post is intact.
- Entrance platform is secured to deck members and entrance section.
- Concrete footing is not exposed.

Tube Slide

- Safety surfacing material around and beneath Tube Slide is acceptable.
- All connecting hardware is in place and secure.
- Connections between sections are secure and free of foreign objects.
- Slide is securely connected to the structure.
- Slide displays no vertical or horizontal movement.
- Concrete footing is not exposed.

Chain Net / Net Wall Climber

- Safety surfacing material around and beneath Chain Net and Net Wall is acceptable.
- Chain link intersections have been inspected for unacceptable wear.
- Connection points to structure and footings are secure.
- Concrete footings are not exposed.

All Other Stationary Accessories

(includes Vertical Climbers, Fire Poles, Arch Climbers, etc.)

- Safety surfacing material around and beneath stationary accessory is acceptable.
- All connecting hardware is in place and secure.
- All welds are sound.
- Accessory shows no sign of horizontal or vertical movement from structure or ground.
- Concrete footing is not exposed.

Annual Evaluation

Once a year the playground should be evaluated on general conditions. Here is a minimum list of items that should be addressed:

- Have permanent maintenance records and documentation of all-safety inspections and repairs been kept on tile?
- Has all equipment been inspected and repaired in accordance with the established maintenance program?
- Has the regularly scheduled maintenance time schedule been adequate for maintaining safe conditions on the site, the structure, and the safety surfacing material?
- If any accidents have occurred; have they been carefully documented and the situations that caused the accidents corrected?
- Has the playground been adequate in terms of size and play experiences given the number and ages of users?
- Have accessible activities addressed the physical abilities of the users?
- Has existing seating been sufficient to encourage adult supervision from all sides of play structure?
- Have litter containers been adequate in terms of number and/or size? In frequency of being emptied?

Replacement Parts

- Order genuine replacement parts from Playcraft Systems.
- Do not introduce non-factory-supplied substitute parts for any purpose. Great care has been taken to provide the highest quality parts and hardware for your structure and accessories. Correct replacement bolts are not available at local hardware stores.
- All repairs and the replacement of parts must done in accordance with current Playcraft Systems specifications.
- Retain complete permanent documentation of all replacement parts ordered, noting both the date installed and the source of the parts.

TO ORDER REPLACEMENT PARTS CONTACT YOUR LOCAL PLAYCRAFT REPRESENTATIVE OR CONTACT CUSTOMER SERVICE AT 1-800-333-8519 In order to provide prompt service, customer service will require the original purchase information, equipment site address and product model information.

Equipment Repair

Playcraft Systems uses only the finest and most durable materials available in the manufacture of its equipment. Occasionally components, because of damage through vandalism, normal wear and tear and various other reasons, need minor repair. Simple repairs can be made and should be expected over the useful life of your equipment.

The following instructions are intended as a guide for simple repairs in the field and are not intended to provide repair instructions for all situations. If you have any questions about equipment repair for components listed in the following or for repair of equipment or components not specifically addressed, please contact your Playcraft representative or call customer service at 1-800-333-8519

IMPORTANT: Do not try to repair broken heavily worn or damaged equipment or components. Broken, heavily damaged or worn equipment or components must be replaced.

Repair of PVC Coated Components

- Use the PVC repair kit included with the service kit provided with your equipment.
- If you need a replacement PVC repair kit, contact your Playcraft representative or call customer service at 1-800-333-8519.
- Lightly sand the component surface needing to be repaired and clean with Acetone. Next apply liquid PVC patch as needed; Allow repaired area to cure for approx. 24 hours prior to use.
  Note: Additional directions are provided with the liquid PVC.

Repair of Powder Coated Components

- Use the Powder Coat repair kit included with the service kit provided with your equipment.
- If you need a replacement Powder Coat repair kit, contact your Playcraft representative or call customer service at 1-800-333-8519
- Lightly sand the component surface needing to be repaired and clean with Acetone. Next apply a coat of primer. Allow drying time.
- Finally apply two coats of powder coat matching touch-up paint. Allow to dry for 24 hrs.

  Note: Additional directions are provided with the touch-up paint.

Repair of Plastic "Poly" Components

Do not try to repair deep gouges. Plastic components with deep gouges should be replaced. Minor surface damage to plastic components such as nicks or graffiti can be repaired as follows:

- Lightly sand surface needing to be repaired.
- Use a heat gun to remove light sanding scratches and to help return plastic to original surface condition. Additional directions may be included with the purchase of a heat gun.- It may be important to practice your plastic repair technique on a hidden surface of the component you wish to repair. (i.e. the under side of a slide)

  Notes:
  (A) Heat guns are available through most hardware stores.
  (B) In most cases damaged plastic cannot be repaired to its original condition.

Replacement of Hardware

- Replace all missing, worn and/or damaged hardware with new factory hardware.
- Secure all non self-locking hardware with a liquid thread lock.
- If you need an additional hardware or specialty tools not provided with your service kit, contact your Playcraft representative or call customer service at 1-800-333-8519.

  Notes:
  (A) Do not use non-factory hardware.
  (B) When replacing hardware, refer to assembly instructions provided with the original equipment or component.

For replacement parts, additional maintenance supplies or information, please contact your Playcraft representative or customer service at:

PLAYCRAFT SYSTEMS
123 North Valley Drive - Grants Pass, OR 97526
Tel: **800.333.8519** Fax: **541.955.6130**

NOTES:

PLAYCRAFT™ INSTALLATION MANUAL

R3.5

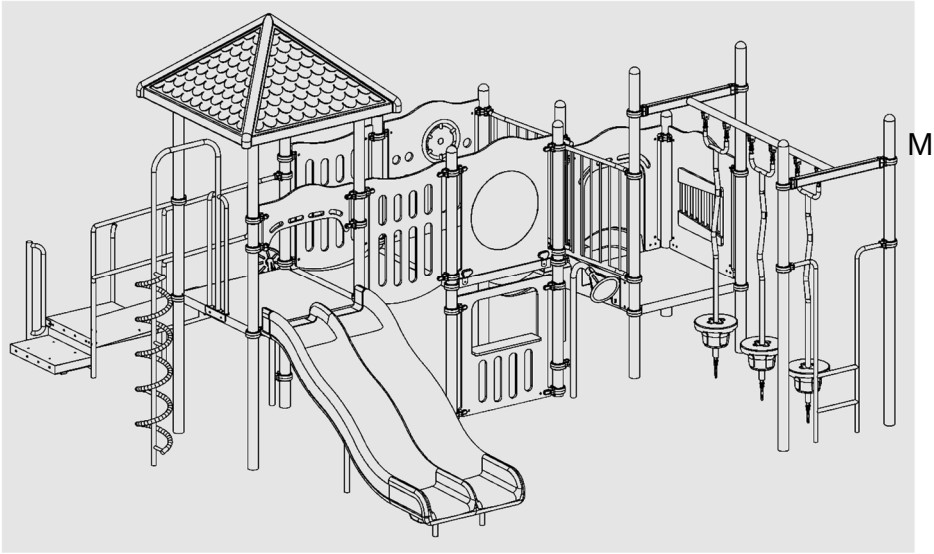
PLAYCRAFT SYSTEMS ROUND 3.5 STEEL POST SYSTEM	PROJECT NAME:

IMPORTANT! THIS MANUAL CONTAINS:

- Construction Views
- General Installation Guidelines
- Maintenance & Safety Information

SCAN HERE FOR

MSDS INFORMATION



INSTALLATION MANUAL TABLE OF CONTENTS	SECTION
Installation Instructions Included	R3.5 – 01
Construction Drawings	R3.5 – 02
General Installation Guidelines	R3.5 – 03
Site Safety Recommendations	R3.5 – 04
Support Posts & Hardware	R3.5 – 05
Concrete Footings	R3.5 – 06
General Safety & Warning Labels	R3.5 – 07
General Maintenance	R3.5 – 08
Collars	R3.5 – 09
General Hardware Applications	R3.5 – 10 to 13

WARNING: **Read all instructions thoroughly before installation. Improperly assembled playground equipment can present a serious safety hazard. Appropriate impact attenuating safety surfacing material is required under and around all play structures and must be maintained.**

If you have any questions during assembly, please contact your Playcraft Representative or:

PlayCraft Systems
123 North Valley Drive, Grants Pass, OR 97526
Phone: 800-333-8519 Fax: 541-955-6130

PLEASE NOTE: The pages enclosed in this section are the construction drawings for the specific job listed.

WARNING: **Read all instructions thoroughly before installation. Improperly assembled playground equipment can present a serious safety hazard. Appropriate impact attenuating safety surfacing material is required under and around all play structures and must be maintained.**

R3.5 - 03.1 PLEASE READ THE FOLLOWING VERY CAREFULLY BEFORE INSTALLATION

1	**IMPORTANT:** Due to the wide variety, modularity and flexibility of our products, we found it necessary to publish these general installation guidelines. These guidelines are intended for use by experienced playground equipment installers and/or general contractors skilled in assembly and installation of playground equipment. As with any project, general construction knowledge and professional judgment may be required. If any questions or concerns arise during the installation or maintenance of your equipment, please contact the factory and ask to speak to a customer service representative at **1-800-333-8519.**
2	As an installer of Playcraft Playground Equipment you are responsible for understanding the recommendations for surfacing and providing an appropriate impact attenuating safety surfacing material. The owner of the playground equipment is responsible for maintaining an appropriate level of impact attenuating safety surfacing material under and around all playground equipment.
3	**ATTENTION INSTALLER:** Upon completion of project, ensure that a copy of the Playground Equipment Manual and Maintenance Kit with all of its contents has been given to the owner of this playground equipment as a product and safety reference and as guidelines for preventative maintenance. **Please make it clear to the owner that the Playground Equipment Manual and Maintenance Kit are to be kept on hand at the playground site at all times.**
4	Read all instructions thoroughly before installation. Improperly assembled playground equipment can present a serious safety hazard. An appropriate impact attenuating safety surfacing material is required under and around all play structures and must be maintained.
5	In addition to the guidelines found in this manual, all equipment purchases shall include a minimum of (1) Top View drawing and (1) Perspective View drawing specific to each piece of equipment. These views are enclosed in Section R3.5-02 marked “Construction Drawings”.

R3.5 - 03.2 RECOMMENDED TOOLS:

You may need the following tools for installation:

Adjustable End Wrenches	Hacksaw	Metal File	Shovel / Spade
Carpenter’s Level	Hammer	Post Hole Digger	Tape Measure
Combination Wrenches	Hex Wrenches	Ratchet Set	Wheelbarrow
Drill & Bits	Impact Driver	Rubber Mallet	
Electric Extension Cord	Liquid Thread Lock (LOCTITE®)	Safety Glasses	

R3.5 - 03.3 TIGHTENING TORQUE FOR HARDWARE (SCREWS, BOLTS AND NUTS)

Tighten all screws, bolts, and nuts snugly. After fasteners are snugly tightened, turn nuts and screws an additional one-half turn. **IMPORTANT:** Set screws should be turned an additional full turn after snug tightening. Once equipment or components are fully assembled, with hardware tightened/torqued, any excess threads (more than two) extending past the nut should be cut off and filed smooth. **Use liquid thread lock (such as LOCTITE® Threadlocker) with all threaded hardware.**

IMPORTANT: Liquid thread lock (prior to curing) helps to eliminate the common problem of “thread seizure” in stainless steel hardware by serving as a lubricant during assembly.

R3.5 - 03.4 GENERAL INSTALLATION GUIDELINES

1	Before you begin, read completely through all instructions carefully.
2	Identify all structural components included with your order. Check parts against your packing slip located in the front pocket of the Installation Manual.
3	Refer to Section R3.5 - 04 for safe playground layout as well as the top view(s) and/or site plan included with your purchase for accurate information on equipment layout. Confirm that the equipment you purchased and its use zones will fit in your site. Site layout is a critical part of overall installation. A clear level site is required for proper installation.
4	While referring to the footing diagram in Section R3.5 - 06 and top view(s) provided, identify each post location and excavate each hole; one at a time as assembly progresses. When referring to the footing specifications included with these instructions, adjustments must be made to compensate for depth/thickness requirements of the selected impact attenuating safety surfacing material (i.e. wood chips vs. rubber matting).

IMPORTANT: If soil conditions are loose or unstable, larger diameter footings are required. Inquire with local contractors for appropriate recommendations.

R3.5 - 03.4 GENERAL INSTALLATION GUIDELINES (CONTINUED)	
5	To ensure proper alignment of system equipment, it is the manufacturer's recommendation that concrete be poured after assembly.
6	While referring to the following installation instructions, erect the equipment (main structure first) and plumb and level as you proceed.
7	Do not fully tighten hardware until assembly is complete.
8	Once assembly is complete, with the equipment plumb and level, tighten the hardware and pour the concrete. All concrete must cure for at least 72 hours prior to being disturbed.
9	Affix Surfacing Level, Warning and Designed for Ages (age appropriate) labels to equipment. Labels should be placed in a conspicuous area such as by the main equipment access point. For replacement or additional warning labels, please contact customer service at 1-800-333-8519. **(Refer to Sections R3.5 – 07.2 & 07.3 for label type and correct placement)**
10	**WARNING:** Never install play equipment over concrete, asphalt, or bare ground. Always use a resilient impact attenuating safety surfacing material. Loose-fill safety surfacing material should not be installed over concrete or asphalt.
11	Do not let children play on or near play equipment until assembly and installation is complete and an impact attenuating safety surfacing material is installed. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. To determine the highest accessible part of equipment, refer to the current publication of the CPSC, "Public Playground Safety Handbook", Publication 325 at www.cpsc.gov. The critical height for surfacing is to be rated in accordance with ASTM F 1292, "Specification for Impact Attenuation of Surfacing Material Within the Use Zone of Playground Equipment". The CPSC "Public Playground Safety Handbook" also provides a table of critical heights for selected loose fill materials. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height ratings of their products. The entire area under and around all playground equipment must be covered with an impact attenuating safety surfacing material. Refer to the current publication of the CPSC, "Public Playground Safety Handbook" for recommendations on the type and depth of the impact attenuating safety surfacing material. **For a copy of the current publication of the CPSC "Public Playground Safety Handbook"** **Write To:** U.S. Consumer Product Safety Commission Office of Information and Public Affairs Washington, D.C. 20207 **Call Toll Free**: 1-800-638-2772 **Visit the C.P.S.C. web site:** www.cpsc.gov
12	Good drainage around structural supports is important (i.e. under swings and at the end of slides) because they tend to become the lowest points and need the most active drainage. Inquire with local contractors for appropriate recommendations.
13	Many surfacing materials can become compacted due to weather and use, which reduces their impact attenuation. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary.

R3.5 - 03.5 SAFETY DURING INSTALLATION	
1	After doing a layout of **all** footings and **before** digging footing holes, be sure to inquire about underground utilities that may exist. Call 811, a federally-mandated national "Call Before You Dig" phone number.
2	Do not leave the job site unattended without making sure that all fastening hardware on all main structures and components have been tightened. We also suggest roping off construction areas and covering all holes that do not have a piece of equipment in them with plywood or other suitable material. **Ready or not, children will use unattended equipment.**
3	Due to the weight involved with the structure you have purchased, it is advisable that a party of four to six persons of average build assemble the structure.

General safety recommendations applicable to the installation and maintenance of play equipment supplied by Playcraft Systems.

R3.5 - 04.1 USE ZONES

Use zones are the areas under and surrounding each piece of play equipment that must be covered by an appropriate impact attenuating safety surfacing material as described above.

The specific size of these use zones depends on the type of play equipment as follows:

R3.5 - 04.1.1 SLIDES

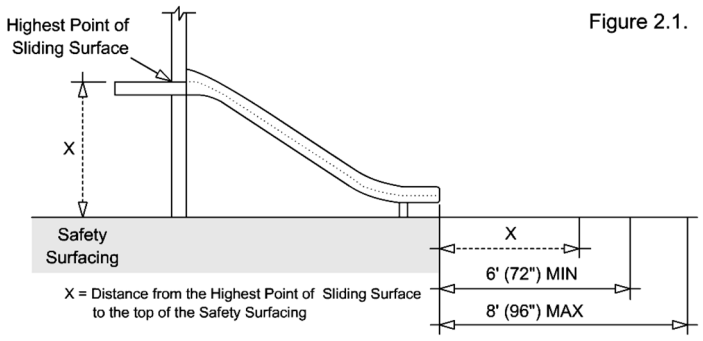


Figure 2.1.

The minimum lower exit end use zone for slide exits is determined as follows:
X = The distance from Highest Point of the slide surface to the Safety Surfacing.
If X is less than 72 in. then the exit use zone for that slide shall be a minimum of 72 in. otherwise the minimum exit use zone shall be the distance X, not exceeding the maximum of 96 in.
(Refer to Figure 4.1 at left)

IMPORTANT: No other play structure use zone shall overlap the lower exit end use zone of a slide. (Refer to the ASTM F 1487, Section 9.6)

R3.5 - 04.1.2 BELT SWINGS (To-Fro Swings)

The use zone must extend at least twice the distance from the pivot point to the safety surfacing material. The use zone must also extend for a minimum of 72 in. out from each end of the swing frame legs. No other play structure use zone shall overlap the front to rear swing use zone. (Refer to the ASTM F 1487, Section 9.4) **Please refer to the ASTM guidelines for additional information on swings.**

R3.5 - 04.1.3 TIRE SWINGS (Rotating Swings)

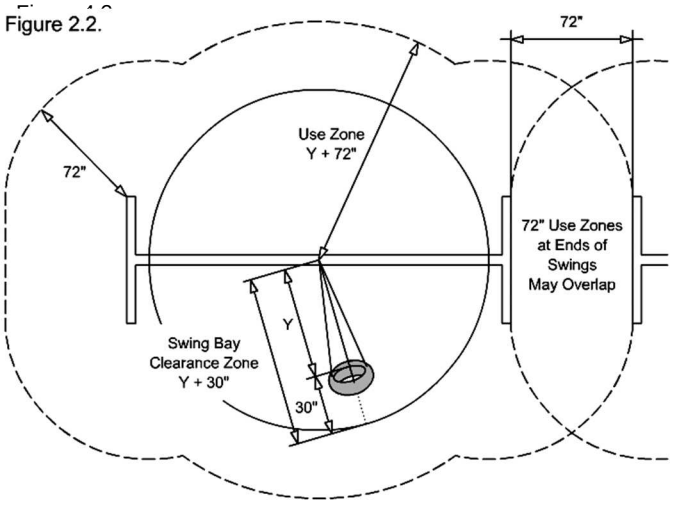


Figure 2.2.

The minimum use zone for rotating swings is determined as follows:

Y = The vertical distance from the top of the Sitting Surface to the Pivot Point.

The minimum use zone of a rotating swing (Ex. a Tire Swing) is determined by taking the distance Y and adding to it 72 in. in all directions. The use zone must also extend for a minimum of 72 in. out of each end from the swing frame legs. The 72 in. use zones at the ends of all swings may overlap. (Refer to Figure 4.2 at left)

IMPORTANT: No other play structure use zone shall overlap the swing bay clearance zone. The rotating swing requires a 108 in. use zone between the rotating swing support structure and all non-swing play structures. (Refer to the ASTM F 1487, Section 9.4.2)

R3.5 - 04.1.4 ALL OTHER PLAY EQUIPMENT

Stationary and rotating play equipment use zones must extend at least 72 in. in all directions from the equipment's perimeter. Rocking/Springing equipment intended for standing use zones must extend at least 84 in. in all directions from the equipment's perimeter with no other use zones overlapping it.

R3.5 - 04.2 SURFACES

All play equipment must be installed over an appropriate impact attenuating safety surfacing material. It is the responsibility of the playground designer, installer, and operator to ensure that the size, type, and depth of impact attenuating safety surfacing material used complies with the CPSC Handbook. This impact attenuating safety surfacing material must cover the entire use zone area to a depth appropriate for the height of play equipment. See the use zones section for specific dimensions for specific types of play equipment. Please refer to the CPSC "Public Playground Safety Handbook", Publication 325 at www.cpsc.gov for more detailed information regarding these issues.

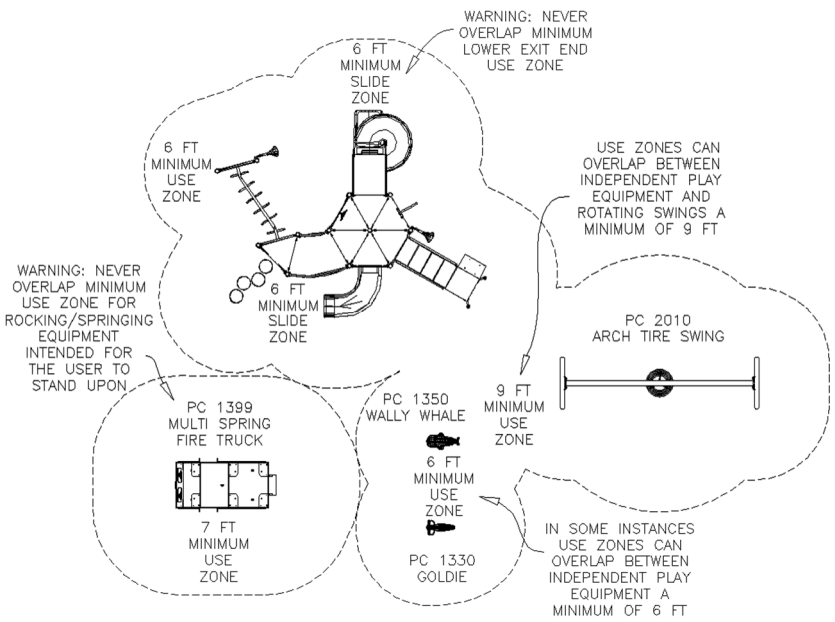
APPROPRIATE	**Unitary Safety Surfacing:** Pour-In-Place Rubber or Rubber Tiling. **Loose Fill Materials:** Bark nuggets, Wood Mulch, Wood Chips, Pea Gravel and Sand. For the Loose Fill Materials listed, Playcraft recommends a minimum uncompressed depth of 12 in. (9 in. compacted) for equipment with fall heights up to 72 in.
INAPPROPRIATE	Turf, Undisturbed Natural Ground, Undisturbed Compacted Sand, Decomposed Granite, Asphalt, Concrete, or any other hard surfacing.

R3.5 – 04.3 IMPORTANT ITEMS

During the installation and maintenance process, ensure that:

1	**WARNING:** Contact burn injuries can occur when metal play surfaces are located in direct sun. To avoid the risk of such burn injuries the United States Consumer Product Safety Commission recommends in it's handbook for public playground safety that metal play surfaces such as stainless steel slides and bare or painted metal crawl tubes should be located and installed in shaded areas and out of direct sunlight. The proper location of metal play surfaces must be addressed during the play area planning process.
2	There are no exposed concrete footings to trip over or fall on. The top of all footings must be at or below the bottom of the layer of impact attenuating safety surfacing material.
3	All bolt threads protruding beyond the nut are cut and de-burred until end is smooth to the touch. Sharp edges and/or points of any kind must be eliminated. No more than two threads may be exposed beyond the end of the nut.
4	All bolts, screws, set screws, and/or other fasteners are securely tightened. Missing bolts, set screws or other fasteners must be replaced immediately.

R3.5 – 04.4 PLAYGROUND LAYOUT EXAMPLE

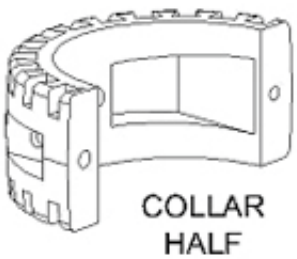


WARNING: No other play structure use zone shall overlap the lower exit end use zone of a slide or the front to rear use zone of a swing.

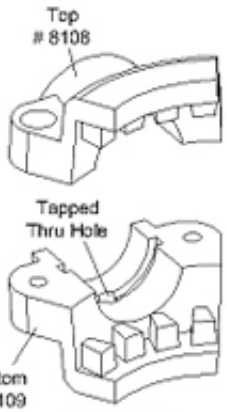
In most instances, the use zone at the end of a swing can overlap with other play equipment use zones.

Please refer to the ASTM guidelines for additional information.

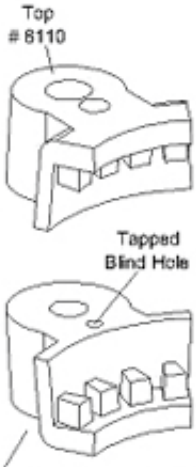




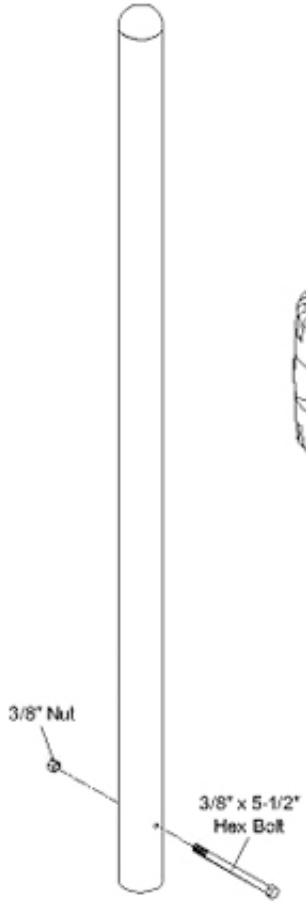
COLLAR
HALF
8107



SOCKET
CLAMP

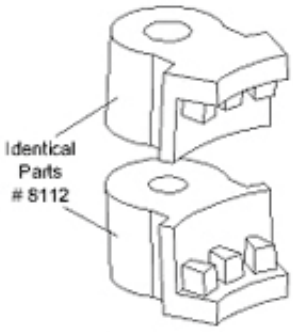


MOUNTING
BLOCK 4



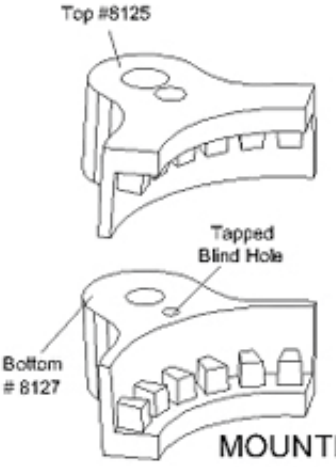
FOOTING PIN

*Insert bolt as shown above in hole near base of posts.



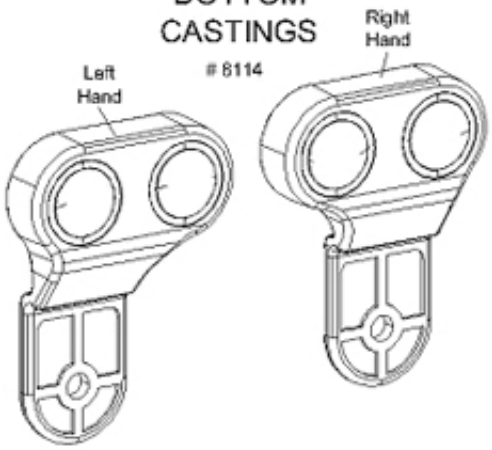
MOUNTING
BLOCK 3

NOTE: Only used for R3.5 Deck 5 (2) 45° Corners (Half Deck)



MOUNTING
BLOCK 6

BOTTOM
CASTINGS
8114





MOUNTING
LUG
8113

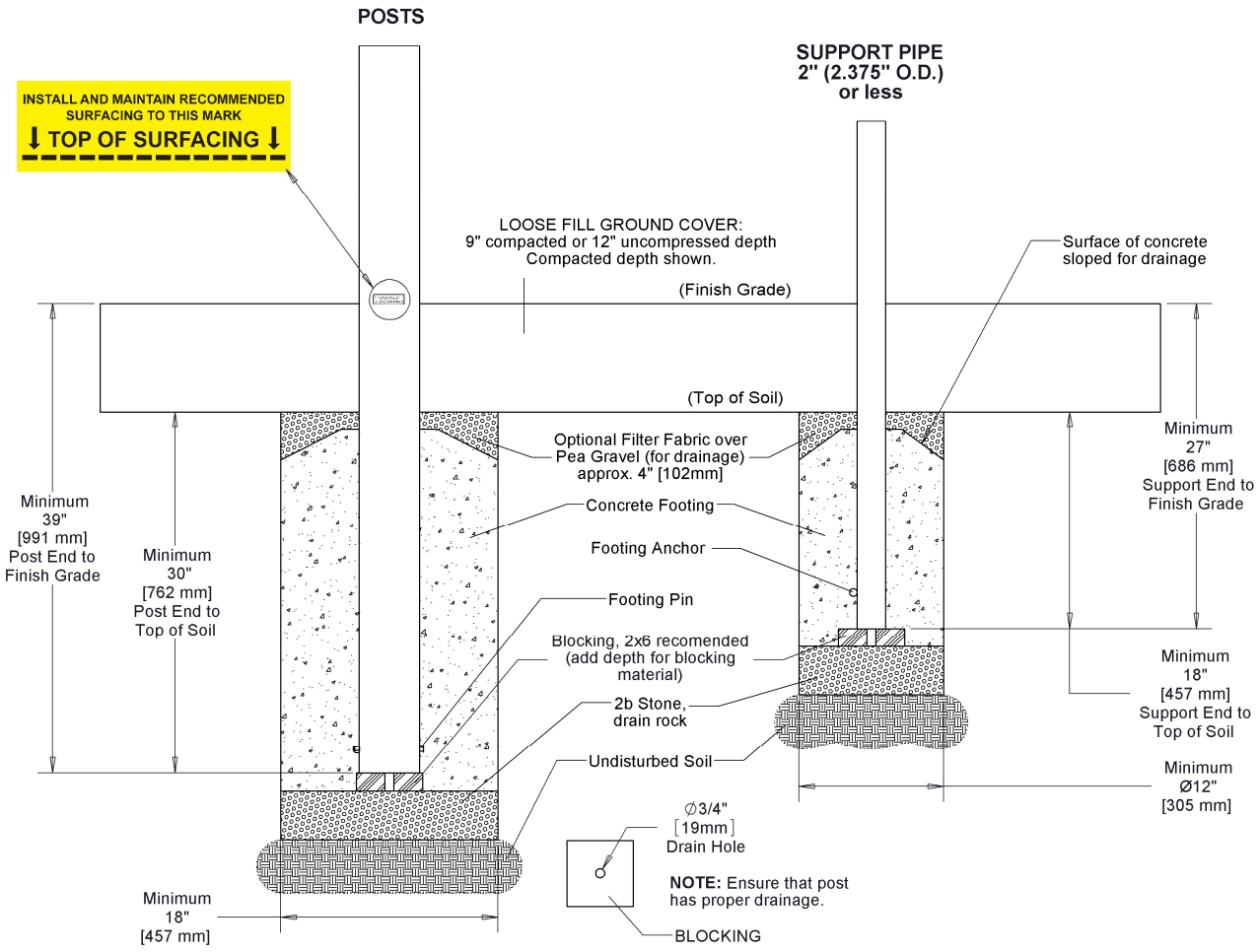


R5
MOUNTING
INSERT
7015

CONCRETE FOOTINGS

R3.5 – 06

IMPORTANT: The footing depth for support posts and other equipment must be adjusted to compensate for the depth/thickness requirements of the selected impact attenuating safety surfacing. (i.e. wood chips vs. rubber matting).



R3.5 - 06.1 IMPORTANT ITEMS	
1	Use more concrete as required for supporting activities with movement such as the Track Rides, Traverses, Chinning Bars and Swings.
2	See specific Swing Installation Instructions for swing post footings and ground cover requirements.
3	Larger footings (more concrete) may be required due to weather conditions and poor, unstable, loose or granitic soil. Before changing footing dimensions we recommend that the footings be reviewed and approved by a registered engineer.
4	Base of all footings must be below the frost line. Determine depth of frost line for your area and adjust footing depth (not post and support depth) as required.

R3.5 - 06.1 IMPORTANT ITEMS (CONTINUED)	
5	Playcraft Systems recommends a loose fill material such as engineered wood fiber (as described in the CPSC) be installed at a depth of no less than 12 in. to allow for natural shrinkage, and compression during use. A minimum 9 in. depth of compressed loose fill material described above is required for equipment with fall heights up to 6 ft. Comparison of impact attenuating safety surfacing material is available in the “Public Playground Safety Handbook”, Publication 325 published by CPSC. When choosing an appropriate impact attenuating safety surfacing material, check with material manufacturer for recommended depth/thickness.
6	Never install loose fill material over concrete or asphalt.
7	The depth of the post or support must be adjusted to compensate for the depth of impact attenuating safety surfacing material ranging from loose fill material to rubber matting.
8	This equipment is designed to be installed on a level site. Footings must be cast against undisturbed or compressed soil. Support posts and all attached decks and play components must be plumb and level.

For more information, refer to the current publication of the USCPSC “Public Playground Safety Handbook”

For a copy, write to:
U.S. Consumer Product Safety Commission
Office of Information and Public Affairs
Washington, D.C. 20207
Or call
Toll-Free: 1-800-638-2772
Website: www.cpsc.gov

R3.5 - 06.2 INSTALLATION	
Step 1	In order to properly install the support posts on your play structure, refer to the Site Safety Recommendations in section R3.5 – 04 as well as the Top View and/or Site Plan drawings found in the Construction Drawings section R3.5 - 02. Mark footing hole location(s) and dig hole(s) as determined. Compact base of footing hole(s) with drain rock as specified at proper depth.
Step 2	Position the support block at the base of the footing hole. Place the support post in the footing hole at the determined depth. The support block helps to stabilize the post during assembly and while the concrete cures, especially in soft soil conditions.
Step 3	Plumb and square all support posts. Block and brace as required to prepare for final assembly and pouring of concrete.
Step 4	Do not pour concrete until the structure is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the structure (at least 72 hours).

R3.5 - 07.1 CHILD SAFETY PRECAUTIONS - PLEASE READ CAREFULLY

1	On-site adult supervision recommended while children are at play.
2	Warn children not to climb or walk on top of playground equipment (framework) not intended for such use.
3	All play equipment should be used in the manner for which it was intended. Children should not swing empty seats or twist ropes and swing chains.
4	Children should be dressed appropriately. Helmets, drawstrings and accessories around the neck, must be removed to prevent strangulation or entanglement.
5	Children should be cautioned to avoid walking too close, between, or in front of moving items.
6	Only one child per swing should be allowed. Instruct children to sit in the center of the swings with their full weight on the seat.
7	Children being pushed on swing equipment should be closely supervised by an adult. It is important to note that an aggressive push could result in a child losing his/her balance.
8	Children should be instructed not to jump off swing equipment when in motion.
9	No more than 3 children should be riding on the tire swing at one time.
10	Children should not be pushed while on the tire swing.
11	Children should be advised to "wait their turn" on activities such as a slide; therefore each child is able to slide down and safely move to the side before another child begins their descent.
12	Children's personal toys (bikes, wagons, etc.) should be stored away from the play structure area.

R3.5 - 07.2 SAFTEY / WARNING LABEL ATTACHMENT

1	Large structures may require two or more sets of Warning Labels. For additional Warning Labels, call (800) 333-8519. Standard set includes (1) Warning Label and (1) Designed for Ages (2-5, 5-12 or 2-12) age appropriate label.
2	Attach in a conspicuous location, such as near an entry.
3	To apply, clean surface with alcohol, remove protective backing and apply to clean post.



R3.5 - 07.3 SURFACING LEVEL LABEL ATTACHMENT

1	Some play equipment may require recommended surfacing level labels appropriately placed at the bottom of all posts. The correct placement of the labels is dependent on the requirements of the specific equipment design and resilient ground cover choice. Please consult with your Playcraft representative or call the factory at (800) 333-8519 for surfacing and label placement advice.
2	To apply, clean surface with alcohol, remove protective backing and apply to clean post.



⇩ASTM LABELS⇩

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF
2 TO 5 YEARS OLD
ADULT SUPERVISION IS RECOMMENDED.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
ASTM-F1487 KC-0020501A

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF
5 TO 12 YEARS OLD
ADULT SUPERVISION IS RECOMMENDED.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
ASTM-F1487 KC-0051201A

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF
2 TO 12 YEARS OLD
ADULT SUPERVISION IS RECOMMENDED.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
ASTM-F1487 KC-0021201A

⇩CSA LABELS⇩

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF
18 MONTHS TO 5 YEARS OLD
ADULT SUPERVISION IS RECOMMENDED.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
CAN/CSA-Z614 KC-0020501C

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF
5 YEARS TO 12 YEARS OLD
ADULT SUPERVISION IS RECOMMENDED.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
CAN/CSA-Z614 KC-0051201C

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF
18 MONTHS TO 12 YEARS OLD
ADULT SUPERVISION IS RECOMMENDED.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
CAN/CSA-Z614 KC-0021201C

⇩WARNING LABEL⇩

⚠WARNING

- Installation over a hard surface such as concrete, asphalt, or packed earth may result in serious injury or death from falls.
- Play surfaces and surfacing may become hot, supervisors should test for hot surfaces prior to allowing children to play.
- Helmets, drawstrings and accessories around the neck, must be removed to prevent strangulation or entanglement.

PLAYCRAFT SYSTEMS
Manufactured by Krauss Craft, Inc.
1-800-333-8519 • 541-955-9199
www.playcraftsystems.com
ASTM-F1487-11 KC-00010001

R3.5 - 07.4 PROPOSITION 65 LABEL ATTACHMENT

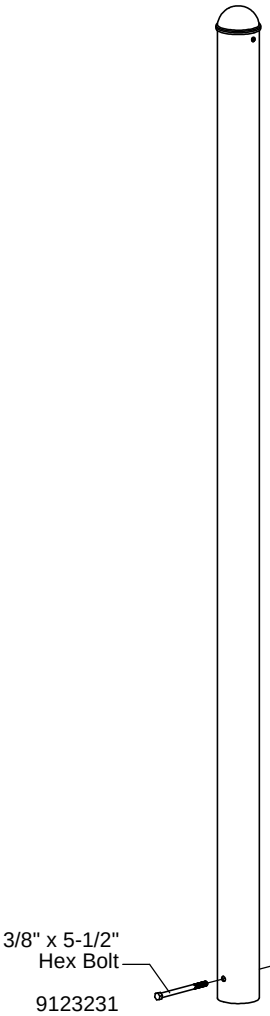
1	Some equipment may or may not contain materials that require labeling under California Proposition 65. To eliminate confusion all California customers will receive the labels shown.	**CALIFORNIA PROP 65 WARNING:** **THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.**
2	Attach in a conspicuous location, such as near an entry.	
3	To apply, clean surface with alcohol, remove protective backing and apply to clean post.	

IMPORTANT: To ensure the safest play area and equipment possible, periodic inspections should be performed and recorded on a daily, weekly and monthly basis. Some form of maintenance program should be established and strictly adhered to. A comprehensive list of maintenance steps, including a sample playground maintenance safety inspection form, can be found in the maintenance manual included with your equipment.

R3.5 – 08.1 YOUR GENERAL MAINTENANCE PROGRAM SHOULD INCLUDE AT MINIMUM, THE FOLLOWING:	
1	Appropriate impact attenuating safety surfacing material must be maintained under and around all playground equipment.
2	The equipment and play area must be kept clean and free of any miscellaneous debris or litter.
3	Moving parts such as ropes, chains, swing hangers, bridges, etc. must be inspected regularly to determine if excessive wear is occurring. Any parts showing excessive wear or damage must be replaced.
4	All bolts, hardware, collars, and fittings must be checked regularly and tightened if necessary.
5	Any broken or missing end caps on pipe must be replaced.
6	Check all Steel and Poly Surfaces and replace or repair as required.
7	Tire swing swivel must be greased at time of installation and on a regular basis. Each swivel is equipped with 1 or 2 grease fittings to allow lubrication with a standard grease gun.
8	Make sure warning labels are legible and in a conspicuous location.

For further information or questions about maintenance or for replacement parts, please contact your Playcraft representative or Playcraft Systems customer service at 1-800-333-8519.

POSTS & HARDWARE



3/8" x 5-1/2" Hex Bolt
9123231

3/8" Hex Nut
9483602

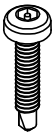
FOOTING PIN
*Insert bolt as shown above in hole near base of post.



6mm Washer
9333602



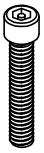
3/8" x1/2" Socket Set Screw
9263012-TR



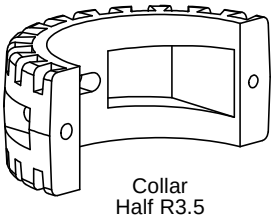
1/4"x 1-1/4" BH TR Tek Screw
9271062-TR



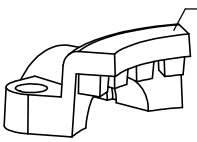
1/4" x 1" Socket Head Screw
9281052-TR



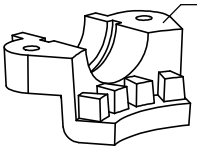
1/4" x 1-3/8" TR Socket Head Screw
9281062-5-TR



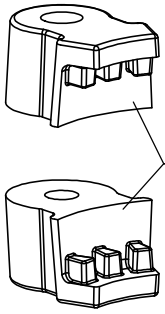
Collar Half R3.5
GG-8107



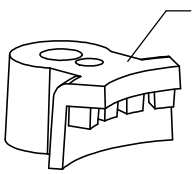
SOCKET CLAMP TOP
GG-8108



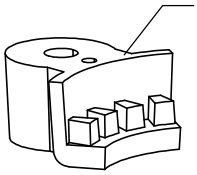
SOCKET CLAMP BOTTOM
GG-8109



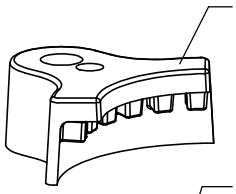
R3.5 MOUNTING BLOCK 3
GG-8112



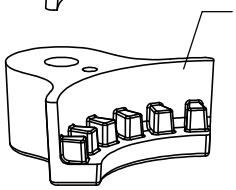
MOUNTING BLOCK TOP
GG-8110



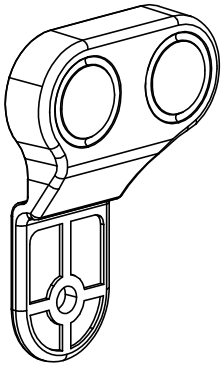
MOUNTING BLOCK BOTTOM
GG-8111



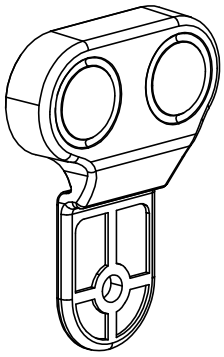
MOUNTING BLOCK 6 TOP
GG-8125



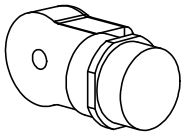
MOUNTING BLOCK 6 BOTTOM
GG-8127



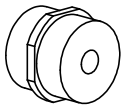
BOTTOM CASTING LEFT
GG-8114-L



BOTTOM CASTING RIGHT
GG-8114-R



MOUNTING LUG
GG-8113



MOUNTING INSERT
GE-7015

IMPORTANT NOTES: Read First

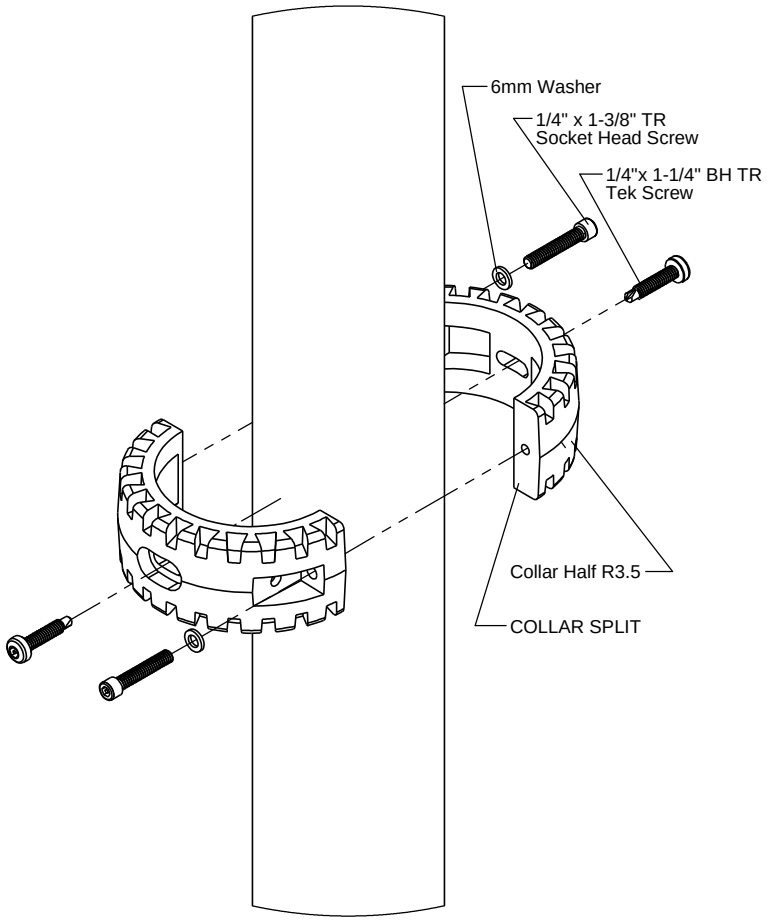
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) See component assembly instructions for collar heights and locations.

(C) The Collar splits should be aligned parallel with deck faces and should always be parallel to the collars of the same component. (See Figure 3)

(D) Important: On overhead event's the collars should be oriented so that the Socket Clamps or Mounting Blocks are installed over the Tek Screw. (See Figure 4)

FIGURE 1
Collar Assembly



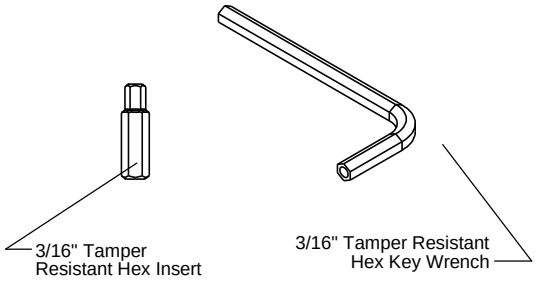


FIGURE 2
Tamper Resistant Tools

Step 1

Locate and mark the position of the collar on the support post, place in the correct position and attach as shown in Figure 1 using the tools shown in Figure 2.
(See Figures 3 and 4 and Notes A, B, C and D)

Important: Do not install Tek Screws until the components location and orientation have been established.

Step 2

Check to ensure the placement of the collar assembly is at the specified height and orientation then install the Tek Screws as shown in Figure 1.

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.
(See Note A)

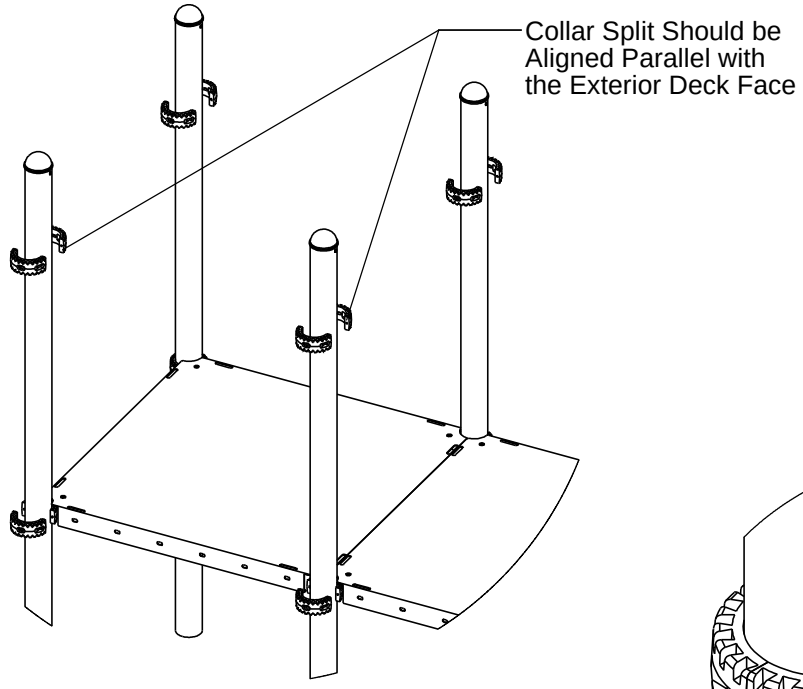


FIGURE 3
Collar Alignment

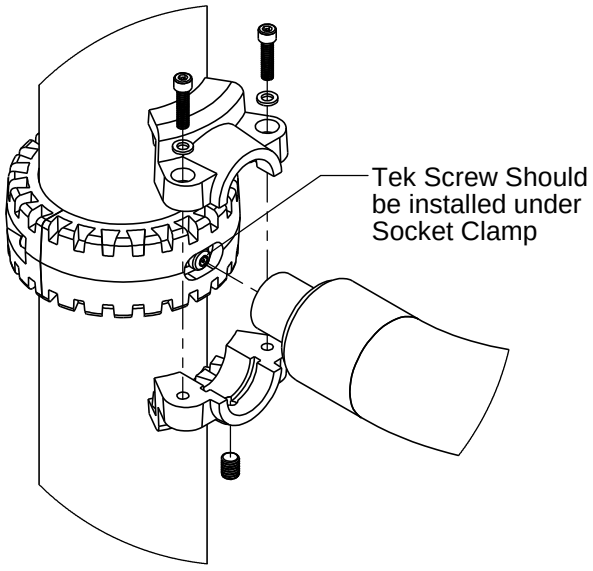


FIGURE 4
Overhead Event Collar Alignment

Specifications

COLLARS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Collars have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

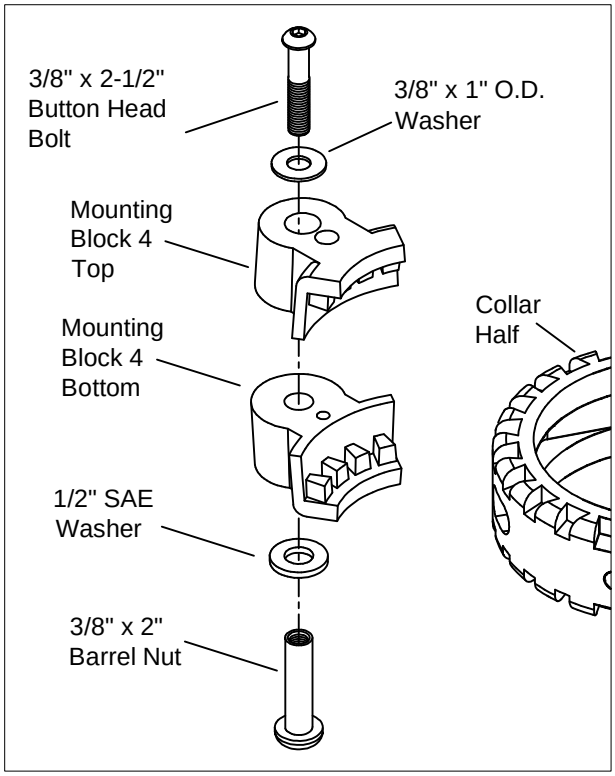
Part #	DESCRIPTION	QTY.
008107	R3.5 Collar Half	2
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	2
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	2
9333602	Washer Flat 6 mm	2

Maintenance

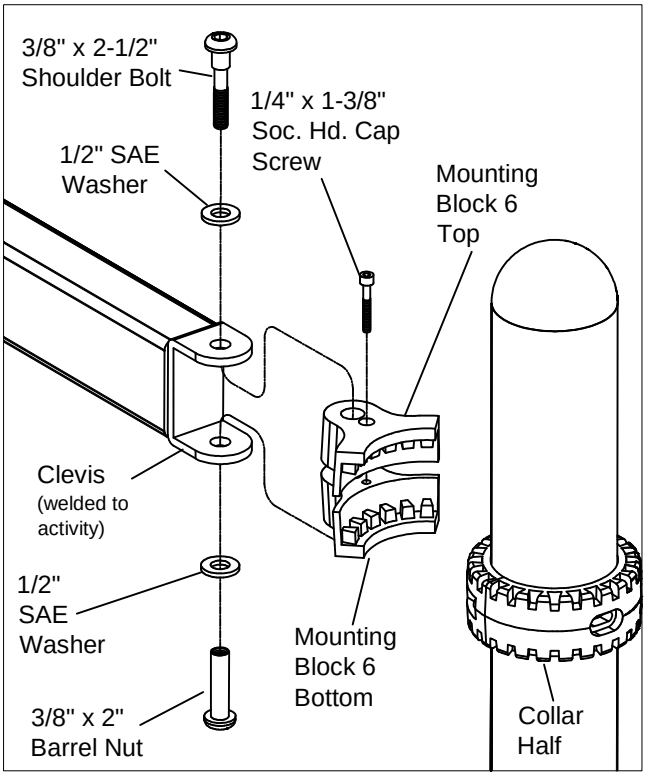
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

MOUNTING BLOCK APPLICATIONS

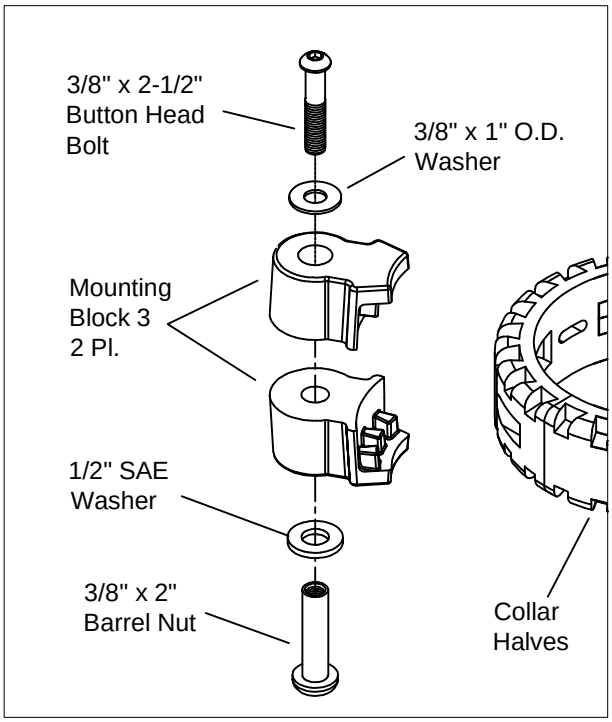
TYPE 1 - R35 Mounting Block 4
(Applies to most decks)



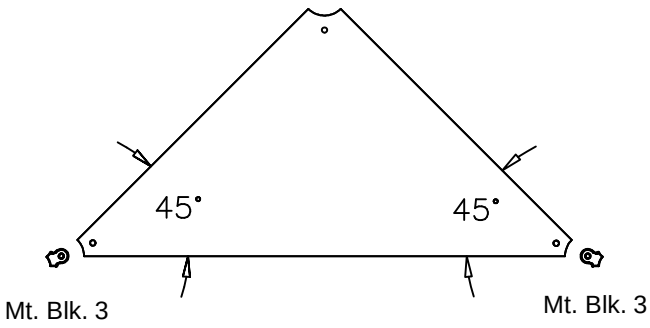
TYPE 2 - R35 Mounting Block 6 & Clevis
(Applies to ALL OVERHEAD EVENTS)



TYPE 3 - R35 Mounting Block 3
(Applies to R3.5 Deck #5 only)



R3.5 Deck #5



Mounting Block 3 is used ONLY on the 45° corners of this deck, 2 Pl.

Parts List - Type 1

PART #	DESCRIPTION	QTY.
008110	Mounting Block 4 Top	1
008111	Mounting Block 4 Bottom	1
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	1
9333002	Washer Flat 3/8" x 1" x .100 thick	1
9345002	Washer Flat SAE 1/2"	1
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Parts List - Type 2

PART #	DESCRIPTION	QTY.
008125	Mounting Block 6 Top	1
008127	Mounting Block 6 Bottom	1
9143112-TR	Bolt Shoulder 3/8" x 2-1/2"	1
9281062-5	Screw Soc HD CS 1/4" x 1-3/8"	1
9345002	Washer Flat SAE 1/2"	2
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Parts List - Type 3

PART #	DESCRIPTION	QTY.
008112	Mounting Block 3	2
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	1
9333002	Washer Flat 3/8" x 1" x .100 thick	1
9345002	Washer Flat SAE 1/2"	1
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Installation

NOTES: More detailed instructions will be supplied with the specific components being installed on your play system.

Step 1.
Attach Collar halves to Post. Refer to Collar Assembly Page R3.5-09.

Step 2.
Attach Mounting Blocks to Collar and activity to Mounting Blocks using type (1-3) hardware as specifed.

Step 3.
Snug tighten all fasteners.

Step 4.
Check to ensure proper placement of the activity.

Step 5.
Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual.

Specifications

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

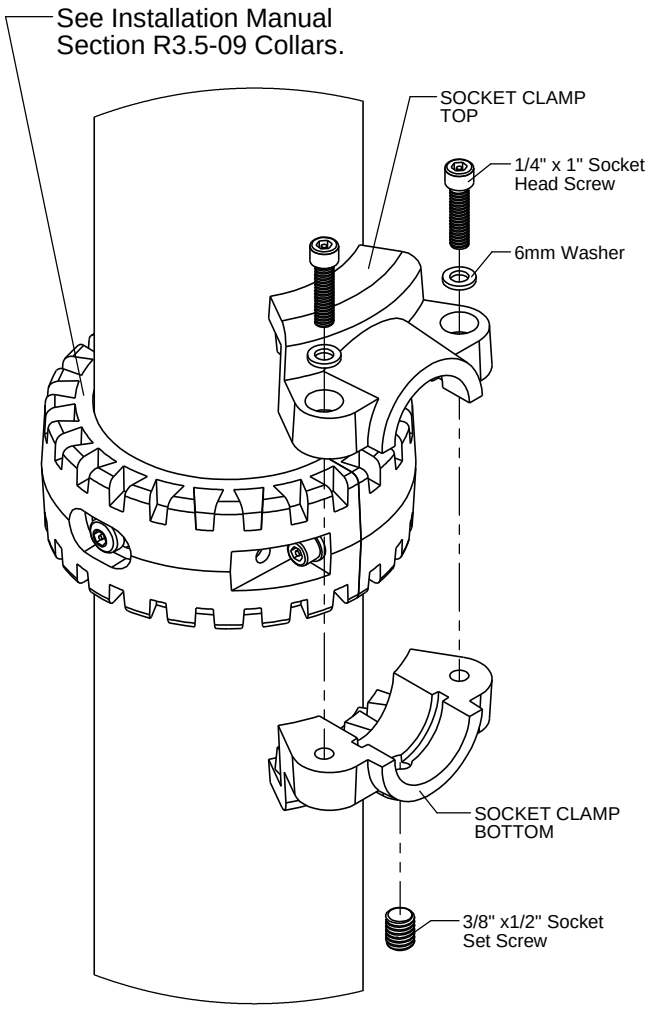
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to installation manual for R3.5-09 Collars.

FIGURE 1
Socket Clamp Assembly



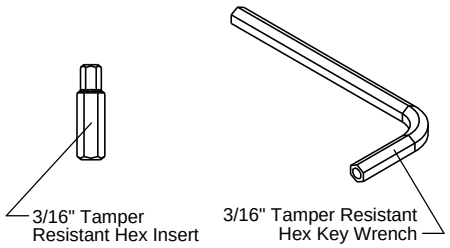


FIGURE 2
Tamper Resistant Tools

Step 1

Attach collar to post. (See Note B)

Step 2

Loosely attach the socket clamps to the collar as shown in Figure 1 using the tools shown in Figure 2. (See Note A and B)

Note: Take care to achieve proper thread engagement of Socket Head Cap Screws to prevent cross threading while drawing upper and lower socket clamp halves together during tightening of hardware.

Step 3

Check the placement of activity and make adjustments if necessary.

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Specifications

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

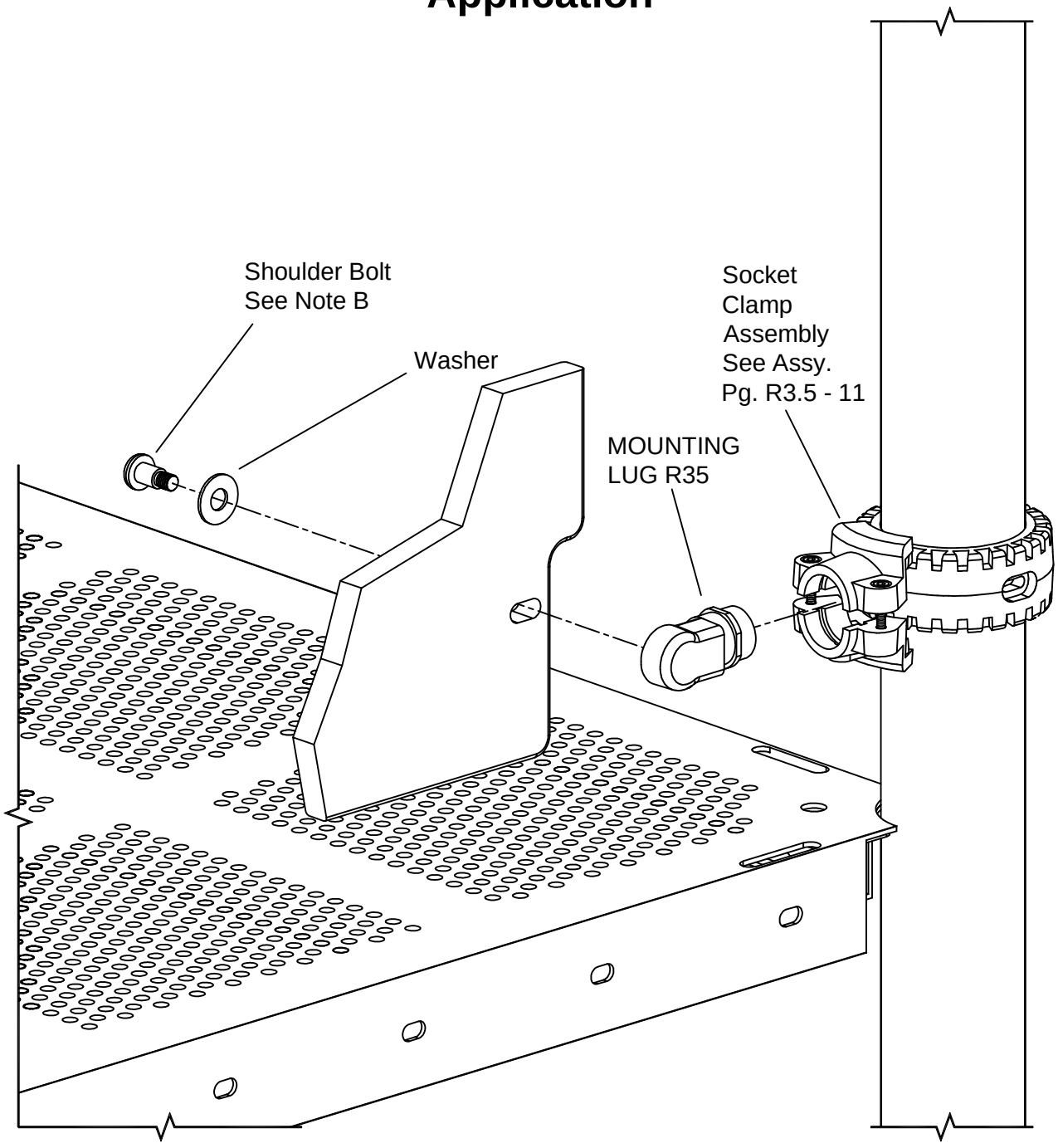
Parts List

Part #	DESCRIPTION	QTY.
008108	Socket Clamp Top R35	1
008109	Socket Clamp Bottom R35	1
9263012-TR	Screw Soc Set 3/8" x 1/2"	1
9281052-TR	Screw Soc HD 1/4" x 1"	2
9333602	Washer Flat 6 mm	2

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

Mounting Lug Application



Parts List

PART #	DESCRIPTION	QTY.
008113	Mounting Lug R35	1

Specifications

MOUNTING LUG:
Shall be precision die-cast from a high strength aluminum alloy. The Mounting Lug has a multi-stage baked-on powder coat finish.

Installation

Notes:

A) More detailed instructions will be supplied with the specific components being installed on your play system.

B) Note that the length of the Shoulder Bolt varies depending upon the application.

Step 1.
Attach Collar Halves to Post. Refer to Collar Assembly Page R3.5 - 09.

Step 2.
Attach Socket Clamp Assembly to Collar. Refer to Socket Clamp Assembly page R3.5 - 11.

Step 3.
Attach the activity to the Mounting Lug using the hardware as specified for the specific application.

Step 4.
Snug tighten all fasteners.

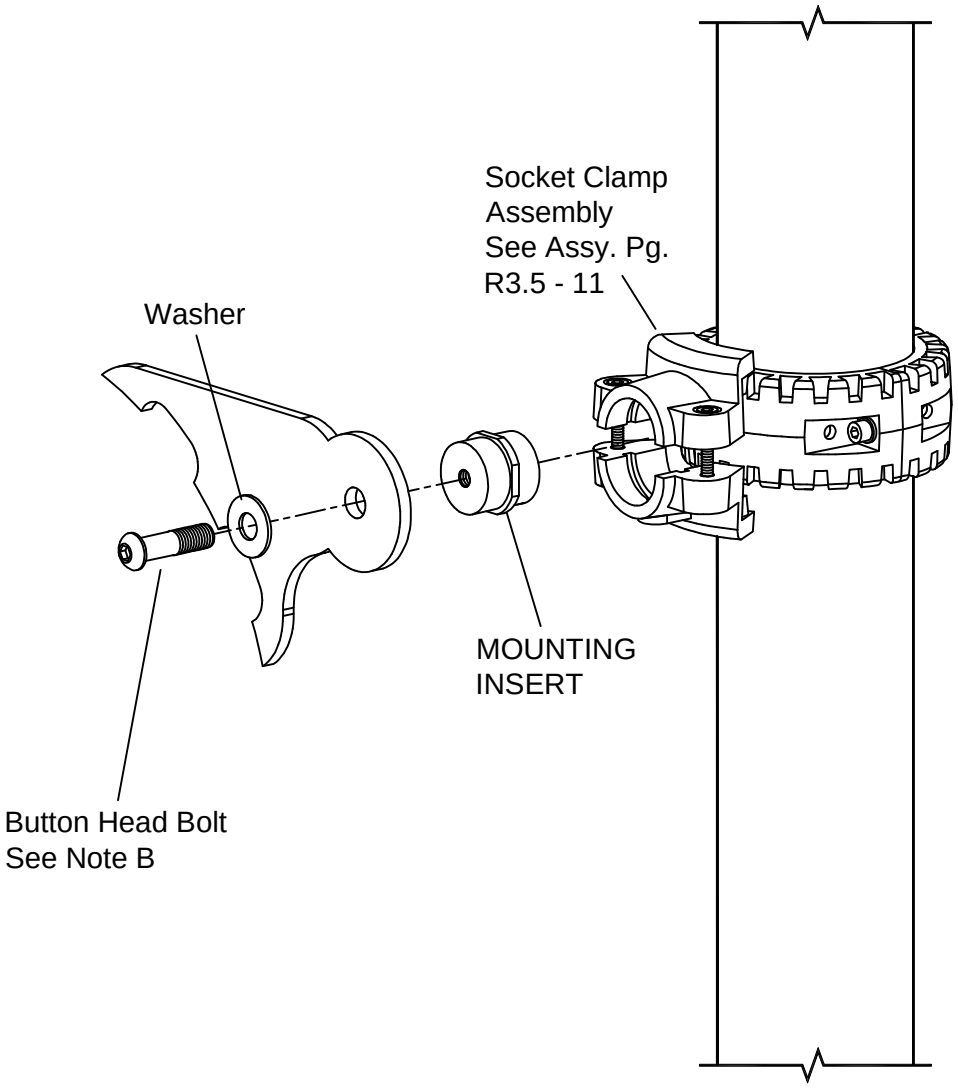
Step 5.
Check to ensure proper placement of the activity and make adjustments if necessary.

Step 6.
Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

Mounting Insert Application



MOUNTING INSERT ASSEMBLY

Parts List

PART #	DESCRIPTION	QTY.
007015	Mounting Insert	1

Specifications

MOUNTING INSERTS:
Shall be precision die-cast from a high strength aluminum alloy.

Installation

Notes:

A) More detailed instructions will be supplied with the specific components being installed on your play system.

B) Note that the length of the Button Head Bolt varies depending upon the application.

Step 1.
Attach Collar Halves to Post. Refer to Collar Assembly Page R3.5 - 09.

Step 2.
Attach Socket Clamps to Collar. Refer to Socket Clamp Assembly Page R3.5 - 11

Step 3.
Attach the activity to the Mounting Insert using hardware as specified for the specific application.

Step 4.
Snug tighten all fasteners.

Step 5.
Check to ensure proper placement of the activity and make adjustments if necessary.

Step 6.
Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

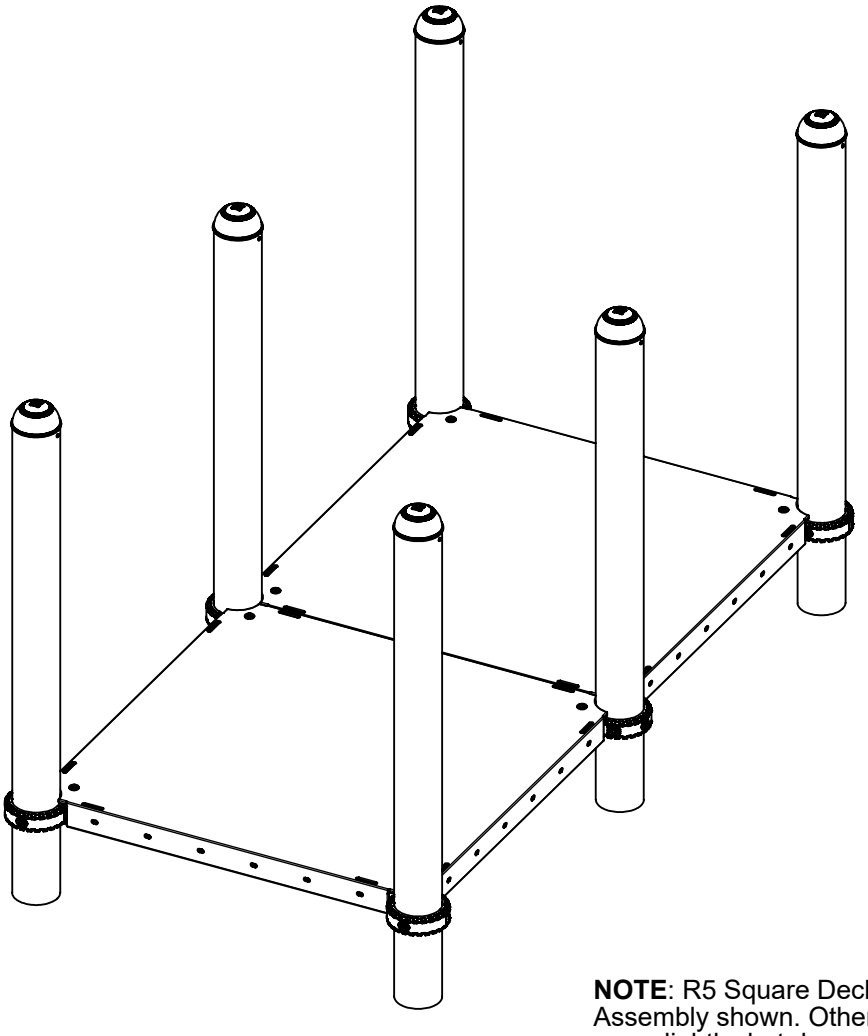
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) These instructions apply to (2) Decks of the same or different styles that are joined together at the same level. See specific deck installation instructions for attaching each deck corner to mounting blocks on post collars.

(C) If Play System has (2) Half Hex Decks 4-Post, (2) 5 Post 90" Decks, or a combination of the two connected at the same level refer to 1100-3 installation instructions. These configurations use longer button head bolts.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Deck to Deck Assembly



NOTE: R5 Square Deck to Square Deck Assembly shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Refer to Top View drawing in the Playground Equipment Manual to locate the position(s) of decks on your play structure.

Step 2

Attach Deck to Deck as shown in Figure 2. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

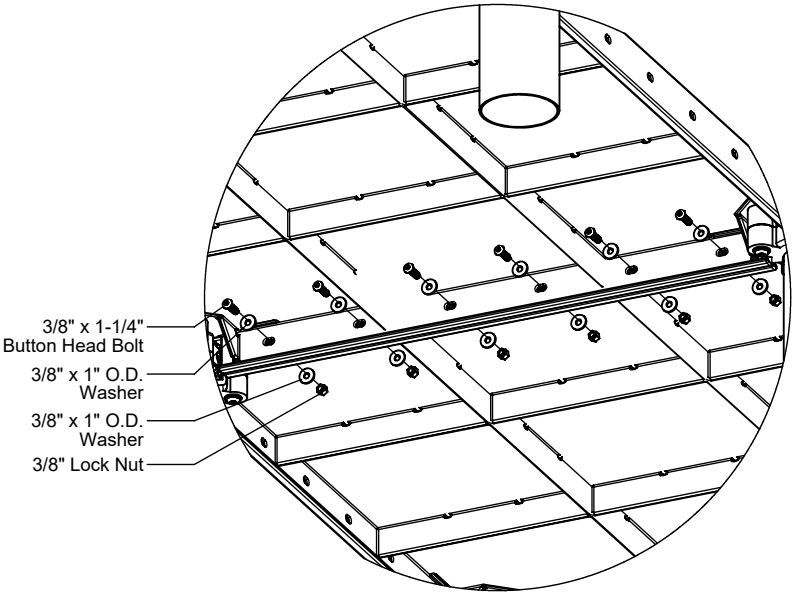


FIGURE 2

Parts List

Part #	DESCRIPTION	QTY
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	6

Specifications

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

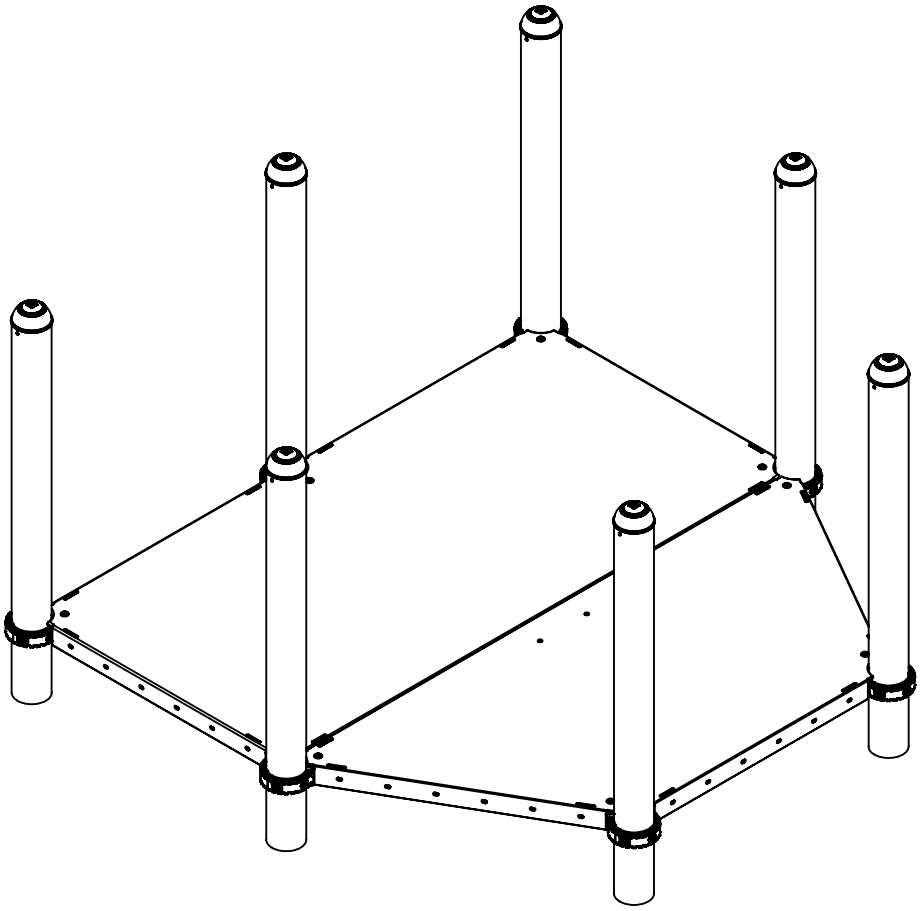
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) These instructions apply to (2) Long Decks of the same or different styles that are joined together at the same level. See specific deck installation instructions for attaching each deck corner to mounting blocks on post collars.

(C) If Play System has (2) Short Decks connected at the same level refer to 1100-2 installation instructions. These configurations use shorter button head bolts.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Deck to Deck Long Assembly



NOTE: R5 5 Post 90" Deck to Half Hex Deck 4-Post Assembly shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Refer to Top View drawing in the Playground Equipment Manual to locate the position(s) of decks on your play structure.

Step 2

Attach Deck to Deck as shown in Figure 2. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

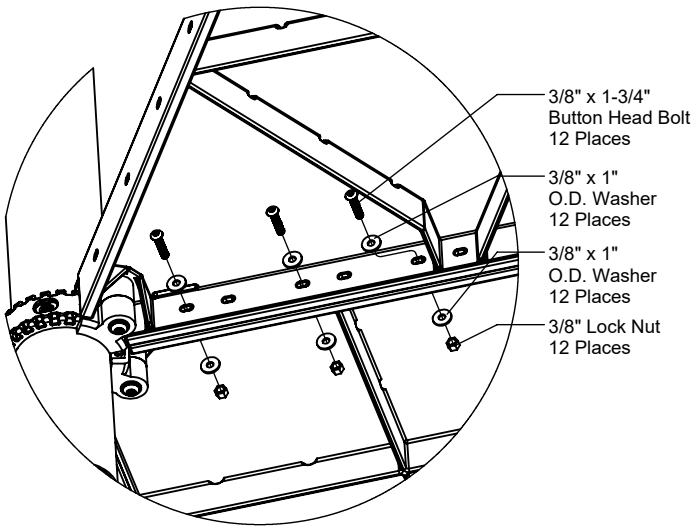


FIGURE 2

Parts List

Part #	DESCRIPTION	QTY
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

Specifications

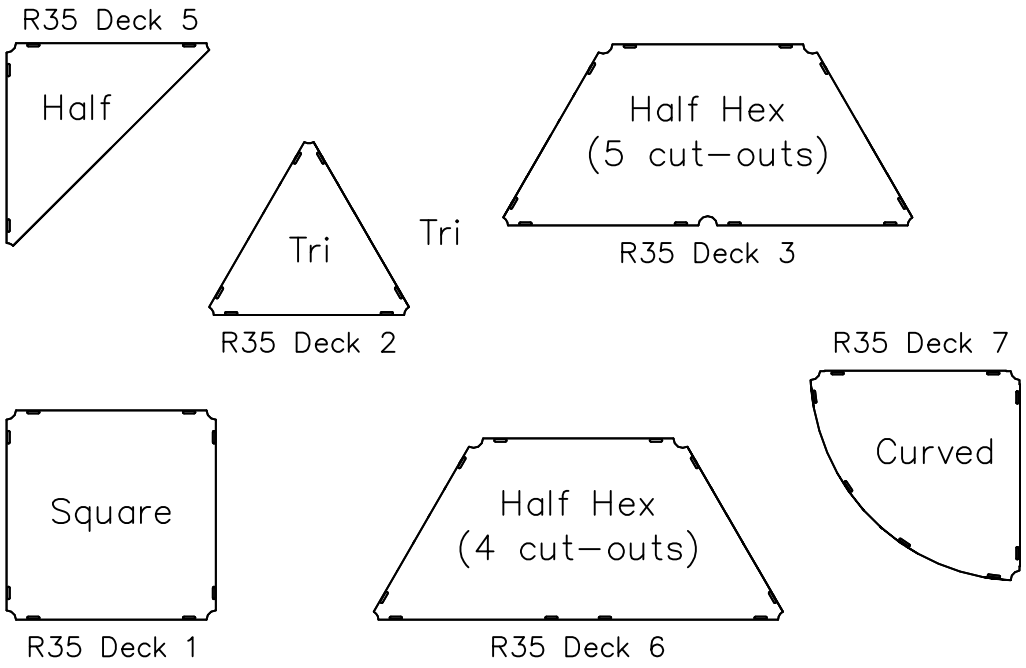
HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

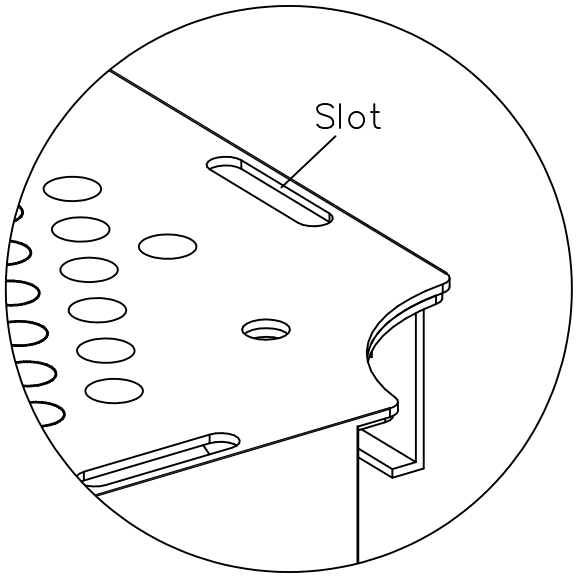
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

DECK IDENTIFICATION

R3.5-1100



Deck Slot



IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

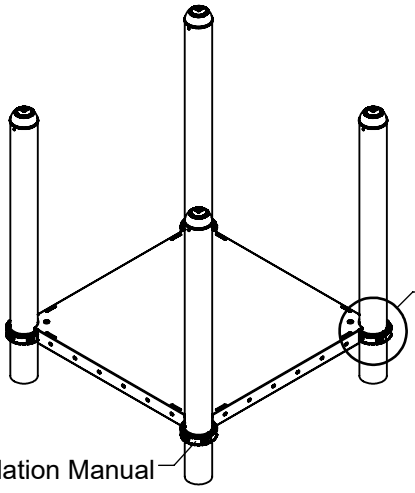
(B) The top of the collars are located 7/8" [22mm] below the top of the deck. Refer to Installation Manual for 09 Collars installation instructions.

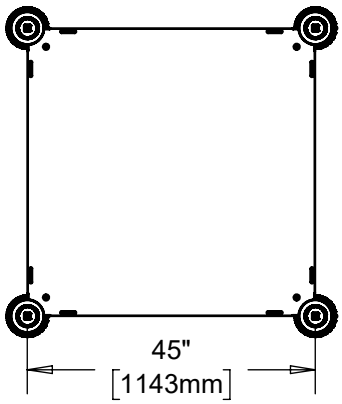
(C) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

(D) All deck hieghts on your system's top view drawing are measured from the top of ground cover (finished grade) to the top of the deck. Post location dimensions are on centers.

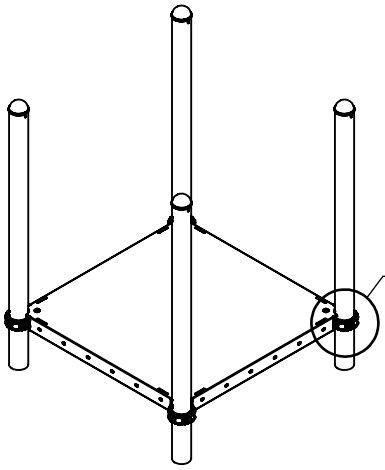
(F) Never allow the gap between decks to be between 3-1/2" [89mm] and 9" [229mm]. Deck fillers are provided for gaps between decks with 6" [152mm] and 12" [305mm] rise increments.

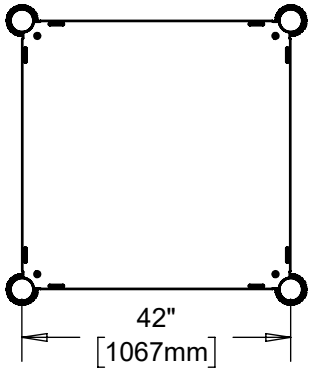
FIGURE 1
Square Deck Assembly





R5 ASSEMBLY





R3.5 ASSEMBLY

Step 1

Attach Deck to Collars as shown in Figure 1.1. (See Note A)

NOTE: 4 Places

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 3

Place required protective surfacing under and around Square Deck Assembly. (See Note C)

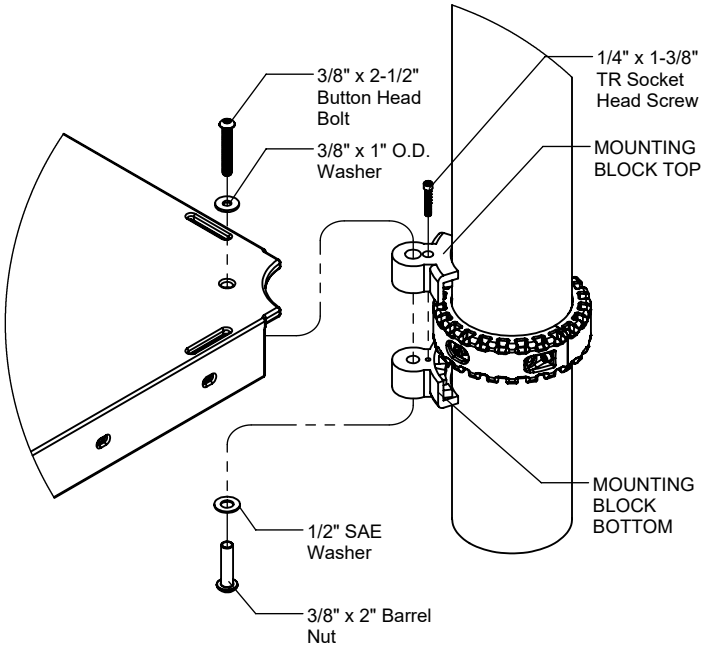


Figure 1.1

R5 Parts List

Part #	DESCRIPTION	QTY
CF-7008	R5 Deck 1 (Square Deck)	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 Parts List

Part #	DESCRIPTION	QTY
CG-8101	Square Deck R3.5	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Specifications

SQUARE DECK:
Shall be fabricated from punched, formed, and welded 12 gauge sheet steel. The Square Deck shall be Play Tuff™ coated after fabrication.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

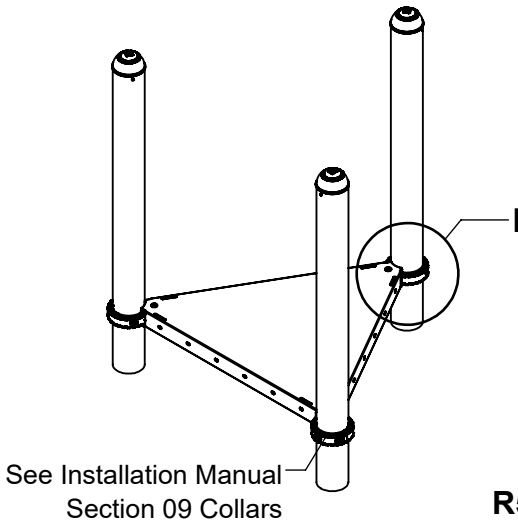
(B) The top of the collars are located 7/8" [22mm] below the top of the deck. Refer to Installation Manual for 09 Collars installation instructions.

(C) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

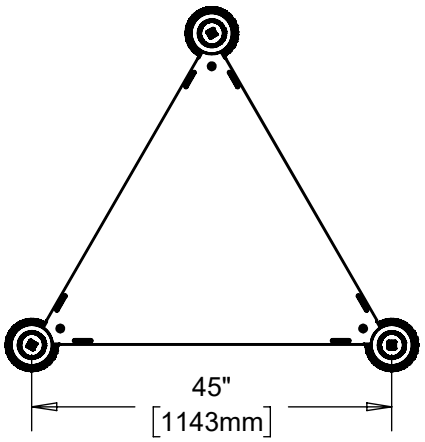
(D) All deck heights on your system's top view drawing are measured from the top of ground cover (finished grade) to the top of the deck. Post location dimensions are on centers.

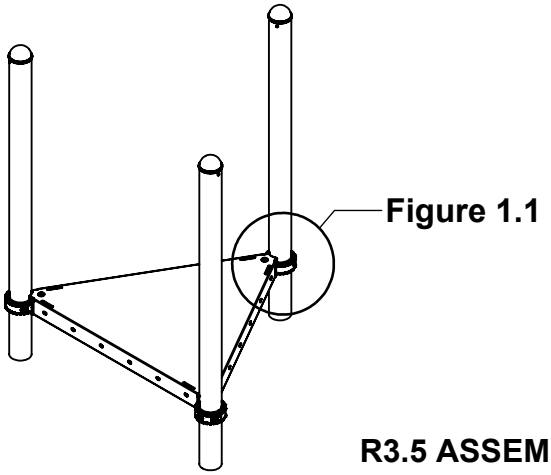
(E) Never allow the gap between decks to be between 3-1/2" [89mm] and 9" [229mm]. Deck fillers are provided for gaps between decks with 6" [152mm] and 12" [305mm] rise increments.

FIGURE 1
Tri Deck Assembly

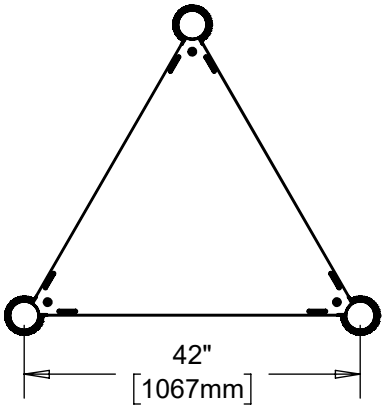


R5 ASSEMBLY





R3.5 ASSEMBLY



Step 1

Attach Deck to Collars as shown in Figure 1.1. (See Note A)

NOTE: 3 Places

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 3

Place required protective surfacing under and around Tri Deck Assembly. (See Note C)

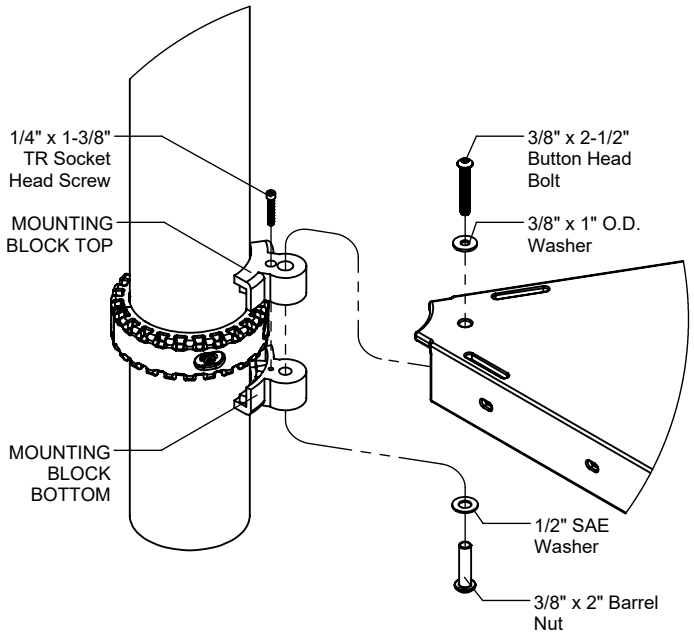


Figure 1.1

R5 Parts List

Part #	DESCRIPTION	QTY
CF-7009	Tri Deck R5	1
GF-7006-B	Mounting Block R5 Bottom	3
GF-7006-T	Mounting Block R5 Top	3
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	3
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	3
9345002	Washer Flat SAE 1/2"	3
9443092-TR	Nut Barrel 3/8" x 2" BH	3

R3.5 Parts List

Part #	DESCRIPTION	QTY
CG-8115	Tri Deck R3.5	1
GG-8110	Mounting Block 4 Top R3.5	3
GG-8111	Mounting Block 4 Bottom R3.5	3
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	3
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	3
9345002	Washer Flat SAE 1/2"	3
9443092-TR	Nut Barrel 3/8" x 2" BH	3

Specifications

TRI DECK:
Shall be fabricated from punched, formed, and welded 12 gauge sheet steel. The Tri Deck shall be Play Tuff™ coated after fabrication.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) The top of collars are located 7/8" [22mm] below the top of the deck. Refer to Installation Manual for 09 Collars installation instructions.

(C) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

(D) All deck heights on your system's top view drawing are measured from the top of ground cover (finished grade) to the top of the deck. Post location dimensions are on centers.

(E) Never allow the gap between decks to be between 3-1/2" [89mm] and 9" [229mm]. Deck fillers are provided for gaps between decks with 6" [152mm] and 12" [305mm] rise increments.

FIGURE 1
Half Hex Deck 5-Post Assembly

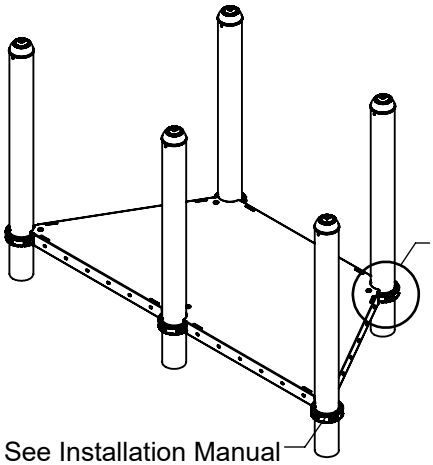
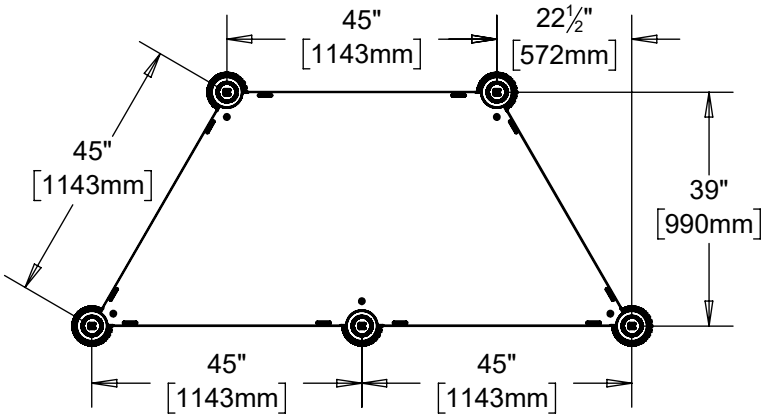


Figure 1.1

See Installation Manual
Section 09 Collars



R5 ASSEMBLY

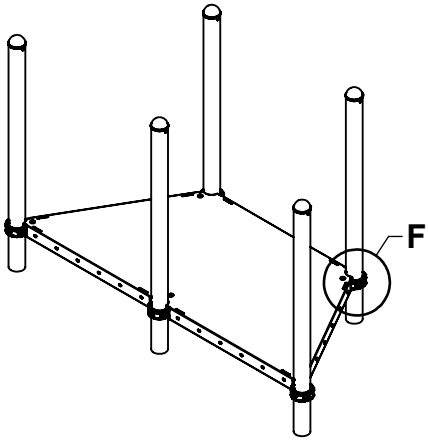
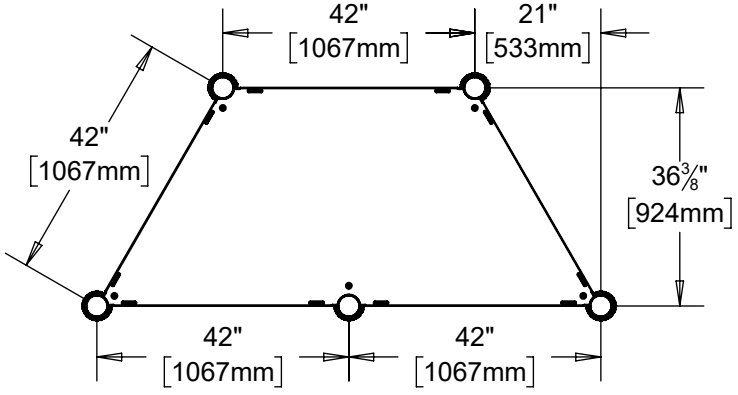


Figure 1.1



R3.5 ASSEMBLY

Step 1

Attach Deck to Collars as shown in Figure 1.1. (See Note A)

NOTE: 5 Places

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 3

Place required protective surfacing under and around Half Hex Deck 5-Post Assembly. (See Note C)

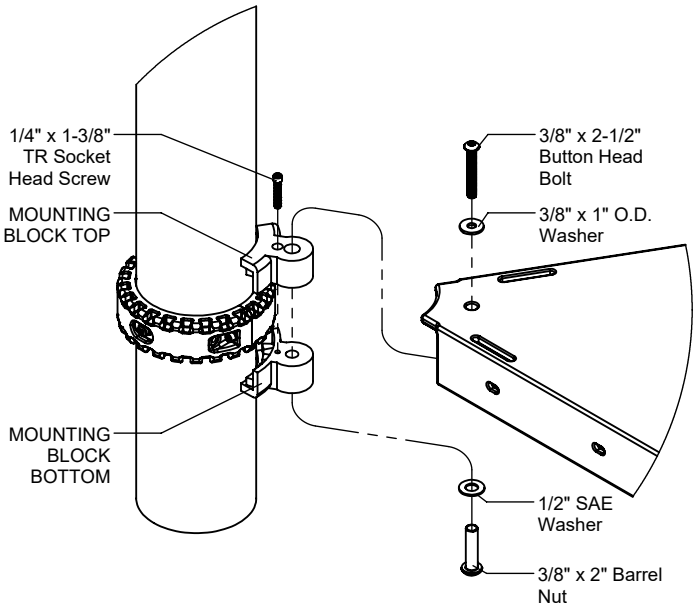


Figure 1.1

R5 Parts List

Part #	DESCRIPTION	QTY
CF-7010	Half Hex Deck 5-Post R5	1
GF-7006-B	Mounting Block R5 Bottom	5
GF-7006-T	Mounting Block R5 Top	5
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	5
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	5
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9345002	Washer Flat SAE 1/2"	5
9443092-TR	Nut Barrel 3/8" x 2" BH	5

R3.5 Parts List

Part #	DESCRIPTION	QTY
CG-8124	Half Hex Deck 5 Post R3.5	1
GG-8110	Mounting Block 4 Top R3.5	5
GG-8111	Mounting Block 4 Bottom R3.5	5
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	5
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	5
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9345002	Washer Flat SAE 1/2"	5
9443092-TR	Nut Barrel 3/8" x 2" BH	5

Specifications

HALF HEX DECK 5-POST:
Shall be fabricated from punched, formed, and welded 12 gauge sheet steel. The Half Hex Deck 5-Post shall be Play Tuff™ coated after fabrication.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

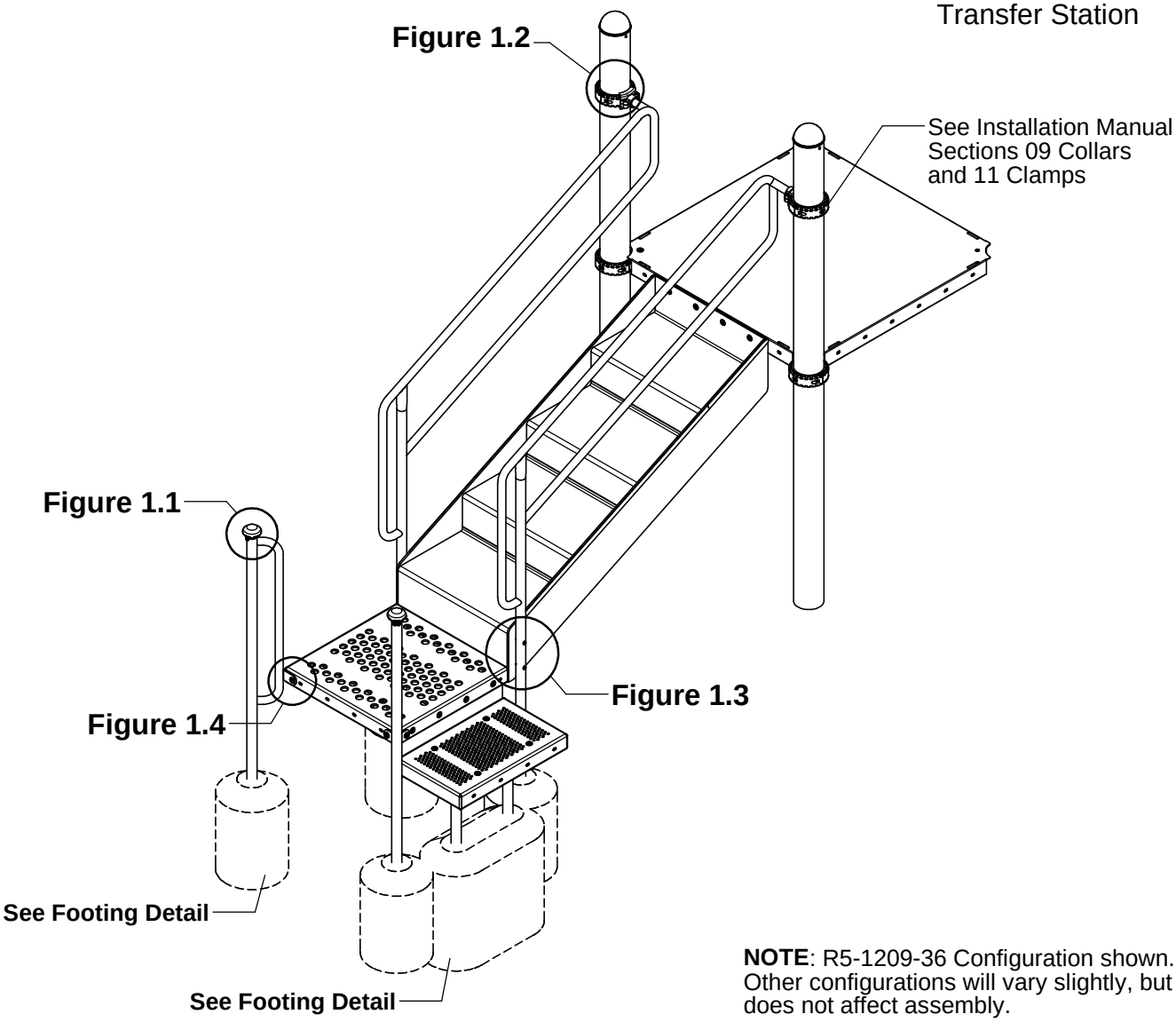
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Transfer Station



NOTE: R5-1209-36 Configuration shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

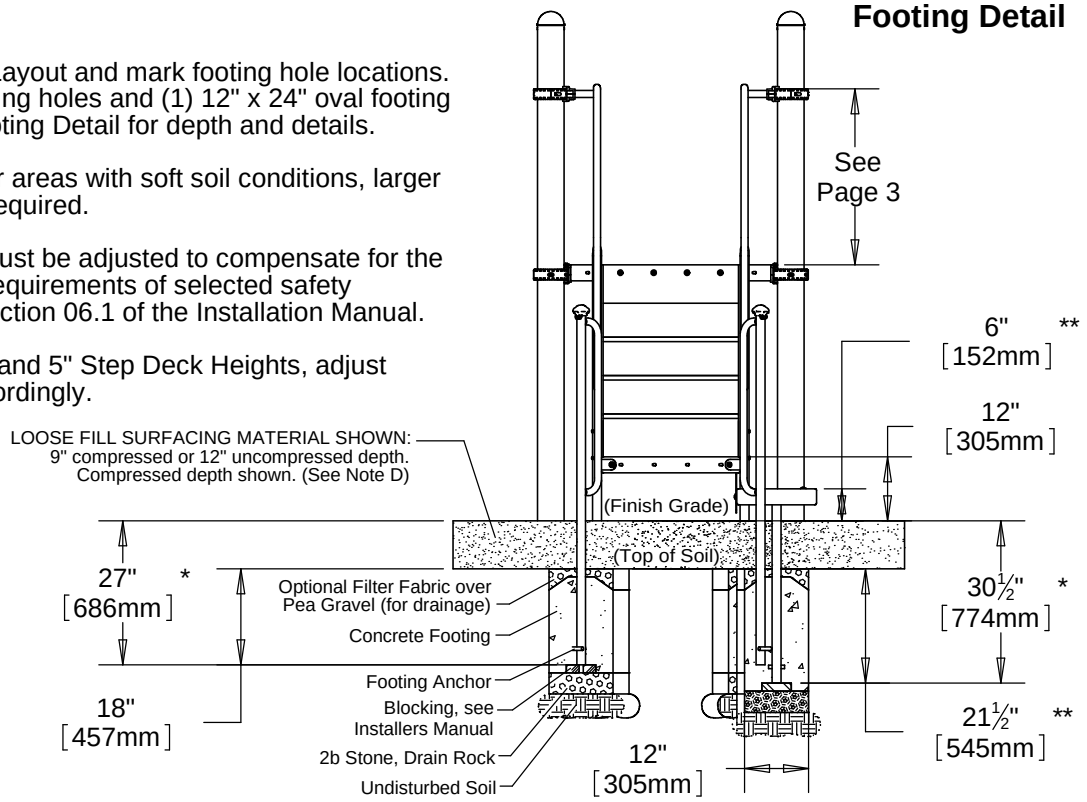
Refer to Footing Layout and mark footing hole locations. Dig (4) Ø 12" footing holes and (1) 12" x 24" oval footing hole. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

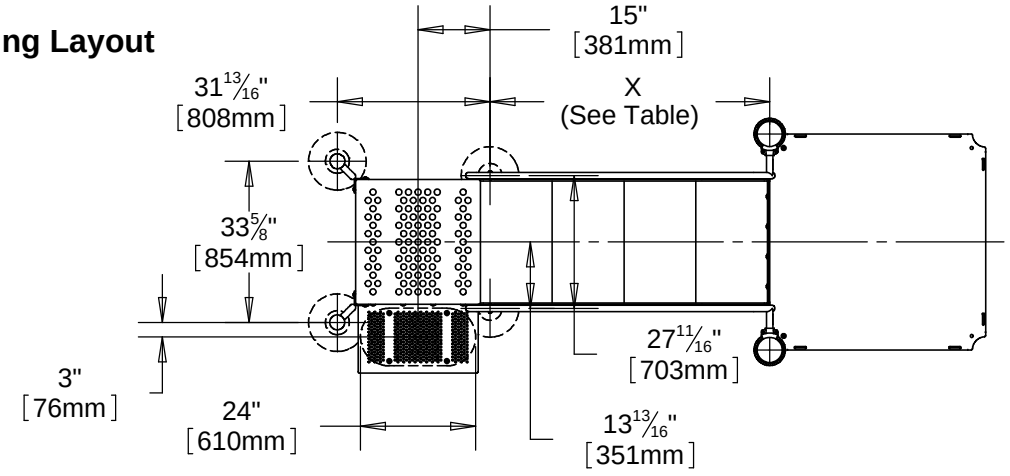
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

** For optional 4" and 5" Step Deck Heights, adjust footing depth accordingly.

Footing Detail



Top View - Footing Layout



Footing Distance Table Center of Post to Center of Footing			
Deck Height	Assembly	X (in.)	X (mm)
24"	Transfer Station 12-24	13-1/4"	337
36"	Transfer Station 12-36	28-1/4"	717
42"	Transfer Station 12-42	43"	1092
48"	Transfer Station 12-48	58-1/4"	1480
60"	Transfer Station 12-60	73-1/4"	1861
72"	Transfer Station 12-72	103-1/4"	2623

Step 2

Locate and attach collars to posts at height shown in Figure 2. (See Note C)

NOTE: Collar height varies based on Transfer Station Hand Rail Type.

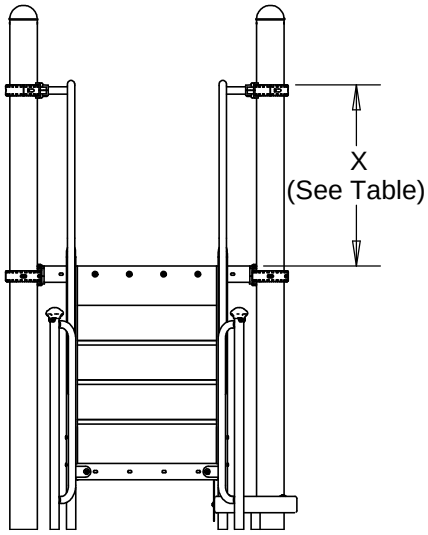
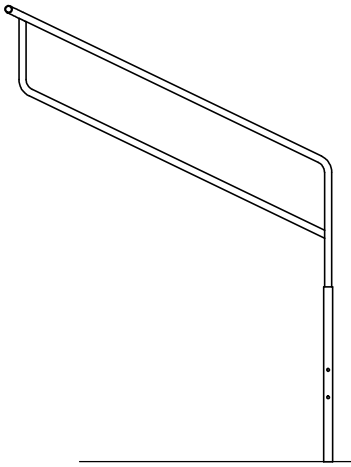
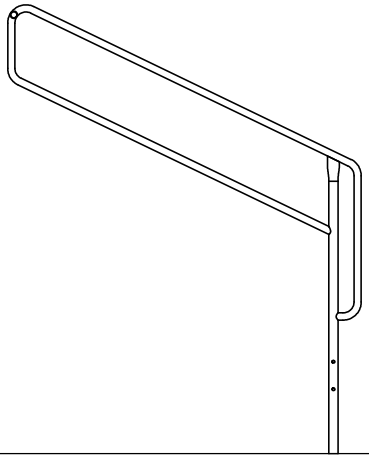


FIGURE 2
Transfer Station Hand Rail Identification and Collar Height

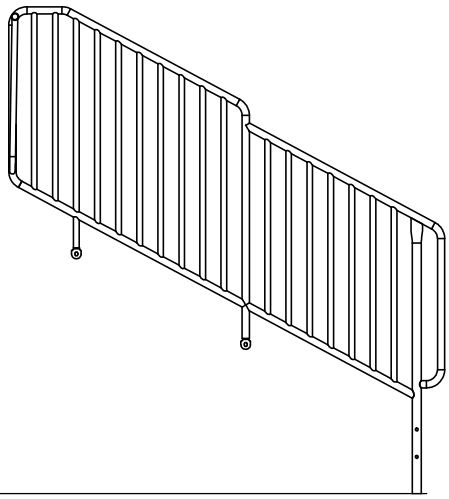
RAIL TYPE 1



RAIL TYPE 2



RAIL TYPE 3



Collar Height Table Top of Deck to Top of Collar		
Hand Rail	X (in.)	X (mm)
TYPE 1	35-1/2"	902
TYPE 2 & 3	33"	838

Step 3 (Factory Assembled)

Attach Transfer Leg Top to Transfer Deck Support as shown in Figure 1.1. (See Note A)

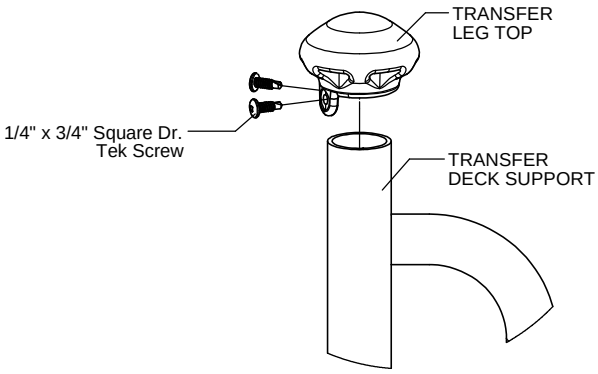


Figure 1.1

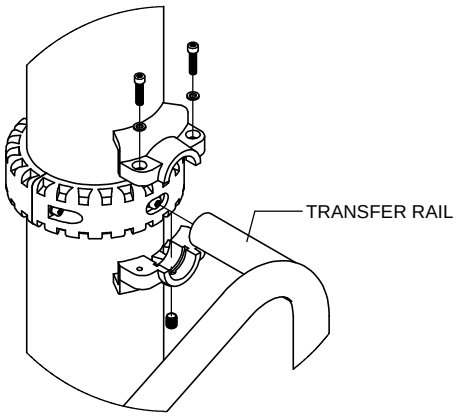


Figure 1.2

Step 4

Place Transfer Rails into footing holes and attach to collars as shown in Figure 1.2. (See Note C)

Step 5

Attach ADA Steps to Transfer Rails as shown in Figure 1.3. (See Note A)

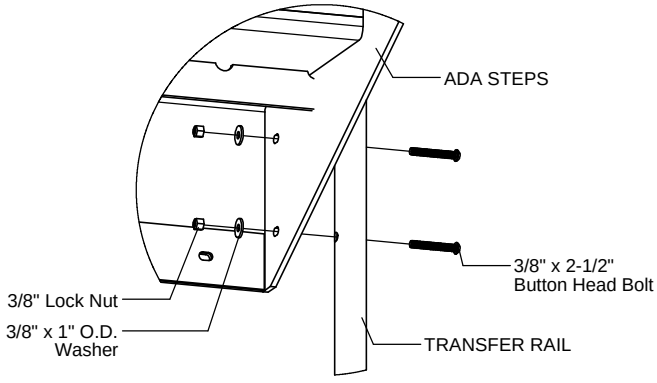


Figure 1.3

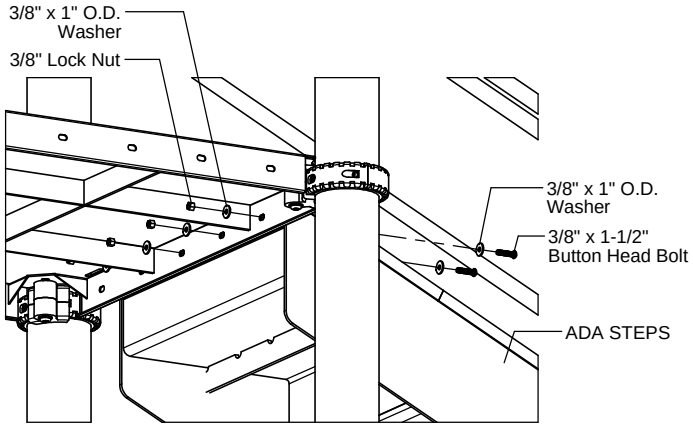


FIGURE 3

Step 6

Attach ADA Steps to deck as shown in Figure 3. (See Note A)

Step 7

For Transfer Station to 60" & 72" Decks Only

Attach Transfer Rail to ADA Steps as shown in Figure 4. (See Note A)

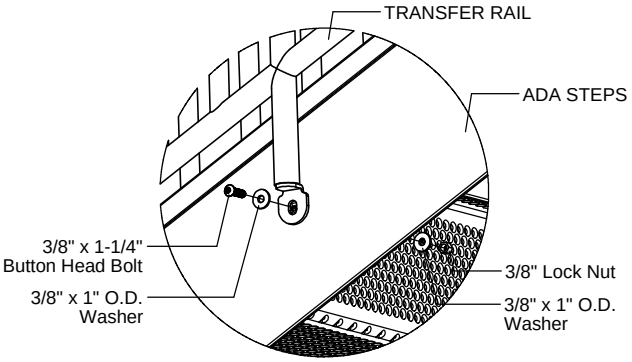


FIGURE 4

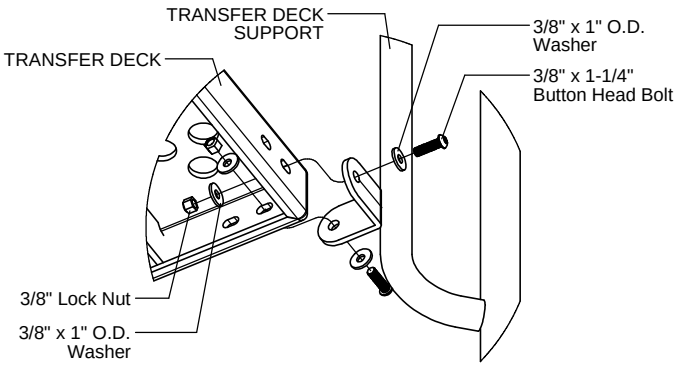


Figure 1.4

Step 8

Attach Transfer Deck Supports to Transfer Deck as shown in Figure 1.4. (See Note A)

Step 9

Place Transfer Deck Supports into footing holes and attach Transfer Deck to ADA Steps as shown in Figure 5. (See Note A)

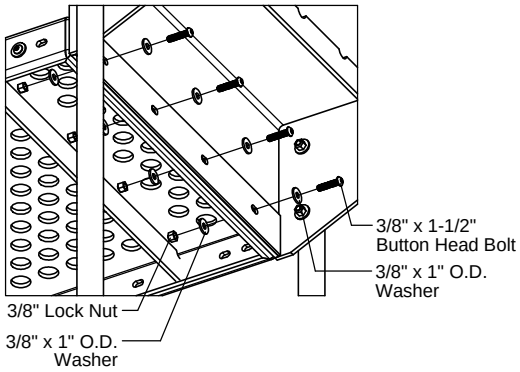


FIGURE 5

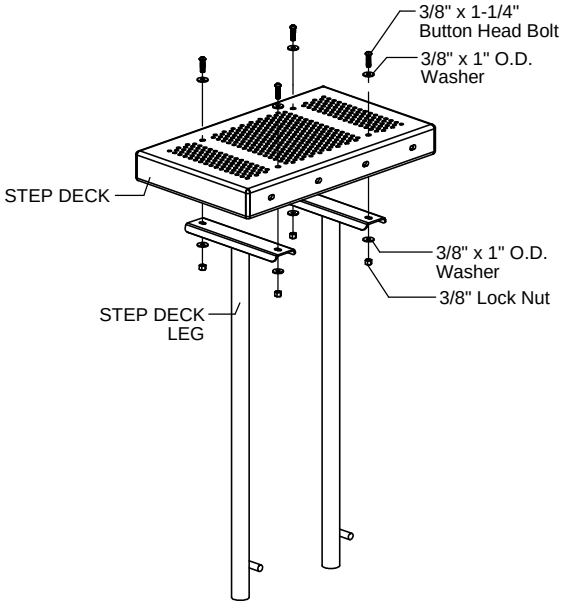


FIGURE 6

Step 10

Attach Step Deck Legs to Step Deck as shown in Figure 6. (See Note A)

Step 11

Place Step Deck Legs into footing holes and attach Filler to Transfer Deck and Step Deck as shown in Figure 7. (See Note A)

Step 12

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 13

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 14

Place required protective surfacing under and around Transfer Station. (See Note D)

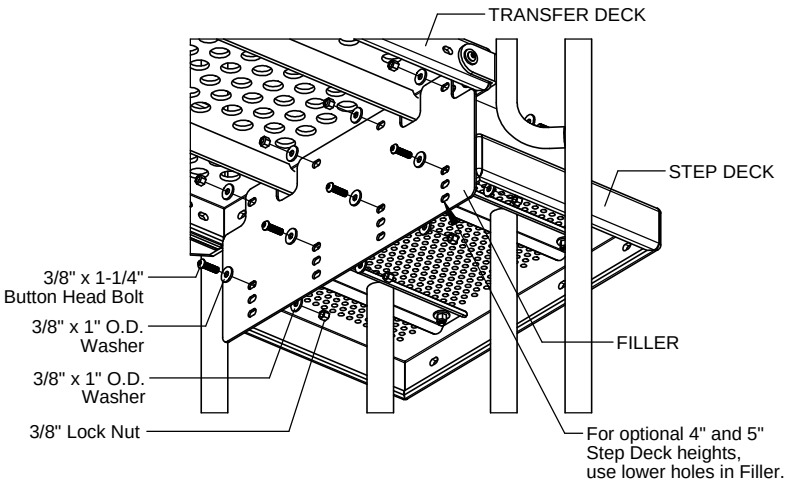


FIGURE 7

Specifications

STEP DECK LEG:
Shall be fabricated using 1.660" O.D. 11 gauge steel tubing with welded 10 gauge steel mounting bracket. The Step Deck Leg shall have a multi-stage baked-on powder coat finish.

STEP RAILS:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.660" O.D. 11 gauge steel leg. The Step Rails shall have a multi-stage baked-on powder coat finish.

TRANSFER STATION WALL:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.660" O.D. 11 gauge steel leg and 1.029" O.D. 14 gauge steel rungs. The Transfer Station Wall shall have a multi-stage baked-on powder coat finish.

STEPS & DECKS:
Shall be fabricated using punched, formed and welded 14 gauge sheet steel. Steps and Decks shall be Play-Tuff™ coated after fabrication.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

S-1209-12 - Transfer Station 12-24		
Part #	**DESCRIPTION**	**QTY.**
AE-4206	Vertical Filler #8	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
CE-4335	ADA Step 12-26	1
FS-1202	Step Deck Leg	2
FS-1209-12	Transfer Station H Rail 24	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-36 - Transfer Station 12-48		
Part #	**DESCRIPTION**	**QTY.**
AE-4206	Vertical Filler #8	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
CE-4294	ADA Steps 36-26	1
FS-1202	Step Deck Leg	2
FS-1209-36R	Transfer Station H. Rail 48	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-24 - Transfer Station 12-36		
Part #	**DESCRIPTION**	**QTY.**
AE-4206	Vertical Filler #8	1
CE-4203	ADA Steps 24-26	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
FS-1202	Step Deck Leg	2
FS-1209-24R	Transfer Station H. Rail 36	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-48 - Transfer Station 12-60		
Part #	**DESCRIPTION**	**QTY.**
AE-4206	Vertical Filler #8	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
CE-4486	ADA Steps 48-26	1
FS-1202	Step Deck Leg	2
FS-1209-48	Transfer Station Wall 60	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	20
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	60
9413002	Nut Lock 3/8"	32

S-1209-30 - Transfer Station 12-42		
Part #	**DESCRIPTION**	**QTY.**
AE-4206	Vertical Filler #8	1
CE-4194	ADA Steps 30-26	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
FS-1202	Step Deck Leg	2
FS-1209-30R	Transfer Station H. Rail 42	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-60 - Transfer Station 12-72		
Part #	**DESCRIPTION**	**QTY.**
AE-4206	Vertical Filler #8	1
CE-0166	ADA Steps 60-26	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
FS-1202	Step Deck Leg	2
FS-1209-60	Transfer Station Wall 72	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	20
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	60
9413002	Nut Lock 3/8"	32

Assembled Parts List

Part #	DESCRIPTION	QTY.
FS-1209A	Transfer Deck Support	2
GE-4636	Transfer Leg Top	2
9271032	Screw Tek 1/4" x 3/4" PH SQDR	4

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

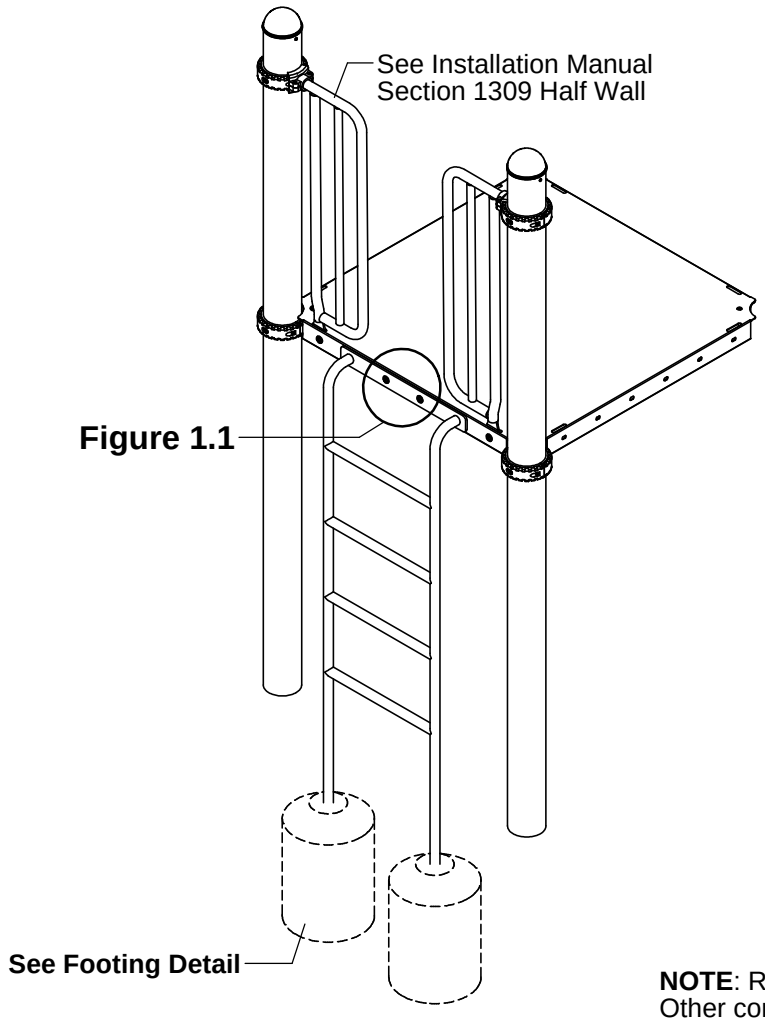
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 1309 Half Wall installation instructions.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Vertical Ladder



NOTE: R5 5' Vertical Ladder shown. Other configurations will vary slightly, but does not affect assembly.

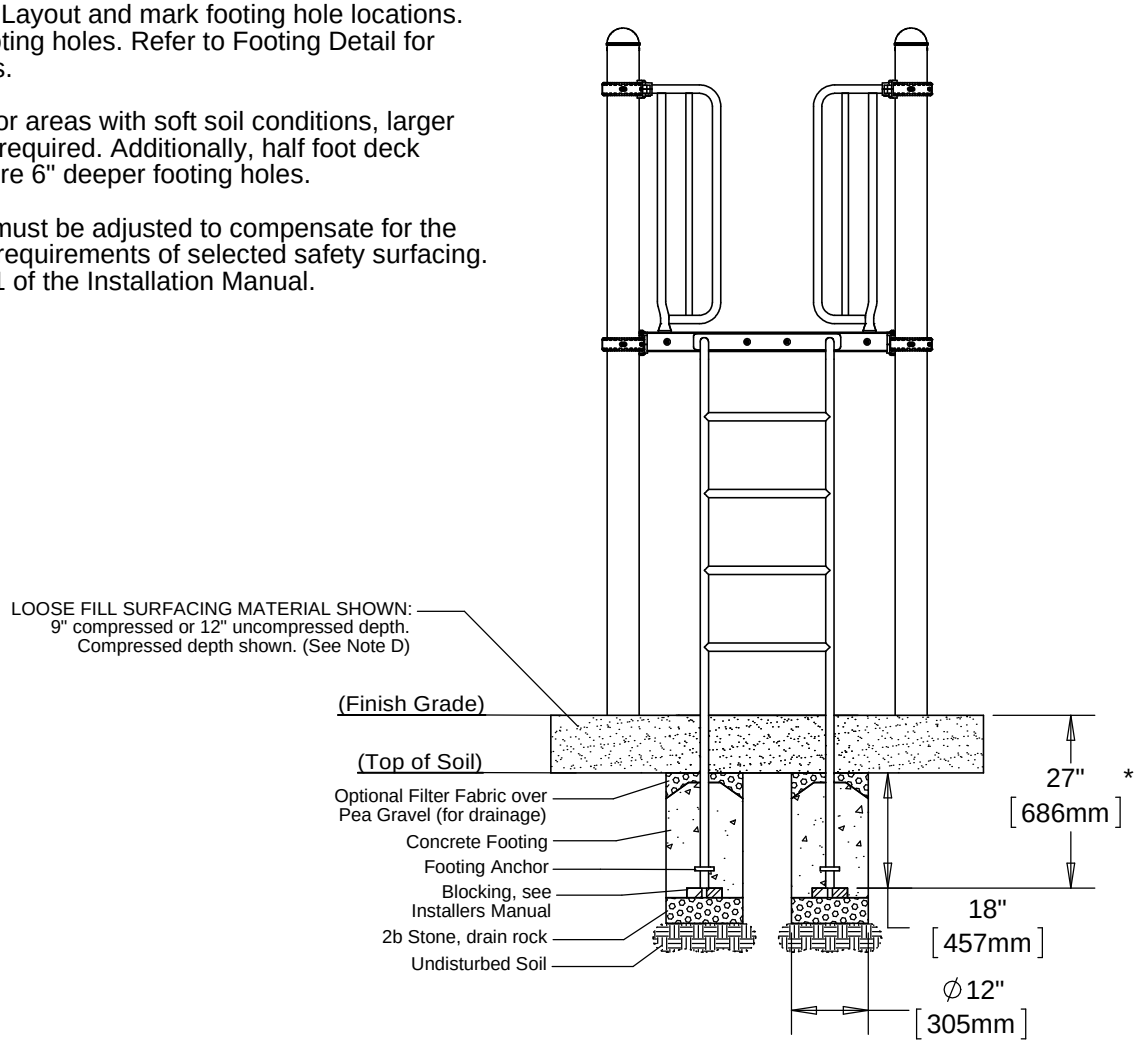
Step 1

Refer to Footing Layout and mark footing hole locations. Dig (2) Ø 12" footing holes. Refer to Footing Detail for depth and details.

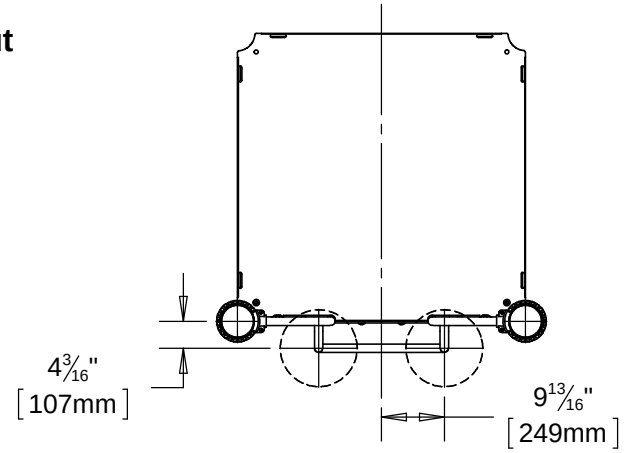
IMPORTANT: For areas with soft soil conditions, larger footings may be required. Additionally, half foot deck heights will require 6" deeper footing holes.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Footing Detail



Top View - Footing Layout



Step 2

Attach Half Walls to Deck. Place Vertical Ladder into footing holes and attach to deck as shown in Figure 1.1. (See Notes A & C)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 5

Place required protective surfacing under and around Vertical Ladder. (See Note D)

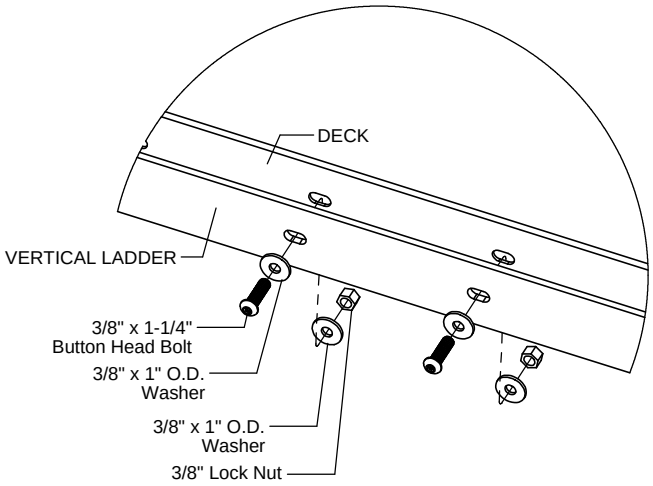


Figure 1.1

Parts List

Part #	DESCRIPTION	QTY.
Varies	Vertical Ladder	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413002	Nut Lock 3/8"	2

Specifications

VERTICAL LADDER:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.315" O.D. 12 gauge steel rungs and 1/4" thick steel mounting plate. The Vertical Ladder shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

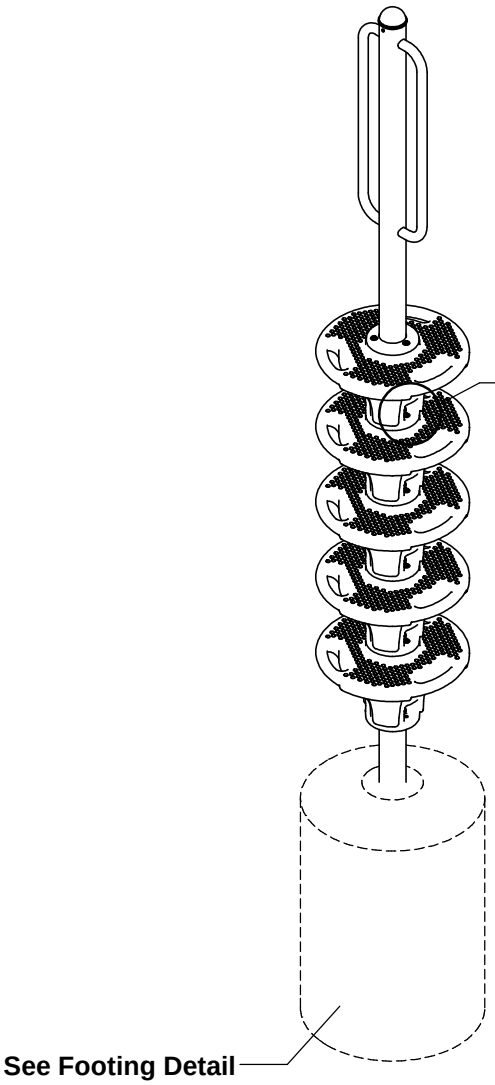
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) The maximum distance from center of post footing to center of deck face is 21" [533 mm] or 34" [864 mm] between center of post footings. Additionally, all handles must point towards each other or towards a conjunctive deck.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Disc Climber



NOTE: 5 Step Disc Climber shown. Other configurations will vary slightly, but does not affect assembly.

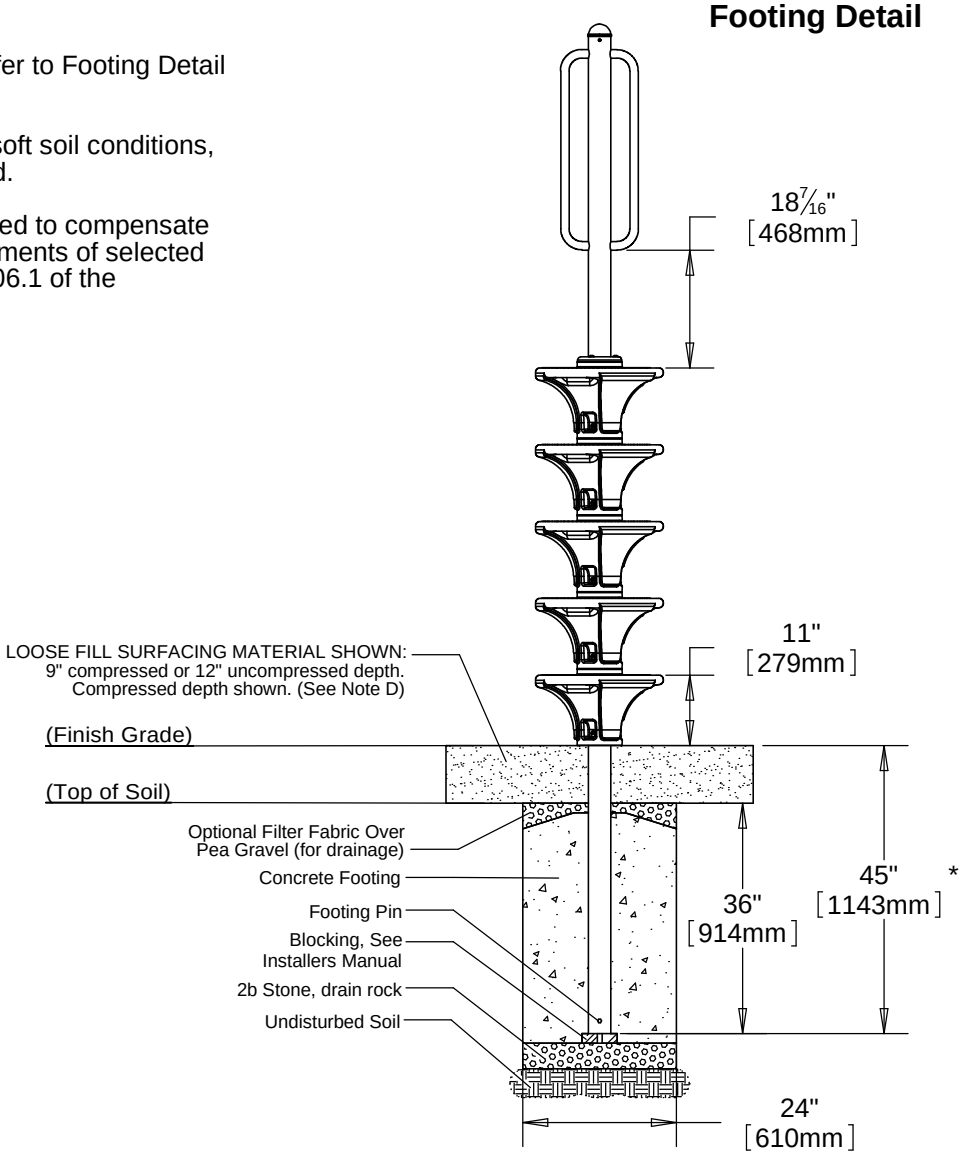
Step 1

Dig (1) Ø 24" footing hole. Refer to Footing Detail for depth and details.

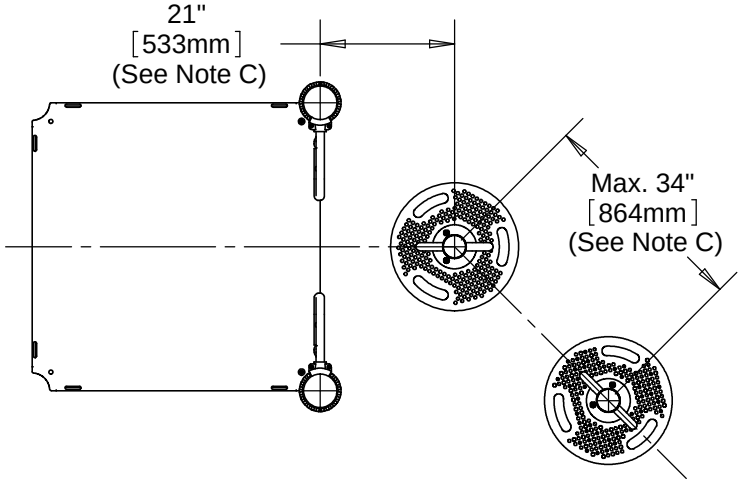
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Footing Detail



Top View
Footing Layout Requirements



Step 2 (Factory Assembled)

Attach Dome Post Cap to Disc Climber Post as shown in Figure 2.

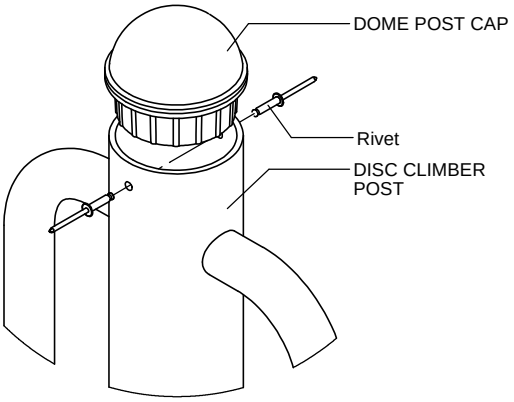


FIGURE 2

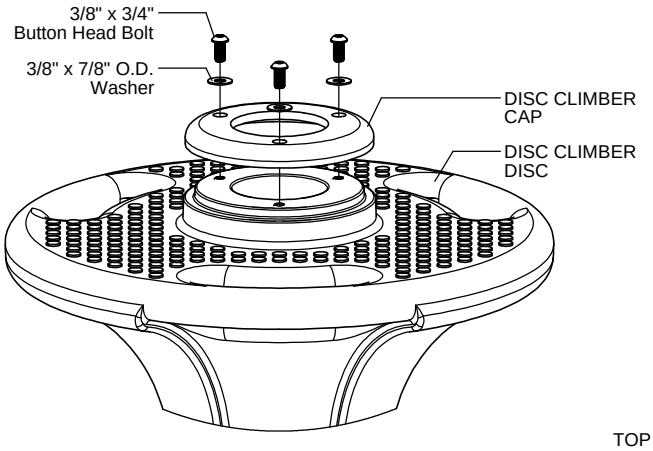


FIGURE 3

Step 3 (Factory Assembled)

Attach Disc Climber Cap to top Disc Climber Disc as shown in Figure 3. (See Note A)

Step 4 (Factory Assembled)

Starting with the top Disc Climber, slide Discs onto Disc Climber Post as shown in Figure 4.

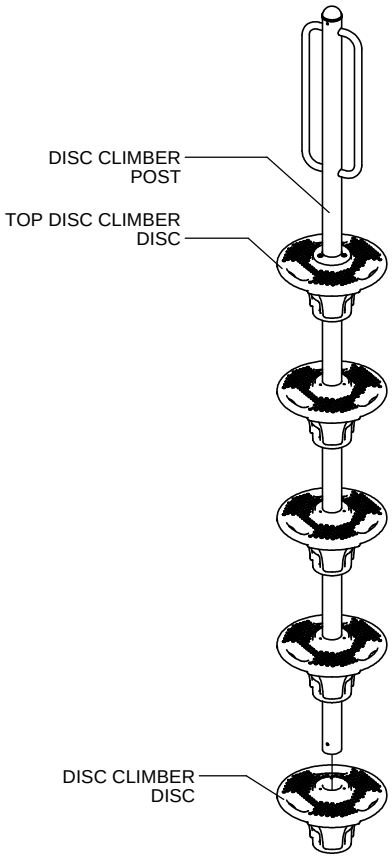


FIGURE 4

Step 5 (Factory Assembled)

FOR EACH ADDITIONAL DISC

Attach Disc Climber Disc to Disc Climber Disc as shown in Figure 1.1. (See Note A)

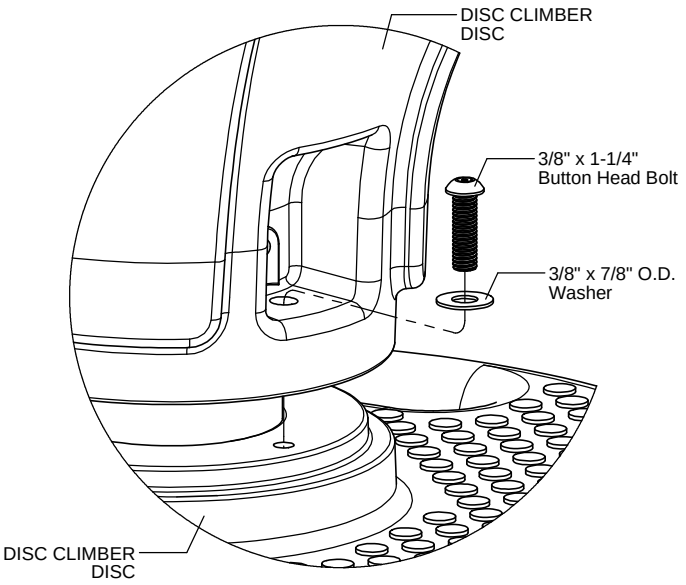


Figure 1.1

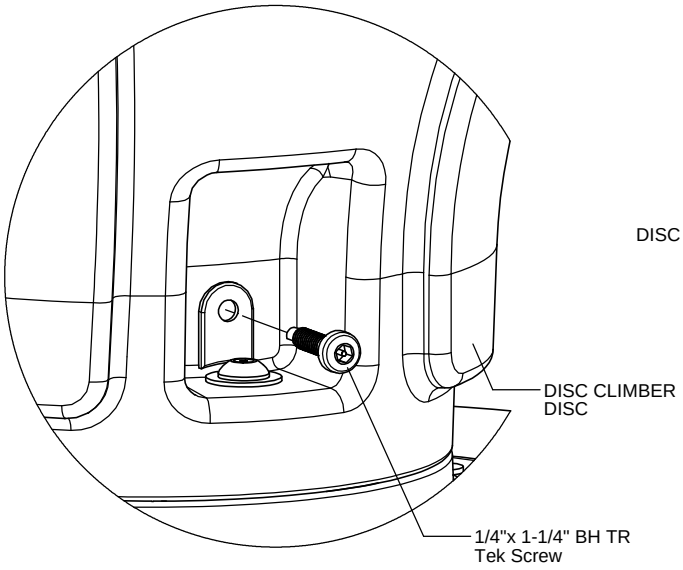


Figure 1.2

Step 6 (Factory Assembled)

Refer to Top View for orientation of handles to top Disc Climber Disc and position as shown in Footing Detail. Secure Disc Climber Disc(s) to Disc Climber Post as shown in Figure 1.2.

Step 7

Install Anchor Pin to Disc Climber Post and place into footing hole as shown in Figure 5. (See Notes A, B, & C)

Step 8

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 9

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 10

Place required protective surfacing under and around Disc Climber. (See Note D)

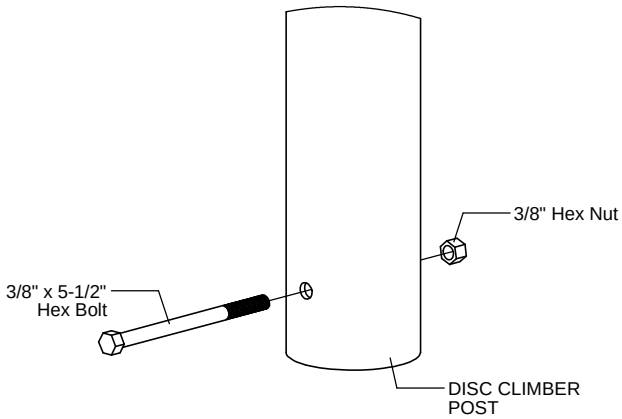


FIGURE 5

Assembled Parts List

1 DISC ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
DE-4373	Disc Climber Disc	1
EG-4442	Disc Climber Cap	1
FS-1233-1	Disc Climber Post 12"	1
GG-8135	Post Cap R3.5 Dome	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	3
9333042	Washer Flat 3/8" x 7/8" O.D.	3
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

2 DISC ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
DE-4373	Disc Climber Disc	2
EG-4442	Disc Climber Cap	1
FS-1233-2	Disc Climber Post 24"	1
GG-8135	Post Cap R3.5 Dome	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	3
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	6
9333042	Washer Flat 3/8" x 7/8" O.D.	6
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

3 DISC ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
DE-4373	Disc Climber Disc	3
EG-4442	Disc Climber Cap	1
FS-1233-3	Disc Climber Post 36"	1
GG-8135	Post Cap R3.5 Dome	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	6
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	9
9333042	Washer Flat 3/8" x 7/8" O.D.	9
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

4 DISC ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
DE-4373	Disc Climber Disc	4
EG-4442	Disc Climber Cap	1
FS-1233-4	Disc Climber Post 48"	1
GG-8135	Post Cap R3.5 Dome	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	9
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	12
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

5 DISC ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
DE-4373	Disc Climber Disc	5
EG-4442	Disc Climber Cap	1
FS-1233-5	Disc Climber Post 60"	1
GG-8135	Post Cap R3.5 Dome	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	15
9333042	Washer Flat 3/8" x 7/8" O.D.	15
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

6 DISC ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
DE-4373	Disc Climber Disc	6
EG-4442	Disc Climber Cap	1
FS-1233-6	Disc Climber Post 72"	1
GG-8135	Post Cap R3.5 Dome	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	15
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	18
9333042	Washer Flat 3/8" x 7/8" O.D.	18
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

Parts List

Part #	DESCRIPTION	QTY
9123231	Bolt Hex 3/8" x 5-1/2"	1
9483602	Nut Hex 3/8"	1

Specifications

DISC CLIMBER CAP:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV protection and color retention.

DISC CLIMBER DISC:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

DISC CLIMBER POST:
Shall be fabricated using 3.5" O.D. 8 gauge steel tubing with welded 1.315" O.D. 12 gauge steel handles. The Disc Climber Post shall have a multi-stage baked-on powder coat finish.

POST CAP R3.5 DOME:
Shall be precision die cast from a high-strength aluminum alloy. The Post Cap R3.5 Dome shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

ROTO FREE FORM CLIMBER

R5 - 1238

Assembly View

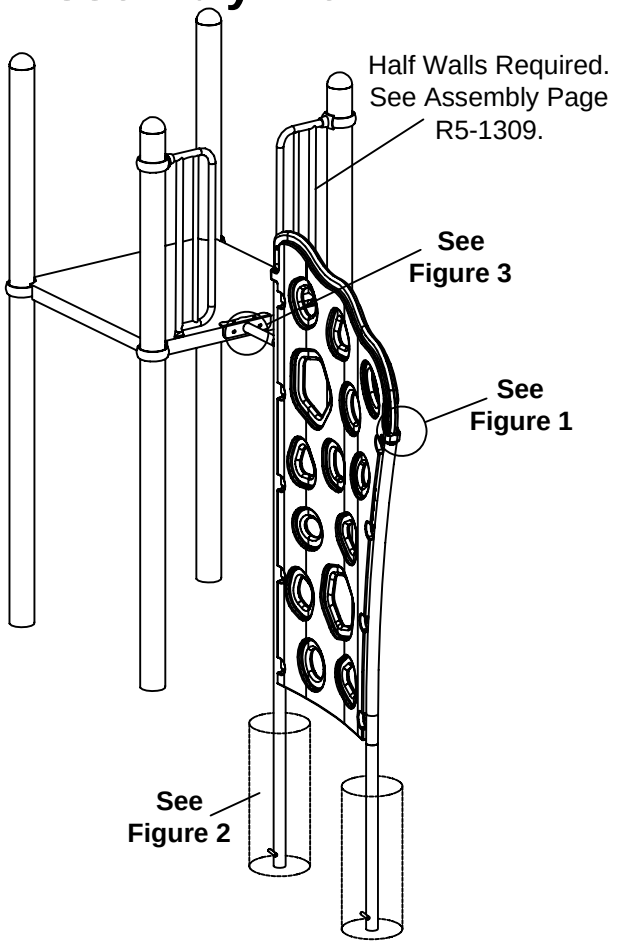


Figure 1

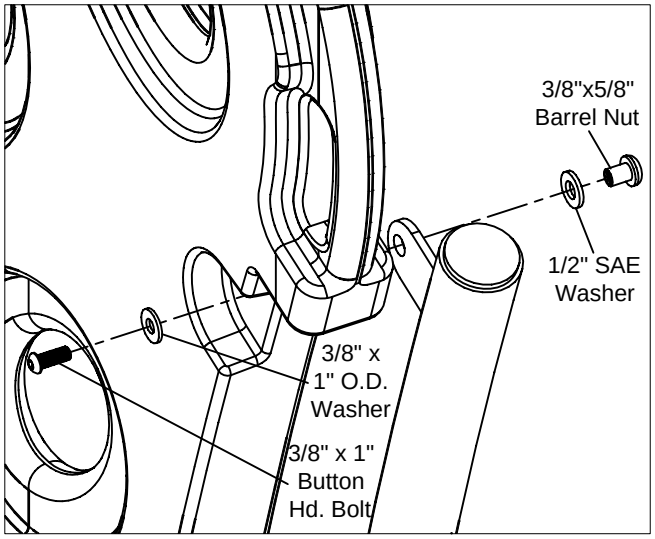
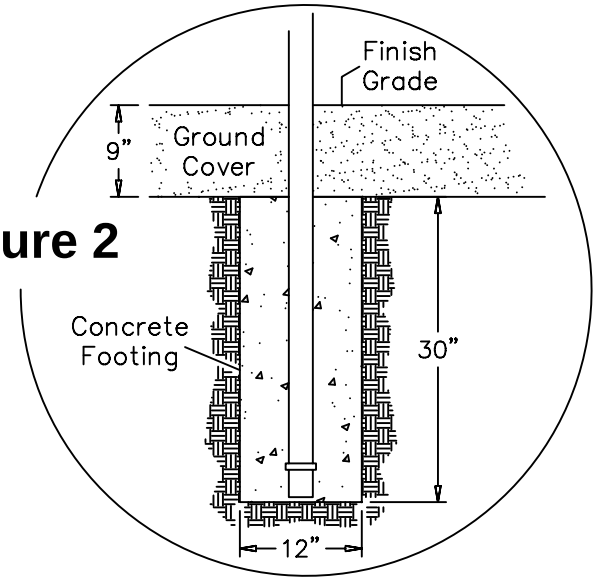


Figure 2



Plan View

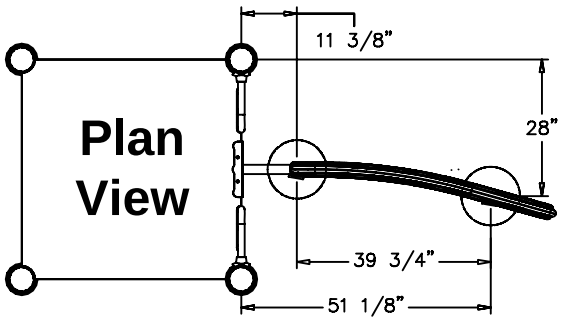
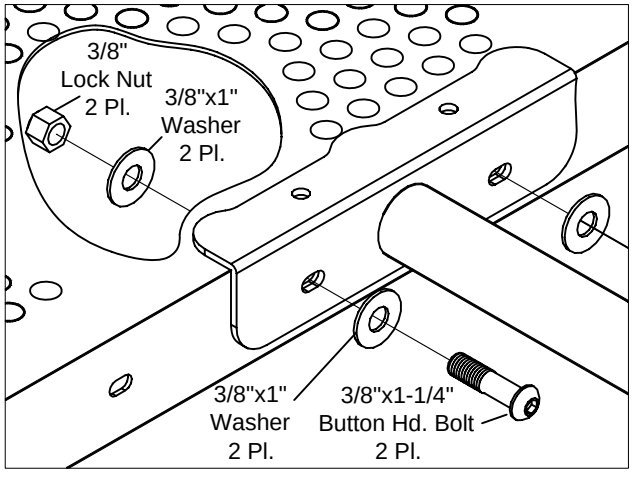


Figure 3



Parts List

QTY.	DESCRIPTION	PART #
1	ROTO Free Form Climb Wall	4705
1	Free Form Climber Legs	FS-1238
9	3/8" x 1" Button Hd. Bolts	9103052-TR
2	3/8" x 1-1/4" Button Hd. Bolts	9103062-TR
13	3/8" x 1" O.D. Washers	9333002
9	1/2" SAE Washers	9345002
2	3/8" Lock Nuts	9413002
9	3/8" x 5/8" Barrel Nuts	9443022-TR

Specifications

FREE FORM CLIMBER:
Shall be made from hot compounded LLDPE plastic.

CLIMBER LEGS:
Shall be made of 2.375" O.D., 10 gage steel tubing with welded deck mount and brackets. Deck mount will be made of 1.315" O.D., 12 gage steel tube with welded .25" thick HR steel bracket.

HARDWARE:
Shall be zinc/nickel plated, galvanized or stainless steel as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts.
A periodic inspection of all parts is necessary.
If a part is broken or worn, replace immediately.

Installation

Notes:
(A) Half Walls are required for this assembly. Refer to Assembly Page R5-1309.

(B) Use liquid thread lock (such as Loctite) with all threaded hardware not including self-locking nuts

Step 1.
Attach Climber Legs to Climb Wall as shown in Figure 1.

Step 2.
Dig (2) 12" Dia. footing holes approx. 30" deep (See Figure 2). See Plan View for locations.

Step 3.
Place assembled Free Form Climber into footing holes and attach to deck face as shown in Figure 3.

Step 4.
Pour concrete footings and allow concrete to cure for 72 hours before continuing.

Step 5.
Fully tighten all fasteners.

IMPORTANT NOTES: Read First

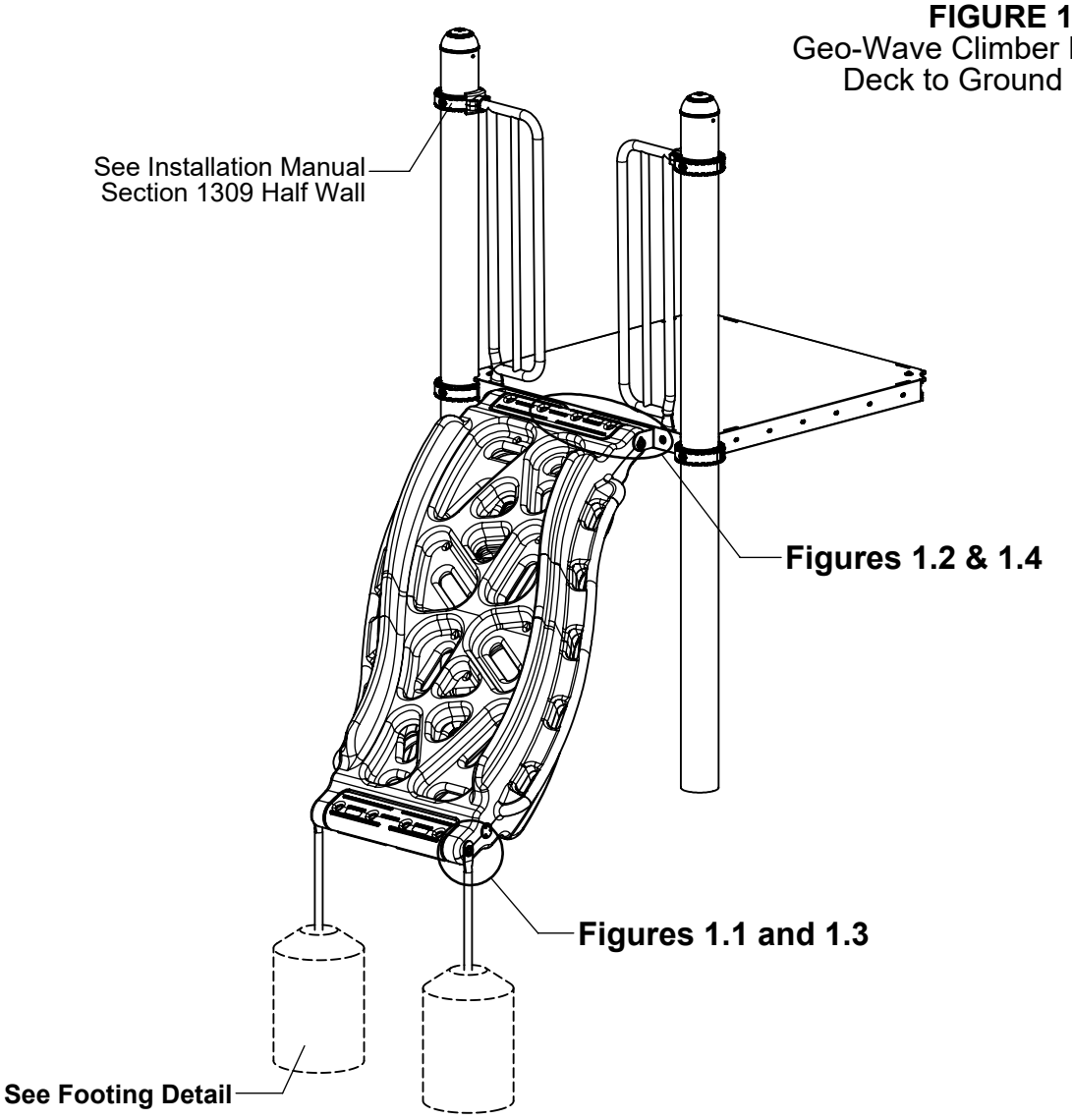
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 1309 Half Wall assembly instructions.

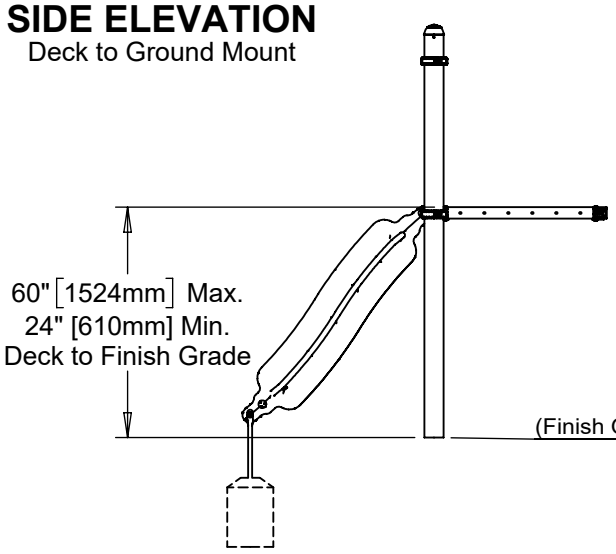
(D) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Geo-Wave Climber Horizontal
Deck to Ground Mount

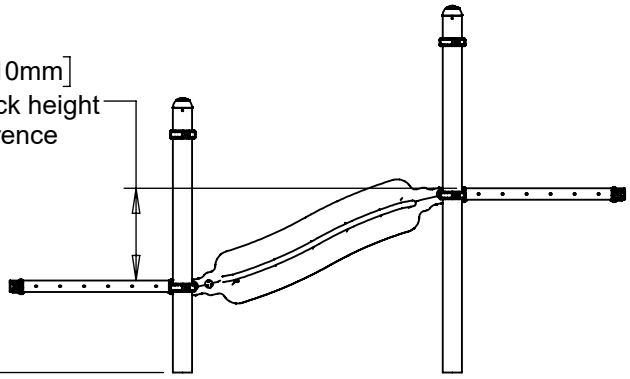


NOTE: R5 4' deck height ground mount shown. Other configurations will vary slightly but does not affect assembly.

SIDE ELEVATION
Deck to Ground Mount



SIDE ELEVATION
Deck to Deck Mount



Footing Distance Table Center of Post to Center of Footing		
Deck Height	X (in.)	X (mm)
24"	69-7/8	1774
30"	68-1/8	1730
36"	65-3/4	1670
42"	62-11/16	1592
48"	58-13/16	1495
54"	54	1372
60"	47-7/8	1216

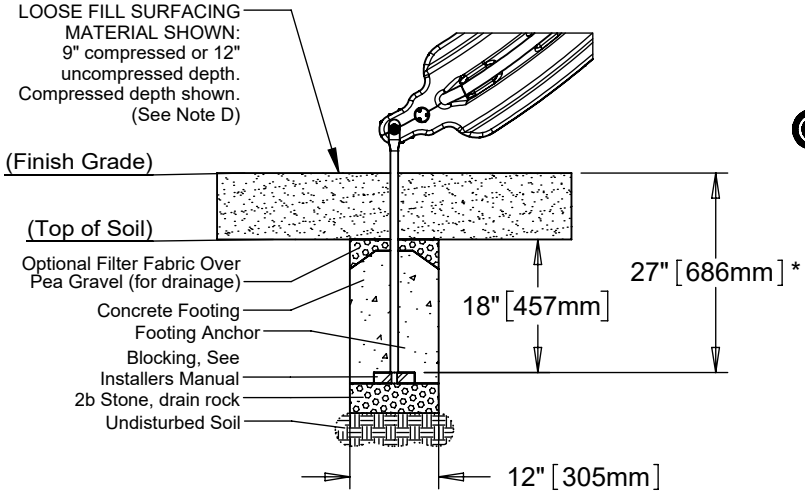
Step 1
For Deck to Ground Mount Only

Refer to Footing Layout and mark footing hole locations.3
Dig 2 Ø 12" footing holes. Refer to Footing Detail for depth and details.

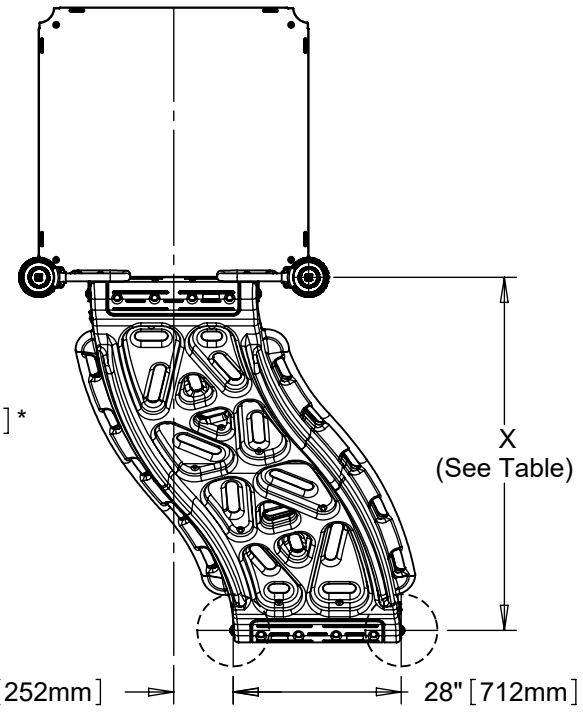
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Footing Detail



Top View - Footing Layout



Step 2 (Factory Assembled)

Plug vent holes at each end using the Vent Plugs as shown in Figure 1.1.

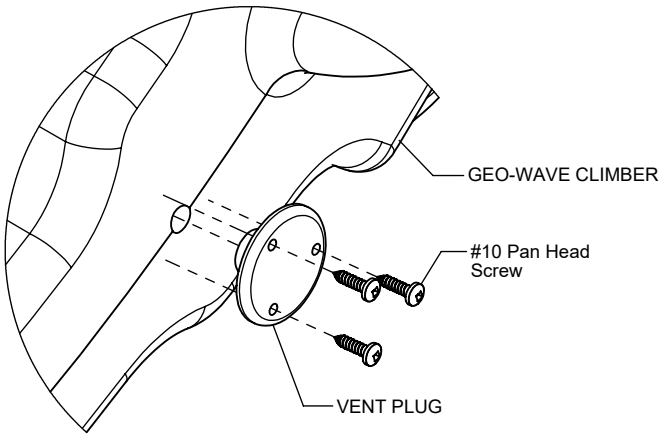


Figure 1.1

Step 3

Attach Half Walls to decks. (See Note C)

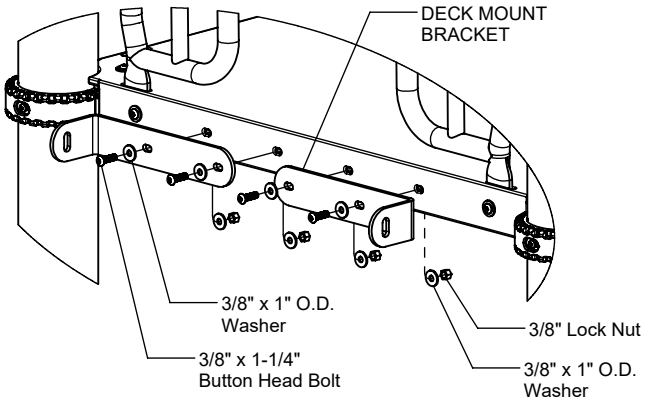


Figure 1.2

Step 4

Attach Deck Mount Brackets to deck as shown in Figure 1.2. (See Note A)

Step 5 (For JPFA Only)

Attach Deck Mount Brackets and Horizantal Geo-Wave Deck Filler to deck as shown in Figure 2. (See Note A)

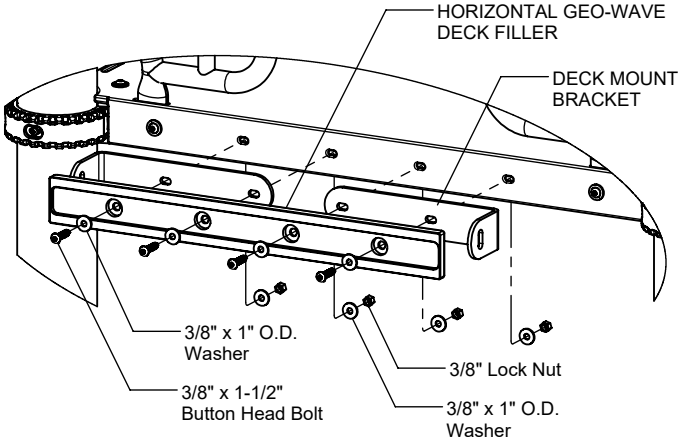


FIGURE 2

Step 6
For Deck to Ground Mount Only

Attach Geo-Wave Climber Legs to Geo-Wave Climber as shown in Figure 1.3. Place Geo-Wave Climber Legs into footing holes. (See Notes A & B)

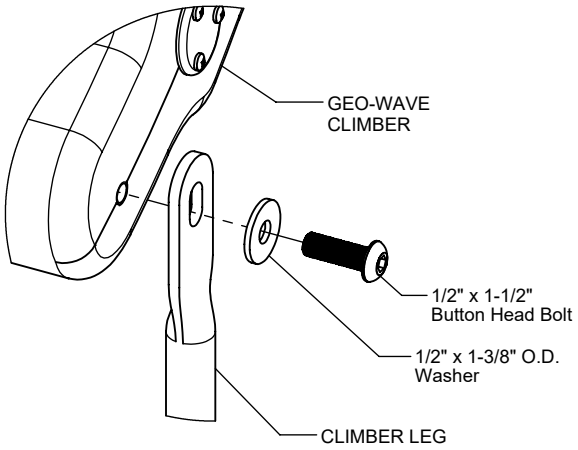


Figure 1.3

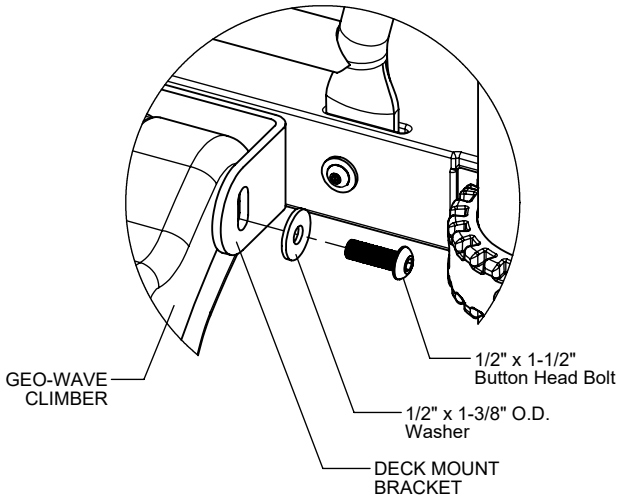


Figure 1.4

Step 7

Attach Geo-Wave Climber to Deck Mount Brackets as shown in Figure 1.4. (See Note A)

Step 8

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 9

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 10

Place appropriate compliant protective surfacing under and around Geo-Wave Climber. (See Note D)

Parts List

DECK TO DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-4820	Geo-Wave Deck Mount Bracket	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9105072	Bolt Button Head 1/2" x 1-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	16
9335062-5	Washer Flat 1/2" x 1-3/8" OD	4
9413002	Nut Lock 3/8"	8

DECK TO GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-4820	Geo-Wave Deck Mount Bracket	2
FS-1249-DGH	Geo-Wave Climber Deck-Ground-Horizontal Leg	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9105072	Bolt Button Head 1/2" x 1-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9335062-5	Washer Flat 1/2" x 1-3/8" OD	4
9413002	Nut Lock 3/8"	4

DECK TO GROUND MOUNT JAPAN		
Part #	**DESCRIPTION**	**QTY**
BE-4820	Geo-Wave Deck Mount Bracket	2
EE-0656	Horizontal Geo-Wave Deck Filler	1
FS-1249-DGH	Geo-Wave Climber Deck-Ground-Horizontal Leg	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9105072	Bolt Button Head 1/2" x 1-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9335062-5	Washer Flat 1/2" x 1-3/8" OD	4
9413002	Nut Lock 3/8"	4

Assembled Parts List

Part #	DESCRIPTION	QTY
DE-4807	Geo-Wave Climber Horizontal	1
EE-4867	Geo-Wave Vent Plug	2
9251032	Screw SQ #10x3/4 DR PH SMS SS	6

Specifications

GEO-WAVE CLIMBER:
Shall be constructed of UV-stabilized, rotationally molded, linear low density polyethylene with an average double wall thickness of .250".

GEO-WAVE DECK MOUNT BRACKET:
Shall be formed from 1/4" thick sheet steel and will have a multi-stage baked-on powder coat finish.

GEO-WAVE CLIMBER LEG:
Shall be fabricated using 1.029" O.D. 14 Gauge steel tubing with formed 1/4" thick end tab and will have a multi-stage baked-on powder coating.

DECK FILLER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

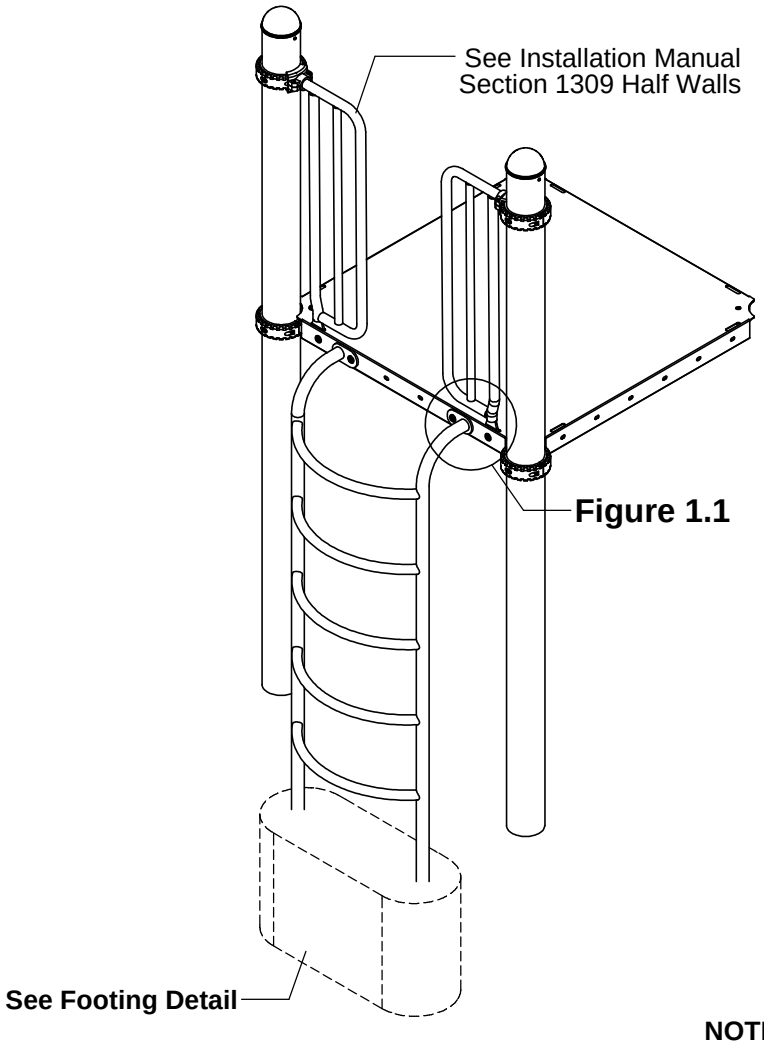
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual 1309 Half Wall assembly instructions.

(D) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Curved Rung Ladder



NOTE: R5 5' deck height shown. R3.5 will vary slightly but does not affect assembly.

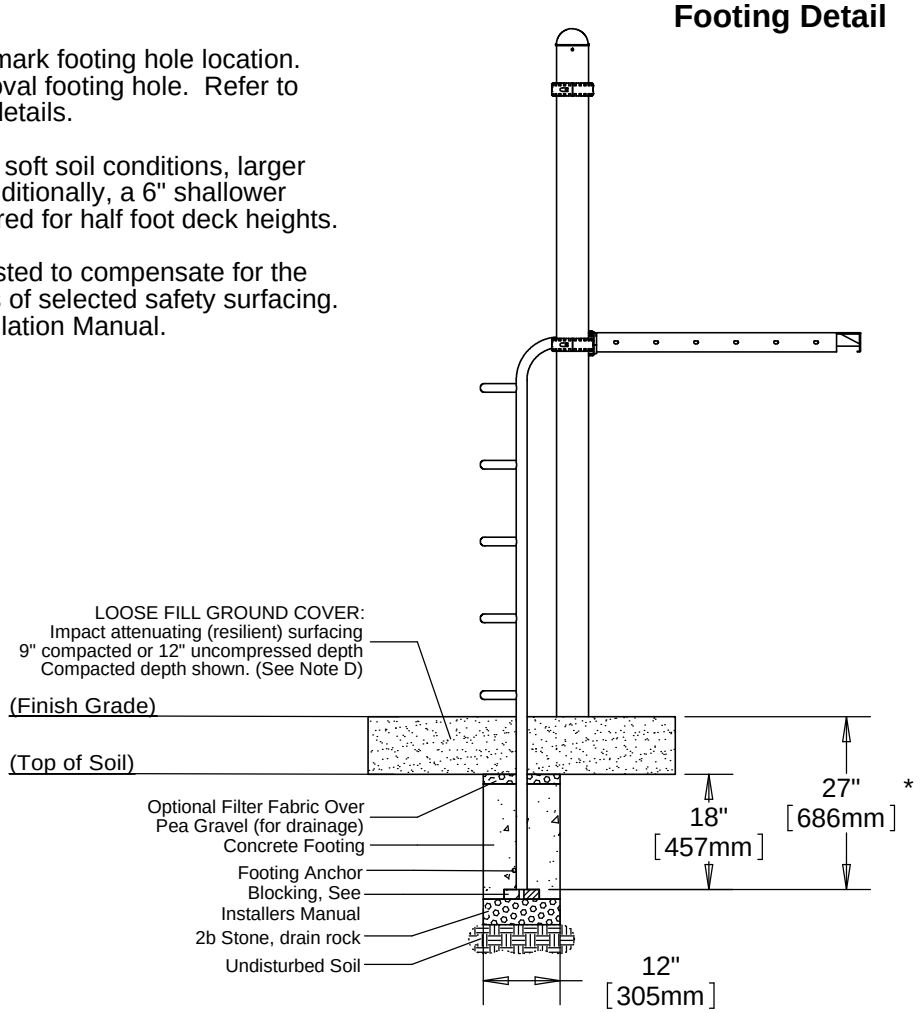
Step 1

Refer to Footing Layout and mark footing hole location. Dig (1) 12" x 32" x 18" deep oval footing hole. Refer to Footing Detail for depth and details.

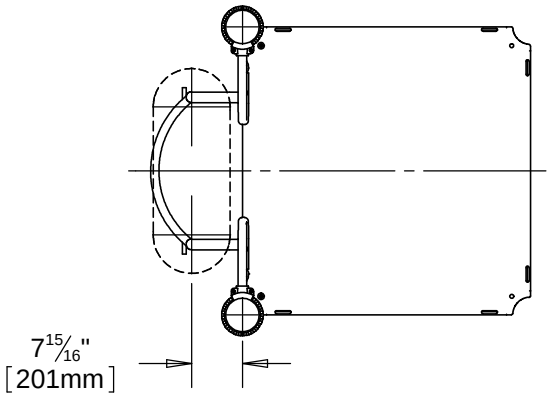
IMPORTANT: For areas with soft soil conditions, larger footings may be required. Additionally, a 6" shallower oval footing hole will be required for half foot deck heights.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Footing Detail



Top View - Footing Layout



Step 2

Attach Half Walls to deck. (See Note C)

Step 3

Place Curved Rung Ladder into footing hole and attach to deck as shown in Figure 1.1. (See Note A)

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 5

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 6

Place appropriate compliant protective surfacing under and around Curved Rung Ladder. (See Note D)

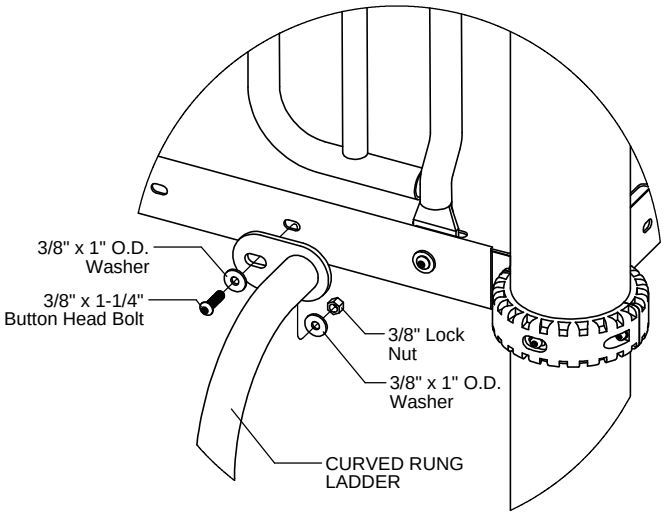


Figure 1.1

Specifications

CURVED RUNG LADDER:
Shall be fabricated using 1.660" O.D. 11 gauge steel tubing with welded 1/4" thick steel mounting plates and 1.315" O.D. 12 gauge steel rungs. The Curved Rung Ladder shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

Part #	DESCRIPTION	QTY
FS-1282	Curved Rung Ladder	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413002	Nut Lock 3/8"	2

Maintenance

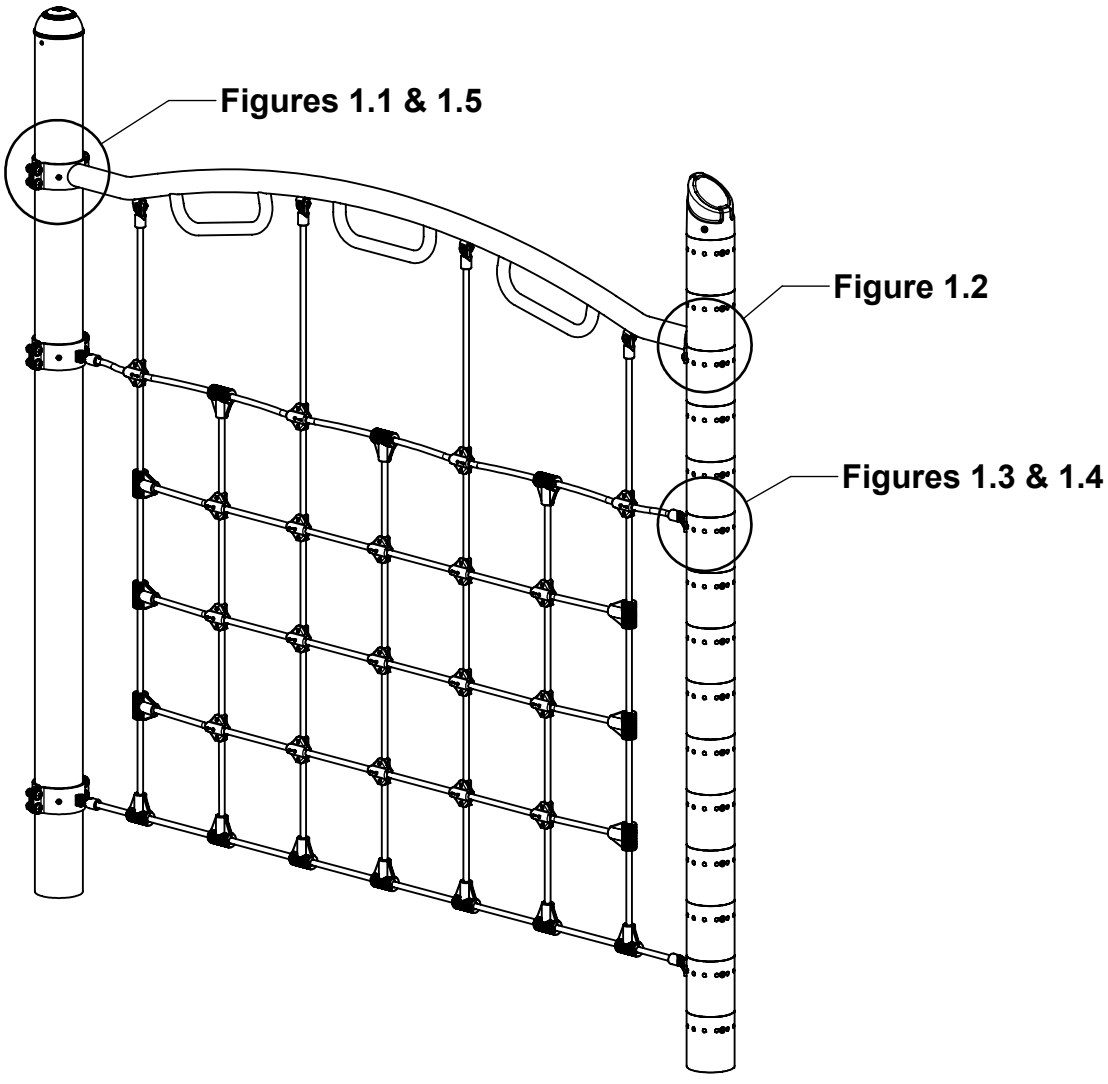
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Matrix Rope Net Wall



NOTE: Matrix Rope Net Wall RH5 shown. Other configurations will vary slightly, but does not affect assembly.

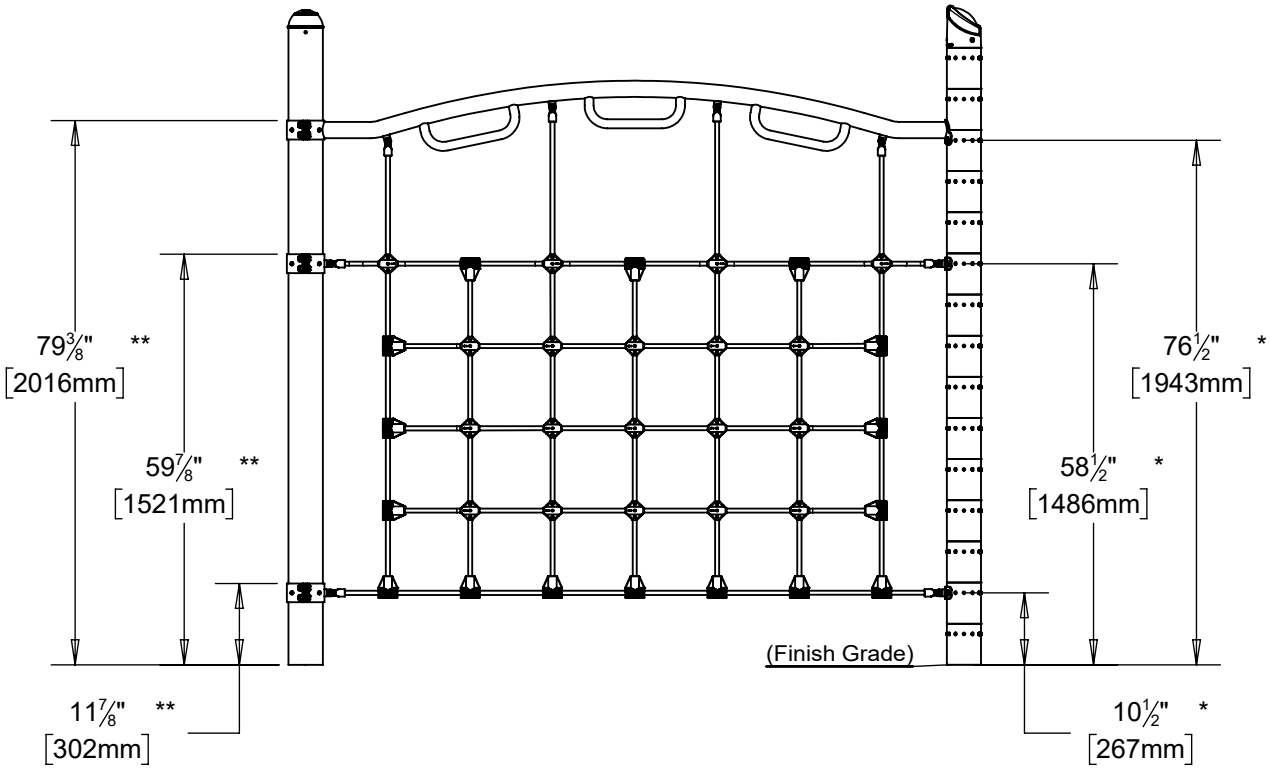
Step 1

Refer to Elevation View, locate Split Collars and mounting holes. Remove required Hole Plugs for assembly.

* Heights shown from finish grade to mounting hole.

** Heights shown from finish grade to top of collar.

Elevation View



Step 2

For R3.5, R5 & Hybrid Only

Locate Split Collar Halves, Matrix Rope Net Beam and Post Anchor Brackets at heights shown in Elevation View and attach to post as shown in Figure 1.1a or 1.1b. (See Note A)

R3.5

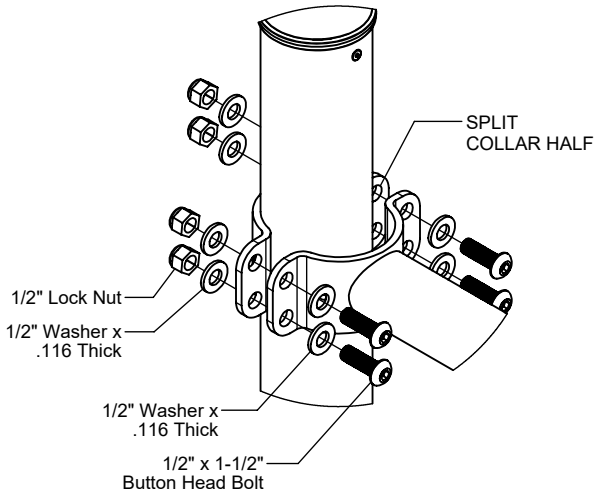


Figure 1.1a

R5

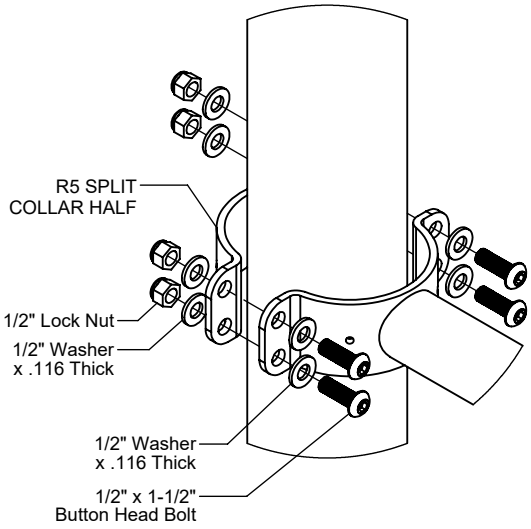


Figure 1.1b

Step 3

For Revolution & Hybrid Only

Locate Matrix Rope Net Beam at heights shown in Elevation View and attach to post as shown in Figure 1.2. (See Note A)

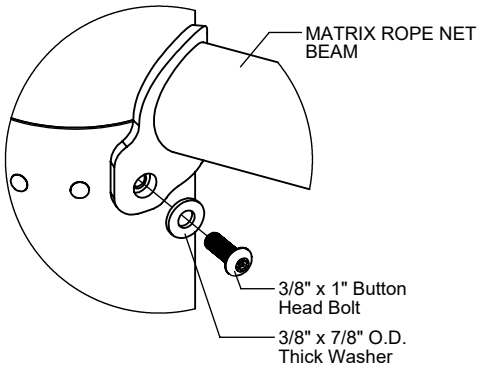


Figure 1.2

Step 4

For Revolution & Hybrid Only

Locate Post Anchor Brackets at heights shown in Elevation View and attach to post as shown in Figure 1.3. (See Note A)

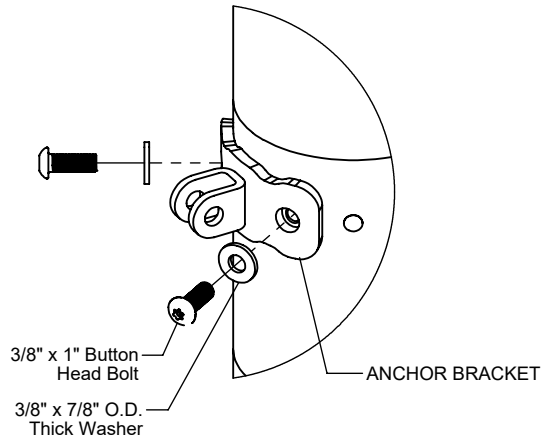


Figure 1.3

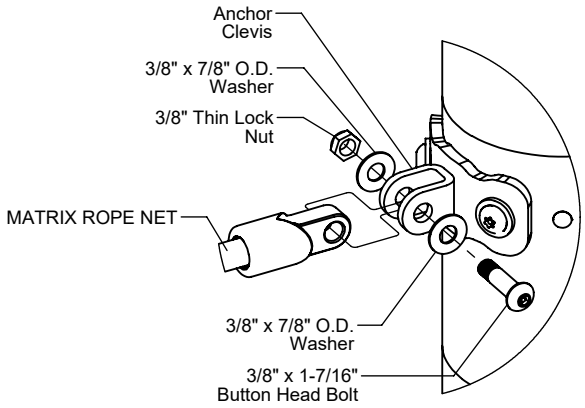


Figure 1.4

Step 5

Attach Matrix Rope Net to Post Anchor Brackets as shown in Figure 1.4. (See Note A)

NOTE: Revolution connection shown.

Step 6

For R3.5, R5 & Hybrid Only

Secure Split Collar Halves to post as shown in Figure 1.5. (See Note A)

Step 7

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 8

Place required protective surfacing under and around Matrix Rope Net Wall. (See Note B)

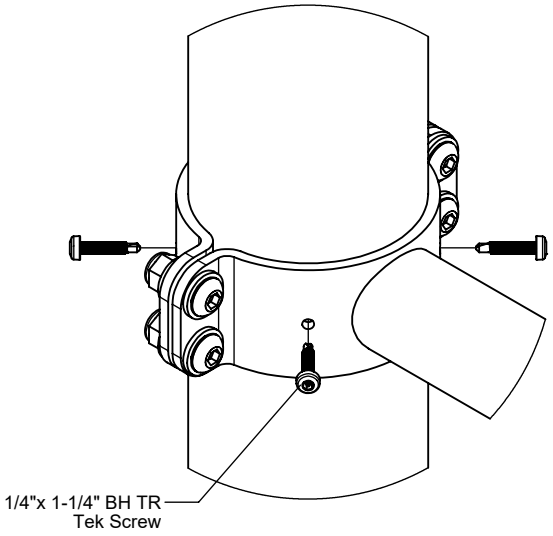


Figure 1.5

R3.5 Parts List

Part #	DESCRIPTION	QTY.
BG-8133	Split Collar Half R3.5	6
FS-1283-R35	Matrix Rope Net Beam R3.5	1
FS-1510-R35-A	Post Anchor Bracket R3.5	4
HG-0008	Matrix Rope Net R3.5	1
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	8
9105072	Bolt Button Head 1/2" x 1-1/2"	24
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	24
9333042	Washer Flat 3/8" x 7/8" O.D.	16
9335002	Washer Flat 1/2" (.116" thick)	48
9415132	Nut Lock 1/2"	24
9423002	Nut Lock Thin 3/8"	8

RH3.5 Parts List

Part #	DESCRIPTION	QTY.
BG-8133	Split Collar Half R3.5	3
FS-1283-RH35	Matrix Rope Net Beam RH3.5	1
FS-1510-R35-A	Post Anchor Bracket R3.5	2
FS-1510-RV-A	Post Anchor Bracket RV	2
HH-0005	Matrix Rope Net RH3.5	1
9103052-TR	Bolt Button Head 3/8" x 1"	6
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	8
9105072	Bolt Button Head 1/2" x 1-1/2"	12
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	12
9333042	Washer Flat 3/8" x 7/8" O.D.	16
9335002	Washer Flat 1/2" (.116" thick)	24
9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	6
9415132	Nut Lock 1/2"	12
9423002	Nut Lock Thin 3/8"	8

RV Parts List

Part #	DESCRIPTION	QTY
FS-1283-RV	Matrix Rope Net Beam RV	1
FS-1510-RV-A	Post Anchor Bracket RV	4
HH-0001	Matrix Rope Net RV	1
9103052-TR	Bolt Button Head 3/8" x 1"	12
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	8
9333042	Washer Flat 3/8" x 7/8" O.D.	16
9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	12
9423002	Nut Lock Thin 3/8"	8

R5 Parts List

Part #	DESCRIPTION	QTY.
BF-7068	Split Collar Half R5	6
FS-1283-R5	Matrix Rope Net Beam R5	1
FS-1510-R5A	Post Anchor Bracket R5	4
HF-0011	Matrix Rope Net R5	1
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	8
9105072	Bolt Button Head 1/2" x 1-1/2"	24
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	24
9333042	Washer Flat 3/8" x 7/8" O.D.	16
9335002	Washer Flat 1/2" (.116" thick)	48
9415132	Nut Lock 1/2"	24
9423002	Nut Lock Thin 3/8"	8

RH5 Parts List

Part #	DESCRIPTION	QTY.
BF-7068	Split Collar Half R5	3
FS-1283-RH5	Matrix Rope Net Beam RH5	1
FS-1510-R5A	Post Anchor Bracket R5	2
FS-1510-RV-A	Post Anchor Bracket RV	2
HH-0001	Matrix Rope Net RV	1
9103052-TR	Bolt Button Head 3/8" x 1"	6
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	8
9105072	Bolt Button Head 1/2" x 1-1/2"	12
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	12
9333042	Washer Flat 3/8" x 7/8" O.D.	16
9335002	Washer Flat 1/2" (.116" thick)	24
9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	6
9415132	Nut Lock 1/2"	12
9423002	Nut Lock Thin 3/8"	8

Specifications

MATRIX ROPE NET BEAM RV:
Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1/4" thick steel mounting brackets, 3/16" thick steel anchors, and 1.315" O.D. 12 gauge steel handles. The Matrix Rope Net Beam RV shall have a multi-stage baked-on powder coat finish.

MATRIX ROPE NET BEAM RH5 & RH3.5:
Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1/4" thick steel mounting brackets and split collars, 3/16" thick steel anchors, and 1.315" O.D. 12 gauge steel handles. The Matrix Rope Net Beam RH5 and RH3.5 shall have a multi-stage baked-on powder coat finish.

MATRIX ROPE NET BEAM R5 & R3.5:
Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1/4" thick steel split collars, 3/16" thick steel anchors, and 1.315" O.D. 12 gauge steel handles. The Matrix Rope Net Beam R5 and R3.5 shall have a multi-stage baked-on powder coat finish.

MATRIX ROPE NET:
Shall be made from 16mm steel-reinforced rope with high-strength copolymer plastic intersection connectors and machined aluminum end ferrules.

POST ANCHOR BRACKET RV:
Shall be fabricated using a 1/4" thick steel mounting bracket with welded 3/16" thick steel anchor. The Post Anchor Bracket RV shall have a multi-stage baked-on powder coat finish.

POST ANCHOR BRACKET R5 & R3.5:
Shall be fabricated using a 1/4" thick steel split collar with welded 3/16" thick steel anchor. The Post Anchor Bracket R5 and R3.5 shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

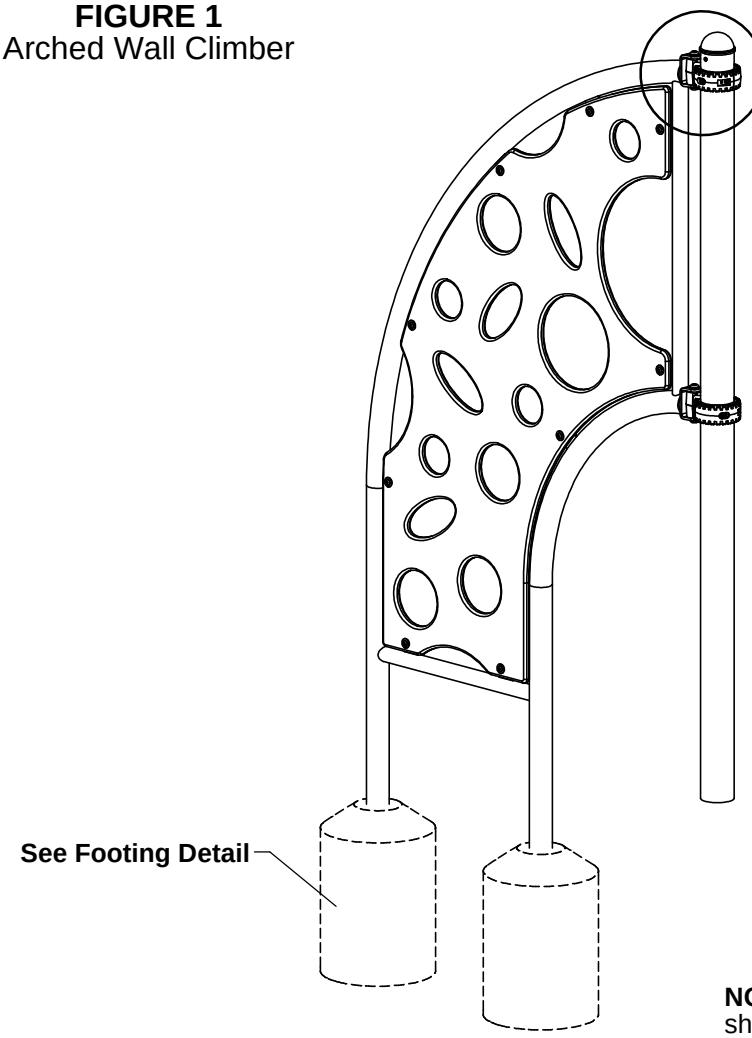
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 09 Collars assembly instructions.

(D) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Arched Wall Climber



NOTE: R3.5 Arched Wall Climber shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Refer to Footing Layout and mark footing hole locations. Dig (2) Ø 12" footing holes. Refer to Footing Detail for depth and details.

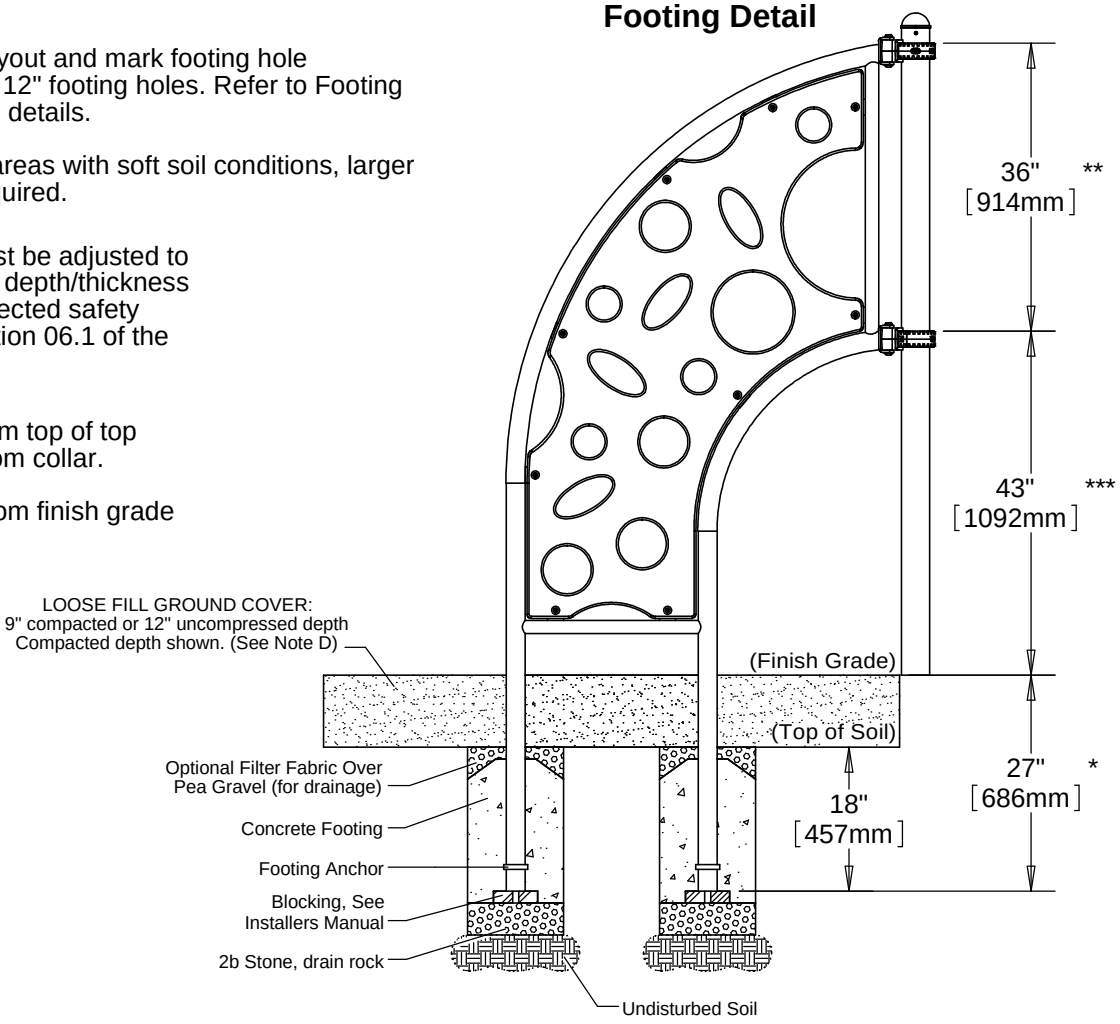
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

** Height shown from top of top collar to top of bottom collar.

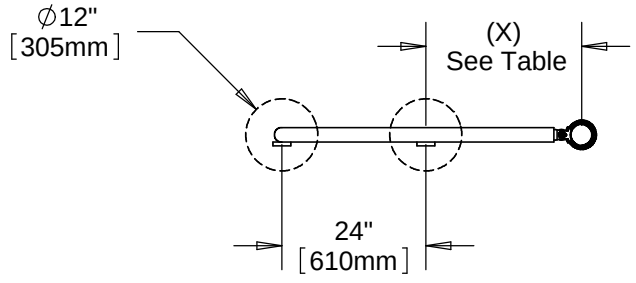
*** Height shown from finish grade to top of collar.

Footing Detail



Footing Distance Table	
Part No.	(X)
R5-1286	26 3/4" [679mm]
R35-1286	26"[660mm]

Footing Layout



Step 2

Locate and attach collars at heights shown in Footing Detail. (See Note C)

Step 3 (Factory Assembled)

Attach Arched Wall Climber Panel to Arched Wall Climber Frame as shown in Figure 2. (See Note A)

Step 4

Attach Arched Wall Climber Frame to collars as shown in Figure 1.1. (See Notes A & C)

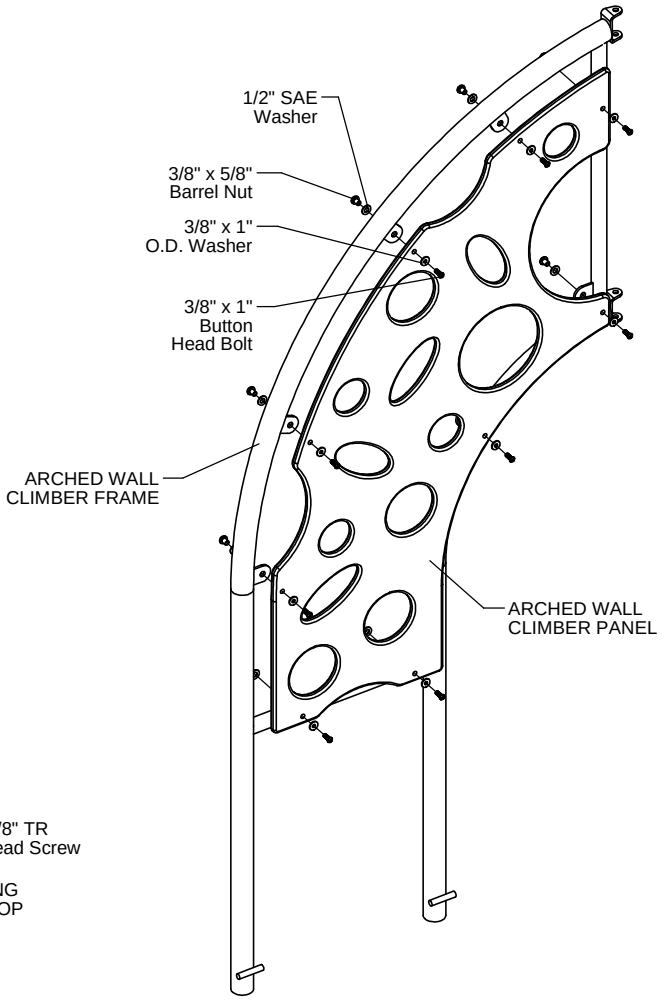


FIGURE 2

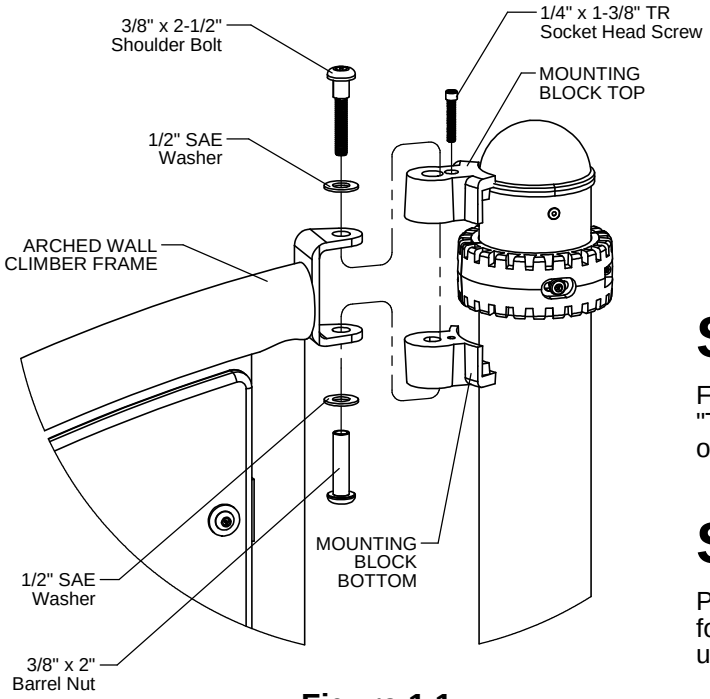


Figure 1.1

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 6

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 7

Place appropriate compliant protective surfacing under and around Arched Wall Climber. (See Note D)

Specifications

ARCHED WALL CLIMBER FRAME:
Shall be 2.375" O.D. 11 gauge curved steel legs with welded 1.660" O.D. steel connectors and 1/4" steel mounting tabs. Arched Wall Climber Frame shall have a multi-stage baked-on powder coat finish

ARCHED WALL CLIMBER PANEL:
Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

R5 Parts List

Part #	DESCRIPTION	QTY.
GF-7006-B	Mounting Block R5 Bottom	2
GF-7006-T	Mounting Block R5 Top	2
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	2
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	2

R3.5 Parts List

Part #	DESCRIPTION	QTY.
GG-8110	Mounting Block 4 Top R3.5	2
GG-8111	Mounting Block 4 Bottom R3.5	2
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	2
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	2

R5 & R3.5 Assembled Parts List

Part #	DESCRIPTION	QTY.
EE-0120	Arched Wall Climber Panel	1
FS-1286	Arched Wall Climber Frame	1
9103052-TR	Bolt Button Head 3/8" x 1"	9
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	9
9345002	Washer Flat SAE 1/2"	9
9443022-TR	Nut Barrel 3/8" x 5/8" BH	9

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

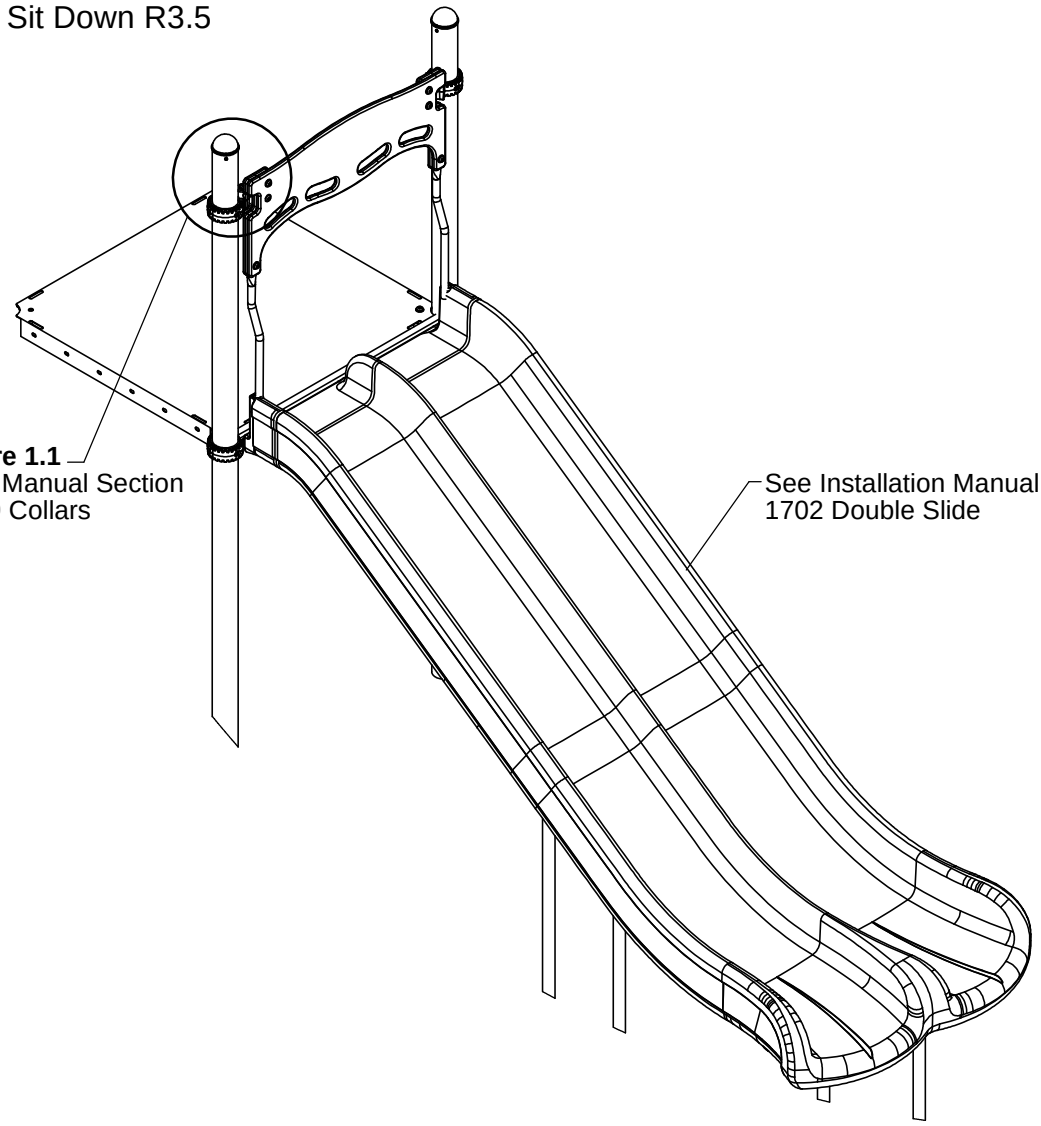
IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R3.5-09 Collars and 1702 Double Slide assembly instructions.

(C) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.

FIGURE 1
Double Sit Down R3.5



Step 1

Attach Double Slide to deck. (See Note B)

Step 2

Attach Back Panels and Double Sit Down Legs to Double Sit Down Panel as shown in Figure 2. (See Note A)

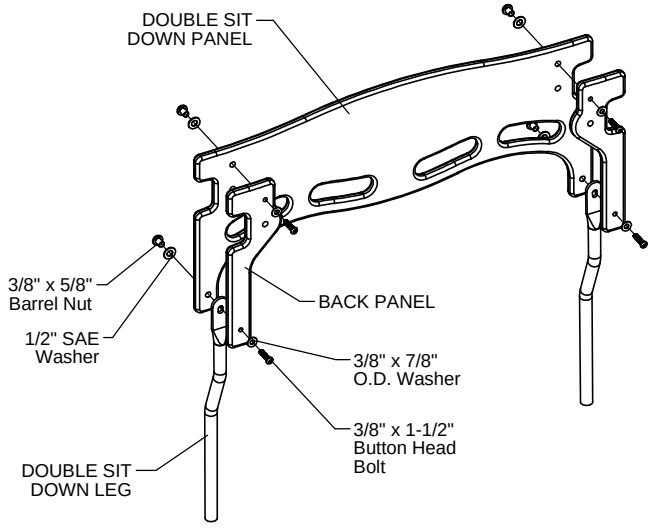
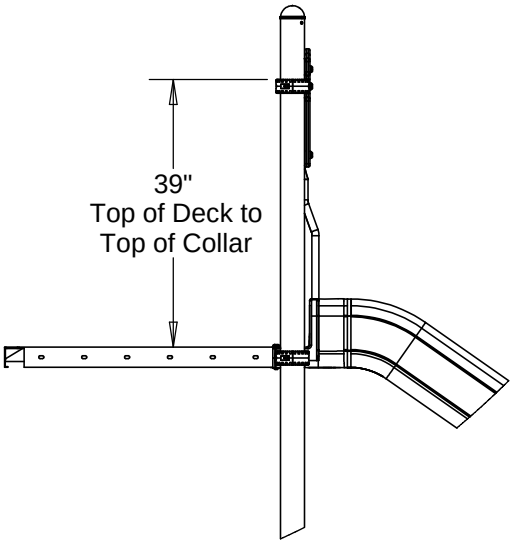


FIGURE 2



SIDE VIEW

Step 3

Attach collars at height shown in Side View. (See Note B)

Step 4

Insert ends of Double Sit Down Leg into Double Slide and attach Double Sit Down to collars as shown in Figure 1.1. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

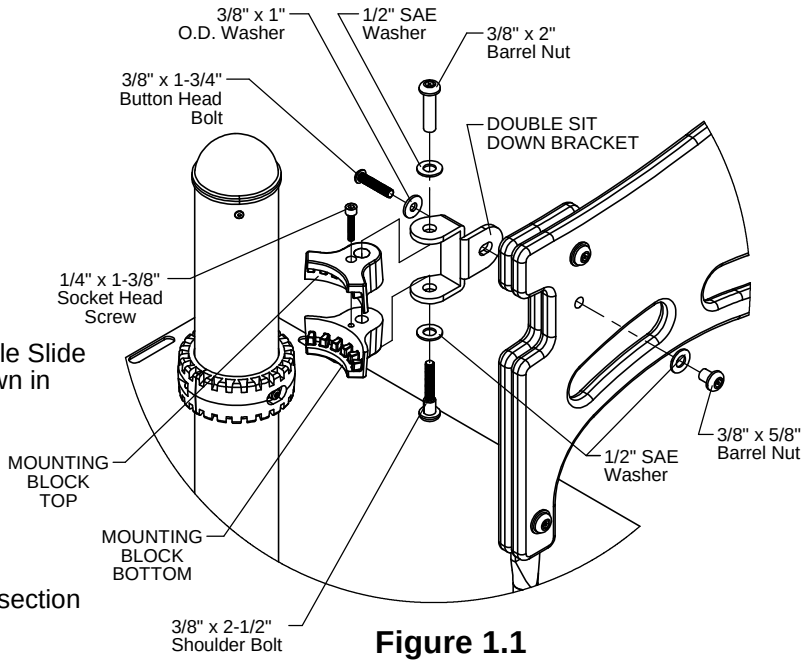


Figure 1.1

DOUBLE SIT DOWN R3.5

Specifications

DOUBLE SIT DOWN and BACK PANEL:
Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

DOUBLE SIT DOWN LEG:
Shall be fabricated from 1.029" O.D. 14 gauge steel tubing with a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

Part #	DESCRIPTION	QTY.
BG-8157	Sit Down Bracket Double R3.5	2
EG-8123	Sit Down Panel Double R3.5	1
EG-8123-L	Sit Down Back Panel Double LH	1
EG-8123-R	Sit Down Back Panel Double RH	1
FS-1305-R35	Sit Down Panel Double R3.5 - Leg	2
GG-8125	Mount Block 6 Top R3.5	2
GG-8127	Mounting Block 6 Bottom R3.5	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	2
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9281062-5	Screw Soc HD 1/4" x 1-3/8"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2
9333042	Washer Flat 3/8" x 7/8" O.D.	4
9345002	Washer Flat SAE 1/2"	10
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6
9443092-TR	Nut Barrel 3/8" x 2" BH	2

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

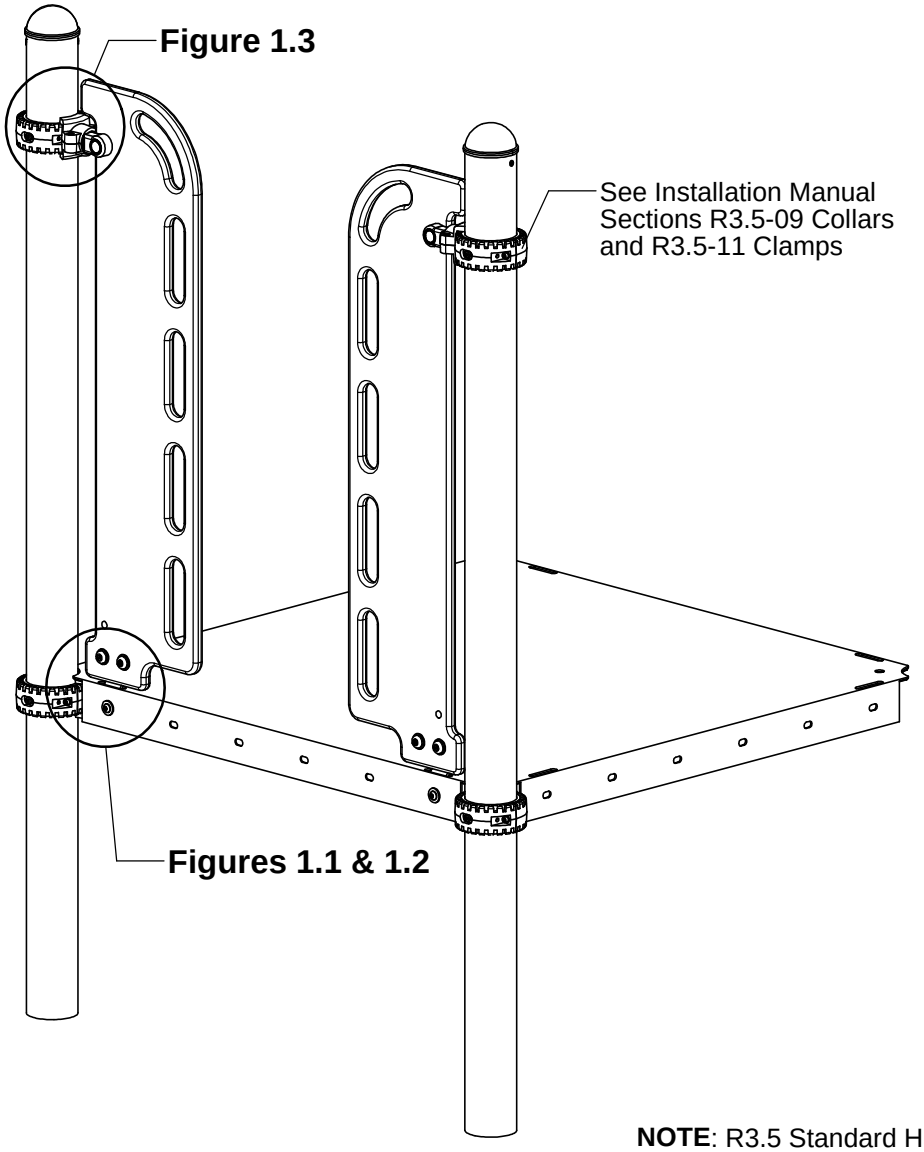
IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R3.5-09 Collars & R3.5-11 Socket Clamps installation instructions.

(C) All gaps created (e.g. between panels, between panel and deck, between panel and roof, etc.) must be less than 3-1/2" [89mm] or greater than 9" [229mm].

FIGURE 1
Half Wall



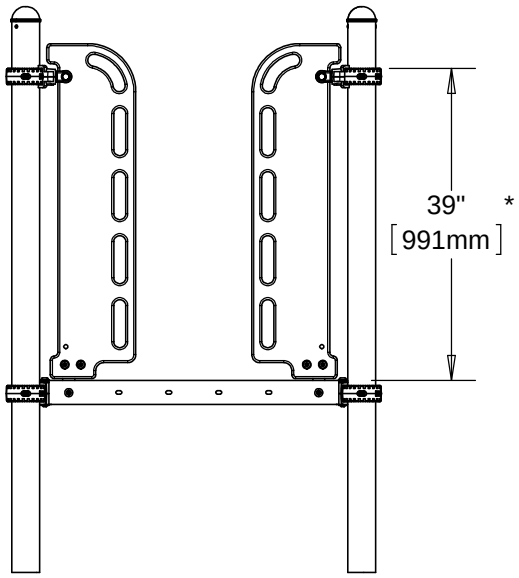
NOTE: R3.5 Standard Half Walls shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Referring to Elevation View, locate and attach collars at height shown.

* Height shown from top of deck to top of collar.

Elevation View



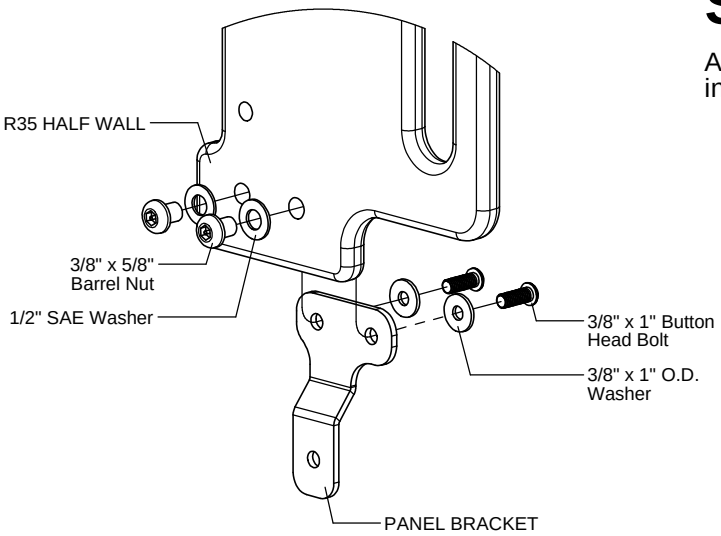


Figure 1.1

Step 2

Attach Panel Bracket to R3.5 Half Wall as shown in Figure 1.1. (See Note A)

Step 3

Attach Panel Bracket to deck as shown in Figure 1.2. (See Note A)

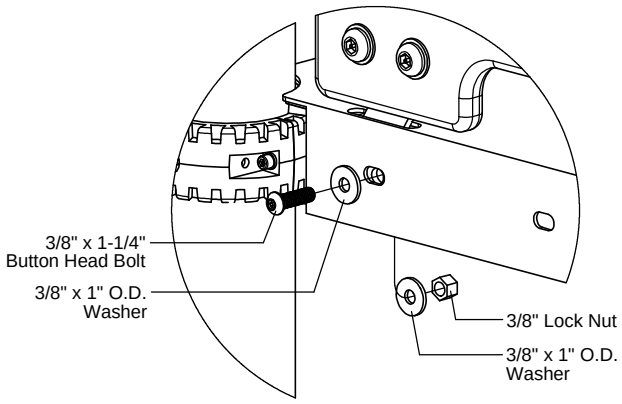


Figure 1.2

Step 4

Attach Half Wall to collar as shown in Figure 1.3. (See Notes A & B)

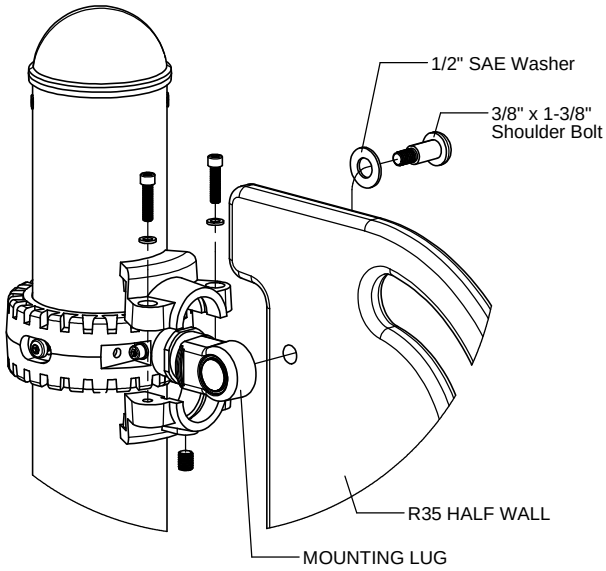


Figure 1.3

Parts List

Part #	DESCRIPTION	QTY
BE-0361-L	R35 Panel Bracket - Left	1
Varies	R3.5 Half Wall	1
GG-8113	Mounting Lug R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	1
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	3
9413002	Nut Lock 3/8"	1
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

Specifications

R3.5 HALF WALL:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

R3.5 PANEL BRACKET:
Shall be precision cut from 3/16" HR sheet steel. The R3.5 Panel Bracket shall have a multi-stage baked-on powder coat finish.

MOUNTING LUGS:
Shall be precision die-cast from a high-strength aluminum alloy. The Mounting Lugs have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

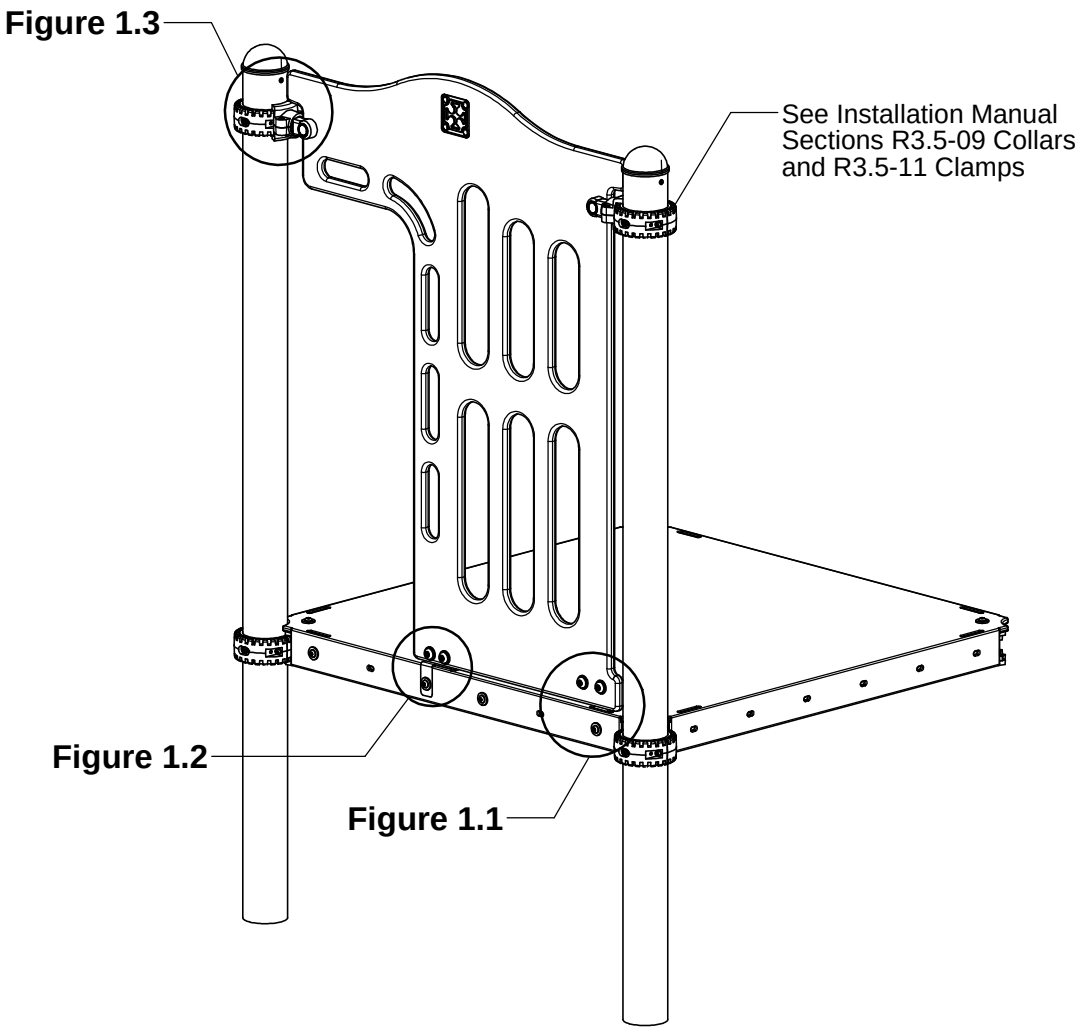
IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R3.5-09 Collars and R3.5-11 Socket Clamps installation instructions.

(C) All gaps created (e.g. between panels, between panel and deck, between panel and roof, etc.) must be less than 3-1/2" [89mm] or greater than 9" [229mm].

FIGURE 1
R3.5 Wall Access



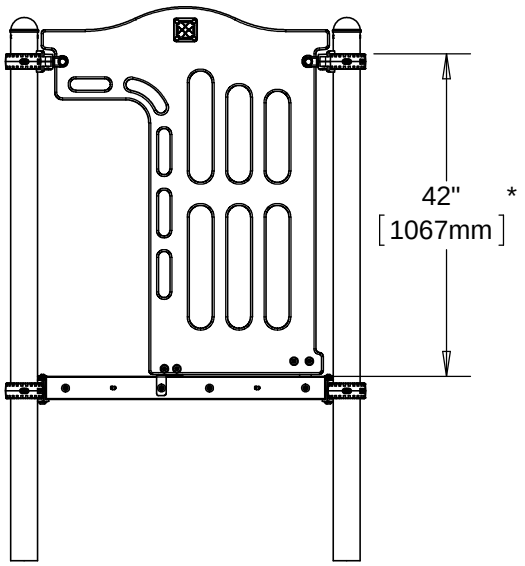
NOTE: R3.5 Access Panel Left shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Refering to Elevation View, locate and attach collars to posts. (See Notes B & C)

* Height shown from top of deck to top of collar.

Elevation View



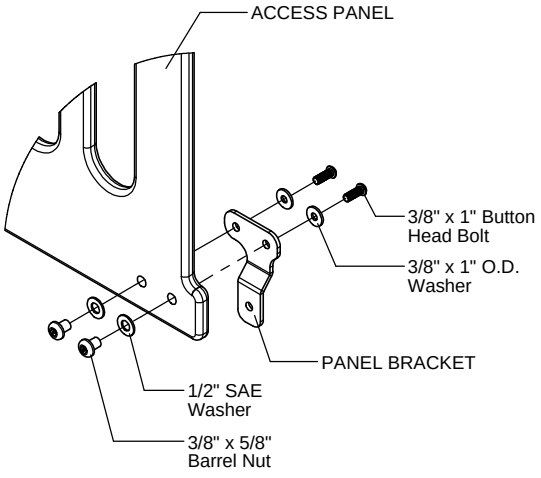


Figure 1.1

Step 2

Attach Panel Bracket to Access Panel as shown in Figure 1.1. (See Note A)

Step 3

Attach Roto Panel Bracket to Access Panel as shown in Figure 1.2. (See Note A)

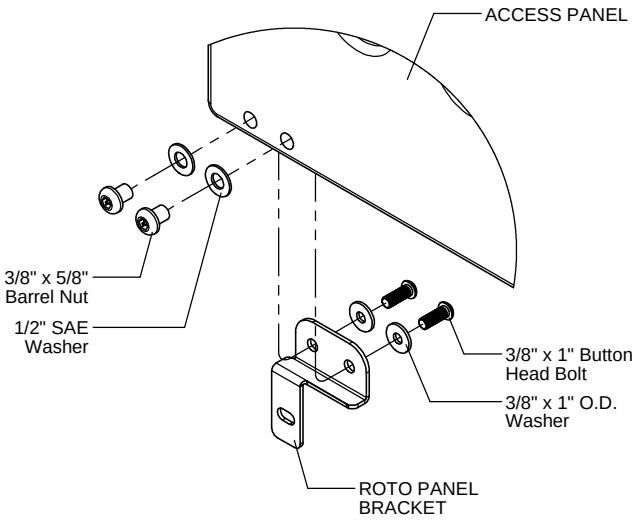


Figure 1.2

Step 4

Attach Panel Brackets to deck as shown in Figure 2. (See Note A)

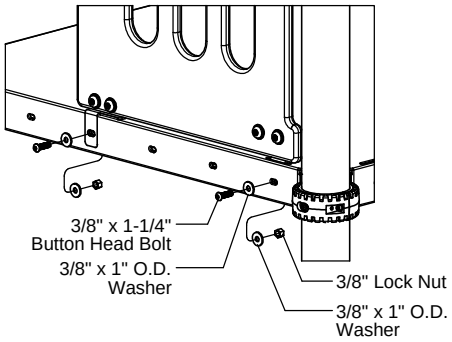


FIGURE 2

Step 5

Attach Access Panel to collars as shown in Figure 1.3. (See Notes A & B)

Step 6

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

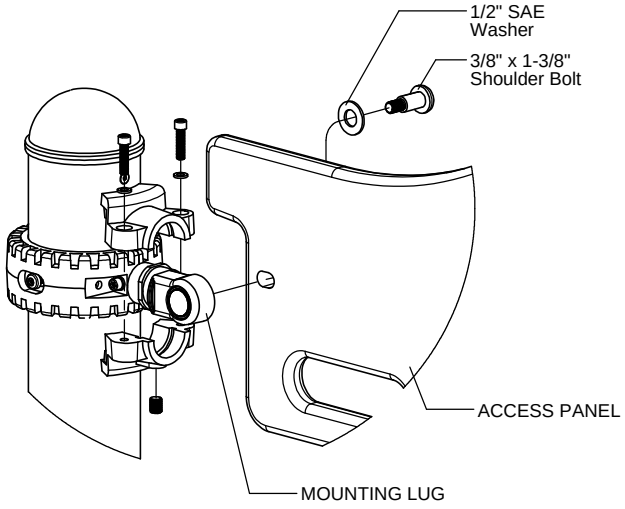


Figure 1.3

Parts List

WALL ACCESS LEFT		
Part #	**DESCRIPTION**	**QTY.**
BE-0361-R	R35 Panel Bracket - Right	1
BF-7117-R	Roto Panel Bracket Right (R5)	1
EG-8247	R3.5 Access Panel	1
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	6
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

WALL ACCESS RIGHT		
Part #	**DESCRIPTION**	**QTY.**
BE-0361-L	R35 Panel Bracket - Left	1
BF-7117-L	Roto Panel Bracket Left (R5)	1
EG-8247	R3.5 Access Panel	1
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	6
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

Specifications

R3.5 ACCESS PANEL:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

R3.5 PANEL BRACKET:
Shall be precision cut and formed from 3/16" thick sheet steel. The R3.5 Panel Bracket shall have a multi-stage baked-on powder coat finish.

ROTO PANEL BRAKET R5:
Shall be punched and formed from 10 gauge sheet steel. The Roto Panel Bracket R5 shall have a multi-stage baked-on powder coat finish.

MOUNTING LUGS:
Shall be precision die-cast from a high-strength aluminum alloy. The Mounting Lugs have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

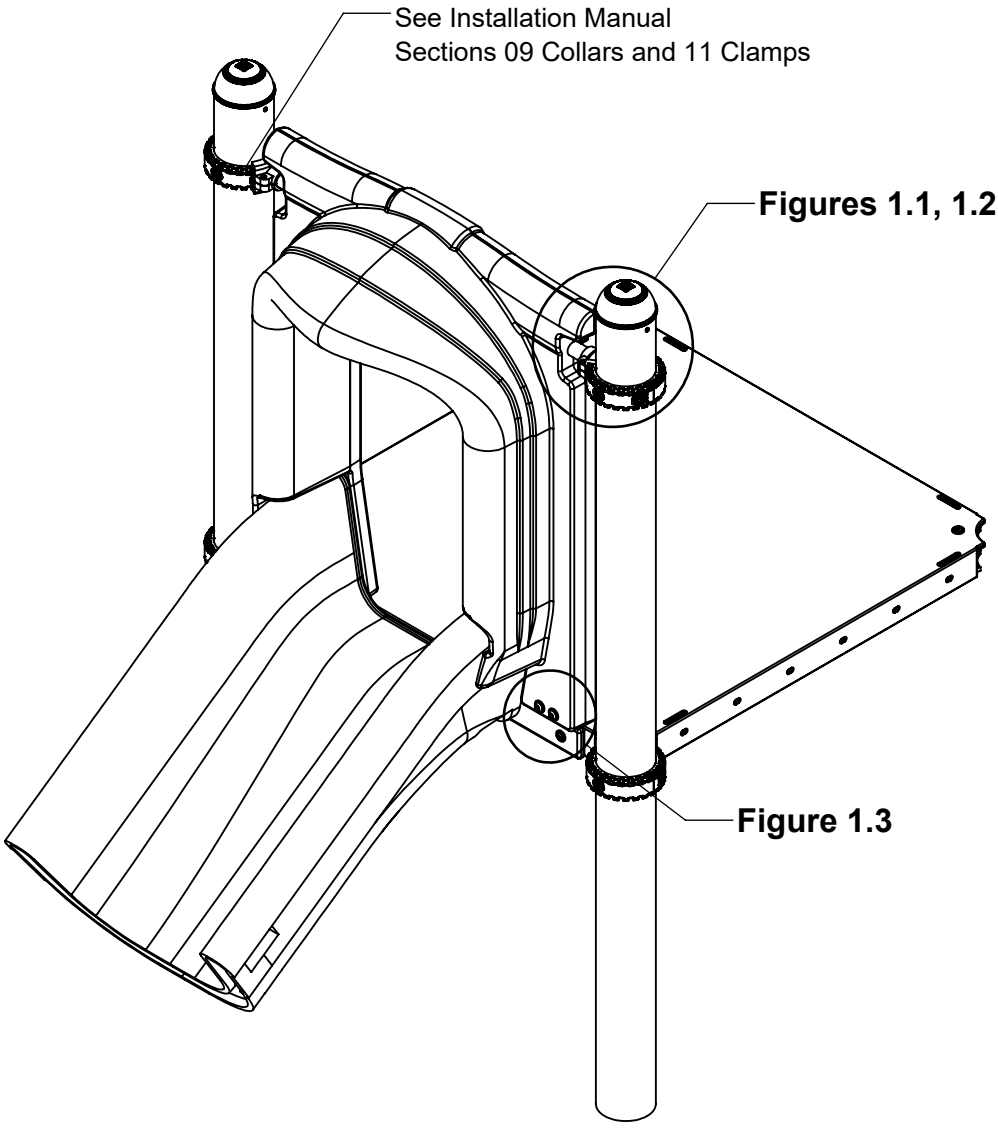
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps.

FIGURE 1
Twister Slide Roto Entry



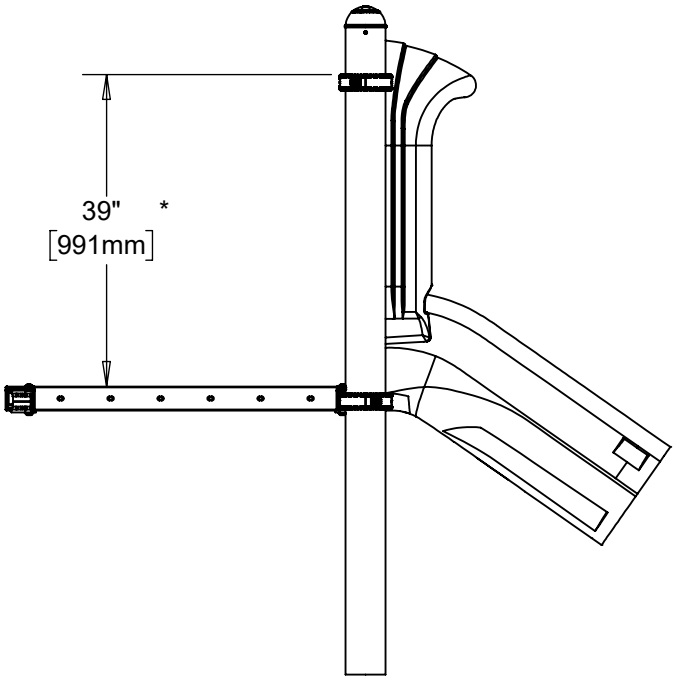
NOTE: R5 Twister Slide Roto Entry shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Locate and attach collars at heights shown in Elevation View. (See Note B)

* Height shown from top of deck to top of collar.

Elevation View



Step 2 (Factory Assembled)

Attach Roto Panel Pipe to Hood as shown in Figure 1.1.

NOTE: Pipe should extend equally from edges of Hood as shown in Figure 1.2. R5 dimension shown.

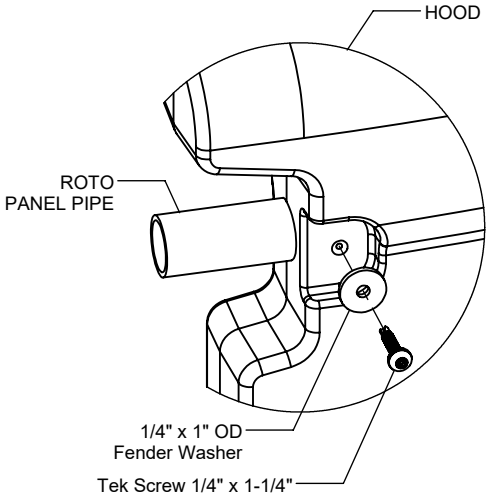


Figure 1.1

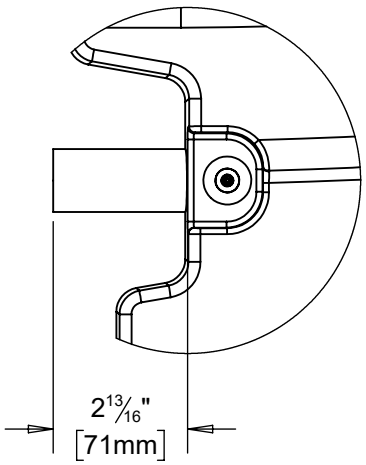


Figure 1.2

Step 3

Attach Hood to Deck Mounting Plate as shown in Figure 1.3. (See Note A)

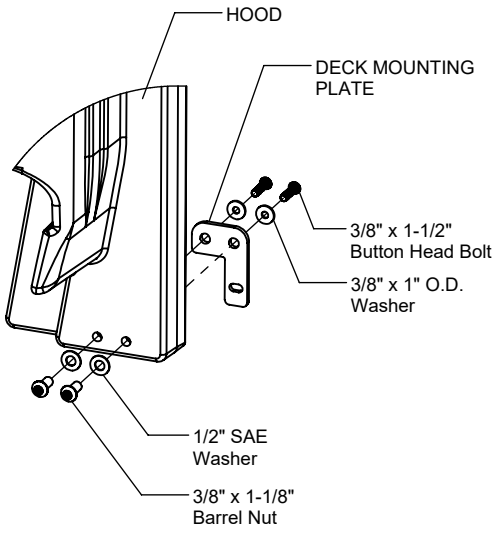


Figure 1.3

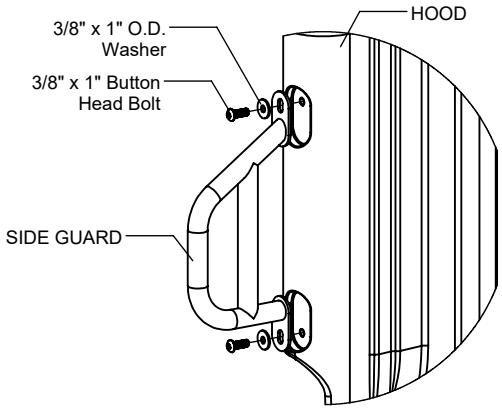


FIGURE 2

Step 4

For Left and Right Versions Only

Attach Guard to Hood as shown in Figure 1.4. (See Note A)

Step 5

Attach Hood and Spacer to Deck as shown in Figure 1.5. Ensure bottom of Hood is touching the top of the Deck. (See Note A)

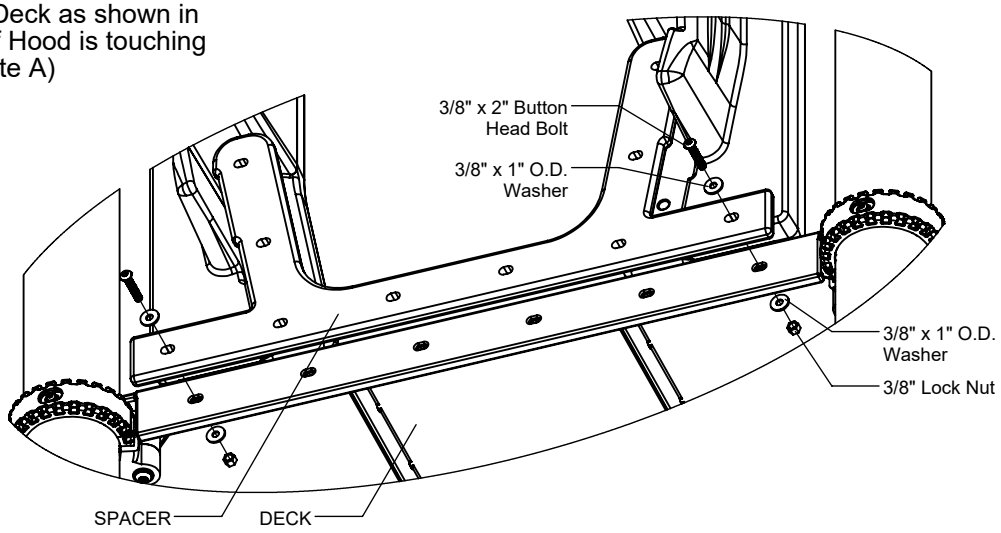


FIGURE 3

Step 6

Attach Hood to Collar as shown in Figure 1.6. (See Note A)

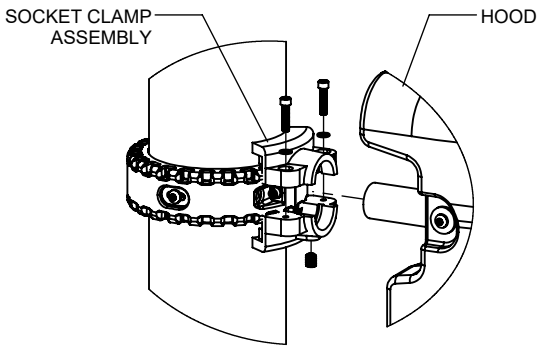


Figure 1.4

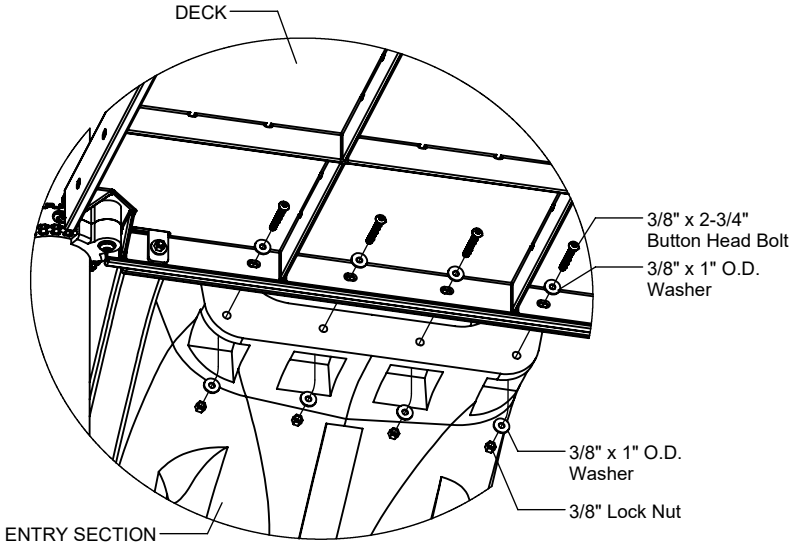


FIGURE 4

Step 7

Attach Entry Section to Deck as shown in Figure 2. (See Note A)

Step 8

Attach Entry Section to Hood as shown in Figure 3. (See Note A)

Step 9

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

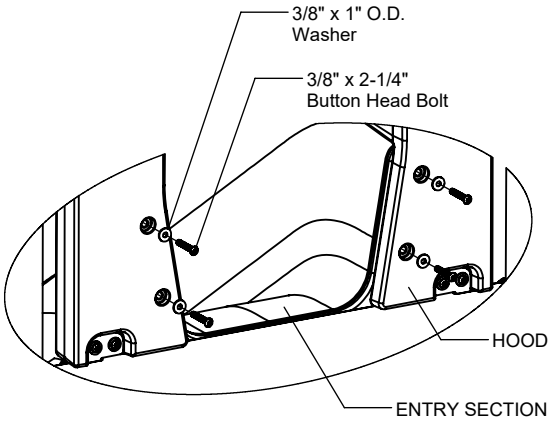


FIGURE 5

Parts List

R5 TWISTER SLIDE ROTO ENTRY		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
EE-0669	Twister Slide Spacer	1
HS-1001-R5	Socket Clamp Set R5	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	20
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	6
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4

R5 LEFT/RIGHT TWISTER SLIDE ROTO ENTRY		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
HS-1001-R5	Socket Clamp Set R5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	6
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4

Assembled Parts List

R5 TWISTER SLIDE ROTO ENTRY		
Part #	**DESCRIPTION**	**QTY**
Varies	Twister Slide - Hood	1
LF-0733	Panel Roto Pipe	1
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2

Parts List

R3.5 TWISTER SLIDE ROTO ENTRY		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
EE-0669	Twister Slide Spacer	1
HS-1001-R35	Socket Clamp Set R3.5	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	20
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	6
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4

R35 LEFT/RIGHT TWISTER SLIDE ROTO ENTRY		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	6
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4

Assembled Parts List

R3.5 TWISTER SLIDE ROTO ENTRY		
Part #	**DESCRIPTION**	**QTY**
Varies	Twister Slide - Hood	1
LG-0014	Panel Roto Pipe R35	1
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2

Specifications

TWISTER SLIDE - HOOD:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

ROTO PANEL DECK MOUNTING PLATE:
Shall be precision cut using 1/4" thick steel and will have a multi-stage baked-on powder coat finish.

PANEL ROTO PIPE:
Shall be fabricated using Ø1.315 12 gauge steel tubing and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SPACER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

TWISTER SIT DOWN SIDE GUARD CANADA:
Shall be fabricated using ∅1.029 14 gauge steel tubing with welded 10 gauge steel tabs and will have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

Assembly View

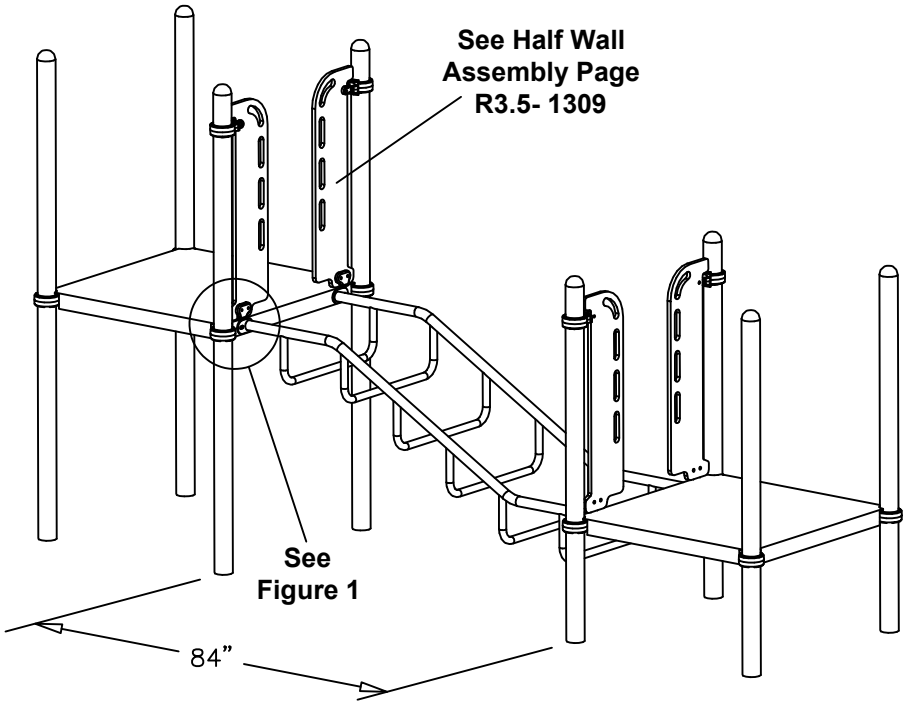
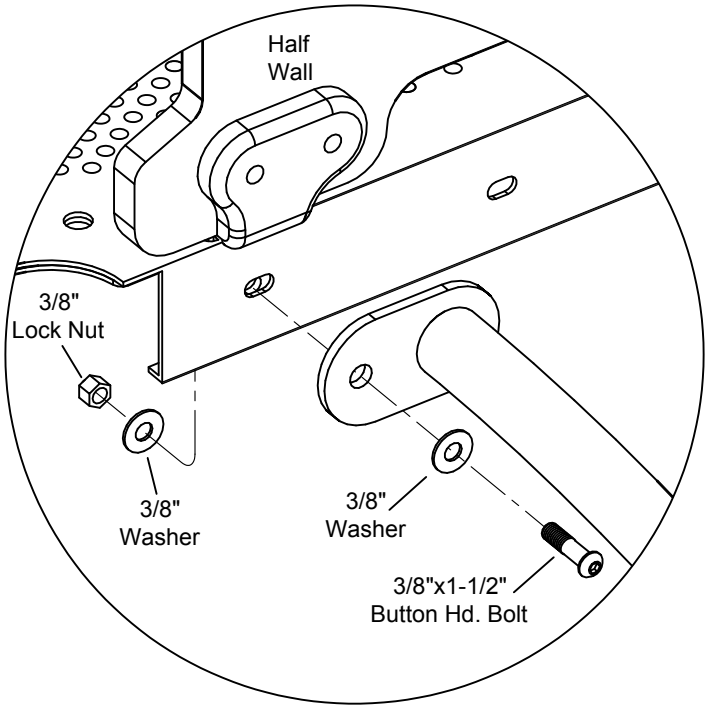


Figure 1



Parts List

QTY.	DESCRIPTION	PART #
1	Inclined Loop Link	FS-1508-R35
4	3/8 x 1-1/2" Button Hd. Bolts	9103072-TR
8	3/8" Washers	9333002
4	3/8" Lock Nuts	9413002

Specifications

INCLINED LOOP LINK:
Shall have 1.99" O.D., 12 gage steel tube side supports and 1.315" O.D., 12 gage steel tubing loops. Loops are evenly spaced and welded to the side supports. Tabs are welded on to the end of each rail to provide attachment points. Finished with a baked on powder coat.

HARDWARE:
Shall be zinc/nickel plated, galvanized or stainless steel as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts.
A periodic inspection of all parts is necessary.
If a part is broken or worn, replace immediately.

Installation

Notes:
(A) This Inclined Loop Link is designed to go between decks 84" apart with a difference in height of 24".

(B) Refer to page R3.5- 1309 Half Wall assembly to install Half Walls.

(C) Refer to page R3.5- 09 Collar assembly to install post collars.

(D) Use liquid thread lock (such a Loctite) with all threaded hardware that does not include self-locking nuts.

Step 1.
Attach Loop Link to decks using the hardware as shown in Figure 1.

Step 2.
Fully tighten all hardware.

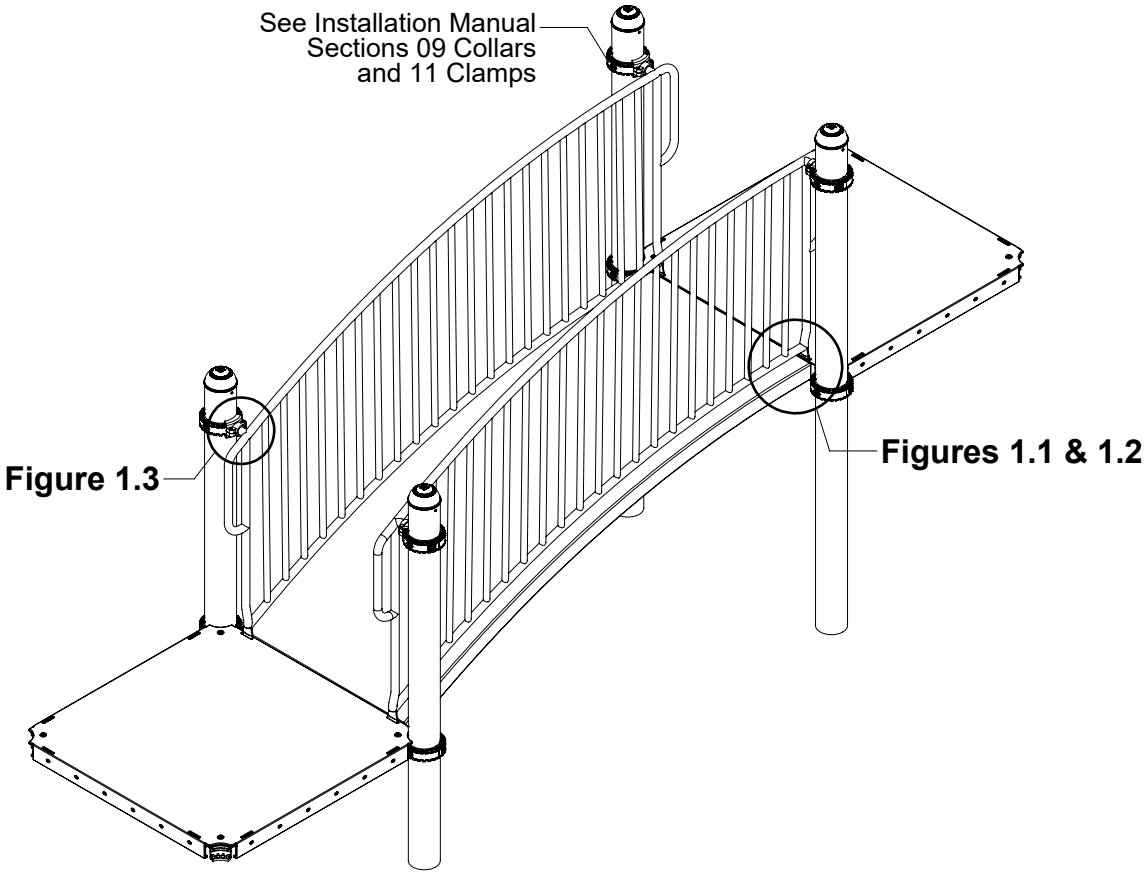
IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.

(C) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Inclined Arch Bridge



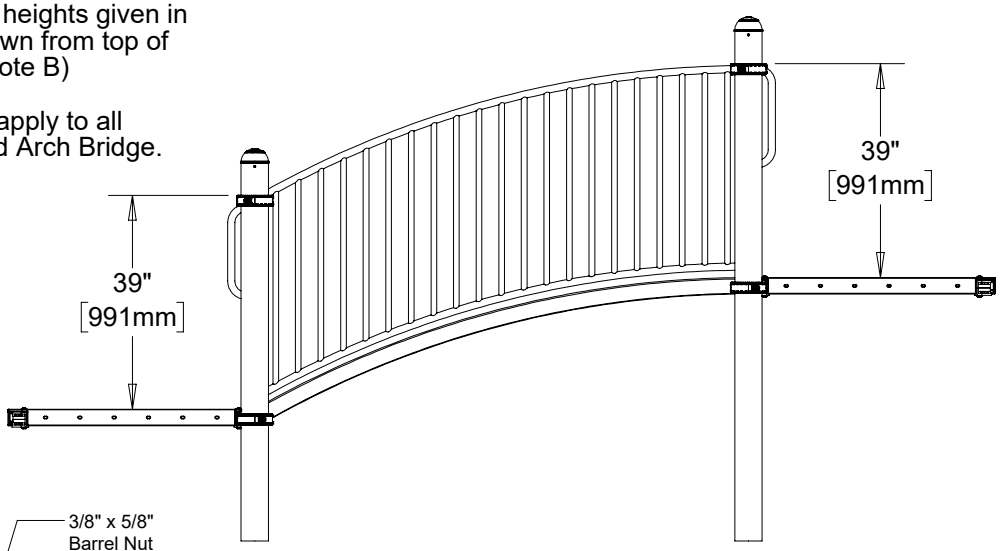
NOTE: R5 Inclined Arch Bridge shown. Other configurations will vary slightly.

Step 1

Locate and attach collars at heights given in Elevation View. Heights shown from top of deck to top of collar. (See Note B)

Note: Collar heights shown apply to all configurations of the Inclined Arch Bridge.

Elevation View



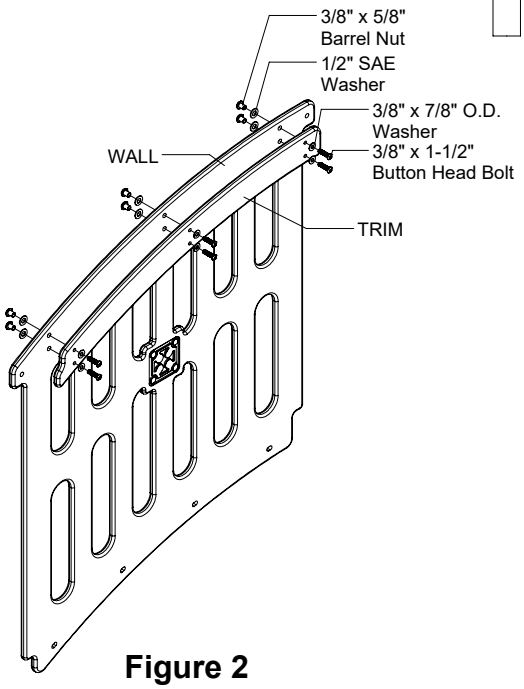


Figure 2

Step 2 (Factory Assembled)

For 42" Version Only

Attach Trim to Walls as shown in Figure 2. (See Note A)

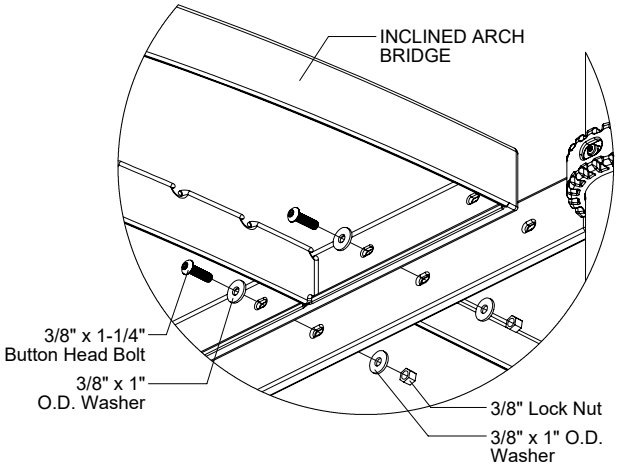


Figure 1.1

Step 3a

For 45", 84", and 90" Versions Only

Attach Inclined Arch Bridge between decks as shown in Figure 1.1. (See Note A)

Step 3b

For 42" Version Only

Attach Inclined Arch Bridge between decks as shown in Figure 1.1 using all six connection points. (See Note A)

Step 4a

For 45", 84", and 90" Versions Only

Attach Inclined Arch Walls to decks as shown in Figure 1.2. (See Note A)

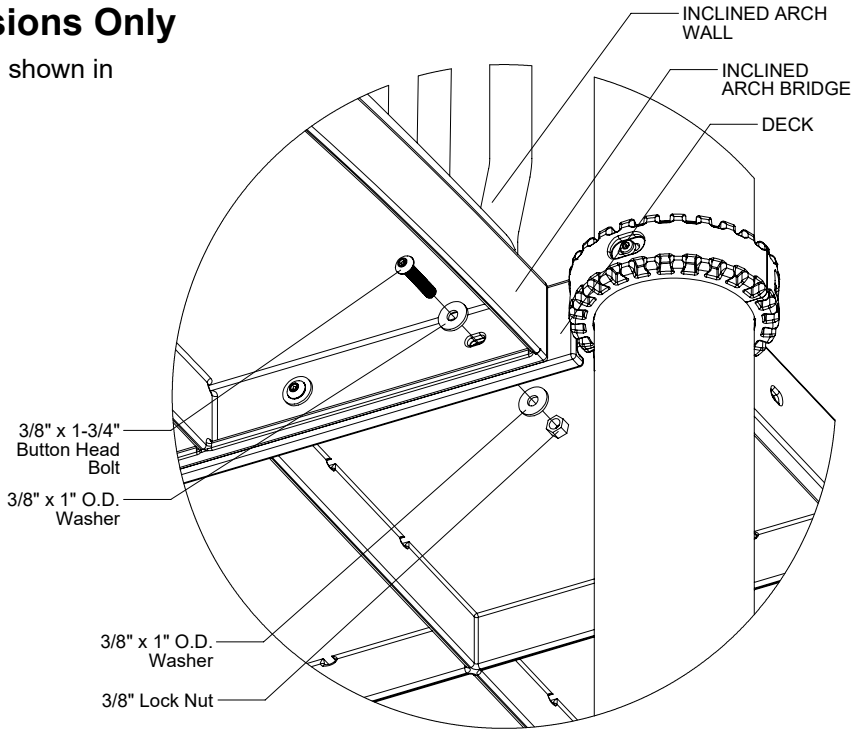


Figure 1.2

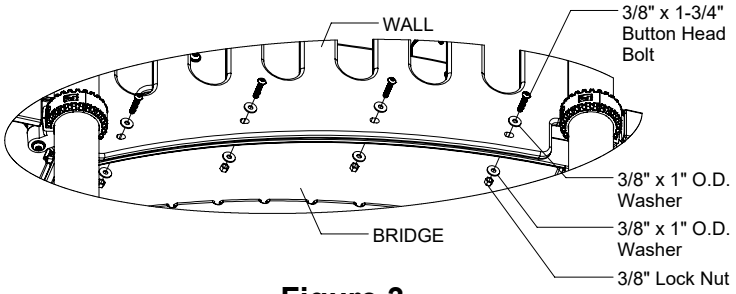


Figure 3

Step 4b

For 42" Version Only

Attach Walls to Bridge as shown in Figure 3. (See Note A)

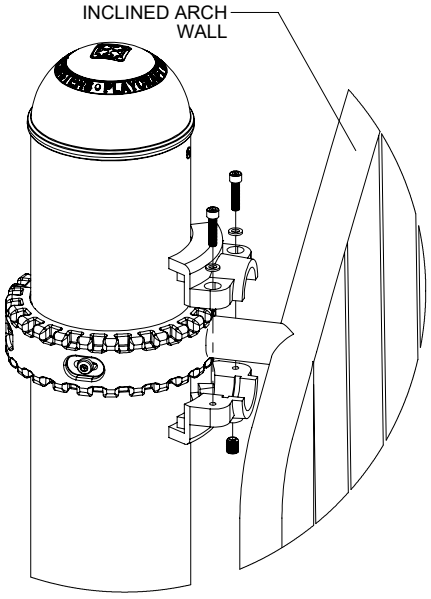


Figure 1.3

Step 5a

For 45", 84", and 90" Versions Only

Attach Inclined Arch Walls to collars as shown in Figure 1.3. (See Notes A & B)

Step 5b

For 42" Version Only

Attach Walls to collars as shown in Figure 4. (See Notes A & B)

Step 6

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 7

Place required protective surfacing under and around Inclined Arch Bridge. (See Note C)

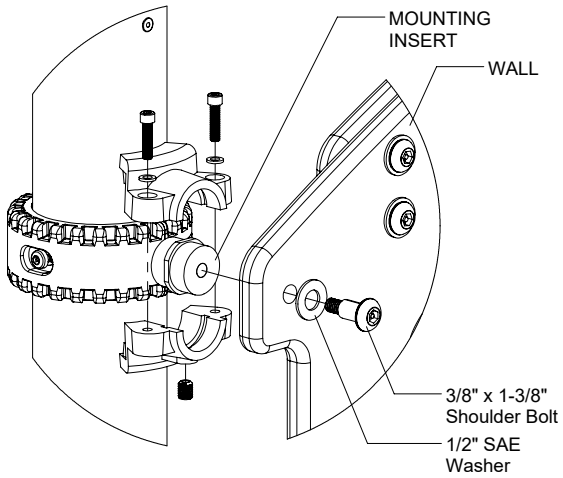


Figure 4

R3.5 42" Assembled Parts List

Part #	DESCRIPTION	QTY
EG-8211-L	Inclined Arch Bridge Wall - Left Side	1
EG-8211-R	Inclined Arch Bridge Wall - Right Side	1
EG-8211-T	Inclined Arch Bridge Wall - Trim	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

R3.5 42" Parts List

Part #	DESCRIPTION	QTY
CG-8200	Inclined Arch Bridge 42" R3.5	1
GE-7015	Mounting Insert	4
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	8
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	40
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	20

R5 45" Parts List

Part #	DESCRIPTION	QTY
CF-7112	Inclined Arch Bridge 45" R5	1
FS-1514-R545	Inclined Arch Wall 45" R5	2
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R3.5 84" Parts List

Part #	DESCRIPTION	QTY
CG-0652	Inclined Arch Bridge 84" R3.5	1
FS-1514-R3584	Inclined Arch Wall 84" R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5 90" Parts List

Part #	DESCRIPTION	QTY
CF-0500	Inclined Arch Bridge 90" R5	1
FS-1514-R590	Inclined Arch Wall 90" R5	2
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5 90" ADA Parts List

Part #	DESCRIPTION	QTY
CF-0500	Inclined Arch Bridge 90" R5	1
FS-1514-R590-ADA	Inclined Arch Wall 90" R5 ADA	2
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

Specifications

INCLINED ARCH BRIDGE:
Shall be fabricated using punched, formed, and welded 12 gauge sheet steel. The Inclined Arch Bridge shall be Play-Tuff™ coated after fabrication.

INCLINED ARCH WALL:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.029" O.D. 14 gauge vertical rails. The Inclined Arch Wall shall have a multi-stage baked-on powder coat finish.

ARCH BRIDGE WALL AND TRIM:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

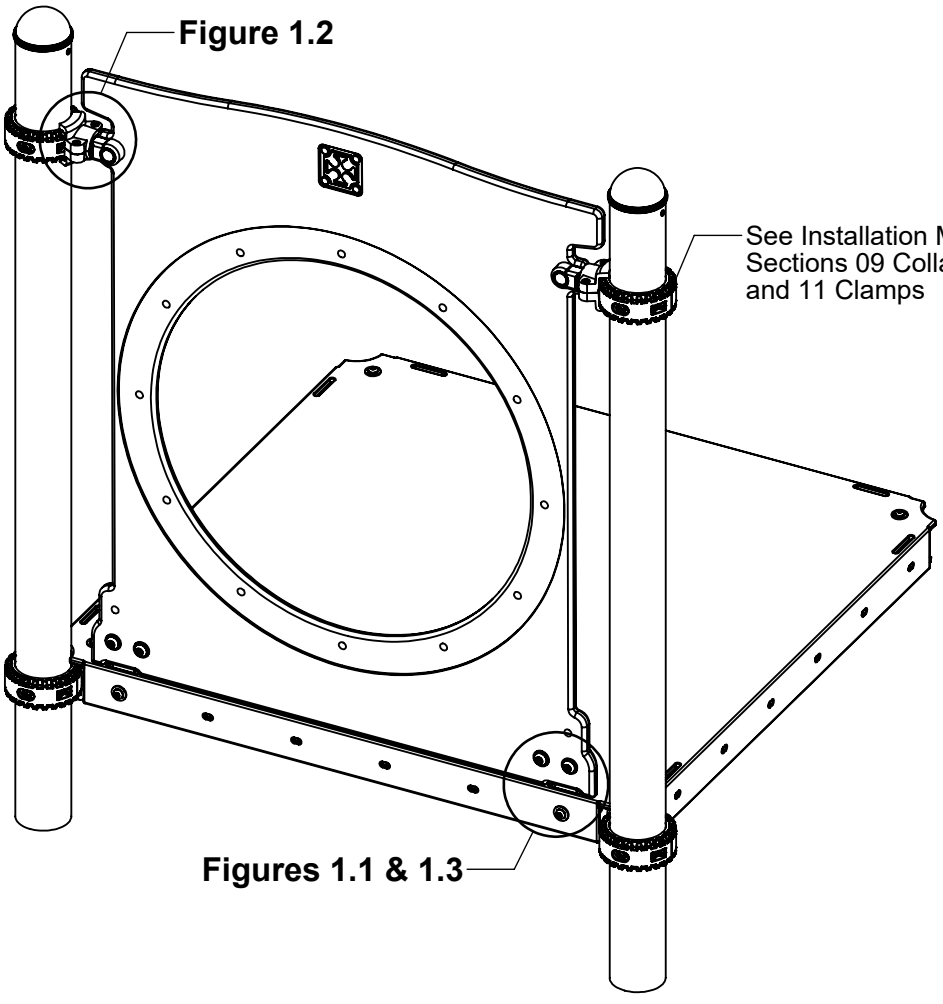
(B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.

(C) All gaps created (e.g. between panels, between panel and deck, between panel and roof, etc.) must be less than 3-1/2" [89mm] or greater than 9" [229mm].

(D) Collar heights may vary with different panels. Use panel to locate collar height.

(E) These instructions apply to all configurations of R3.5 panels.

FIGURE 1
R3.5 Panel Assembly



NOTE: R3.5 Panel deck mount shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Locate and attach collars at heights shown in Elevation View. (See Note B)

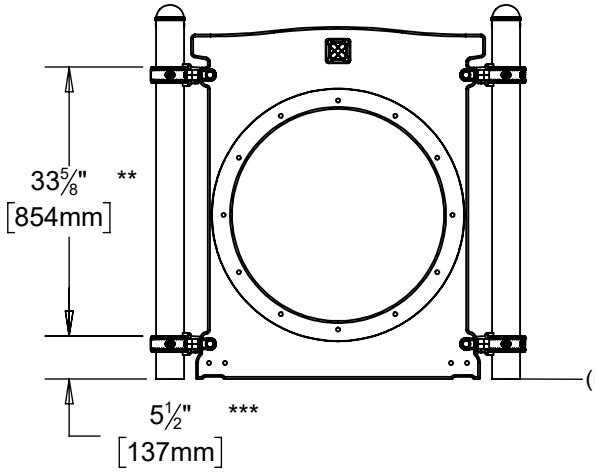
* Height shown from top of deck to top of collar.

** Height shown from top of collar to top of collar.

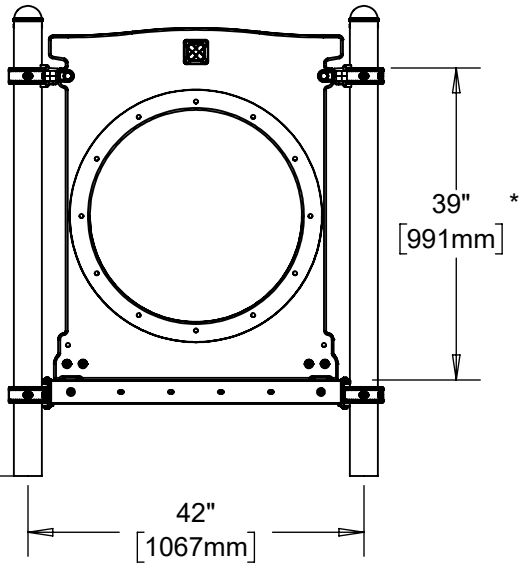
*** Height shown from finish grade to top of collar.

Elevation View

Ground Mount



Deck Mount



Step 2

For Deck Mount Only

Attach Panel Bracket to Panel as shown in Figure 1.1. (See Note A)

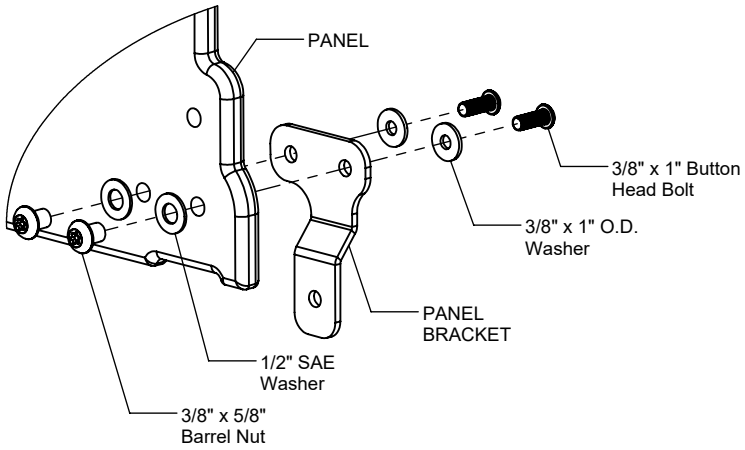


Figure 1.1

Step 3

Attach Panel to Collar as shown in Figure 1.2. (See Notes A & B)

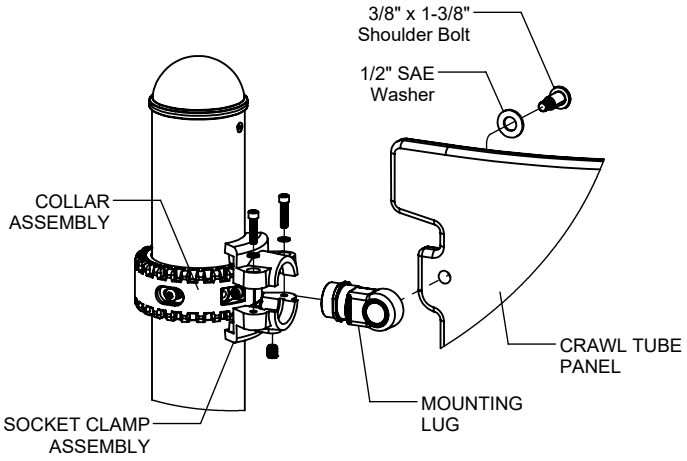


Figure 1.2

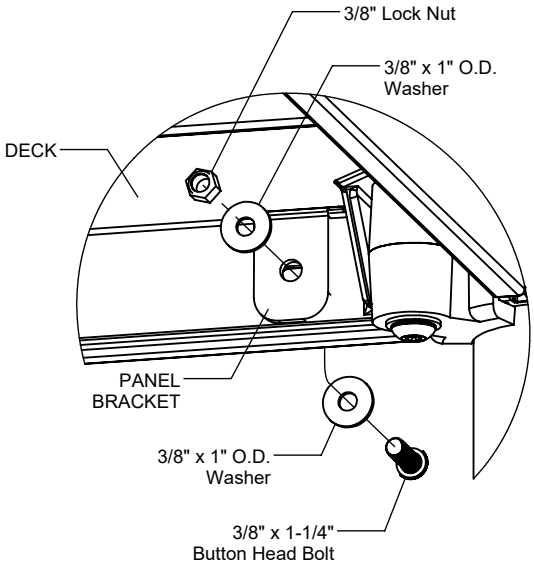


Figure 1.3

Step 4

For Deck Mount Only

Attach Panel Bracket to Deck as shown in Figure 1.3. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-0361-L	R35 Panel Bracket - Left	1
BE-0361-R	R35 Panel Bracket - Right	1
Varies	R3.5 Panel	1
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	6
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
Varies	R3.5 Panel	1
GG-8113	Mounting Lug R3.5	4
HS-1001-R35	Socket Clamp Set R3.5	4
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9345002	Washer Flat SAE 1/2"	4

Specifications

R3.5 PANEL:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

R3.5 PANEL BRACKET:
Shall be fabricated using 3/16" sheet steel and will have a multi-stage baked-on powder coat finish.

MOUNTING LUGS & SOCKET CLAMPS:
Shall be precision die-cast from a high-strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

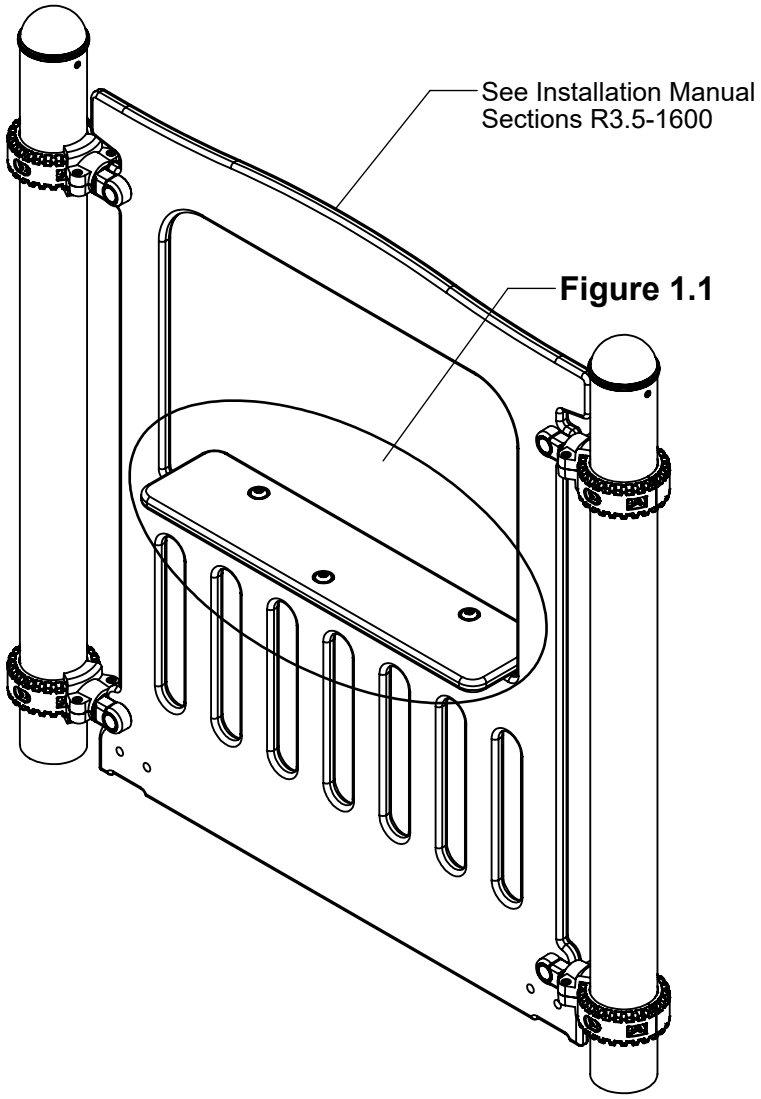
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R3.5-1600 instructions.

FIGURE 1
Counter Assembly



Step 1

Attach the HDPE Panel Counter to the Panel as shown in Figure 1.1. (See Note A)

Step 2

Assemble Panel to posts as detailed in R35-1600 (See Note B).

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

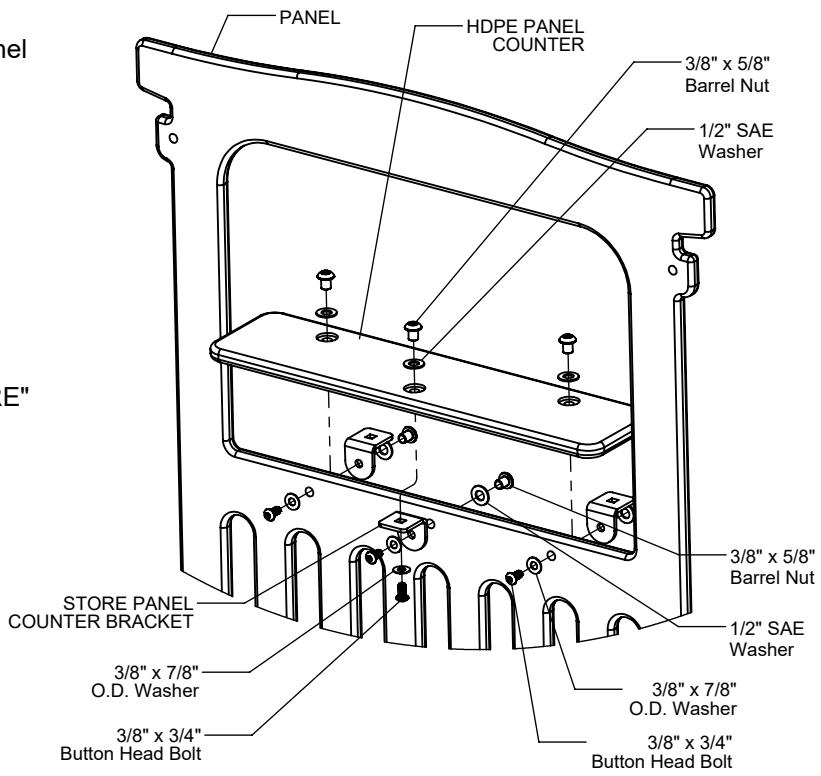


FIGURE 1.1

Parts List

GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-4285	Store Panel Counter Bracket	3
EE-0006	HDPE Panel Counter 25	1
EG-8145	Store Panel R3.5	1
GG-8113	Mounting Lug R3.5	4
HS-1001-R35	Socket Clamp Set R3.5	4
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333042	Washer Flat 3/8" x 7/8" O.D.	6
9345002	Washer Flat SAE 1/2"	10
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-0361-L	R35 Panel Bracket - Left	1
BE-0361-R	R35 Panel Bracket - Right	1
BE-4285	Store Panel Counter Bracket	3
EE-0006	HDPE Panel Counter 25	1
EG-8145	Store Panel R3.5	1
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9333042	Washer Flat 3/8" x 7/8" O.D.	6
9345002	Washer Flat SAE 1/2"	12
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	10

Specifications

PANEL & HDPE PANEL COUNTER:
Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

STORE PANEL COUNTER BRACKET:
Shall be precision laser cut and formed from 3/16" sheet steel. The Store Panel Counter Bracket has a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

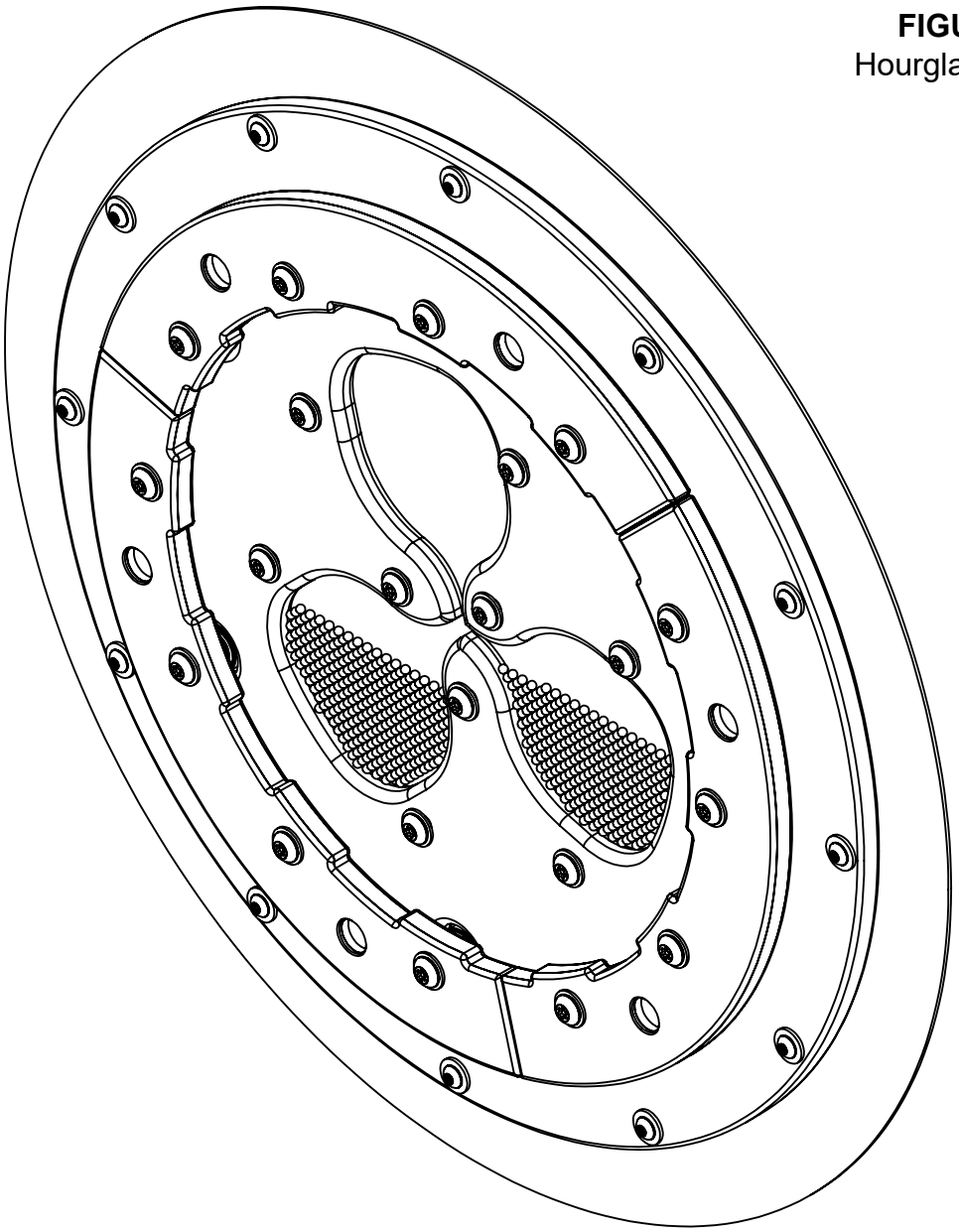
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R35-1600 R3.5 Panel Assembly and R5-1601 Panel Type 1 (Rotomold) installation instructions.

FIGURE 1
Hourglass Panel



NOTE: Hourglass Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Attach Flange Bearings to Roller Bearing as shown in Figure 2.

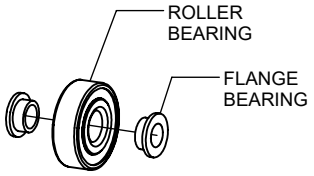


FIGURE 2

Step 2 (Factory Assembled)

Attach Rotator and Clamping Rings to Mounting Ring as shown in Figure 3. Measure approximately 600 1/4" SS Ball Bearings and pour into Rotator cavity. (See Note A)

NOTE: For R35 Panel assemblies, replace the Mounting Ring with the Main Mounting Panel.

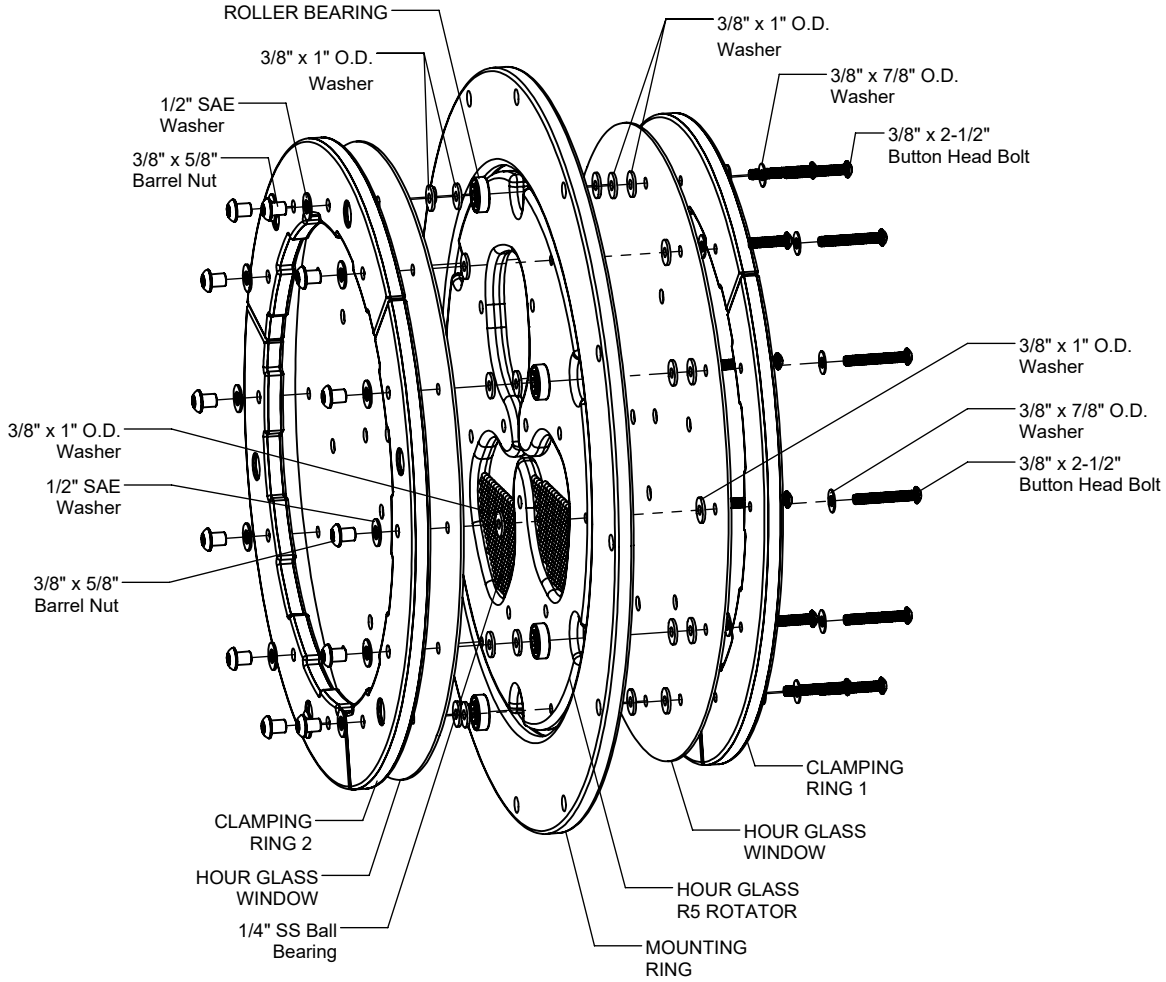


FIGURE 3

Step 3 (Factory Assembled)

Secure Window to Rotator as shown in Figure 4. (See Note A)

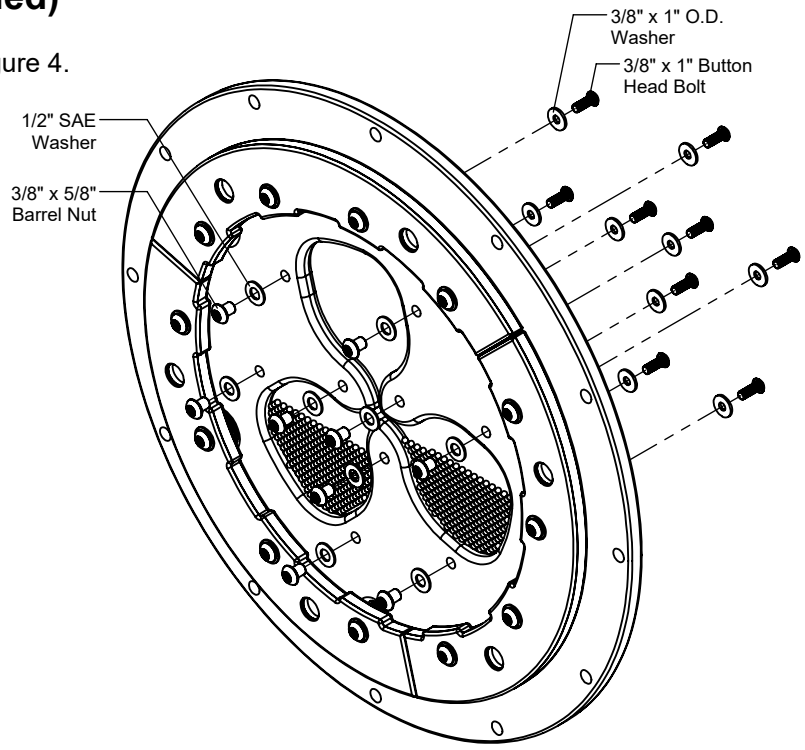


FIGURE 4

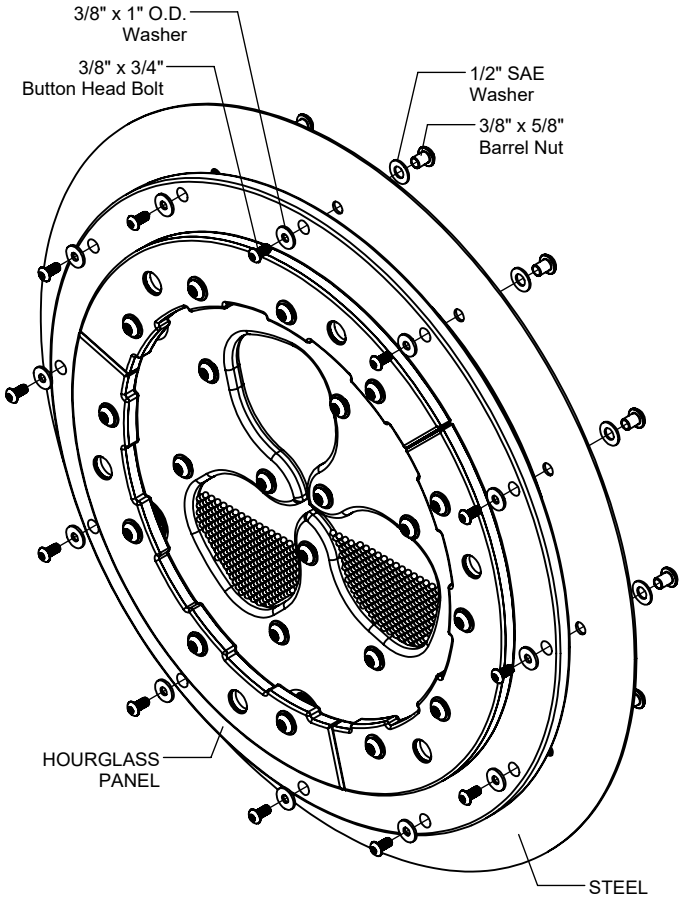


FIGURE 5

Step 4a

For Steel Event Panel Only

Attach Hour Glass Panel to Steel Event Panel as shown in Figure 5. (See Note A)

NOTE: This step may be factory assembled. See Bill of Materials for Assembled Parts List.

Step 4b

For HDPE Event Panel Only

Attach Hour Glass Panel to HDPE Event Panel as shown in Figure 6. (See Note A)

NOTE: This step may be factory assembled. See Bill of Materials for Assembled Parts List.

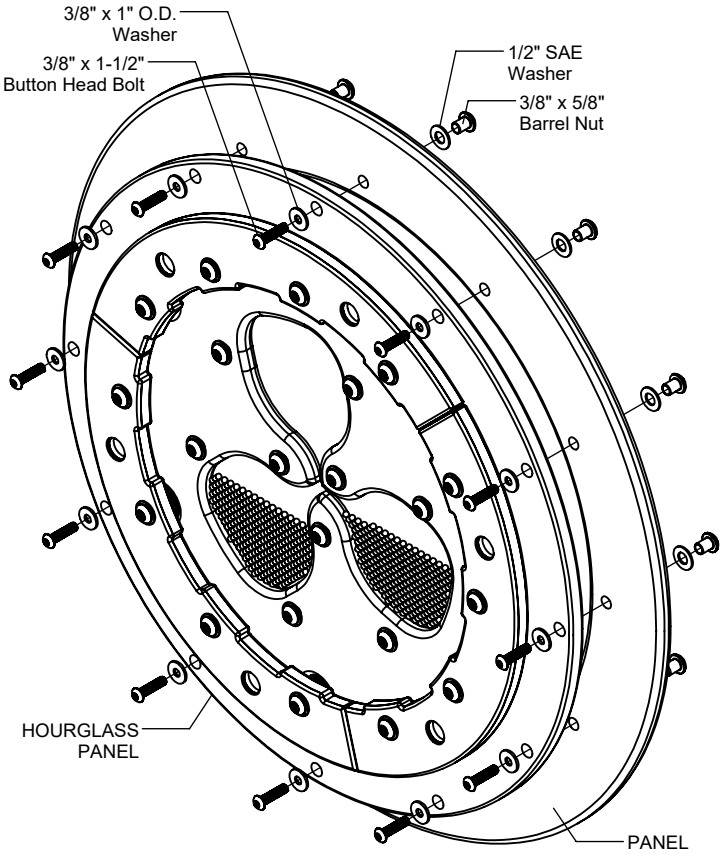


FIGURE 6

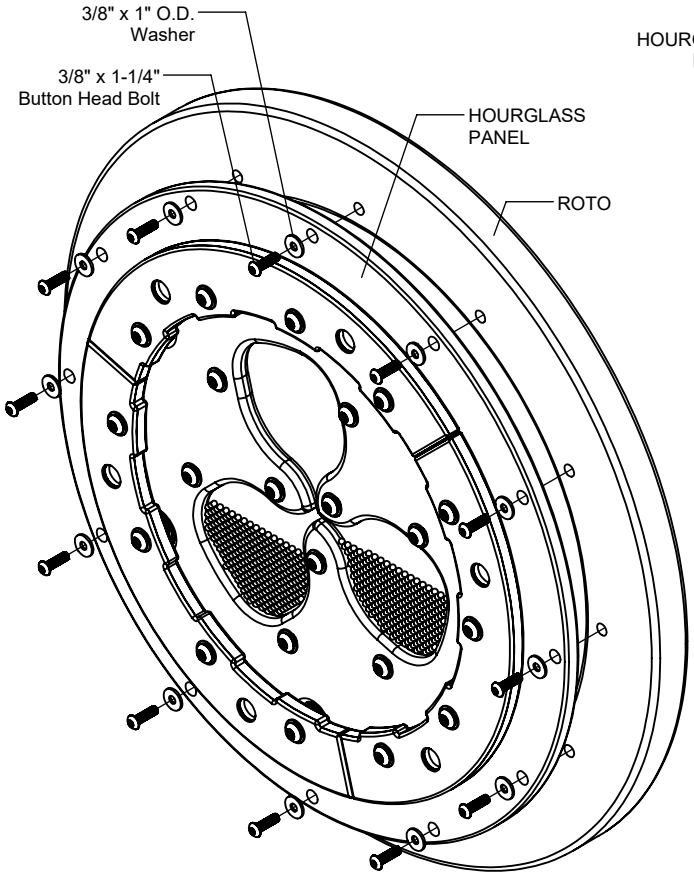


FIGURE 7

Step 4c

For Roto Event Panel Only

Attach Hour Glass Panel to Roto Event Panel as shown in Figure 7. (See Note A)

NOTE: This step may be factory assembled. See Bill of Materials for Assembled Parts List.

Step 5

For Standard R5/R35 Panel Only

Complete standard panel assembly as described in R35-1600 R3.5 Panel Assembly and R5-1601 Panel Type 1 (Rotomold) installation instructions (See Note B)

Step 6

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

HDPE INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

ROTO INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12

Assembled Parts List

INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
EE-4292	Hour Glass Window	2
EF-4246-R	Pin Ball Panel Mounting Ring	1
EF-4247	Hour Glass R5 Rotator	1
EG-8161-CR1	Pin Ball Clamping Ring 1	3
EG-8161-CR2	Pin Ball Clamping Ring 2	3
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
57100	Ball Bearing SS 1/4"	600
9103052-TR	Bolt Button Head 3/8" x 1"	9
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	45
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9345002	Washer Flat SAE 1/2"	21
9443022-TR	Nut Barrel 3/8" x 5/8" BH	21

Parts List

R35 DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-0361-L	R35 Panel Bracket - Left	1
BE-0361-R	R35 Panel Bracket - Right	1
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	6
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

R35 GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
GG-8113	Mounting Lug R3.5	4
HS-1001-R35	Socket Clamp Set R3.5	4
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9345002	Washer Flat SAE 1/2"	4

Assembled Parts List

R35 PANEL		
Part #	**DESCRIPTION**	**QTY**
EE-4292	Hour Glass Window	2
EF-4247	Hour Glass R5 Rotator	1
EG-8161-CR1	Pin Ball Clamping Ring 1	3
EG-8161-CR2	Pin Ball Clamping Ring 2	3
EG-8161-P	Round Insert Panel R3.5	1
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
57100	Ball Bearing SS 1/4"	600
9103052-TR	Bolt Button Head 3/8" x 1"	9
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	45
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9345002	Washer Flat SAE 1/2"	21
9443022-TR	Nut Barrel 3/8" x 5/8" BH	21

Parts List

R5 GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
HS-1001-R5	Socket Clamp Set R5	4

Assembled Parts List

R5 GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
DF-7107-G	Roto Panel Round-Ground	1
EE-4292	Hour Glass Window	2
EF-4246-R	Pin Ball Panel Mounting Ring	1
EF-4247	Hour Glass R5 Rotator	1
EG-8161-CR1	Pin Ball Clamping Ring 1	3
EG-8161-CR2	Pin Ball Clamping Ring 2	3
GE-0011	Zinc Collar	4
LF-0733	Panel Roto Pipe	2
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
57100	Ball Bearing SS 1/4"	600
9103052-TR	Bolt Button Head 3/8" x 1"	9
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9248112	Screw Drywall #8 x 2-1/2" Sq Dr	8
9263012	Screw Soc Set 3/8" x 1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	57
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9345002	Washer Flat SAE 1/2"	21
9443022-TR	Nut Barrel 3/8" x 5/8" BH	21

Specifications

PIN BALL PANEL MOUNTING RING, HOUR GLASS ROTATOR AND PIN BALL CLAMPING RINGS:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

HOURGLASS WINDOW:
Shall be made from .118 thick polycarbonate sheet plastic.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

R5 DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BF-7117-L	Roto Panel Bracket Left (R5)	1
BF-7117-R	Roto Panel Bracket Right (R5)	1
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	6

Assembled Parts List

R5 DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
DF-7107	Roto Panel Round	1
EE-4292	Hour Glass Window	2
EF-4246-R	Pin Ball Panel Mounting Ring	1
EF-4247	Hour Glass R5 Rotator	1
EG-8161-CR1	Pin Ball Clamping Ring 1	3
EG-8161-CR2	Pin Ball Clamping Ring 2	3
GE-0011	Zinc Collar	2
LF-0733	Panel Roto Pipe	1
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
57100	Ball Bearing SS 1/4"	600
9103052-TR	Bolt Button Head 3/8" x 1"	9
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9248112	Screw Drywall #8 x 2-1/2" Sq Dr	4
9263012	Screw Soc Set 3/8" x 1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	57
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9345002	Washer Flat SAE 1/2"	21
9443022-TR	Nut Barrel 3/8" x 5/8" BH	21

Maintenance

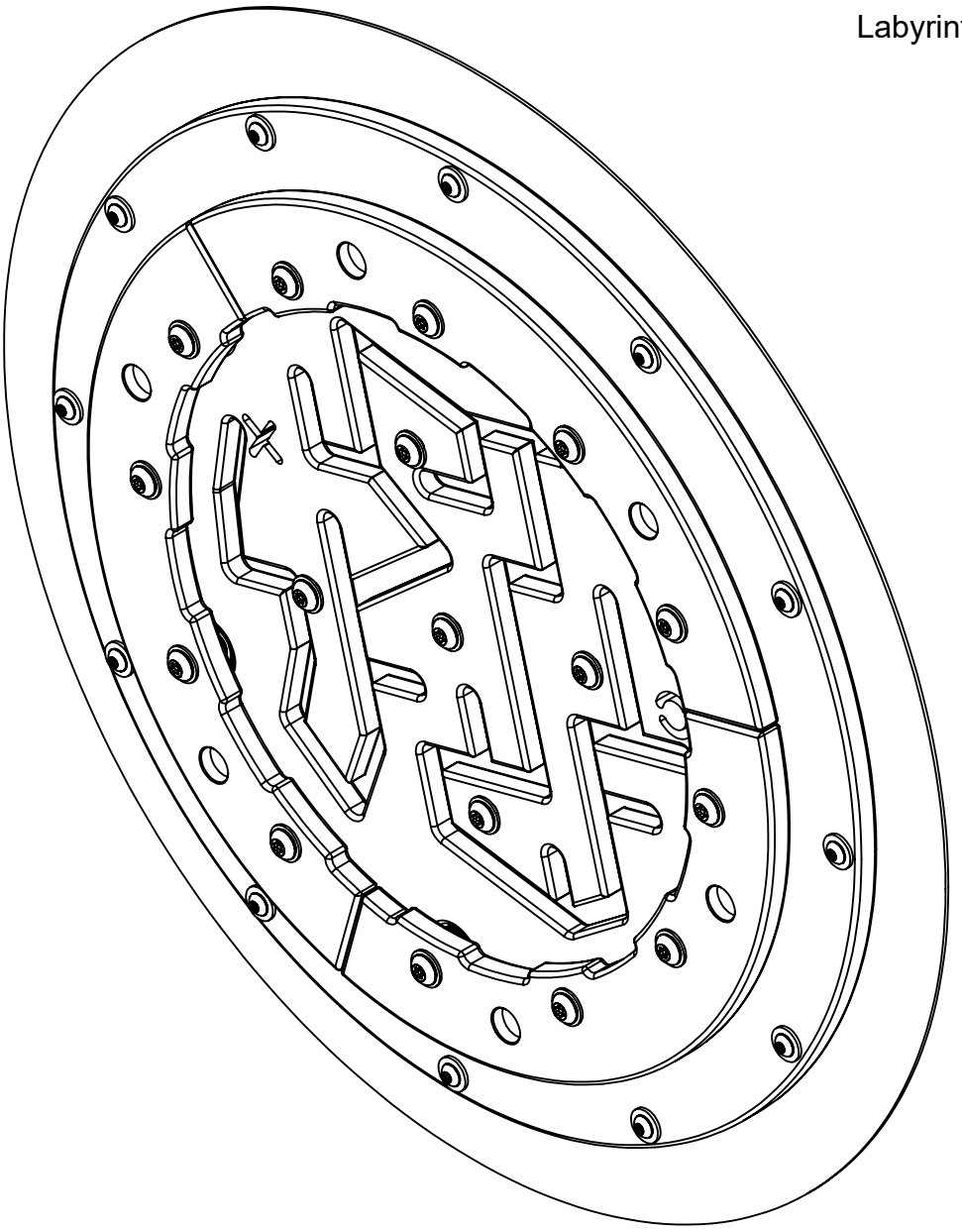
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R35-1600 R3.5 Panel Assembly and R5-1601 Panel Type 1 (Rotomold) installation instructions.

FIGURE 1
Labyrinth Panel



NOTE: Labyrinth Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Attach Flange Bearings to Roller Bearing as shown in Figure 2.

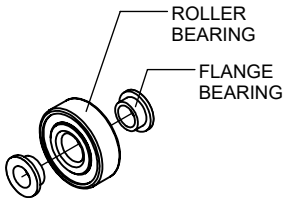


FIGURE 2

Step 2 (Factory Assembled)

Attach Labyrinth Panel Rotator and Labyrinth Panel Retainers to Mounting Ring as shown in Figure 3. (See Note A)

NOTE: For R35 Panel assemblies, replace the Mounting Ring with the Main Mounting Panel.

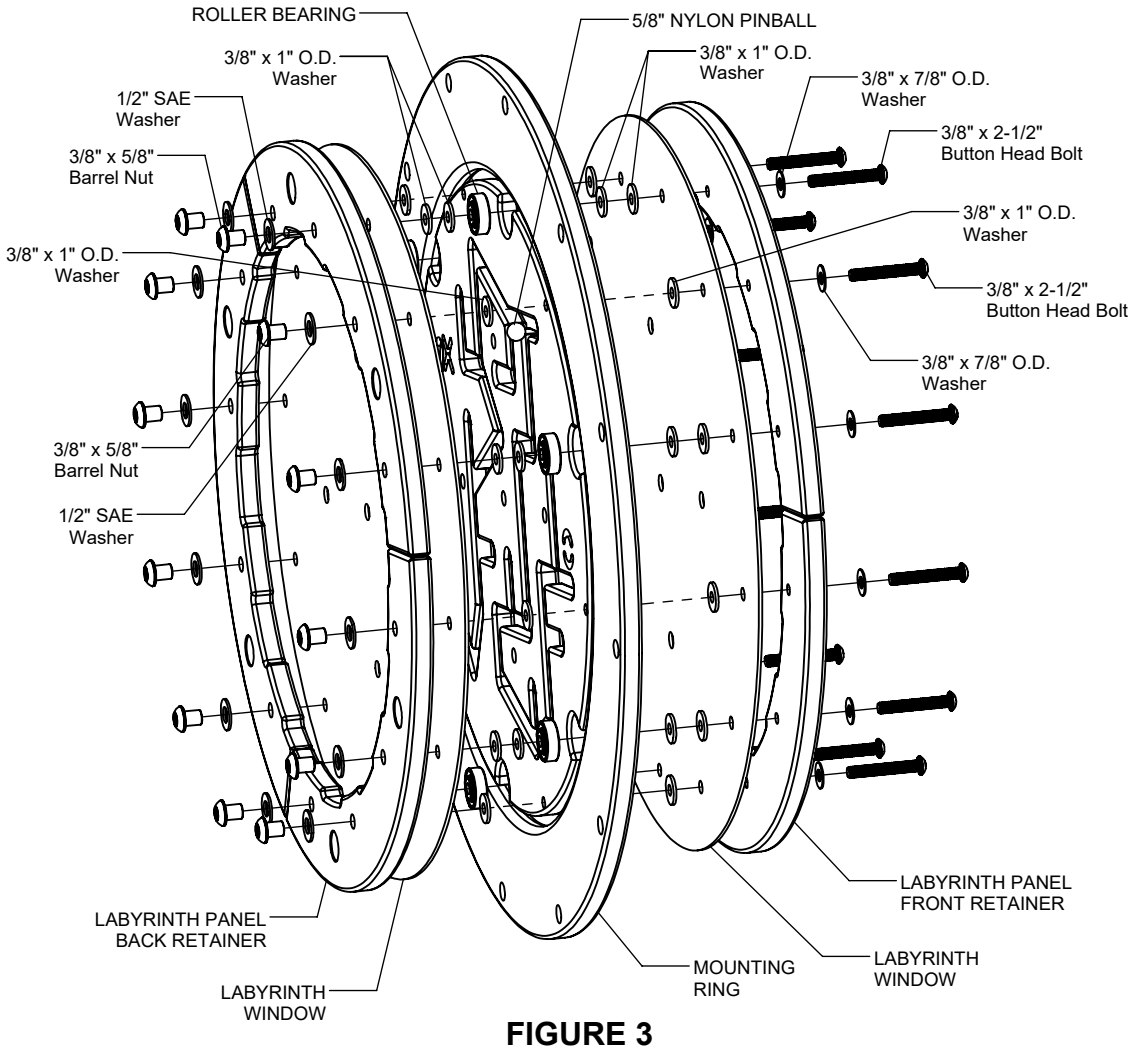


FIGURE 3

Step 3 (Factory Assembled)

Attach Window to Rotator as shown in Figure 4. (See Note A)

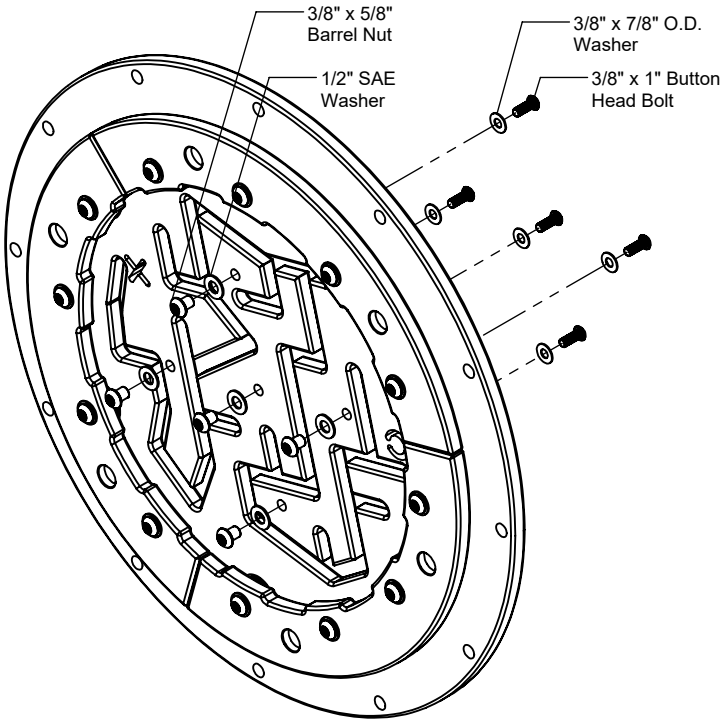


FIGURE 4

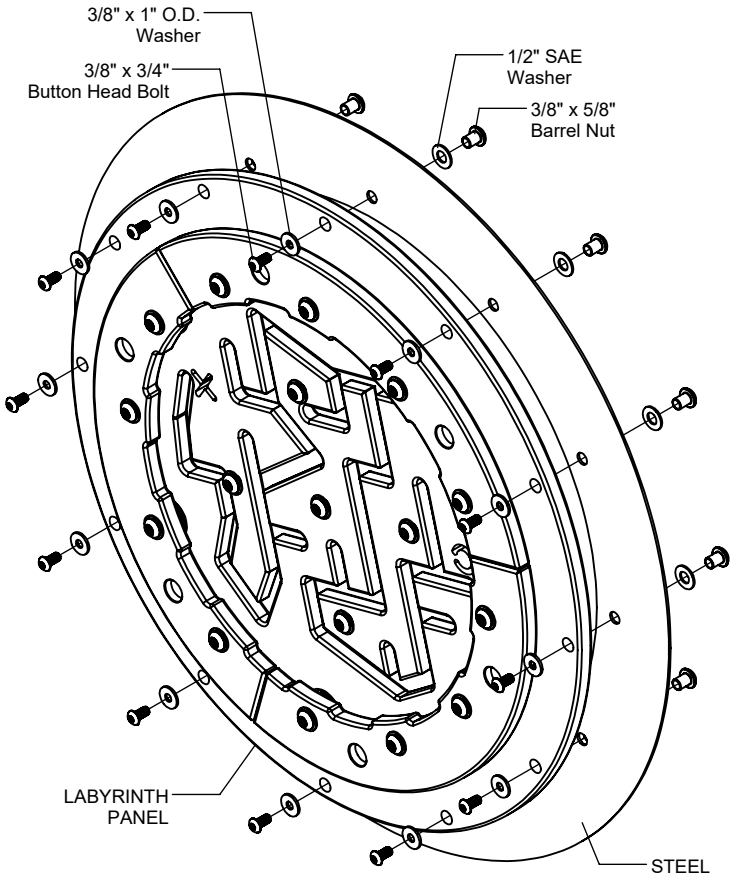


FIGURE 5

Step 4a

For Steel Event Panel Only

Attach Labyrinth Panel to Steel Event Panel as shown in Figure 5. (See Note A)

NOTE: This step may be factory assembled. See Bill of Materials for Assembled Parts List.

Step 4b

For HDPE Event Panel Only

Attach Labyrinth Panel to HDPE Event Panel as shown in Figure 6. (See Note A)

NOTE: This step may be factory assembled. See Bill of Materials for Assembled Parts List.

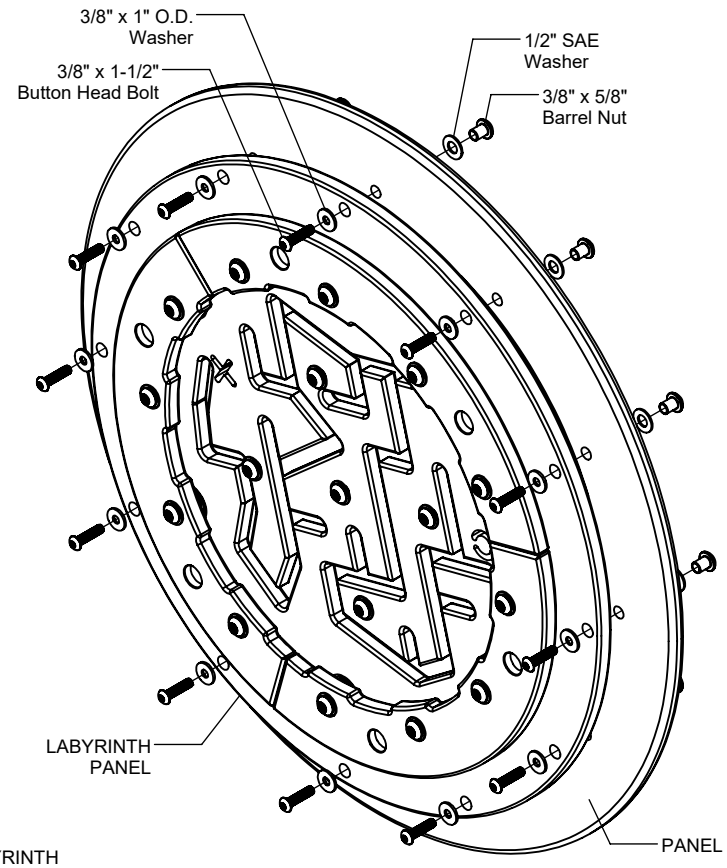


FIGURE 6

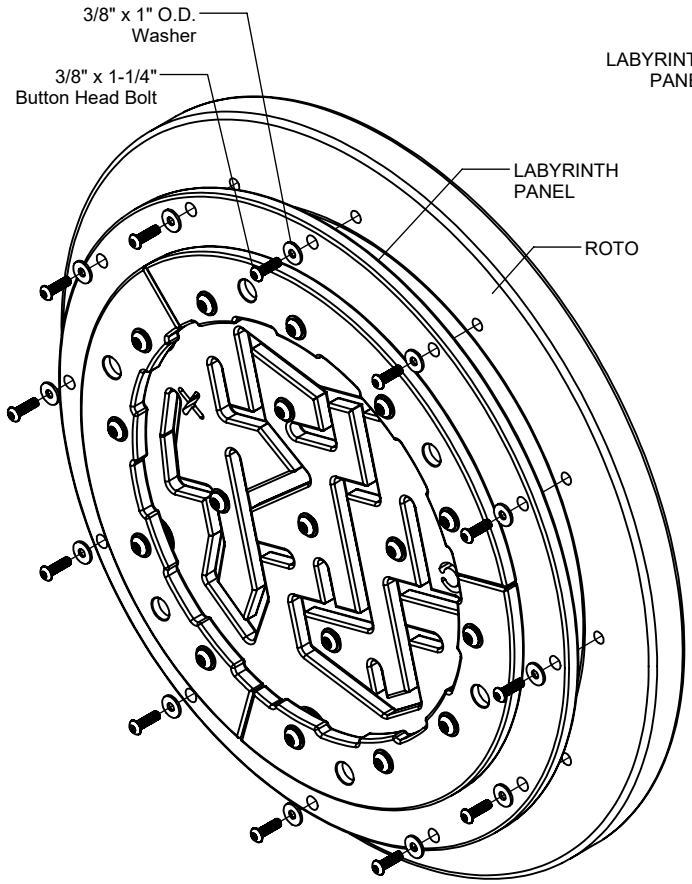


FIGURE 7

Step 4c

For Roto Event Panel Only

Attach Labyrinth Panel to Roto Event Panel as shown in Figure 7. (See Note A)

NOTE: This step may be factory assembled. See Bill of Materials for Assembled Parts List.

Step 5

For Standard R5/R35 Panel Only

Complete standard panel assembly as described in R35-1600 R3.5 Panel Assembly and R5-1601 Panel Type 1 (Rotomold) installation instructions (See Note B)

Step 6

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

HDPE INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

ROTO INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12

Assembled Parts List

INSERT MOUNT		
Part #	**DESCRIPTION**	**QTY**
EE-4334	Labyrinth Window	2
EF-4246-R	Pin Ball Panel Mounting Ring	1
EG-8163-BRET	Labyrinth Panel Back Retainer R3.5	3
EG-8163-FRET	Labyrinth Panel Front Retainer R3.5	3
EG-8163-R	Labyrinth Panel Rotator R3.5	1
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
579000	5/8" Nylon Pinball	1
9103052-TR	Bolt Button Head 3/8" x 1"	5
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	36
9333042	Washer Flat 3/8" x 7/8" O.D.	17
9345002	Washer Flat SAE 1/2"	17
9443022-TR	Nut Barrel 3/8" x 5/8" BH	17

Parts List

R35 DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BE-0361-L	R35 Panel Bracket - Left	1
BE-0361-R	R35 Panel Bracket - Right	1
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	6
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

R35 GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
GG-8113	Mounting Lug R3.5	4
HS-1001-R35	Socket Clamp Set R3.5	4
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9345002	Washer Flat SAE 1/2"	4

Assembled Parts List

R35 PANEL		
Part #	**DESCRIPTION**	**QTY**
EE-4334	Labyrinth Window	2
EG-8161-P	Round Insert Panel R3.5	1
EG-8163-BRET	Labyrinth Panel Back Retainer R3.5	3
EG-8163-FRET	Labyrinth Panel Front Retainer R3.5	3
EG-8163-R	Labyrinth Panel Rotator R3.5	1
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
579000	5/8" Nylon Pinball	1
9103052-TR	Bolt Button Head 3/8" x 1"	5
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	36
9333042	Washer Flat 3/8" x 7/8" O.D.	17
9345002	Washer Flat SAE 1/2"	17
9443022-TR	Nut Barrel 3/8" x 5/8" BH	17

Parts List

R5 GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
HS-1001-R5	Socket Clamp Set R5	4

Assembled Parts List

R5 GROUND MOUNT		
Part #	**DESCRIPTION**	**QTY**
DF-7107-G	Roto Panel Round-Ground	1
EE-4334	Labyrinth Window	2
EF-4246-R	Pin Ball Panel Mounting Ring	1
EG-8163-BRET	Labyrinth Panel Back Retainer R3.5	3
EG-8163-FRET	Labyrinth Panel Front Retainer R3.5	3
EG-8163-R	Labyrinth Panel Rotator R3.5	1
GE-0011	Zinc Collar	4
LF-0733	Panel Roto Pipe	2
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
579000	5/8" Nylon Pinball	1
9103052-TR	Bolt Button Head 3/8" x 1"	5
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9248112	Screw Drywall #8 x 2-1/2" Sq Dr	8
9263012	Screw Soc Set 3/8" x 1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	48
9333042	Washer Flat 3/8" x 7/8" O.D.	17
9345002	Washer Flat SAE 1/2"	17
9443022-TR	Nut Barrel 3/8" x 5/8" BH	17

Specifications

PIN BALL PANEL MOUNTING RING, LABYRINTH PANEL ROTATOR AND LABYRINTH PANEL FRONT AND BACK RETAINER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

LABYRINTH WINDOW:
Shall be made from .118 thick polycarbonate sheet plastic.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

R5 DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
BF-7117-L	Roto Panel Bracket Left (R5)	1
BF-7117-R	Roto Panel Bracket Right (R5)	1
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	6

Assembled Parts List

R5 DECK MOUNT		
Part #	**DESCRIPTION**	**QTY**
DF-7107	Roto Panel Round	1
EE-4334	Labyrinth Window	2
EF-4246-R	Pin Ball Panel Mounting Ring	1
EG-8163-BRET	Labyrinth Panel Back Retainer R3.5	3
EG-8163-FRET	Labyrinth Panel Front Retainer R3.5	3
EG-8163-R	Labyrinth Panel Rotator R3.5	1
GE-0011	Zinc Collar	2
LF-0733	Panel Roto Pipe	1
481000	Roller Bearing 1/2"x1-3/8"x7/16" thick	6
562000	Flange Bearing	12
579000	5/8" Nylon Pinball	1
9103052-TR	Bolt Button Head 3/8" x 1"	5
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	12
9248112	Screw Drywall #8 x 2-1/2" Sq Dr	4
9263012	Screw Soc Set 3/8" x 1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	48
9333042	Washer Flat 3/8" x 7/8" O.D.	17
9345002	Washer Flat SAE 1/2"	17
9443022-TR	Nut Barrel 3/8" x 5/8" BH	17

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

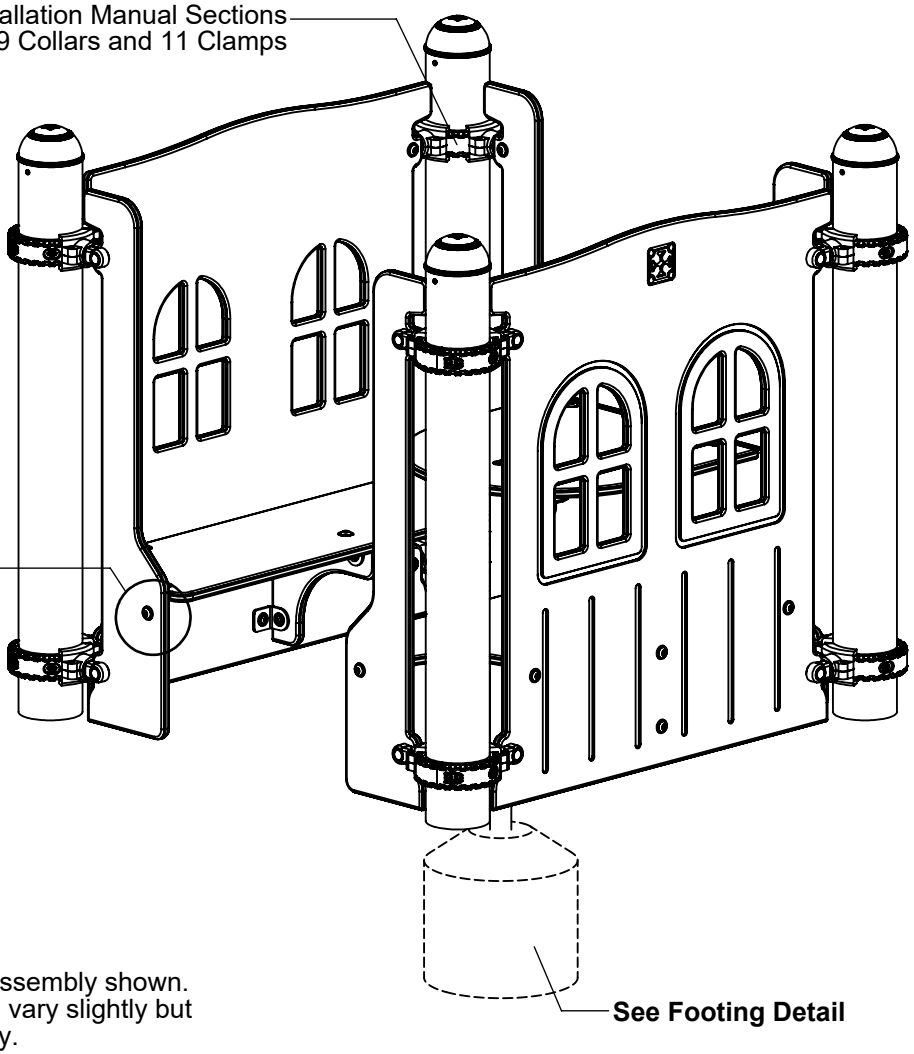
(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.

(D) All gaps created (e.g. between panels, between panel and deck, between panel and roof, etc.) must be less than 3-1/2" [89mm] or greater than 9" [229mm].

(E) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Clubhouse Assembly



NOTE: R5 Clubhouse Assembly shown. Other configurations will vary slightly but does not affect assembly.

Step 1

Refer to Footing Layout and mark footing hole location. Dig (1) Ø 12" footing hole. Refer to Footing Detail for depth and details.

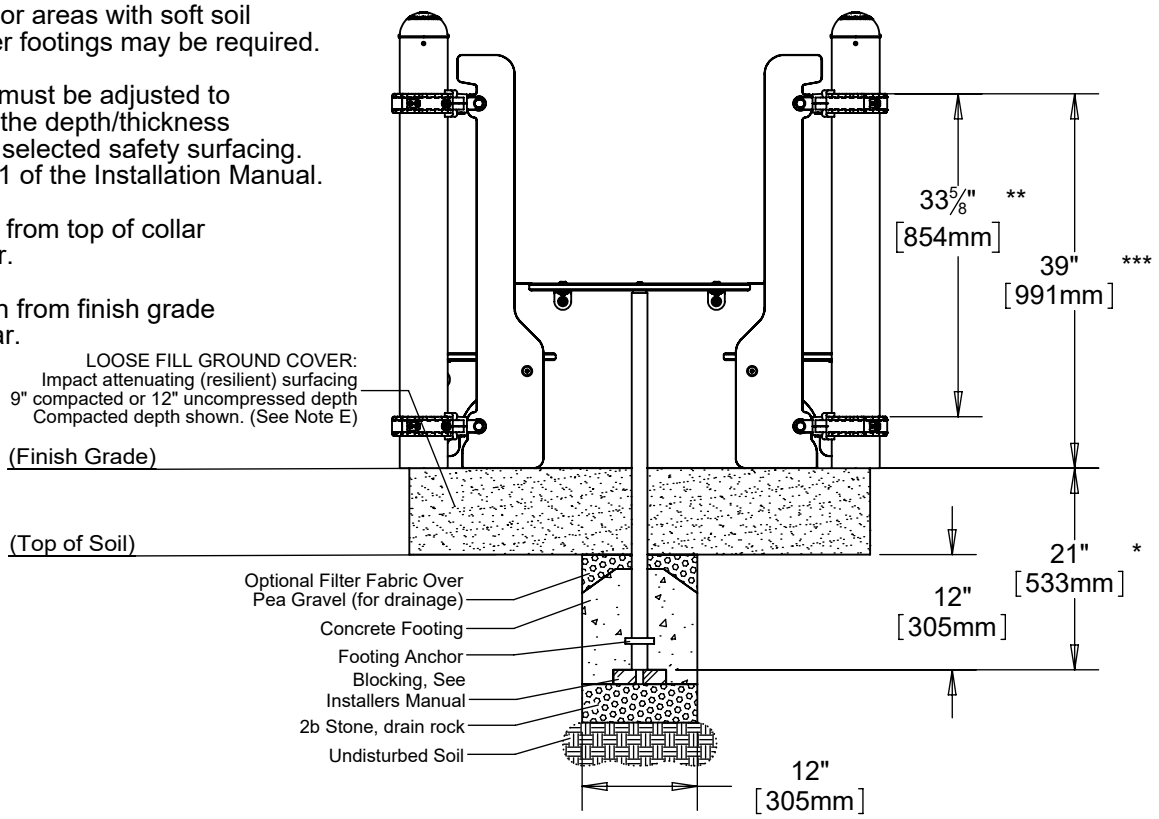
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

** Height shown from top of collar to top of collar.

*** Height shown from finish grade to top of collar.

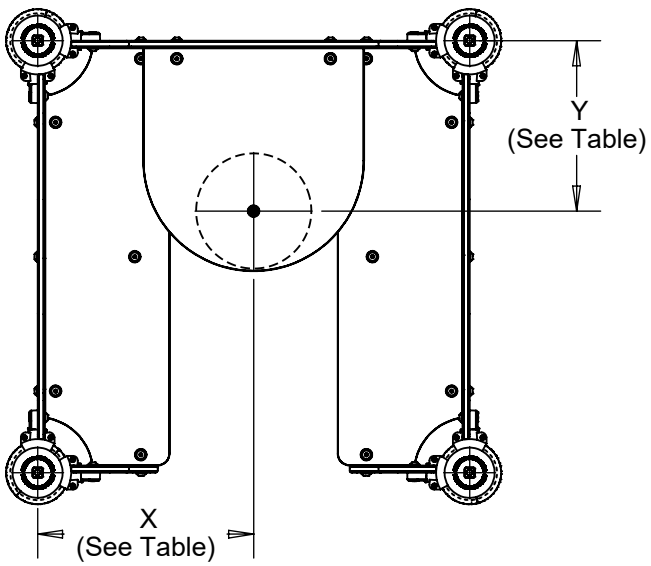
Footing Detail



Top View - Footing Layout

X Footing Distance Table Center of Post to Center of Footing		
Assembly	X (in.)	X (mm)
R3.5	21	533
R5	22-1/2	572

Y Footing Distance Table Center of Post to Center of Footing		
Assembly	Y (in.)	Y (mm)
R3.5	14-3/4	375
R5	17-3/4	451



Step 2 (Factory Assembled)

Install Nutsert into Table Support as shown in Figure 2. (See Note A)

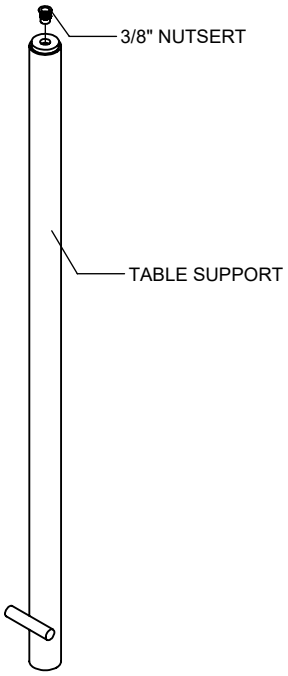


FIGURE 2

Step 3

Locate and attach collars at heights shown in Footing Detail. Attach Panels to posts as shown in Figure 3. Mounting Lugs are located on the outside of the Clubhouse Panels. (See Notes A & C)

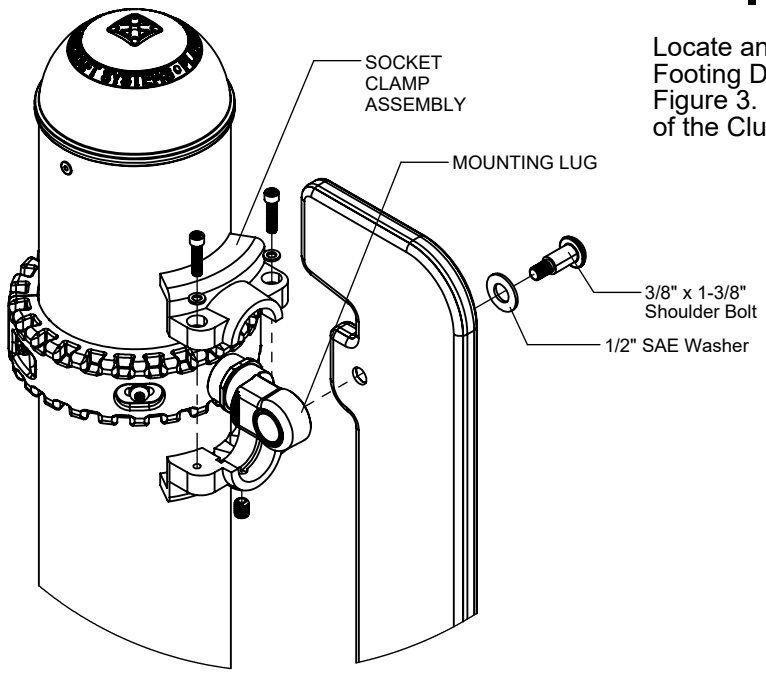


FIGURE 3

Step 4

Refer to Figure 4 for location and attach Store Panel Counter Brackets to Panels as shown in Figure 1.1. (See Note A)

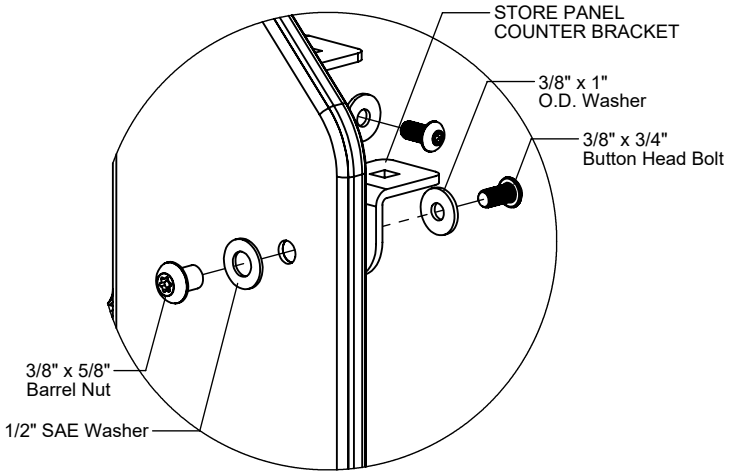


Figure 1.1

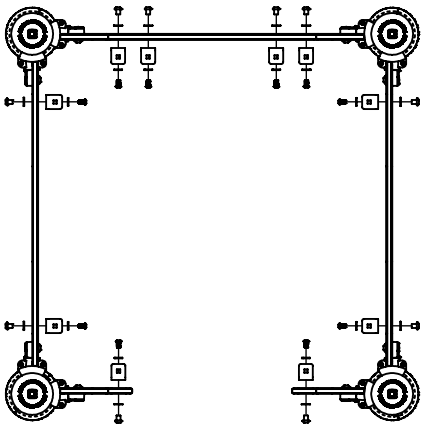


FIGURE 4

Step 5

Attach Store Panel Counter Brackets to Main Panel as shown in Figure 5. (See Note A)

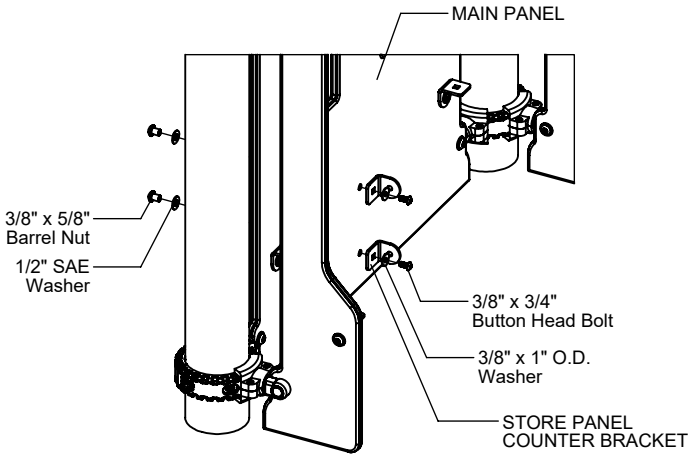


FIGURE 5

Step 6

Attach Seat Support to Store Panel Counter Brackets. Attach Store Panel Counter Bracket to Seat Support as shown in Figure 6. (See Note A)

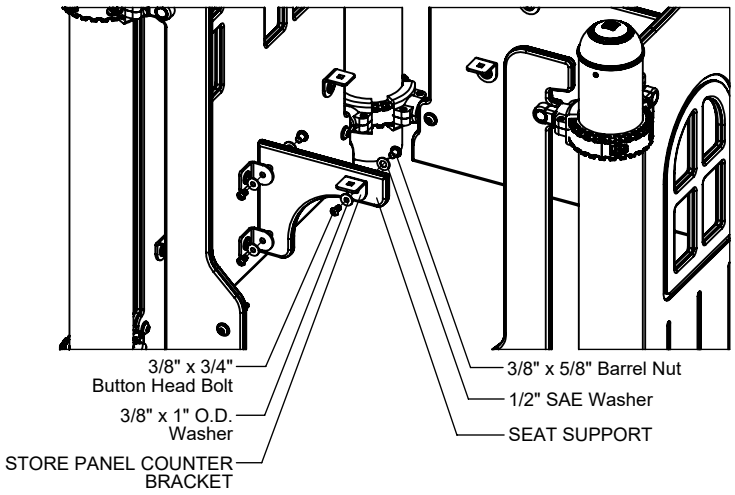


FIGURE 6

Step 7

Attach Seat to Store Panel Counter Brackets as shown in Figure 7. (See Note A)

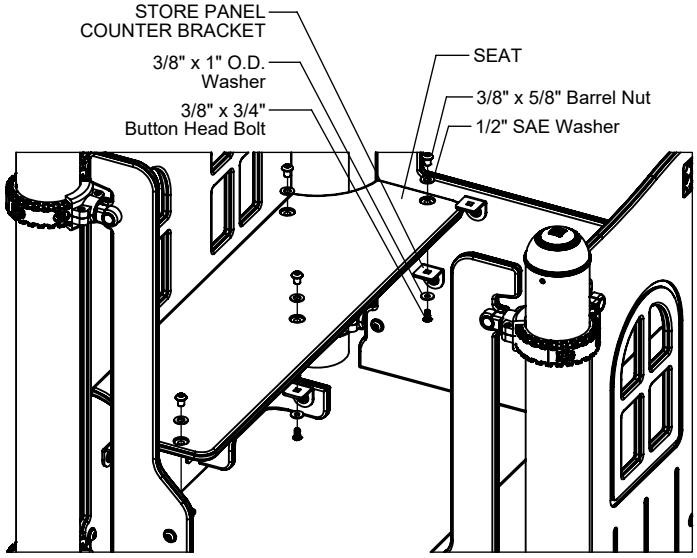


FIGURE 7

Step 8

Place Table Support into footing hole. Attach Table to Store Panel Counter Brackets and Table Support as shown in Figure 8. (See Notes A & B)

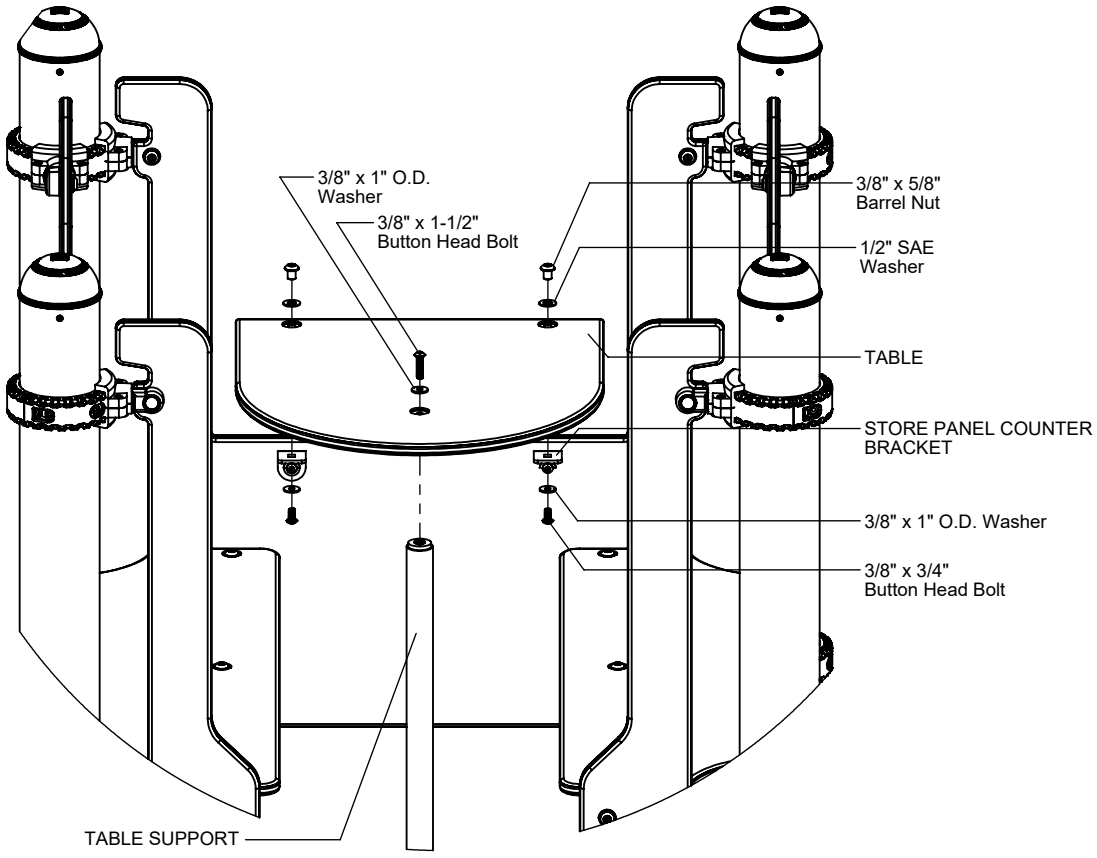


FIGURE 8

Step 9

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 10

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 11

Place appropriate compliant protective surfacing under and around Clubhouse Assembly. (See Note E)

Parts List

R3.5 CLUBHOUSE ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
BE-4285	Store Panel Counter Bracket	16
EG-8212-EP	Clubhouse Panels R3.5 - End Panel	1
EG-8212-HW	Clubhouse Panels R3.5 - Half Wall	2
EG-8212-MP	Clubhouse Panels R3.5 - Main Panel	2
EG-8212-S	Clubhouse Panels R3.5 - Seat	2
EG-8212-SS	Clubhouse Panels R3.5 - Seat Support	2
EG-8212-T	Clubhouse Panels R3.5 - Table	1
GG-8113	Mounting Lug R3.5	16
HS-1001-R35	Socket Clamp Set R3.5	16
9103032-TR	Bolt Button Head 3/8" x 3/4"	32
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	1
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	16
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	33
9345002	Washer Flat SAE 1/2"	48
9443022-TR	Nut Barrel 3/8" x 5/8" BH	32

R5 CLUBHOUSE ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
BE-4285	Store Panel Counter Bracket	16
EF-7102-EP	Clubhouse Panels R5 - End Panel	1
EF-7102-HW	Clubhouse Panels R5 - Half Wall	2
EF-7102-MP	Clubhouse Panels R5 - Main Panel	2
EF-7102-S	Clubhouse Panels R5 - Seat	2
EF-7102-SS	Clubhouse Panels R5 - Seat Support	2
EF-7102-T	Clubhouse Panels R5 - Table	1
GG-8113	Mounting Lug R3.5	16
HS-1001-R5	Socket Clamp Set R5	16
9103032-TR	Bolt Button Head 3/8" x 3/4"	32
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	1
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	16
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	33
9345002	Washer Flat SAE 1/2"	48
9443022-TR	Nut Barrel 3/8" x 5/8" BH	32

Assembled Parts List

Part #	DESCRIPTION	QTY
FS-1639	Clubhouse Table Support	1
455110	Nutsert 3/8 x .690	1

Parts List

R3.5 TABLE ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
BE-4285	Store Panel Counter Bracket	2
EG-0056	Clubhouse Table Panel R3.5	1
EG-8212-T	Clubhouse Panels R3.5 - Table	1
GG-8113	Mounting Lug R3.5	4
HS-1001-R35	Socket Clamp Set R3.5	4
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	1
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9345002	Washer Flat SAE 1/2"	8
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

R5 TABLE ASSEMBLY		
Part #	**DESCRIPTION**	**QTY**
BE-4285	Store Panel Counter Bracket	2
EF-0057	Clubhouse Table Panel R5	1
EF-7102-T	Clubhouse Panels R5 - Table	1
GG-8113	Mounting Lug R3.5	4
HS-1001-R5	Socket Clamp Set R5	4
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	1
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9345002	Washer Flat SAE 1/2"	8
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

Specifications

CLUB HOUSE PANELS & TRIM:
Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

CLUB HOUSE TABLE SUPPORT:
Shall be fabricated using 1.660" O.D. steel tubing welded to a 1/4" thick pipe plug with threaded insert and will have a multi-stage baked-on powder coat finish.

STORE PANEL COUNTER BRACKET:
Shall be precision laser cut and formed from 3/16" sheet steel and will have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

MOUNTING LUGS:
Shall be precision die-cast from a high-strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

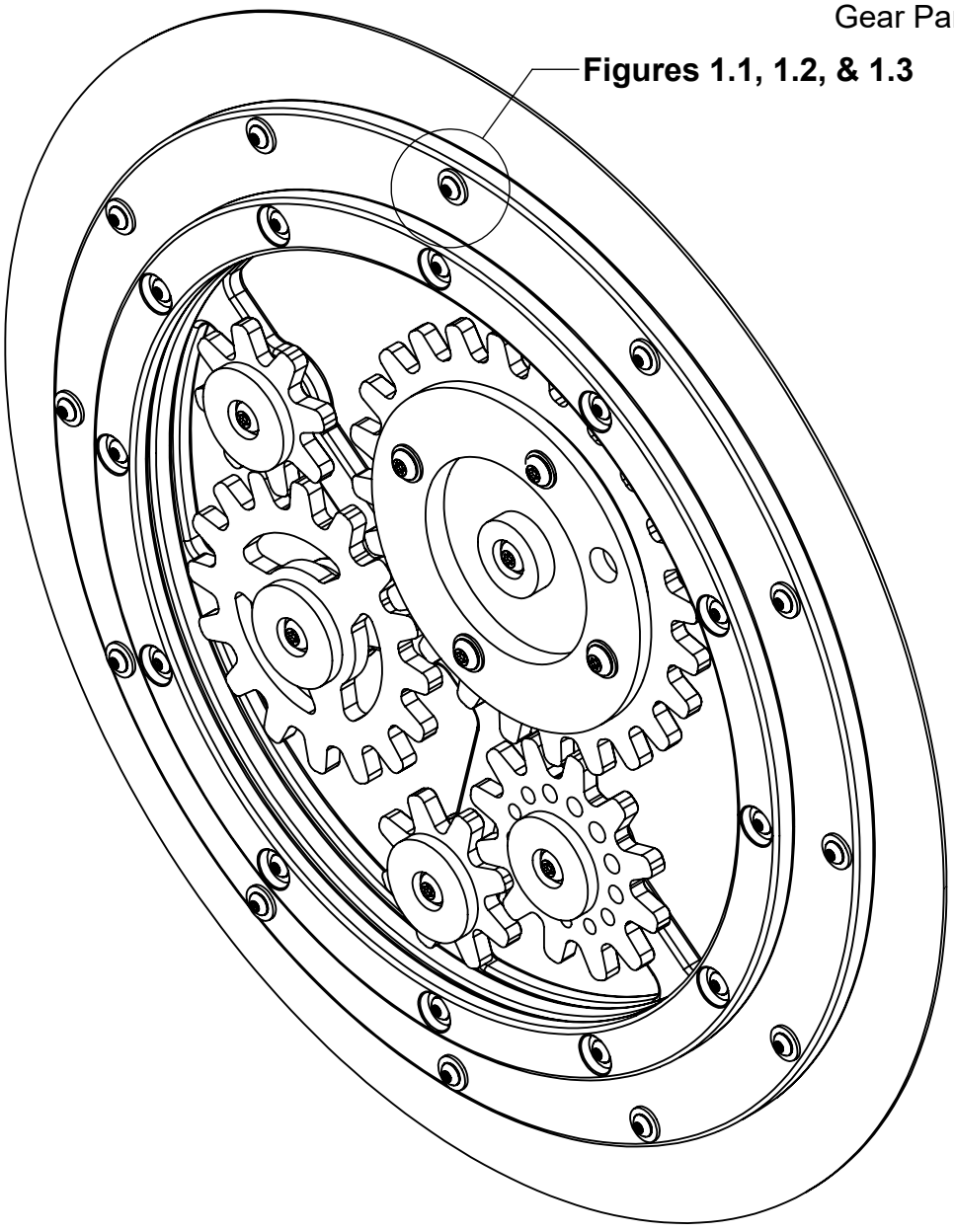
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Gear Panel Round



NOTE: Gear Panel Round to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Press Barrel Nuts through Hubs and partially assemble Gears to Window Front as shown in Figure 2. (See Note A)

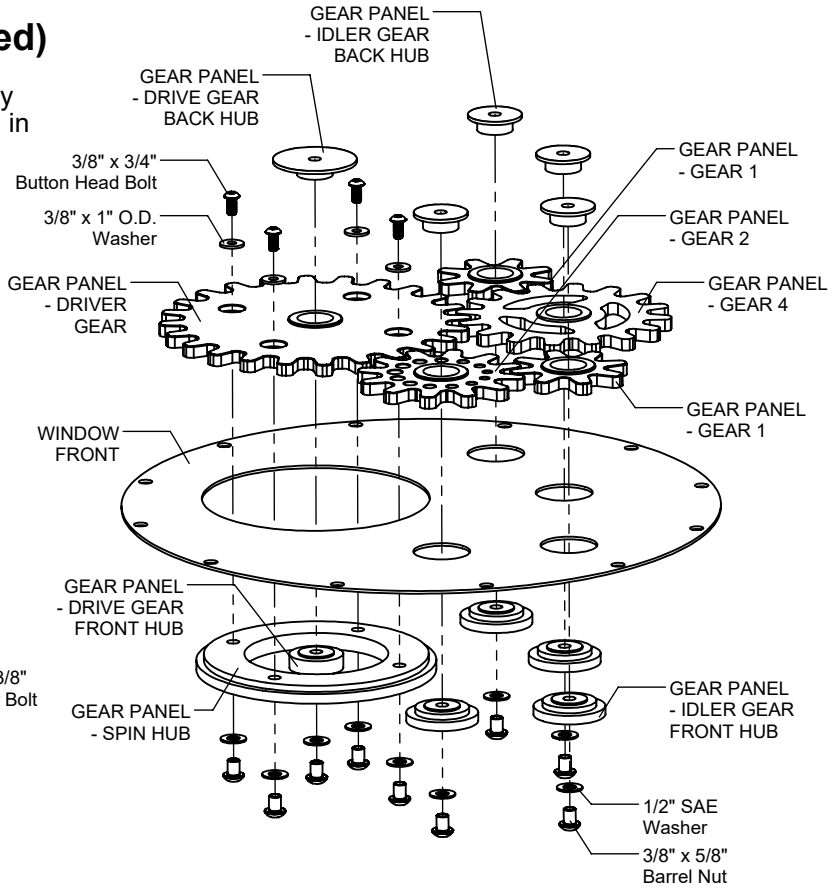


FIGURE 2

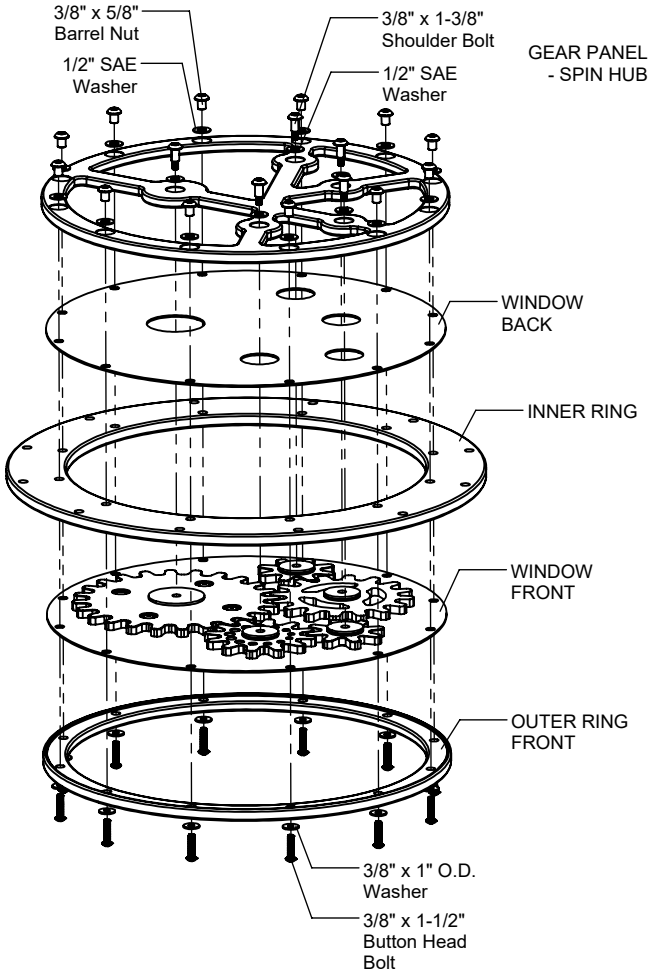


FIGURE 3

Step 2 (Factory Assembled)

Assemble the Gear Panel Frame as shown in Figure 3. (See Note A)

Step 3a

For Steel Event Panel Only

Attach Gear Panel Round to Steel Event Panel as shown in Figure 1.1. (See Note A)

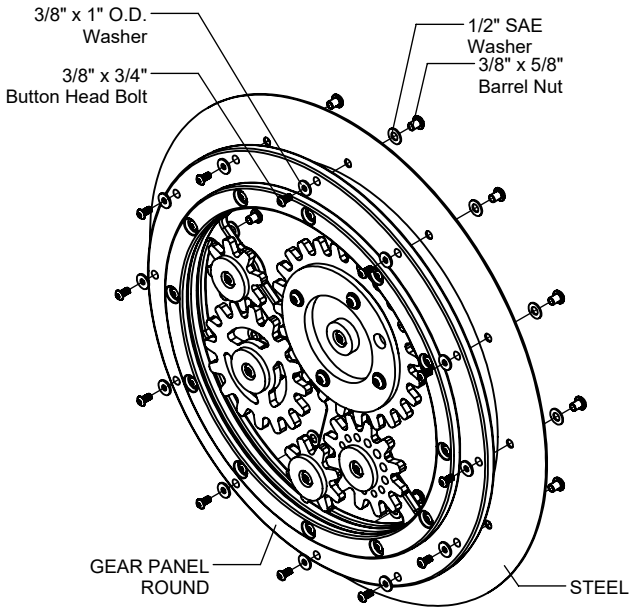


Figure 1.1

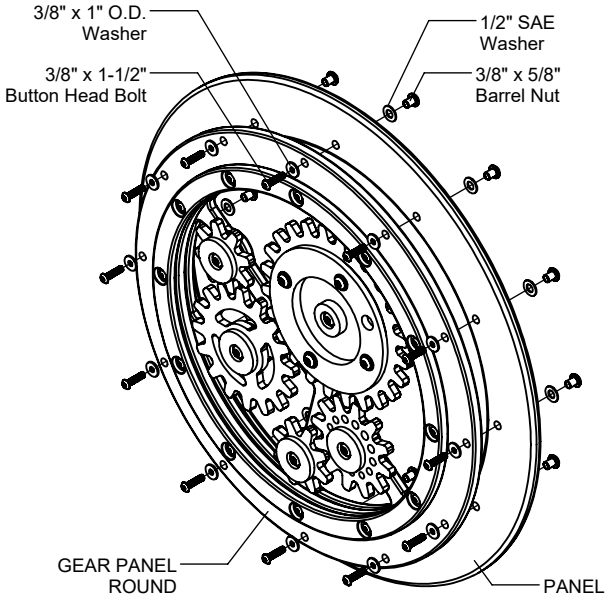


Figure 1.2

Step 3b

For HDPE Event Panel Only

Attach Gear Panel Round to HDPE Event Panel as shown in Figure 1.2. (See Note A)

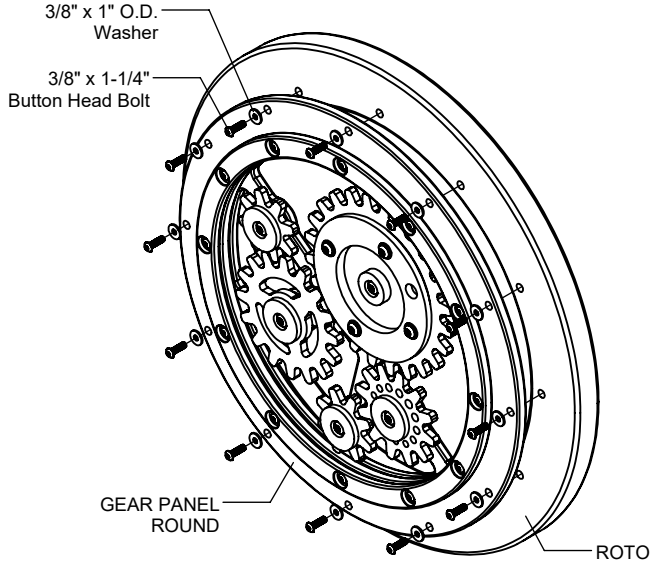


Figure 1.3

Step 3c

For Roto Event Panel Only

Attach Gear Panel Round to Roto Event Panel as shown in Figure 1.3. (See Note A)

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

ROTO MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12

Assembled Parts List

Part #	DESCRIPTION	QTY
EE-0688-IR	Gear Panel Round Inner Ring	1
EE-0688-ORB	Gear Panel Round Outer Ring Back	1
EE-0688-ORF	Gear Panel Round Outer Ring Front	1
EE-0689-WB	Gear Panel Round Window Back	1
EE-0689-WF	Gear Panel Round Window Front	1
EE-8216-DG	Gear Panel - Driver Gear	1
EE-8216-DGBH	Gear Panel - Drive Gear Back Hub	1
EE-8216-DGFH	Gear Panel - Drive Gear Front Hub	1
EE-8216-G1	Gear Panel - Gear 1	2
EE-8216-G2	Gear Panel - Gear 2	1
EE-8216-G4	Gear Panel - Gear 4	1
EE-8216-IGBH	Gear Panel - Idler Gear Back Hub	4
EE-8216-IGFH	Gear Panel - Idler Gear Front Hub	4
EE-8216-SH	Gear Panel - Spin Hub	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	5
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	16
9345002	Washer Flat SAE 1/2"	26
9443022-TR	Nut Barrel 3/8" x 5/8" BH	21

Specifications

GEAR PANEL COMPONENTS:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

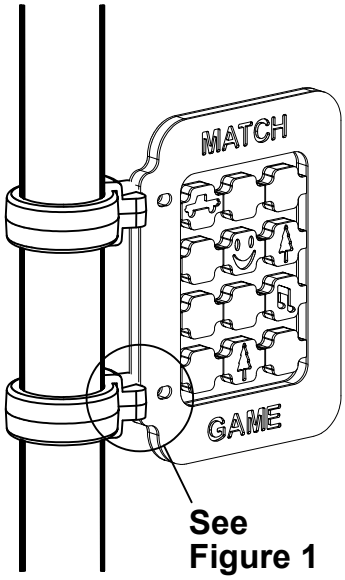
GEAR PANEL WINDOWS:
Shall be made from .118 Polycarbonate sheet plastic.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

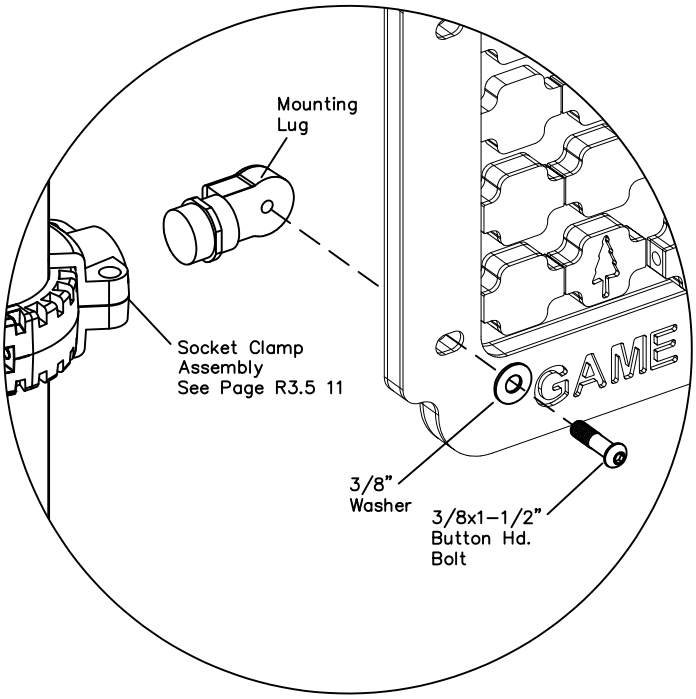
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

Assembly View



This assembly applies to all Panel Pals.

Figure 1



PANEL PAL ASSEMBLY

Parts List

QTY.	DESCRIPTION	PART #
1	Panel Pal	varies
2	Socket Clamp R35 Assy.	See Pg. 11
2	Mounting Lug R35	8113
2	3/8 x 1-1/2" Button Hd. Bolt	9103072-TR
2	3/8" Washer	9333002

Specifications

PANEL PAL:
Shall be constructed of 3/4" thick, high-density polyethylene.

MOUNTING LUGS, CLAMPS, BOTT. CASTINGS:
Shall be precision die-cast from a high strength aluminum alloy. Finished with a baked on powder coating.

HARDWARE:
Shall be zinc/nickel plated, galvanized or stainless steel as required to resist corrosion.

Installation

Notes:
(A)
Use liquid thread lock (such as Loctite) with all threaded hardware that does not include self-locking nuts.

Step 1.
Locate and mark the position of the collars on the support post and attach as shown on Collar Assembly page R3.5-09.

Step 2.
Attach the Panel to the post as shown in Figures 1. See Assembly Page R3.5-11 for Socket Clamp and hardware.

Step 3.
Fully tighten all fasteners.

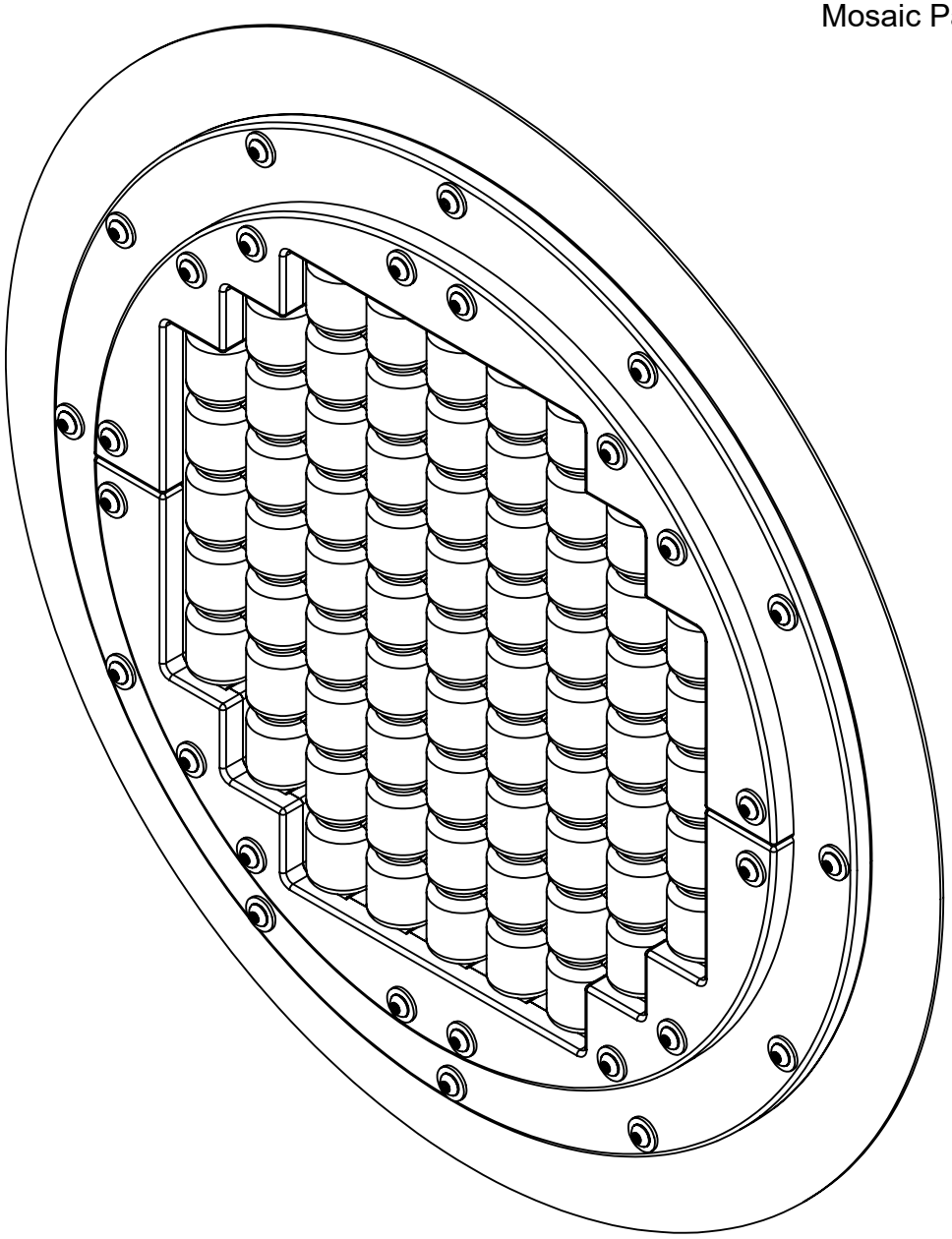
Maintenance

Periodically tighten all screws, bolts and nuts.
A periodic inspection of all parts is necessary.
If a part is broken or worn, replace immediately.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Mosaic Panel Round



NOTE: Mosaic Panel Round to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Assemble Mosaic Block Halves (pairing black halves with grey halves) together and slide on Activity Panel Tubes. Assemble Mosaic Blocks and Retainers to Panel as shown in Figure 2. (See Note A)

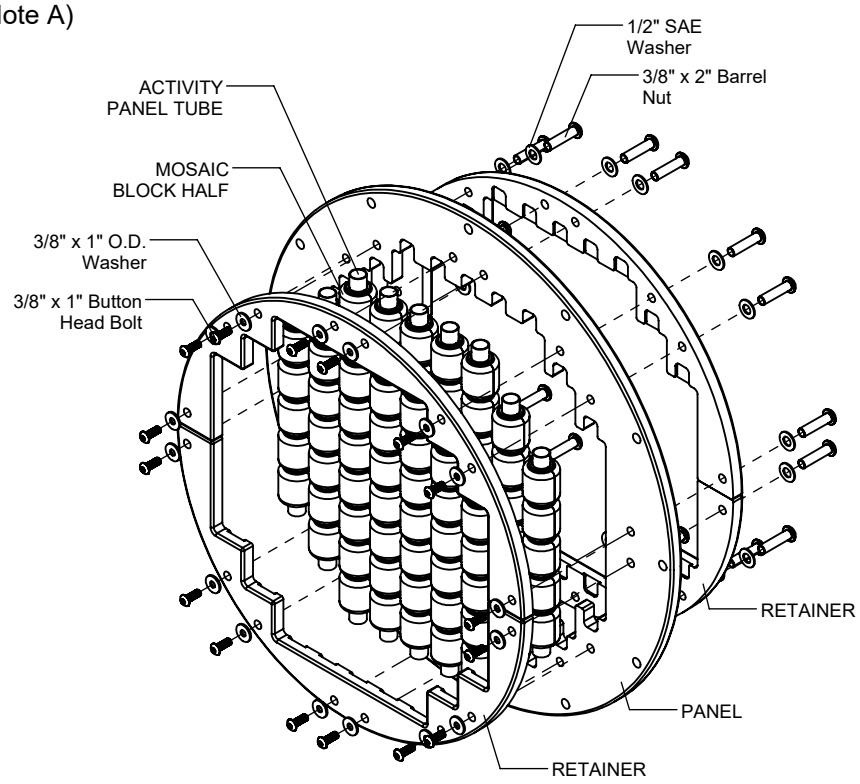


FIGURE 2

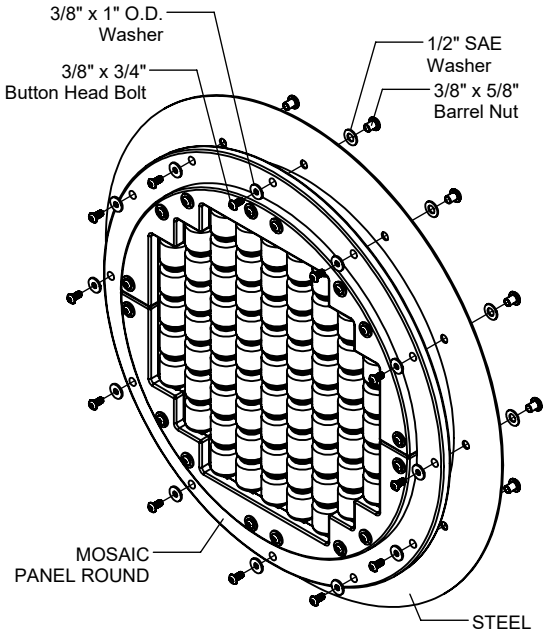


FIGURE 3

Step 2a

For Steel Event Panel Only

Attach Mosaic Panel Round to Steel Event Panel as shown in Figure 3. (See Note A)

Step 2b

For HDPE Event Panel Only

Attach Mosaic Panel Round to HDPE Event Panel as shown in Figure 4. (See Note A)

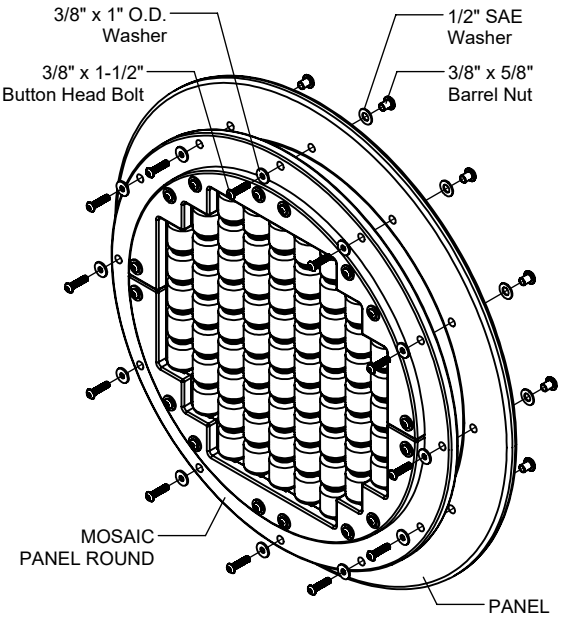


FIGURE 4

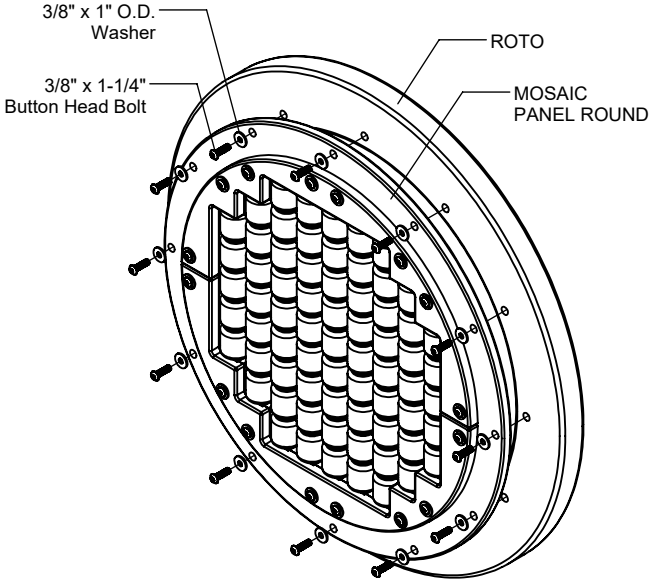


FIGURE 5

Step 2c

For Roto Event Panel Only

Attach Mosaic Panel Round to Roto Event Panel as shown in Figure 5. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

ROTO MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12

Assembled Parts List

Part #	DESCRIPTION	QTY
EE-0690	Mosaic Panel Round	1
EE-0690-R	Mosaic Panel Round Retainer	4
FE-0002	Mosaic Block Half	82
FE-0002-B	Mosaic Block Half - Black	19
FE-0002-G	Mosaic Block Half - Grey	37
LE-0075-1275	Activity Panel Tube 12.75"	2
LE-0075-17375	Activity Panel Tube 17.375"	2
LE-0075-22	Activity Panel Tube 22"	5
9103052-TR	Bolt Button Head 3/8" x 1"	16
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	16
9345002	Washer Flat SAE 1/2"	16
9443092-TR	Nut Barrel 3/8" x 2" BH	16

Specifications

MOSAIC PANEL ROUND & RETAINER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

MOSAIC BLOCKS:
Shall be made from injection molded plastic.

ACTIVITY PANEL TUBE:
Shall be fabricated from 0.924" O.D. galvanized steel tubing.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

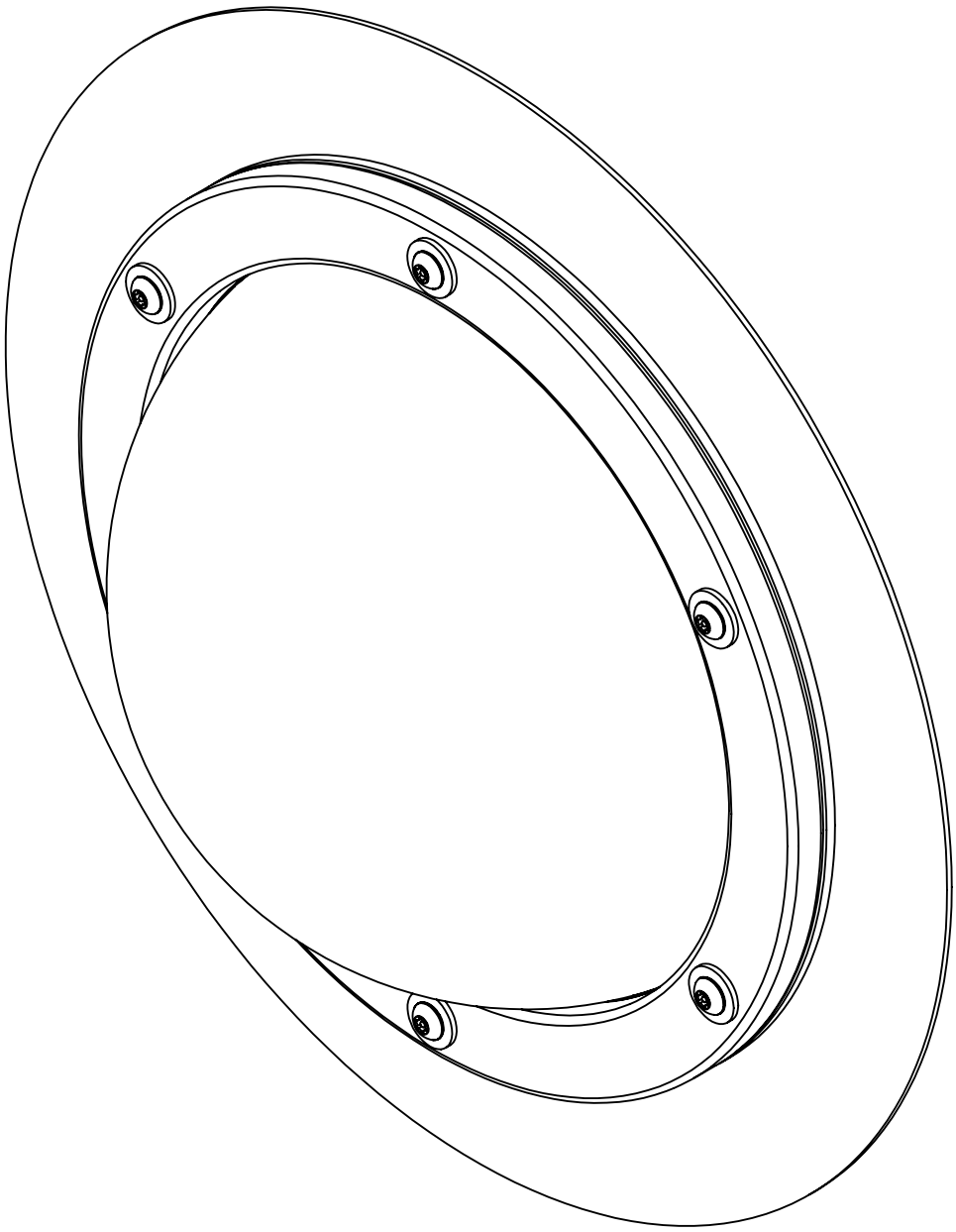
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Small Bubble Panel



NOTE: Small Bubble Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1a

For Steel Event Panel Only

Attach Bubble and Trim to Steel Event Panel as shown in Figure 2. (See Note A)

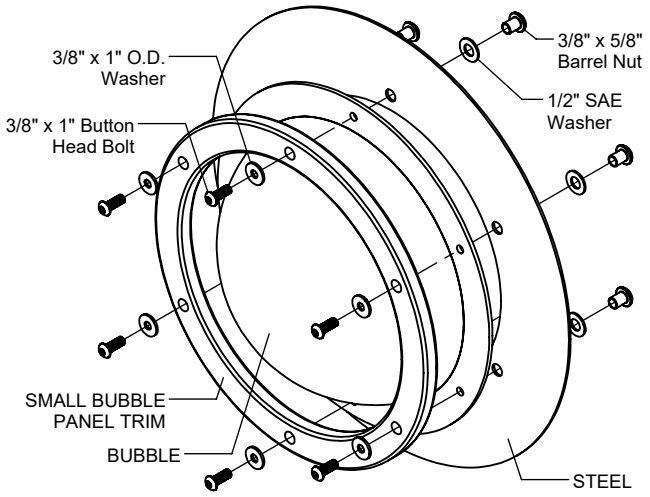


FIGURE 2

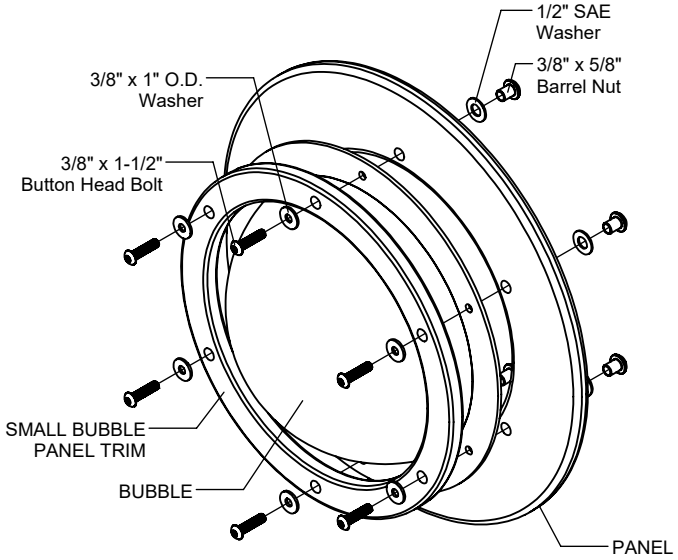


FIGURE 3

Step 1b

For HDPE Event Panel Only

Attach Bubble and Trim to HDPE Event Panel as shown in Figure 3. (See Note A)

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
DE-0010	Bubble 16"	1
EE-0682	Small Bubble Panel Trim	1
9103052-TR	Bolt Button Head 3/8" x 1"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
DE-0010	Bubble 16"	1
EE-0682	Small Bubble Panel Trim	1
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

Specifications

SMALL BUBBLE PANEL TRIM:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SMALL BUBBLE PANEL:
Shall be made from polycarbonate.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

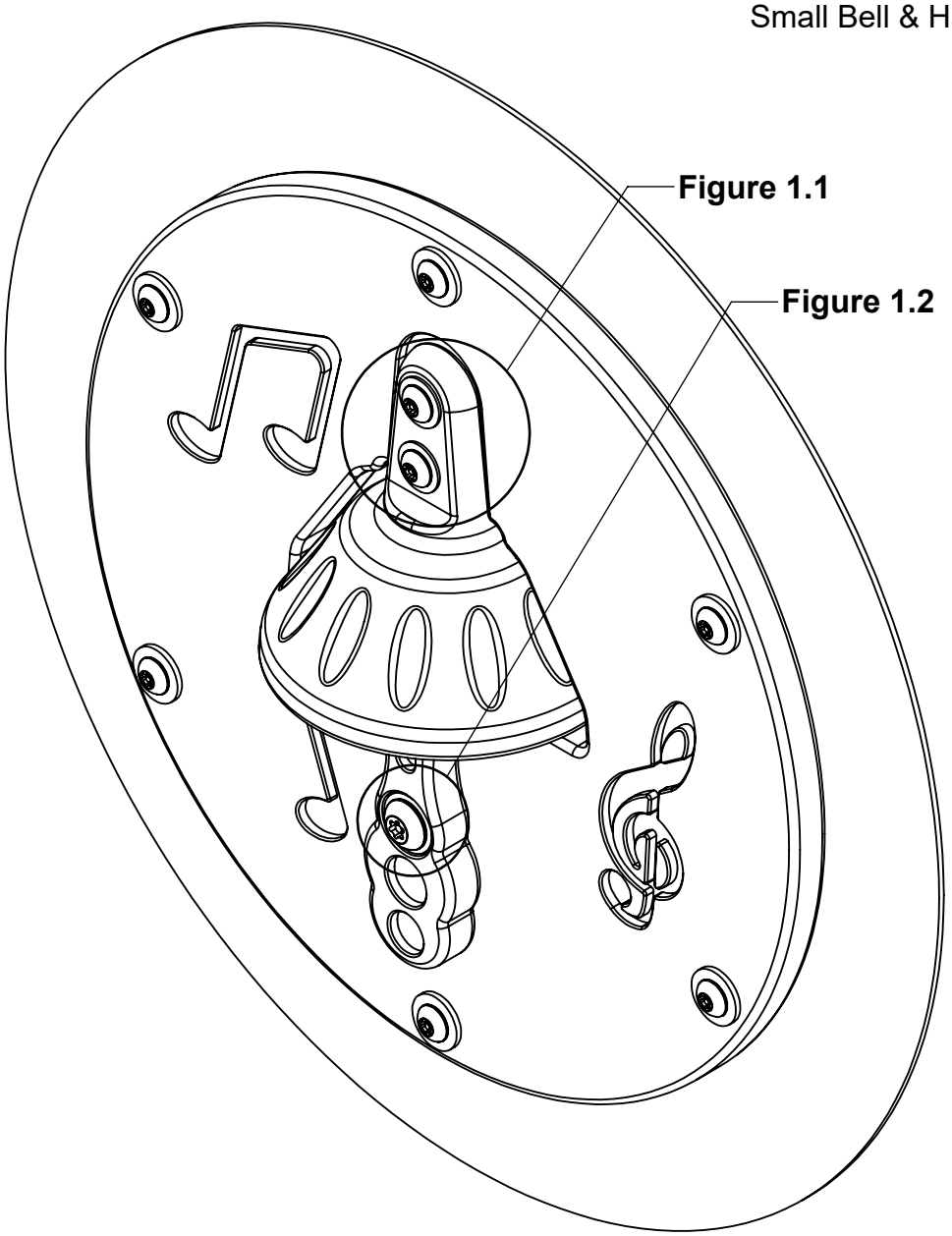
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Small Bell & Hammer Panel



NOTE: Small Bell & Hammer to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Attach Bell to Panel as shown in Figure 1.1.
(See Note A)

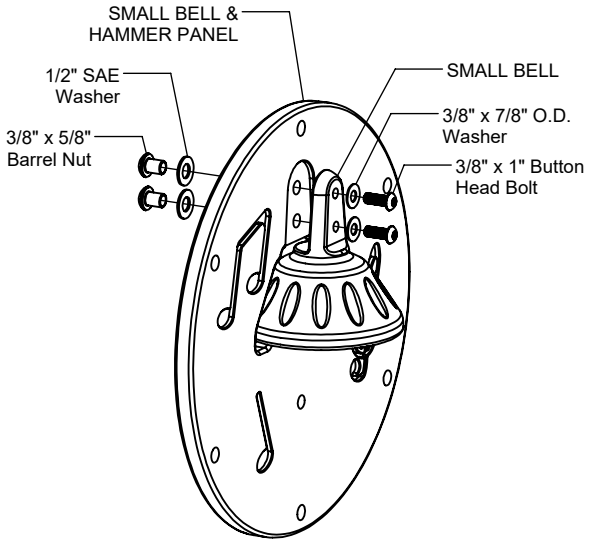


Figure 1.1

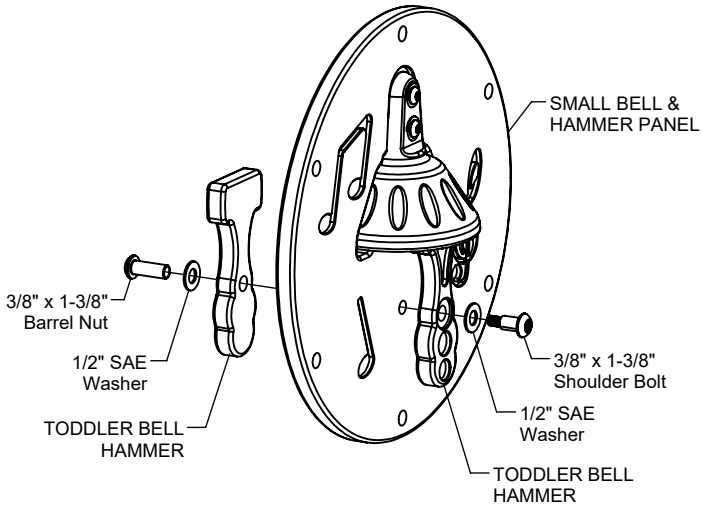


Figure 1.2

Step 2 (Factory Assembled)

Attach Hammer to Panel as shown in Figure 1.2.
(See Note A)

Step 3a

For Steel Event Panel Only

Attach Small Bell & Hammer Panel to
Steel Event Panel as shown in Figure 2.
(See Note A)

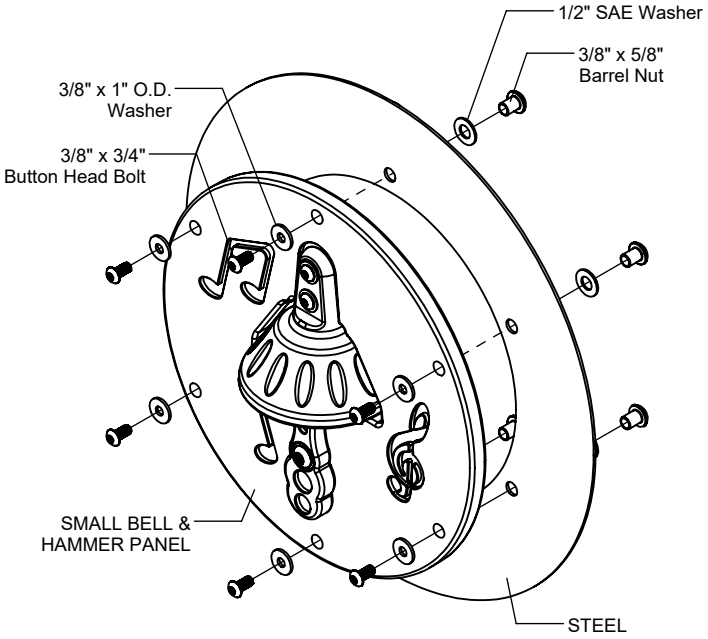


FIGURE 2

Step 3b

For HDPE Event Panel Only

Attach Small Bell & Hammer Panel to HDPE Event Panel as shown in Figure 3. (See Note A)

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

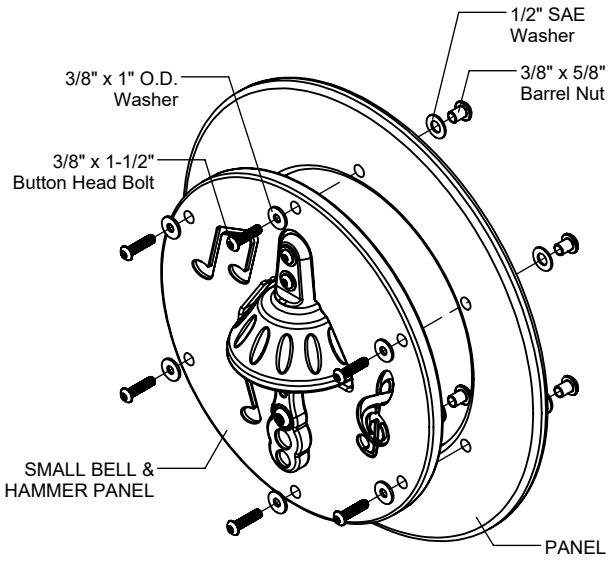


FIGURE 3

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

Assembled Parts List

Part #	DESCRIPTION	QTY
EE-0683	Small Bell and Hammer Panel	1
EI-0061	Toddler Bell Hammer	2
GE-0005	Small Bell	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	1
9333042	Washer Flat 3/8" x 7/8" O.D.	2
9345002	Washer Flat SAE 1/2"	4
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	1

Specifications

SMALL BELL AND HAMMER PANEL & HAMMER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SMALL BELL:
Shall be precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

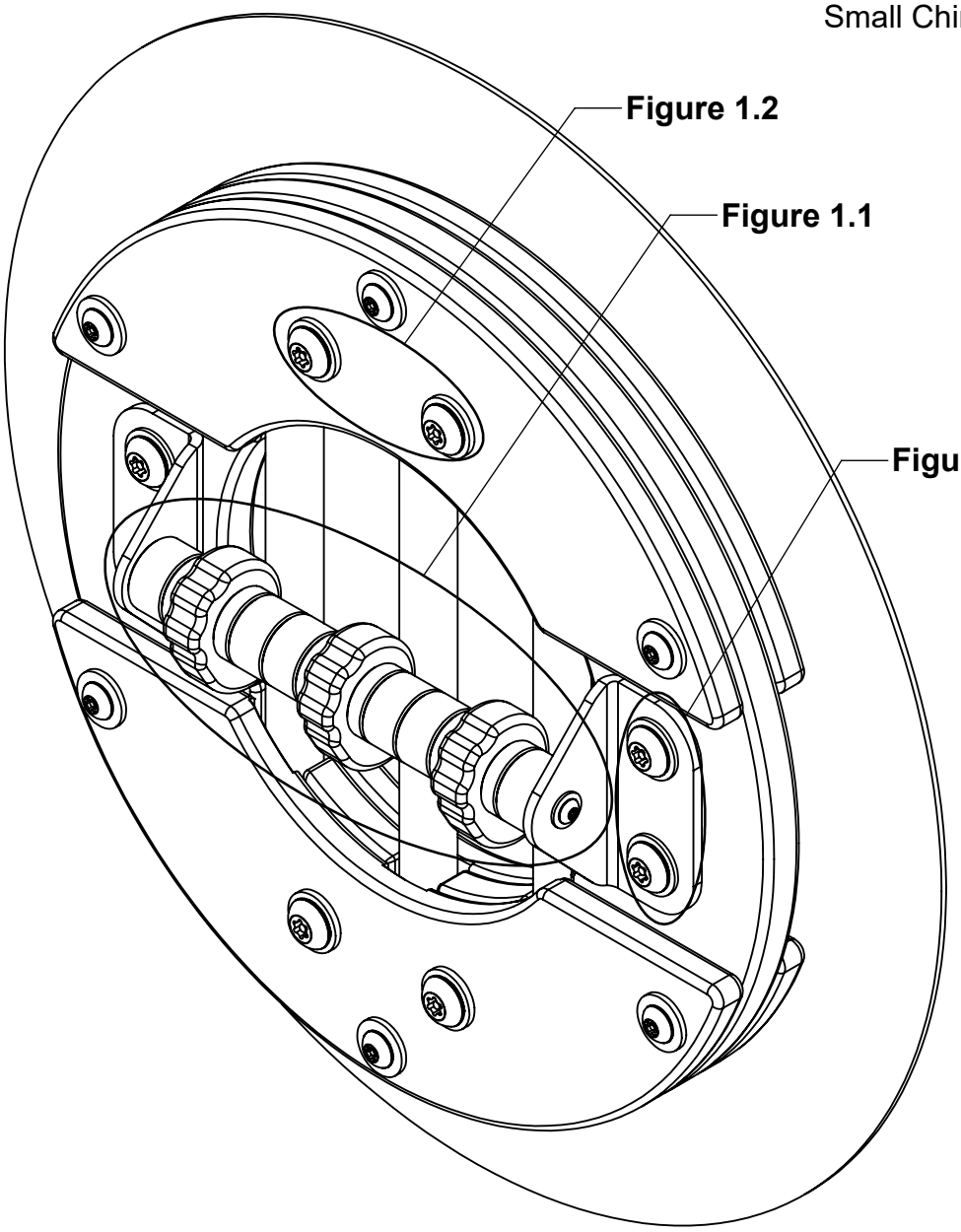
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Small Chime Panel



NOTE: Small Chime Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Place Spacers, Hubs and Hammers onto Pin as indicated and attach Chime Panel Brackets as shown in Figure 1.1. (See Note A).

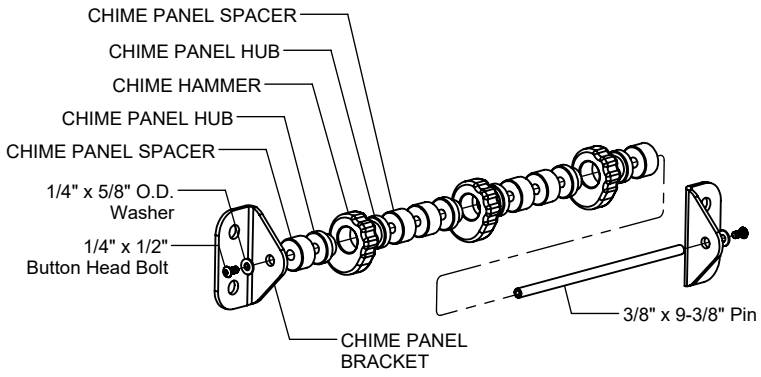


Figure 1.1

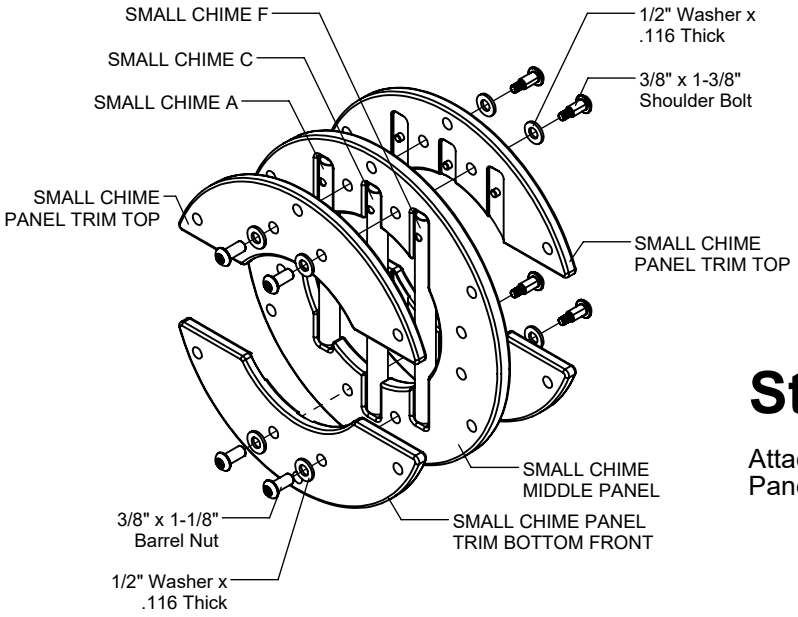


Figure 1.2

Step 2 (Factory Assembled)

Attach Chimes and Trim to Small Chime Middle Panel as shown in Figure 1.2. (See Note A)

Step 3 (Factory Assembled)

Attach Chime Panel Brackets to Middle Panel as shown in Figure 1.3. (See Note A).

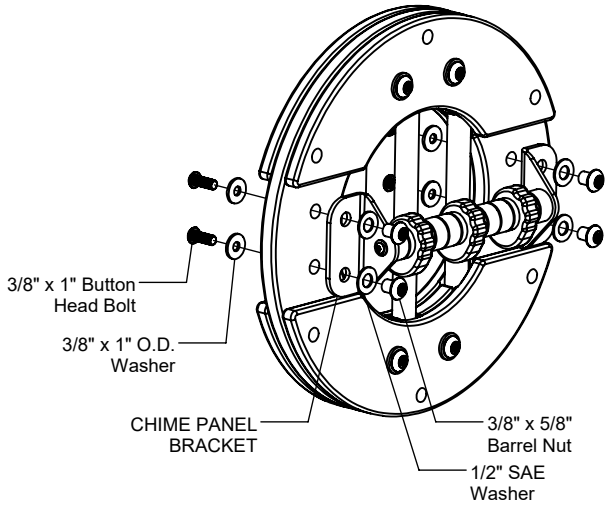


Figure 1.3

Step 4a

For Steel Event Panel Only

Attach Small Chime Panel to Steel Event Panel as shown in Figure 2. (See Note A)

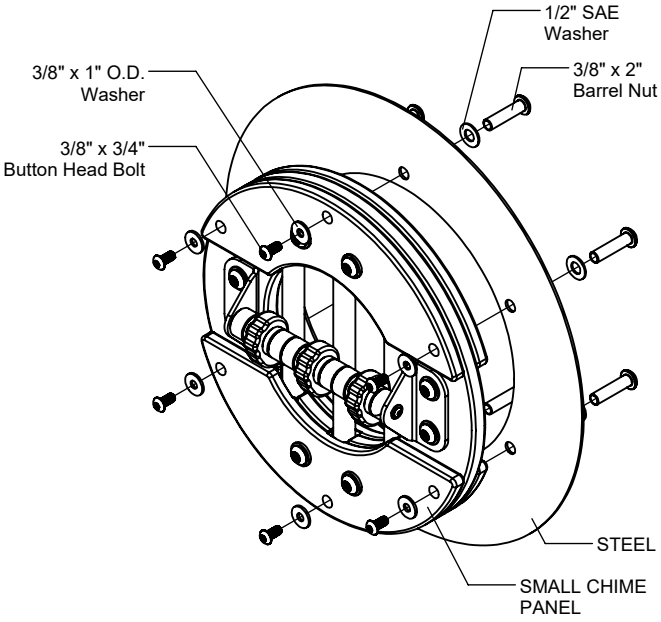


FIGURE 2

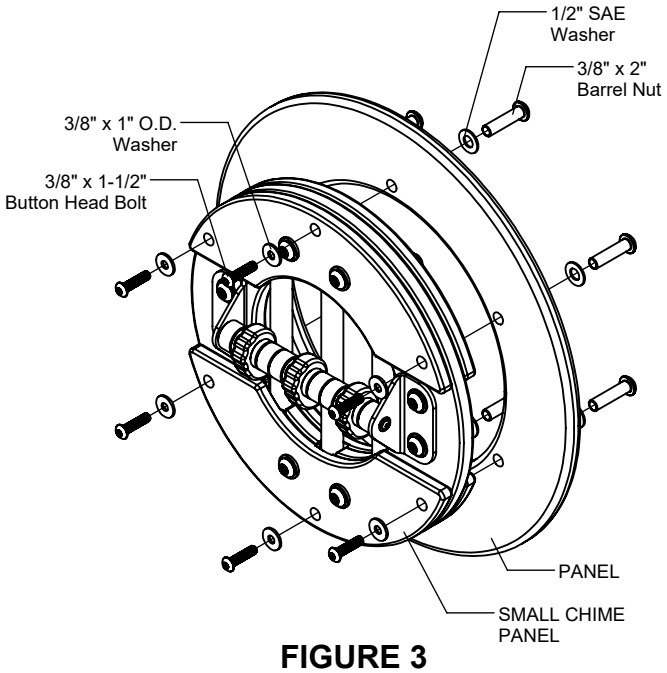


FIGURE 3

Step 4b

For HDPE Event Panel Only

Attach Small Chime Panel to HDPE Event Panel as shown in Figure 2. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443092-TR	Nut Barrel 3/8" x 2" BH	6

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443092-TR	Nut Barrel 3/8" x 2" BH	6

Assembled Parts List

Part #	DESCRIPTION	QTY
BE-0835	Chime Panel Bracket	2
EE-0503	Chime Hammer	3
EE-0504-HUB	Chime Panel Hub	6
EE-0504-SPC	Chime Panel Spacer	6
EE-0699-MP	Small Chime Middle Panel	1
EE-0699-TRMBB	Small Chime Panel Trim Bottom Back	1
EE-0699-TRMBF	Small Chime Panel Trim Bottom Front	1
EE-0699-TRMT	Small Chime Panel Trim Top	2
IE-0142	3/8" x 9-3/8" x 1/4-20 Threaded Pin	1
LE-0077-A	Small Chime A	1
LE-0077-C	Small Chime C	1
LE-0077-F	Small Chime F	1
9101012-TR	Bolt Button Head 1/4" x 1/2"	2
9103052-TR	Bolt Button Head 3/8" x 1"	4
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9331002	1/4" x 5/8" x .051 Washer	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9335002	Washer Flat 1/2" (.116" thick)	8
9345002	Washer Flat SAE 1/2"	4
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4

Specifications

CHIME PANELS & CHIME HAMMER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

CHIME PANEL HUBS & SPACERS:
Shall be made from high density 1" sheet plastic specially formulated for optimum UV stability and color retention.

CHIMES:
Shall be fabricated using 0.75" Galvanized EMT 18ga and will have a multi-stage baked-on powder coat finish.

CHIME PANEL BRACKET:
Shall be punched and formed using 3/16" sheet steel and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

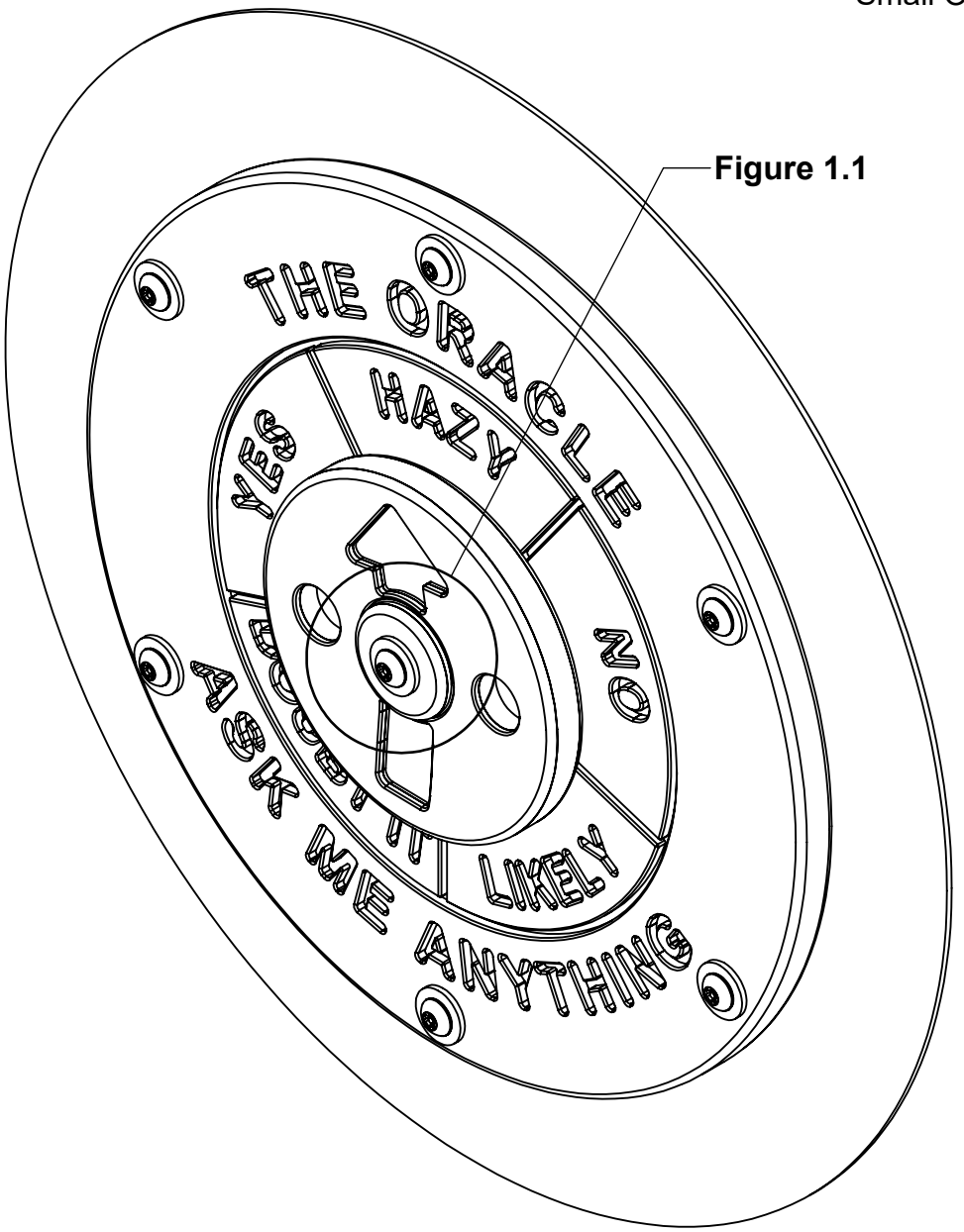
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Small Oracle Panel



NOTE: Small Oracle Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Attach Arrow and Hubs to Panel as shown in Figure 1.1. (See Note A)

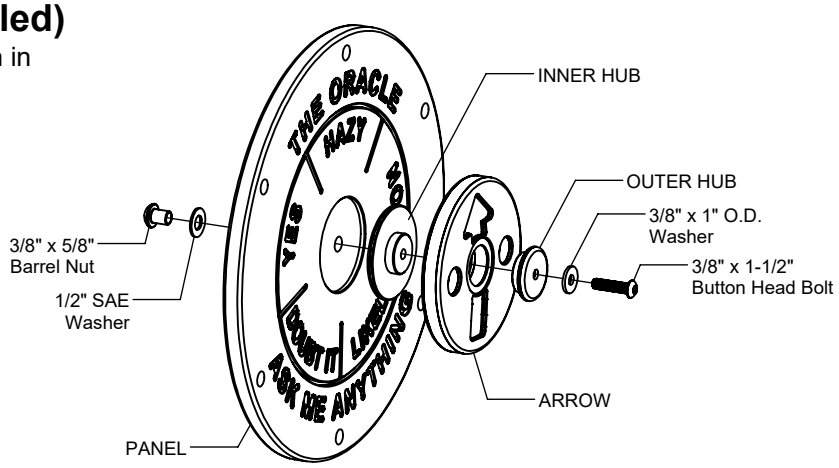


Figure 1.1

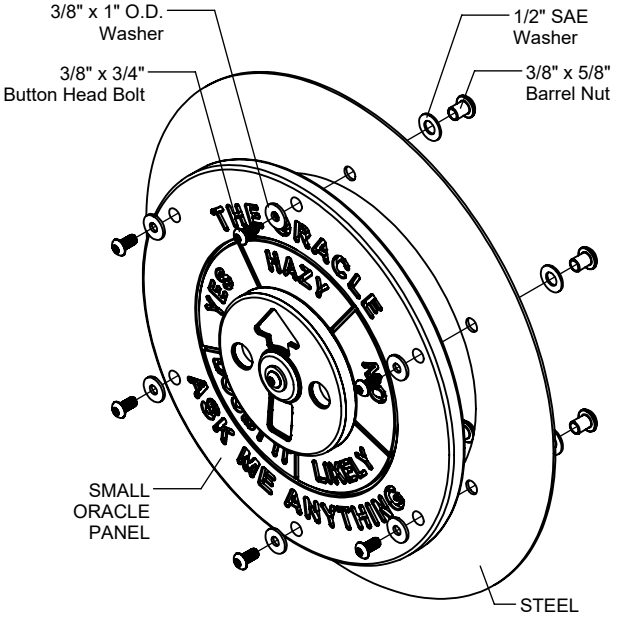


FIGURE 2

Step 2a

For Steel Event Panel Only

Attach Small Oracle Panel to Steel Event Panel as shown in Figure 2. (See Note A)

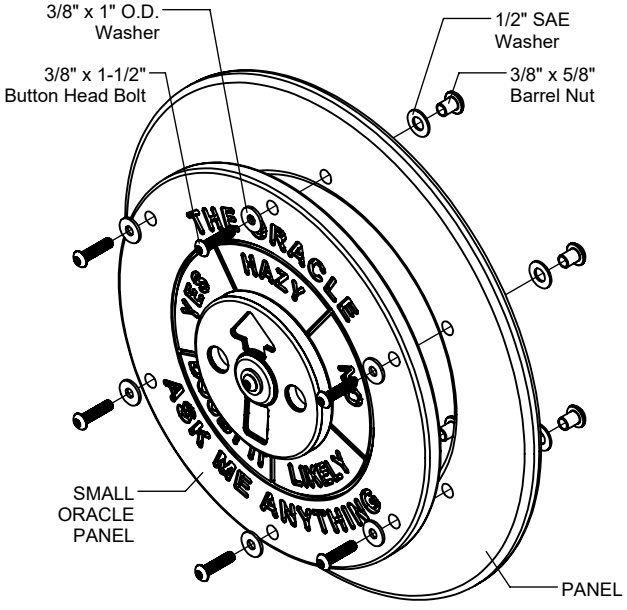


FIGURE 3

Step 2b

For HDPE Event Panel Only

Attach Small Oracle Panel to HDPE Event Panel as shown in Figure 3. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

Assembled Parts List

Part #	DESCRIPTION	QTY
EE-0101-IH	Seek Panel - Inner Hub	1
EE-0101-OH	Seek Panel - Outer Hub	1
EE-0686	Small Oracle Panel	1
EE-0686-A	Small Oracle Panel Arrow	1
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	1
9345002	Washer Flat SAE 1/2"	1
9443022-TR	Nut Barrel 3/8" x 5/8" BH	1

Specifications

SMALL ORACLE PANEL, ARROW, INNER & OUTER HUBS:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

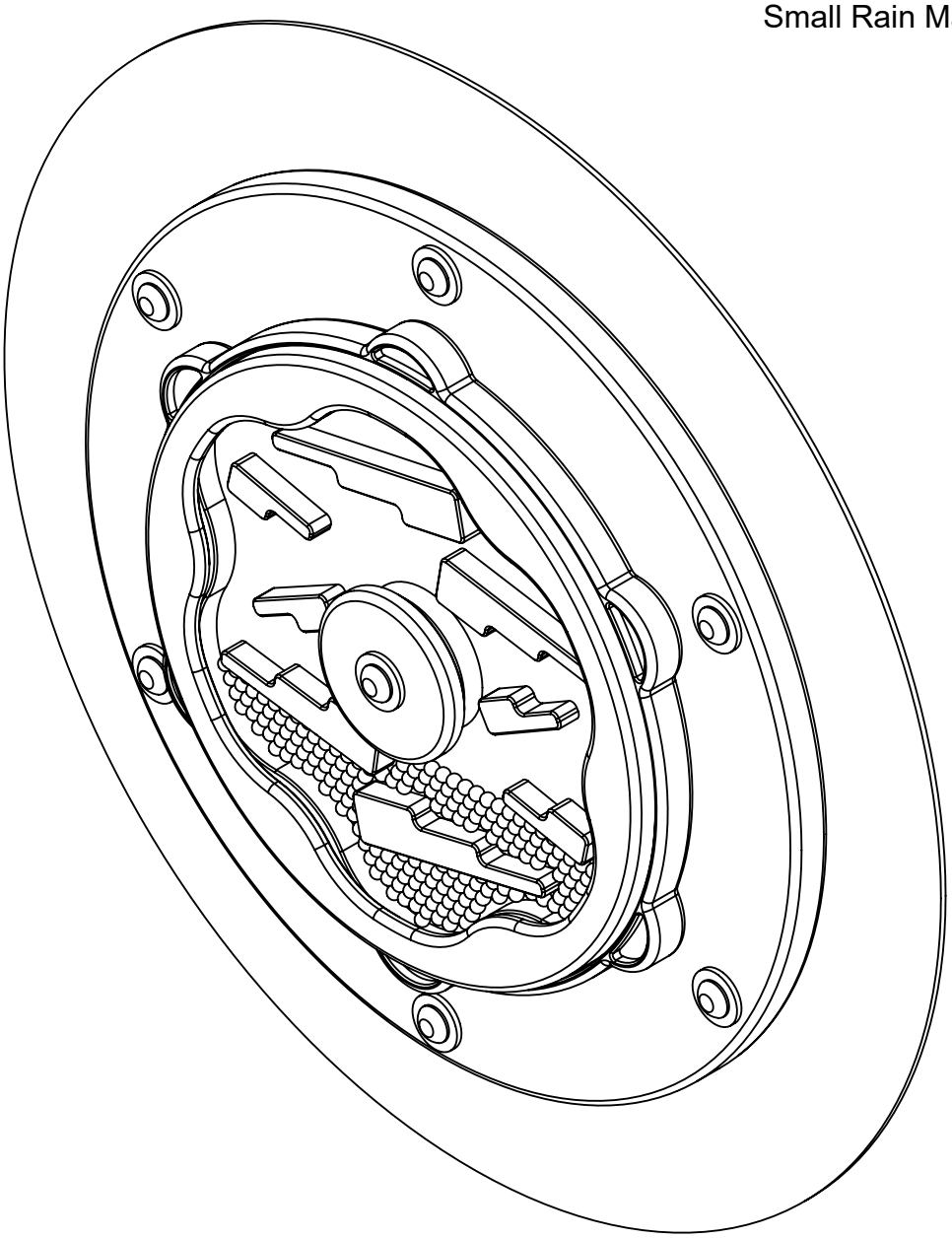
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Small Rain Maker Panel



NOTE: Small Rain Maker Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Measure approximately 200 1/4" SS Ball Bearings and pour into Rotator. Attach Window and Cover to Rotator as shown in Figure 2.

NOTE: Use care to not over tighten the #10 Pan Head Screws and strip threads from the blind holes in the Cover.

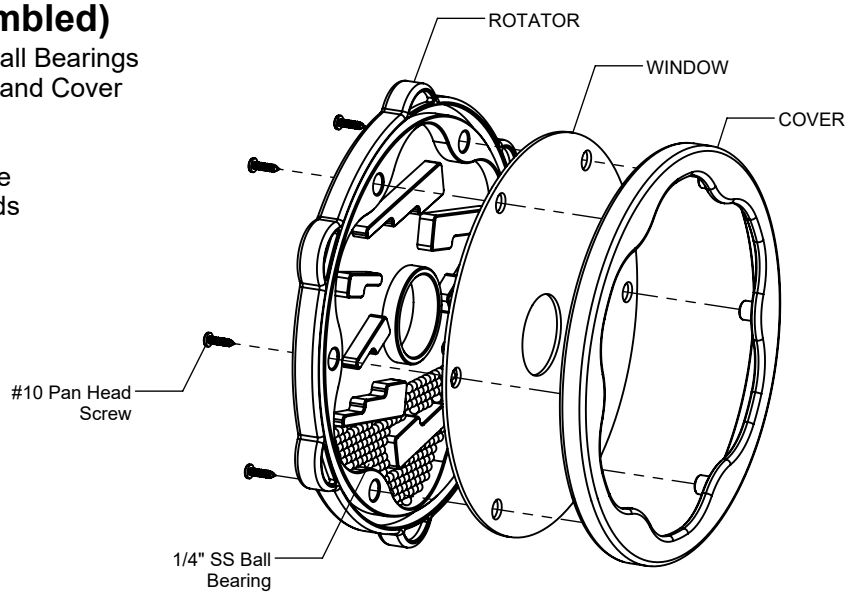


FIGURE 2

Step 2 (Factory Assembled)

Attach Rotator to Back Panel as shown in Figure 3. (See Note A).

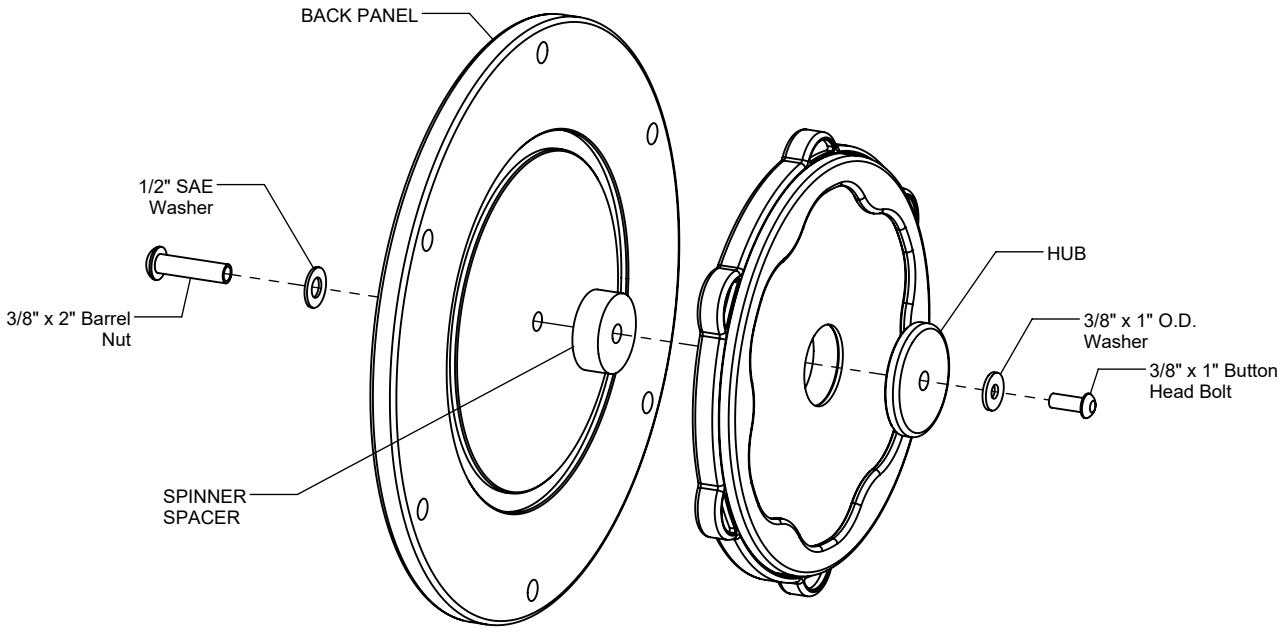


FIGURE 3

Step 3a

For Steel Event Panel Only

Attach Small Rain Maker Panel to Steel Event Panel as shown in Figure 4. (See Note A)

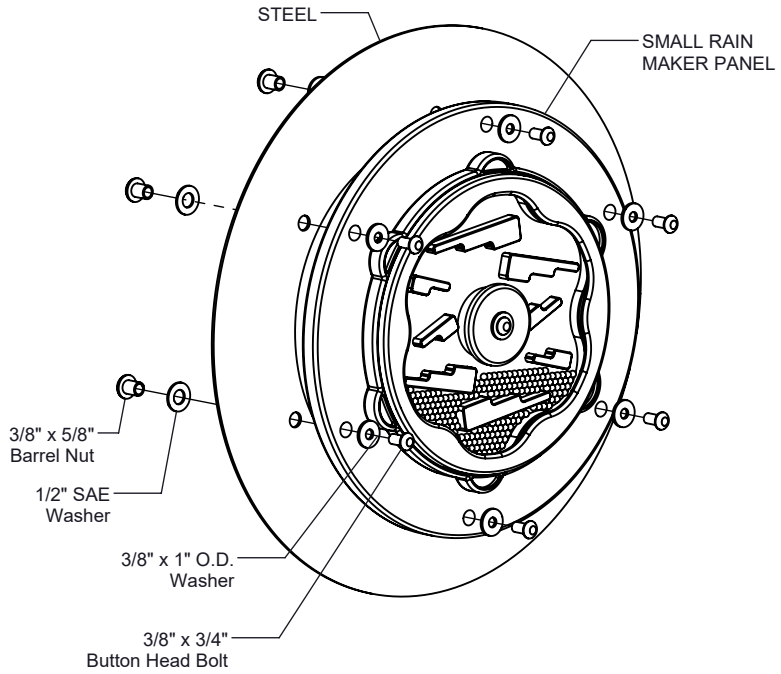


FIGURE 4

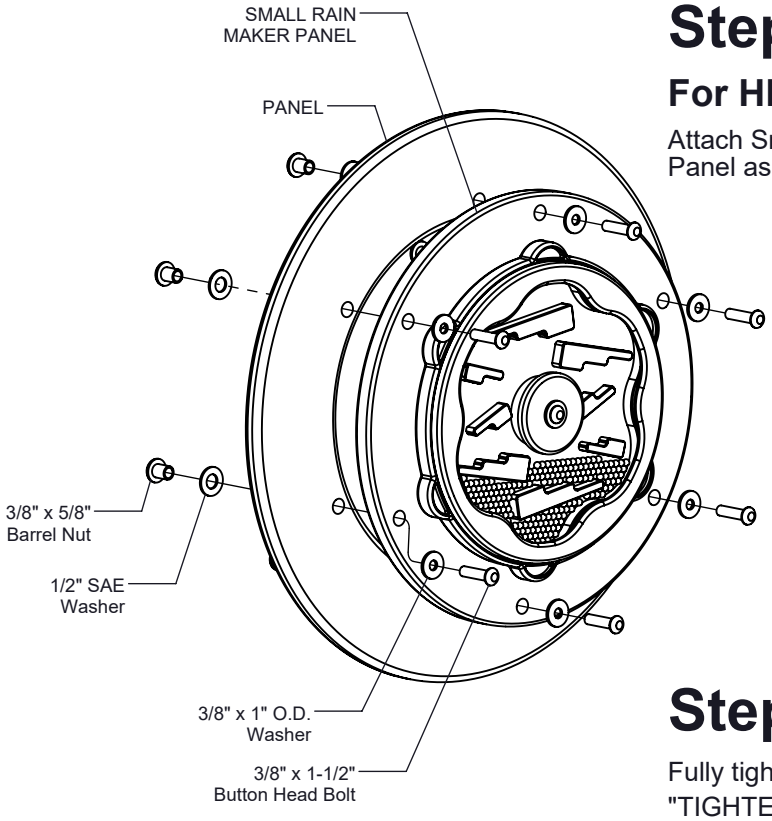


FIGURE 5

Step 3b

For HDPE Event Panel Only

Attach Small Rain Maker Panel to HDPE Event Panel as shown in Figure 5. (See Note A)

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

STEEL MOUNT		
PART #	DESCRIPTION	QTY
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

HDPE MOUNT		
PART #	DESCRIPTION	QTY
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

Assembled Parts List

PART #	DESCRIPTION	QTY
EE-0697-BP	Small Rain Maker Back Panel	1
EE-0697-C	Small Rain Maker Cover	1
EE-0697-C-H	SMALL RAIN MAKER COVER HUB	1
EE-0697-ROT	Small Rain Maker Rotator	1
EE-0698	Small Rain Maker Window	1
EI-0064	Toddler Spinner Spacer	1
57100	Ball Bearing SS 1/4"	200
9103052-TR	Bolt Button Head 3/8" x 1"	1
9251032	Screw SQ #10x3/4 DR PH SMS SS	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	1
9345002	Washer Flat SAE 1/2"	1
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Specifications

SMALL RAIN MAKER BACK PANEL, SMALL RAIN MAKER COVER, SMALL RAIN MAKER COVER HUB, SMALL RAIN MAKER ROTATOR & TODDLER SPINNER SPACER:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SMALL RAIN MAKER WINDOW:
Shall be made from .118 Polycarbonate sheet.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

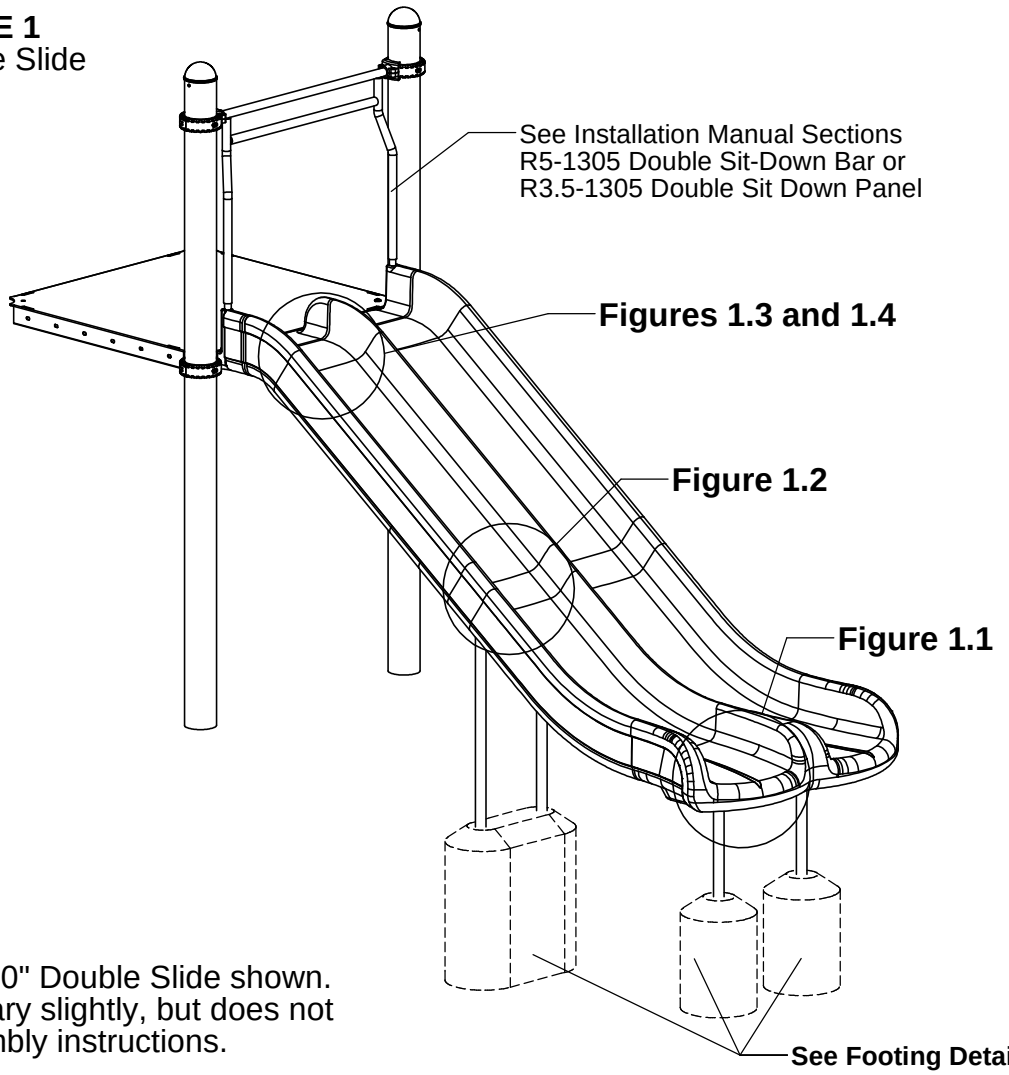
(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual Section R5-1305 Double Sit Down Bar and R3.5-1305 Double Sit Down Panel.

(D) Exit height must be between 7" [180mm] and 15" [380mm] from finish grade for slides with an elevation greater than 48". For slide elevations no greater than 48", the exit height shall be no greater than 11". Exit region must also have a downward slope of 0 to 4°.

(E) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.

FIGURE 1
60" Double Slide



NOTE: R5 60" Double Slide shown. R3.5 may vary slightly, but does not affect assembly instructions.

Step 1

Refer to corresponding Footing Layout and mark footing hole locations. Dig (2) Ø 12" and (1) 12" x 24" footing hole(s). Refer to Footing Detail for depth and details.

Note: For 36" Double Slide dig only (2) Ø 12" footing holes.

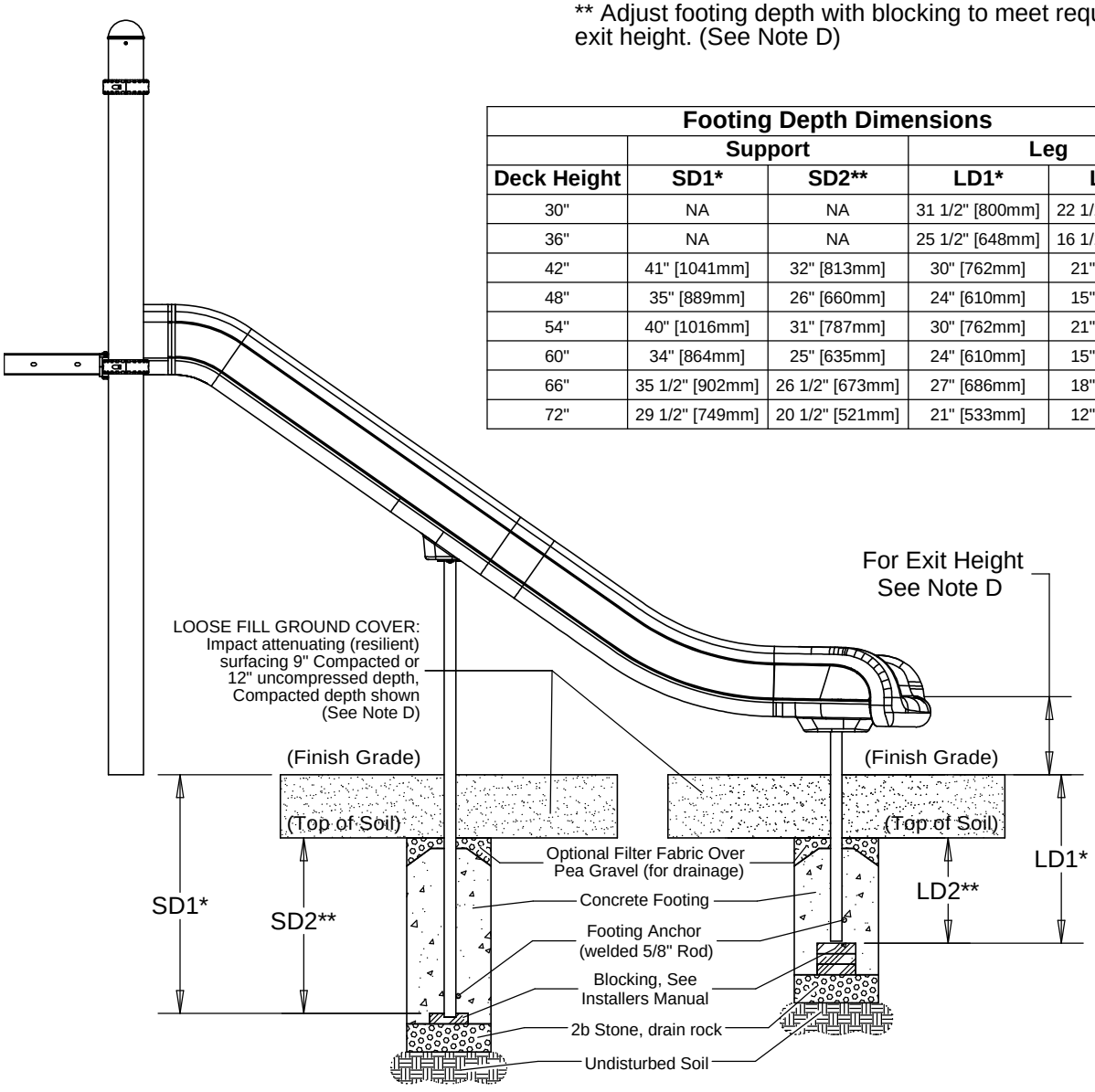
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual

** Adjust footing depth with blocking to meet required exit height. (See Note D)

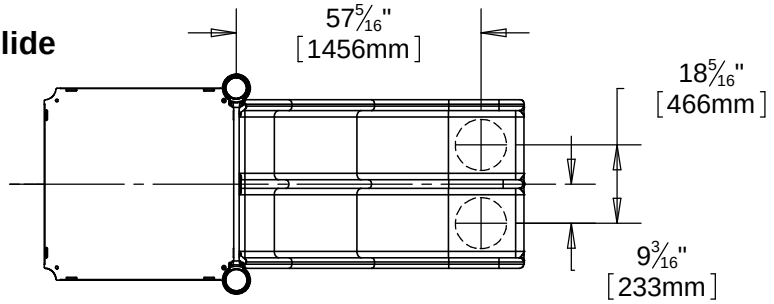
Footing Detail

Footing Depth Dimensions				
	Support		Leg	
Deck Height	SD1*	SD2**	LD1*	LD2**
30"	NA	NA	31 1/2" [800mm]	22 1/2" [572mm]
36"	NA	NA	25 1/2" [648mm]	16 1/2" [419mm]
42"	41" [1041mm]	32" [813mm]	30" [762mm]	21" [533mm]
48"	35" [889mm]	26" [660mm]	24" [610mm]	15" [381mm]
54"	40" [1016mm]	31" [787mm]	30" [762mm]	21" [533mm]
60"	34" [864mm]	25" [635mm]	24" [610mm]	15" [381mm]
66"	35 1/2" [902mm]	26 1/2" [673mm]	27" [686mm]	18" [457mm]
72"	29 1/2" [749mm]	20 1/2" [521mm]	21" [533mm]	12" [305mm]

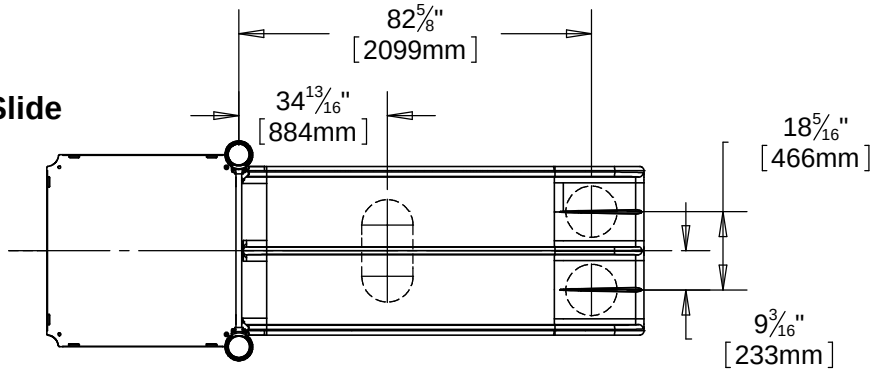


R5 Top View - Footing Layouts

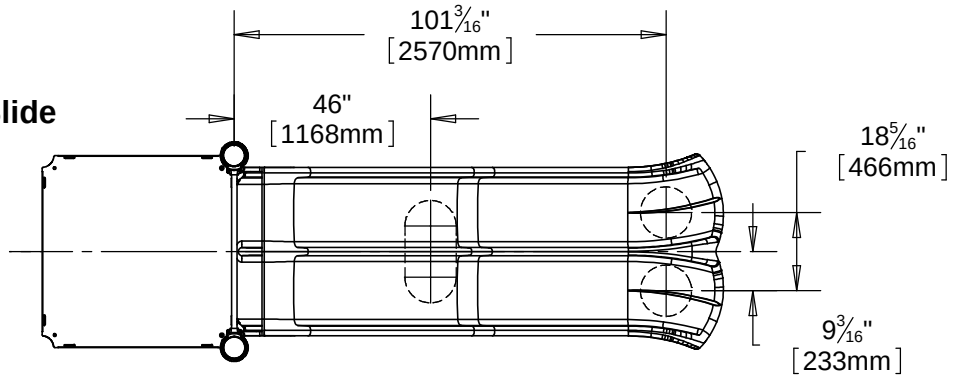
36" Double Slide



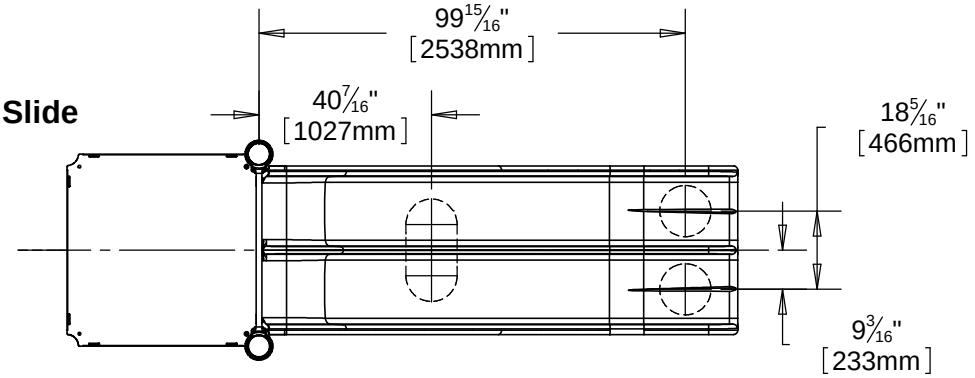
48" Double Slide



60" Double Slide

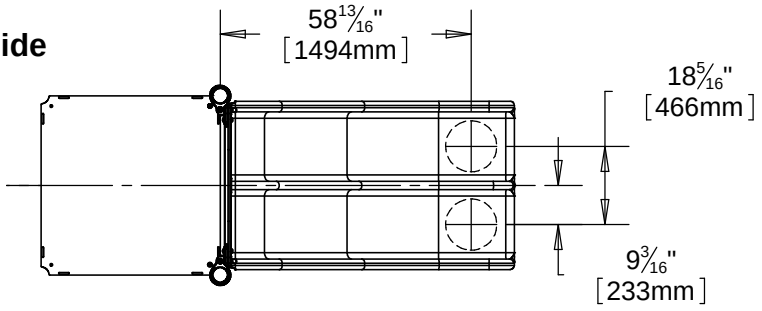


72" Double Slide

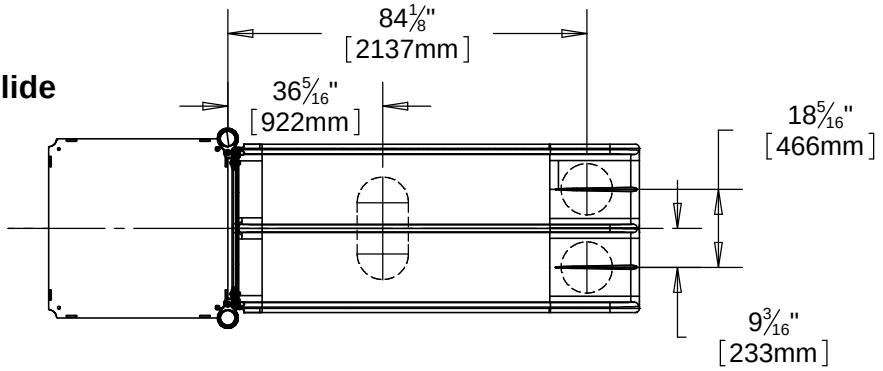


R3.5 Top View - Footing Layouts

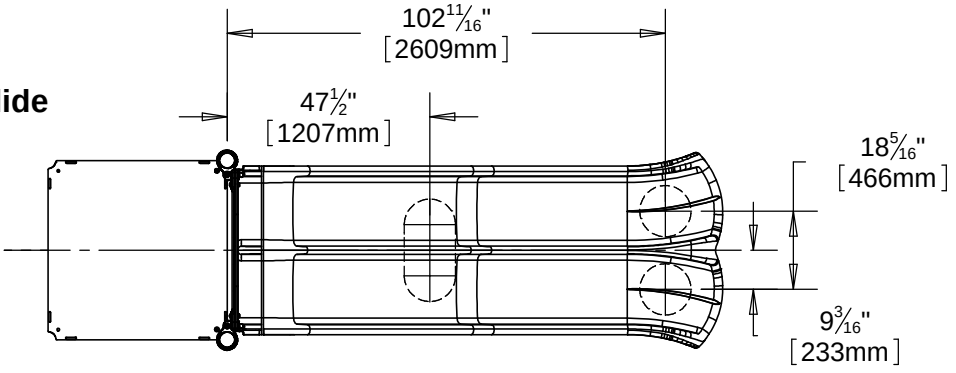
36" Double Slide



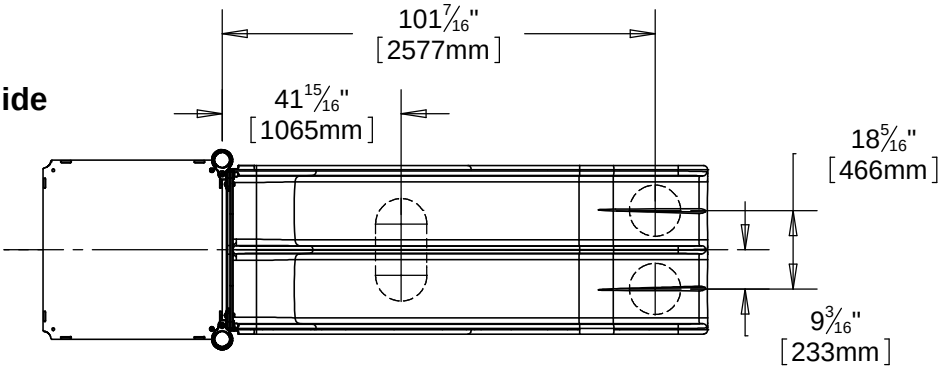
48" Double Slide



60" Double Slide



72" Double Slide



Step 2

Attach Double Slide Leg to the base of the double slide as shown in Figure 1.1. (See Note A)

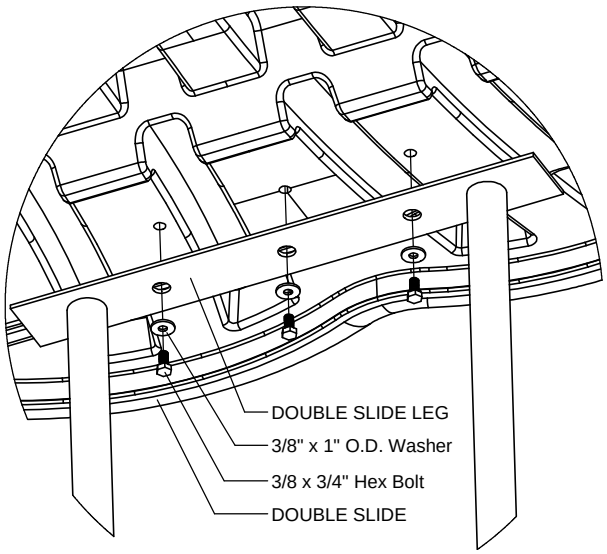


Figure 1.1

Step 3

Note: This step does not apply to the 36" Double Slide. Attach slide supports to the double slide as shown in Figure 1.2. (See Note A)

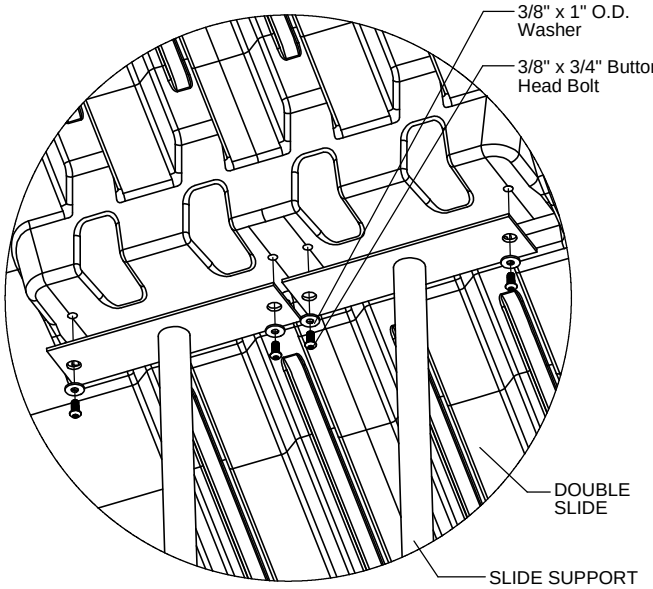


Figure 1.2

Step 4

For R5 Double Slide only
Place the Double Slide Leg and Supports into the footing holes and attach the face of the double slide to the face of the R5 deck as shown in Figure 1.3. (See Note A)

For R3.5 Double Slide only
Place the Double Slide Leg and Supports into the footing holes and attach the double slide and the R3.5 Double Slide Spacer to the face of the R3.5 deck as shown in Figure 1.4. (See Note A)

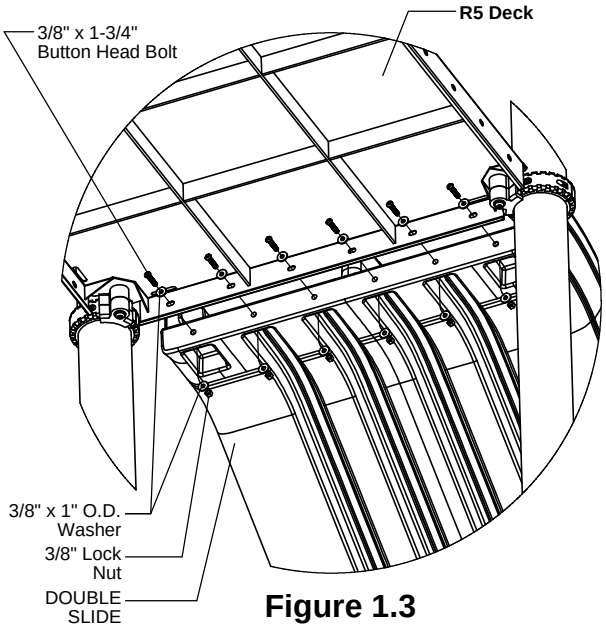


Figure 1.3

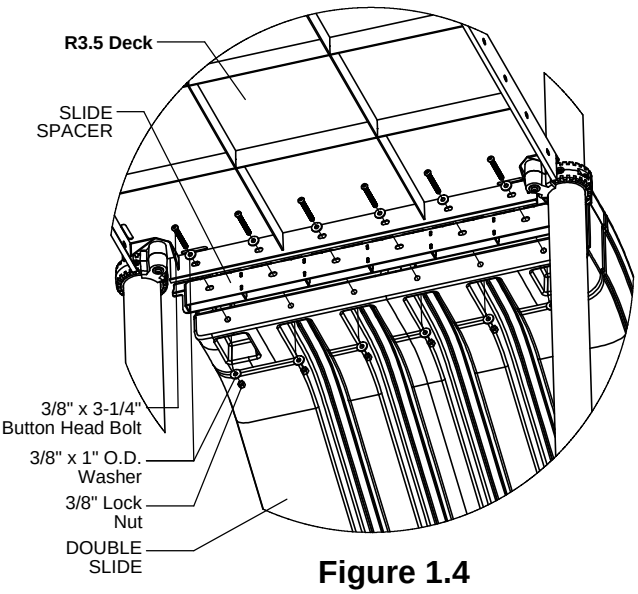


Figure 1.4

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 6

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B and D)

Step 7

Place appropriate compliant protective surfacing under and around the Double Slide. (See Note E)

Specifications

DOUBLE SLIDE SPACER:
Shall be fabricated using punched and formed 12 gauge sheet Steel. The Double Slide Spacer shall be Play-Tuff™ coated after fabrication.

DOUBLE SLIDE:
Shall be constructed of UV-stabilized, rotationally molded linear low density polyethylene with an average wall thickness of 1/4" with a molded in footing base.

DOUBLE SLIDE LEG:
Shall be fabricated of (2) 1.660" O.D. 11 gauge steel tubing welded onto a 3/16" plate steel with a 5/8" steel rod welded to the base as a footing anchor. The Double Slide Leg has a multi-stage baked-on powder coat finish.

SLIDE SUPPORT:
Shall be fabricated of 1.660" O.D., 11 gauge steel tubing welded onto a 3/16" steel plate with a 5/8" steel rod welded to the base as a footing anchor. The Slide Support has a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

36" Double Slide

R5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
DE-4224	Double Slide 36-42	1
FS-1702	Double Slide Leg	1
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	15
9413002	Nut Lock 3/8"	6

R3.5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
CG-8128	Slide Spacer R3.5	1
DE-4224	Double Slide 36-42	1
FS-1702	Double Slide Leg	1
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	15
9413002	Nut Lock 3/8"	6

48" Double Slide

R5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
DE-4400	Wave Slide Double 48	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

R3.5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
CG-8128	Slide Spacer R3.5	1
DE-4400	Wave Slide Double 48	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

60" Double Slide

R5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
DE-4806	60" Doulbe Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

R3.5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
CG-8128	Slide Spacer R3.5	1
DE-4806	60" Doulbe Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

72" Double Slide

R5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
DE-4324	72" Double Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

R3.5 Parts List		
Part #	**DESCRIPTION**	**QTY.**
CG-8128	Slide Spacer R3.5	1
DE-4324	72" Double Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

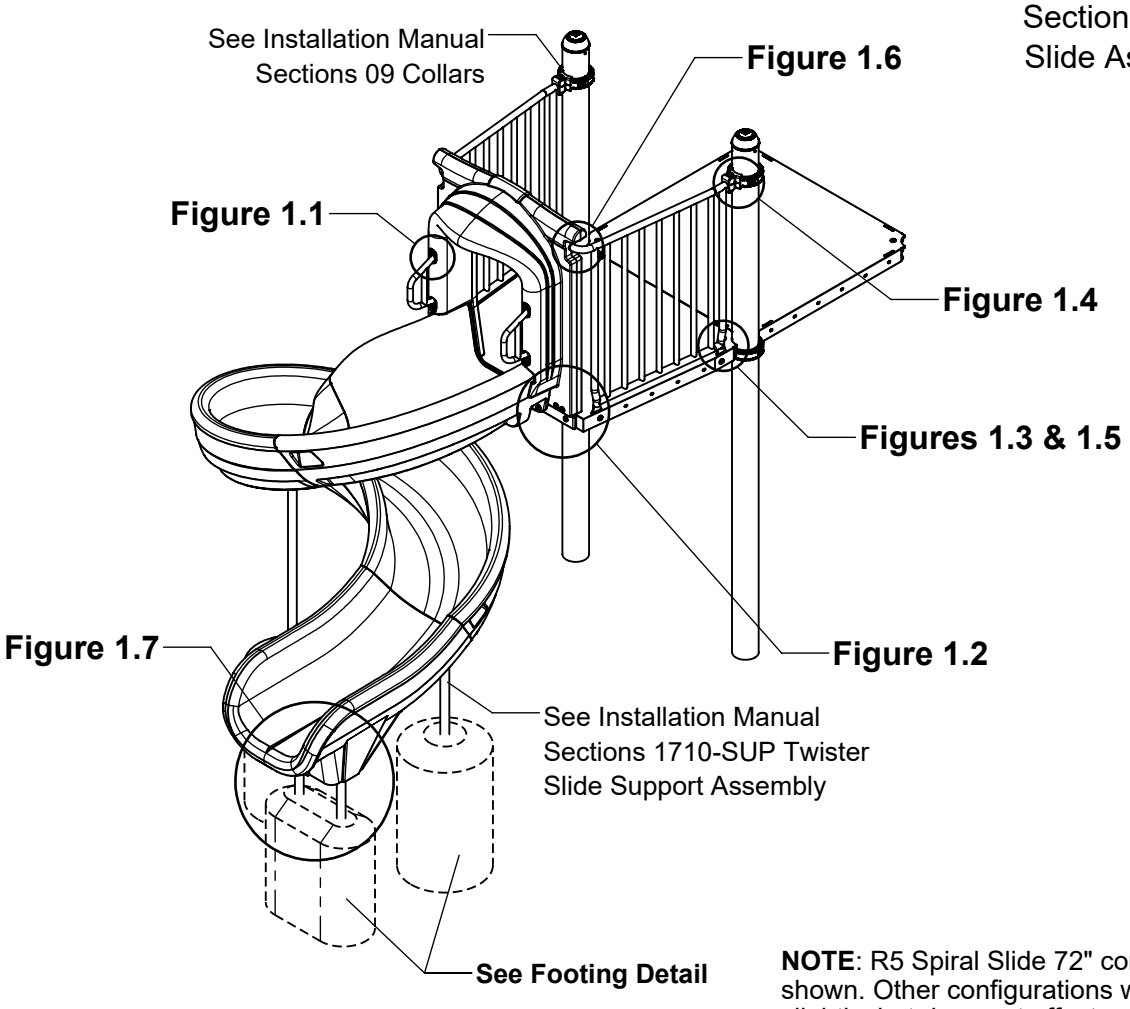
(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 09 Collars, 11 Socket Clamps, and 1710-SUP installation instructions.

(D) For slides with an entry elevation of 48" [1219mm] or greater, the exit height must be between 7" [180mm] and 15" [380mm] from finish grade. For slides with an entry elevation of less than 48" [1219mm], the exit height must be less than 11" [279mm]. Exit region must always have a downward slope between 0° and 4°.

(E) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Sectional Spiral Slide Assembly



NOTE: R5 Spiral Slide 72" configuration shown. Other configurations will vary slightly, but does not affect assembly.

Step 1

Refer to Footing Layout and mark footing hole locations. Dig (2) Ø18" footing holes and (1) 12" x 24" oval footing hole. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

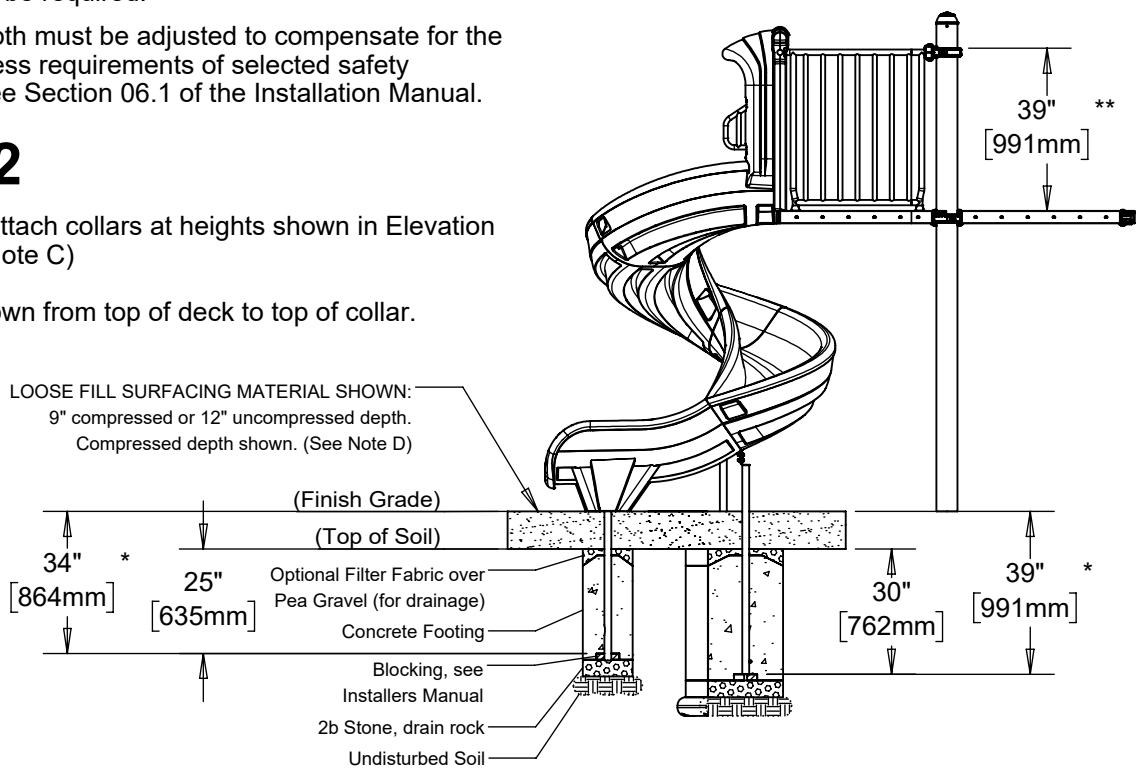
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Step 2

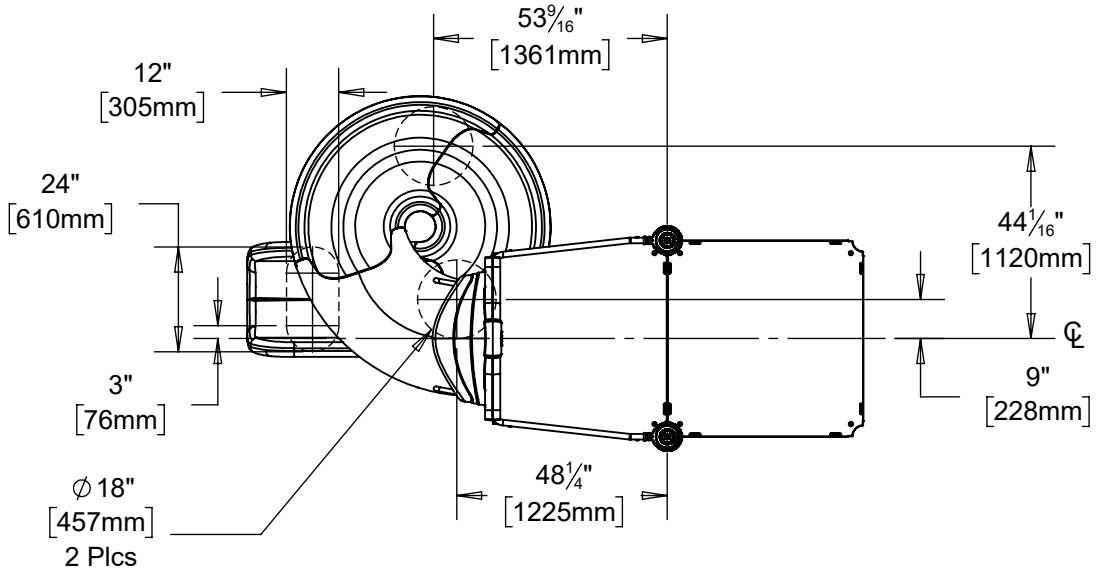
Locate and attach collars at heights shown in Elevation View. (See Note C)

** Height shown from top of deck to top of collar.

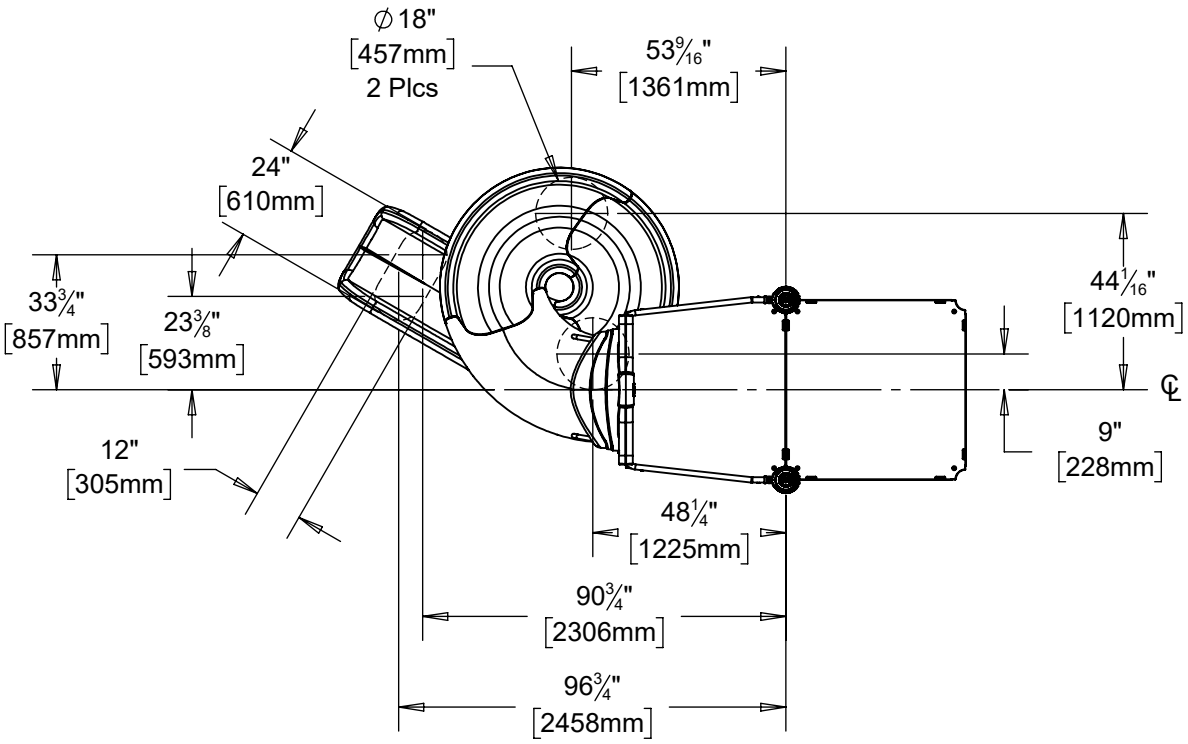
Elevation View - Footing Detail



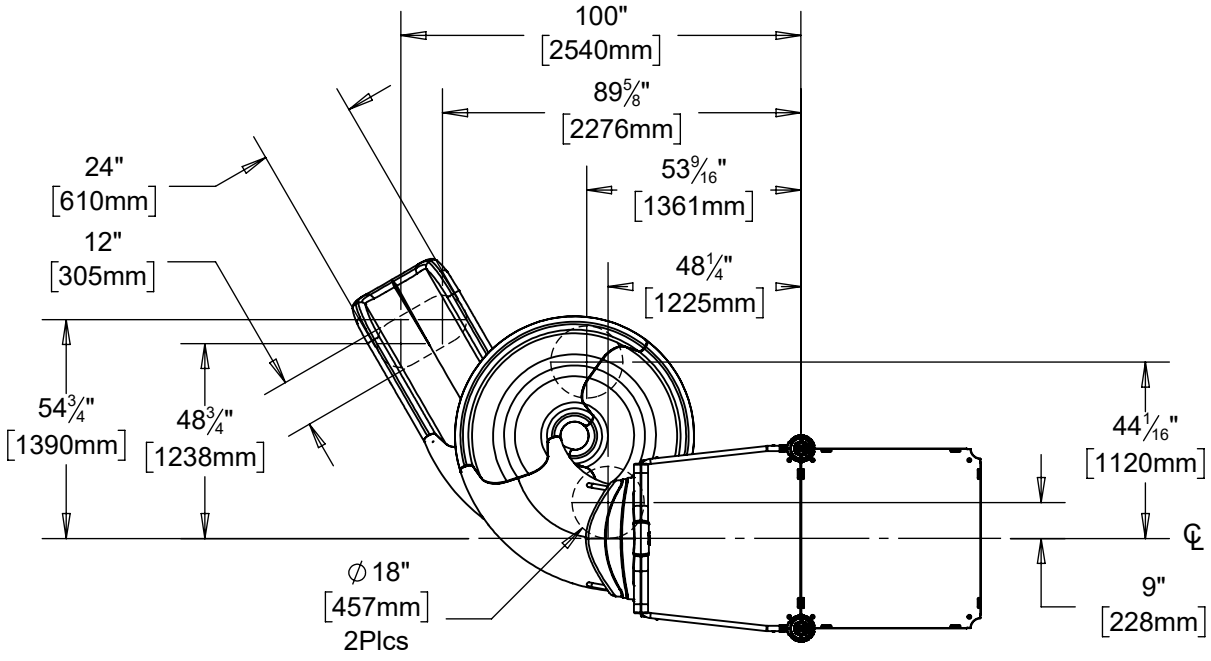
Top View - Footing Layout 72"



Top View - Footing Layout 84"



Top View - Footing Layout 96"



Step 3 (Factory Assembled)

For Infinity Version Only

Attach Infinity Wall Trim to Infinity Wall as shown in Figure 2.

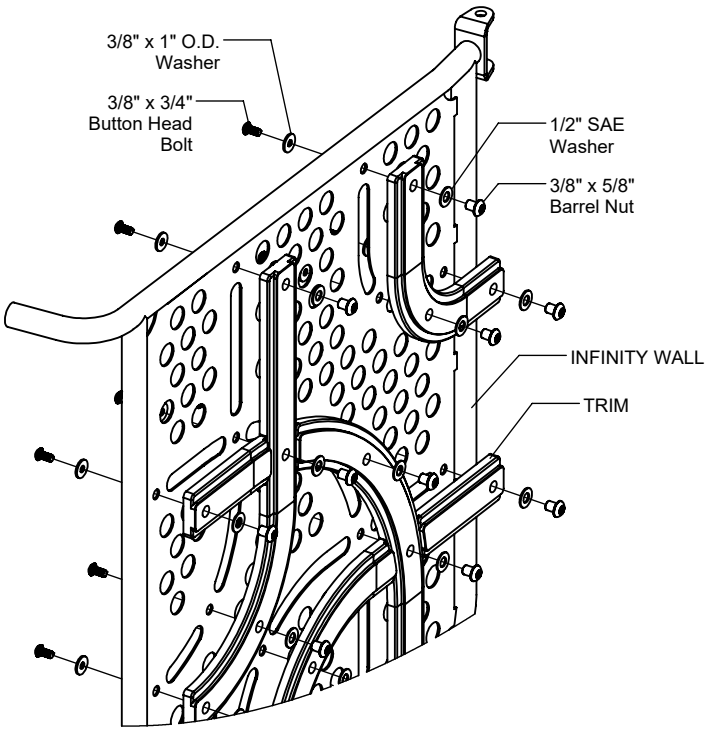


FIGURE 2

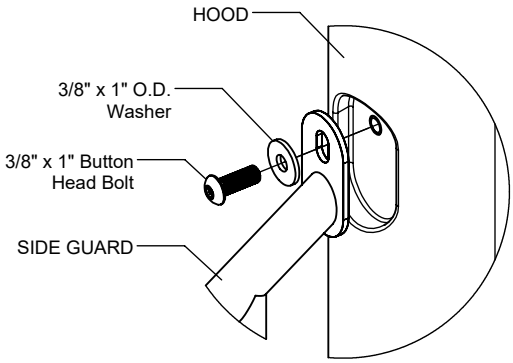


Figure 1.1

Step 4

Attach Side Guard to Hood as shown in Figure 1.1. (See Note A)

Step 5

Attach Deck Mounting Plate to Hood as shown in Figure 1.2. (See Note A)

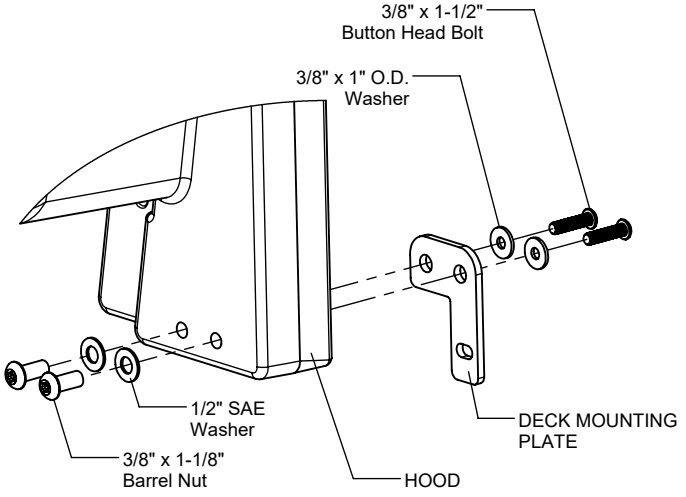


Figure 1.2

Step 6

Attach Deck to Collar as shown in Figure 1.3. (See Note A)

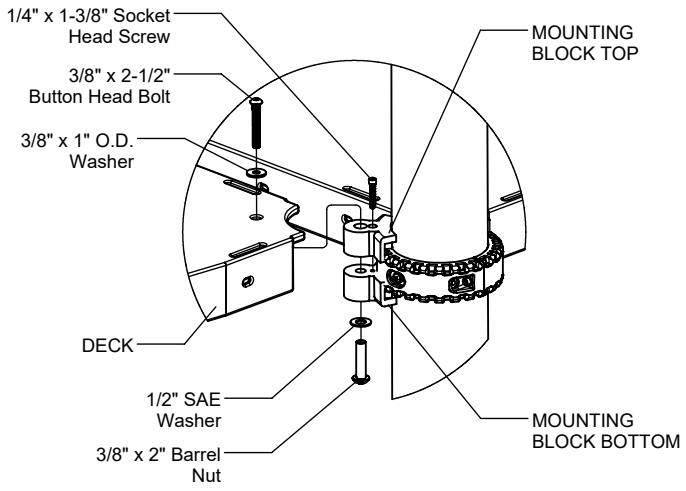


Figure 1.3

Step 7

Attach Spiral Slide Deck to Deck as shown in Figure 3. (See Note A)

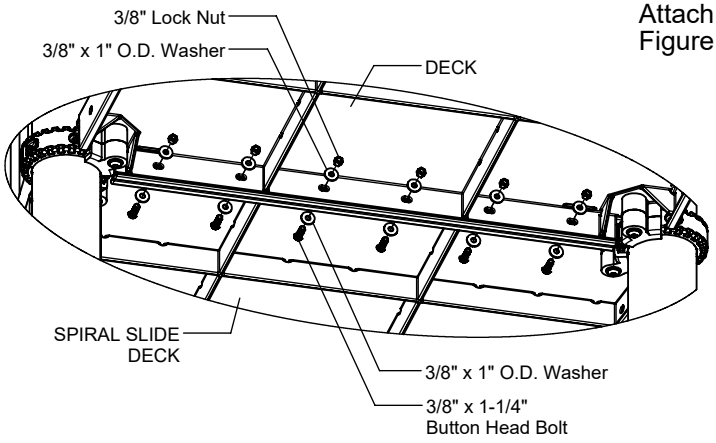


FIGURE 3

Step 8

Attach Wall to Collar as shown in Figure 1.4. (See Note A)

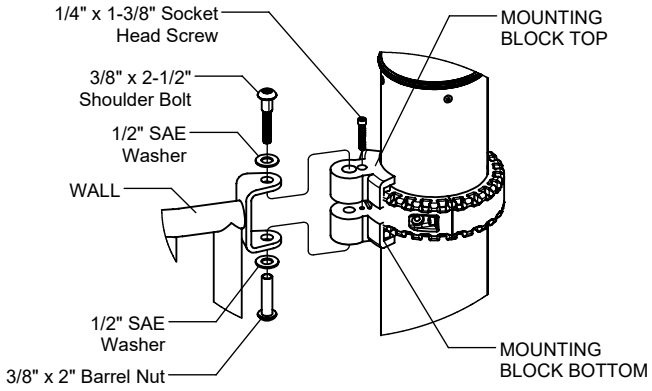


Figure 1.4

Step 9

Attach Wall to Deck as shown in Figure 1.5. (See Note A)

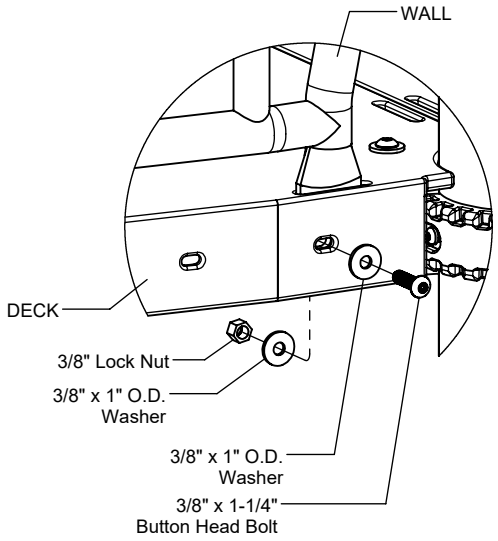


Figure 1.5

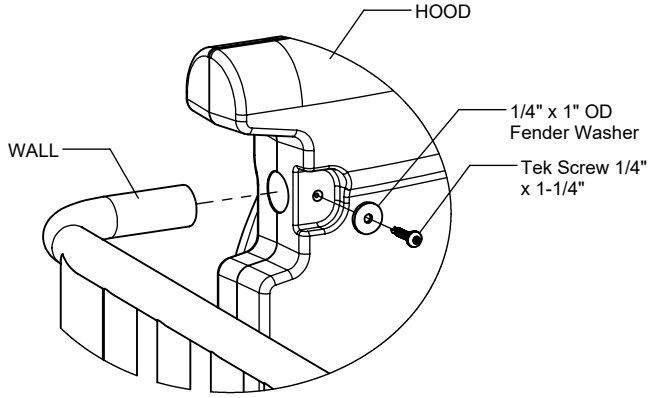


Figure 1.6

Step 10

Attach Wall to Hood as shown in Figure 1.6. (See Note A)

NOTE: Repeat Steps 7-8 for other side before securing with Tek screw.

Step 11

Attach Spacer and Hood to Deck as shown in Figure 4. (See Note A)

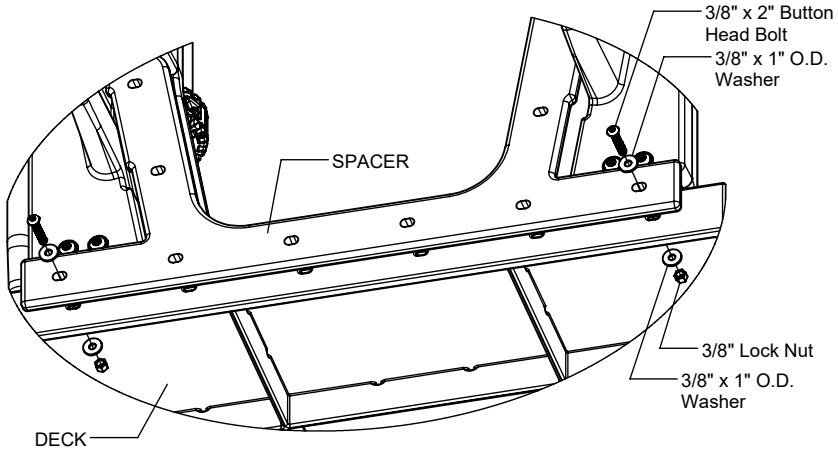


FIGURE 4

Step 12

Attach Curved Entry to Spiral Slide Deck as shown in Figure 5. (See Note A)

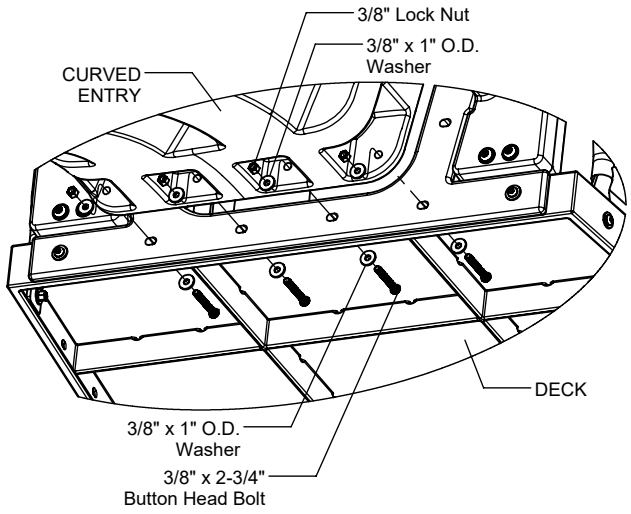


FIGURE 5

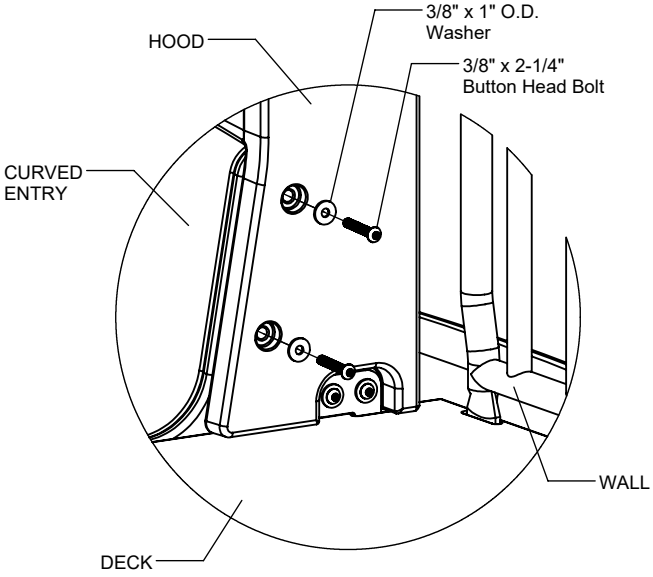


FIGURE 6

Step 13

Secure Curved Entry to Hood as shown in Figure 6. (See Note A)

Step 14

Attach Curved Entry to Spiral Section as shown in Figure 7. (See Note A)

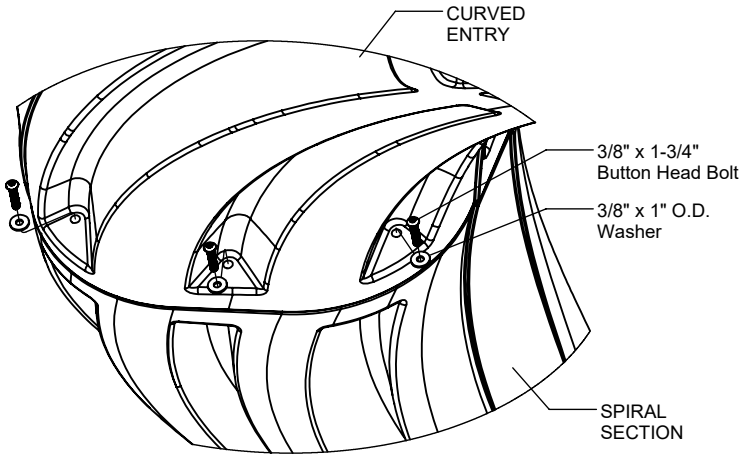


FIGURE 7

Step 15

Attach Spiral Section to Spiral Section with support with as shown in Figure 8. For connections not using a support, attach Sections as shown in Figure 7. (See Note A)

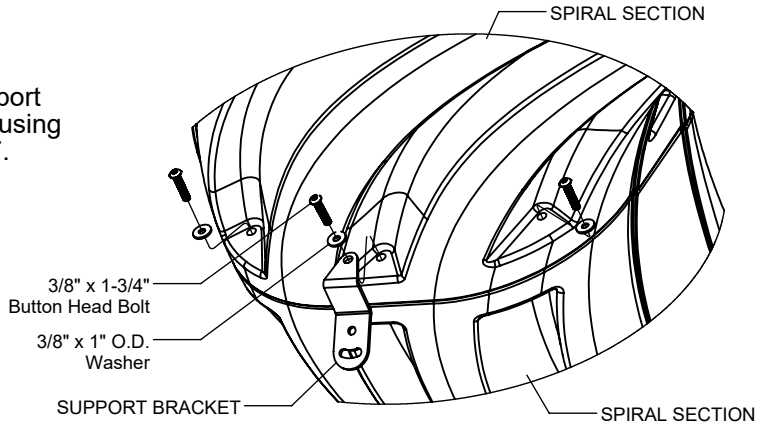


FIGURE 8

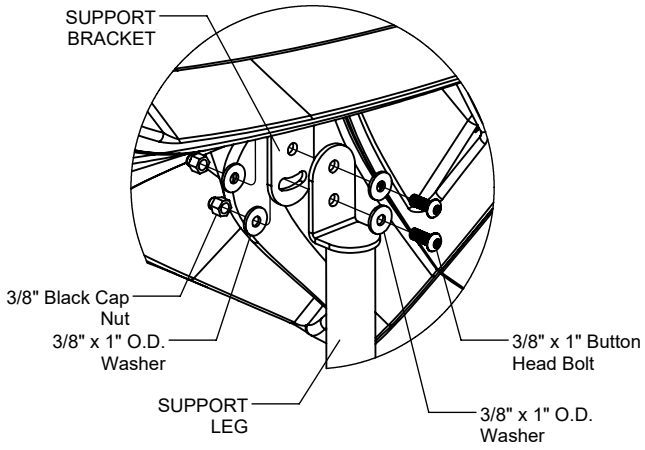


FIGURE 9

Step 16

Place Slide Support in footing hole and attach to Support Bracket as shown in Figure 9. (See Note A)

Step 17

Place Slide Leg in footing hole and attach to Exit Section as shown in Figure 1.7. (See Note A)

Step 18

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 19

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 20

Place required protective surfacing under and around Sectional Spiral Slide Assembly. (See Note E)

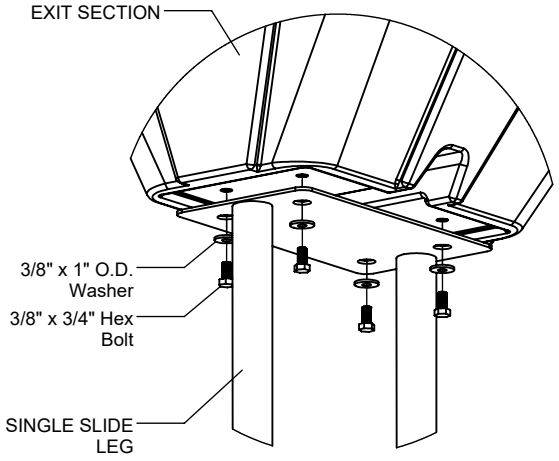


Figure 1.7

Parts List

R5 SPIRAL SLIDE 72"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
FS-1706-S-ENT-R5-L	Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-ENT-R5-R	Sectional Spiral Slide Wall R5 - Right	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-50	Twister Slide Support Assembly	1
S-1710-72	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R3.5 SPIRAL SLIDE 72"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
FS-1706-S-ENT-R35-L	Sectional Spiral Slide Wall R35 - Left	1
FS-1706-S-ENT-R35-R	Sectional Spiral Slide Wall R35 - Right	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-50	Twister Slide Support Assembly	1
S-1710-72	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R5 SPIRAL SLIDE 84"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
FS-1706-S-ENT-R5-L	Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-ENT-R5-R	Sectional Spiral Slide Wall R5 - Right	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R3.5 SPIRAL SLIDE 84"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
FS-1706-S-ENT-R35-L	Sectional Spiral Slide Wall R35 - Left	1
FS-1706-S-ENT-R35-R	Sectional Spiral Slide Wall R35 - Right	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R5 SPIRAL SLIDE 96"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
FS-1706-S-ENT-R5-L	Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-ENT-R5-R	Sectional Spiral Slide Wall R5 - Right	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R3.5 SPIRAL SLIDE 96"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
FS-1706-S-ENT-R35-L	Sectional Spiral Slide Wall R35 - Left	1
FS-1706-S-ENT-R35-R	Sectional Spiral Slide Wall R35 - Right	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R5 INFINITY SPIRAL SLIDE 72"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
DE-4339-EXT	Twister Slide - Exit	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-50	Twister Slide Support Assembly	1
S-1710-72	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R3.5 INFINITY SPIRAL SLIDE 72"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
DE-4339-EXT	Twister Slide - Exit	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-50	Twister Slide Support Assembly	1
S-1710-72	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R5 INFINITY SPIRAL SLIDE 84"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R3.5 INFINITY SPIRAL SLIDE 84"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R5 INFINITY SPIRAL SLIDE 96"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Parts List

R3.5 INFINITY SPIRAL SLIDE 96"		
Part #	**DESCRIPTION**	**QTY**
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Specifications

SPIRAL SLIDE DECK:
Shall be precision cut, formed, and welded using 12 gauge thick steel and shall be Play-Tuff™ coated after fabrication.

TWISTER SLIDE SECTIONS & HOOD:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

TWISTER SLIDE SPACER & INFINITY WALL TRIM:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SINGLE SLIDE LEG:
Shall be fabricated using ∅1.660" 11 gauge steel tubing with 10 gauge HR steel and ∅5/8" round bar and will have a multi-stage baked-on powder coat finish.

SECTIONAL SPIRAL SLIDE WALL:
Shall be fabricated using ∅1.315" 12 gauge steel tubing and ∅1.029" 14 gauge steel tubing with 1/4" HR steel clevis and will have a multi-stage baked-on powder coat finish.

INFINITY WALL SECTIONAL SPIRAL SLIDE WALL:
Shall be fabricated using ∅1.315" 12 gauge steel tubing, 12ga HR sheet steel and 1/4" HR steel clevis and will have a multi-stage baked-on powder coat finish.

TWISTER SIT DOWN SIDE GUARD CANADA:
Shall be fabricated using ∅1.029" 14 gauge steel tubing with 10 gauge HR steel and will have a multi-stage baked-on powder coat finish.

SECTIONAL SLIDE SUPPORT:
Shall be fabricated using ∅1.660" 11 gauge steel tubing with 3/16" HR steel ∅5/8" round bar and will have a multi-stage baked-on powder coat finish.

SECTIONAL SLIDE SUPPORT BRACKET:
Shall be fabricated using 3/16" HR steel and will have a multi-stage baked-on powder coat finish.

ROTO PANEL DECK MOUNTING PLATE:
Shall be fabricated using 1/4" HR steel and will have a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Assembled Parts List

R5 INFINITY SPIRAL SLIDE		
Part #	**DESCRIPTION**	**QTY**
EF-0606-L1	Infinity Wall Sectional Spiral Slide Wall R5 Trim 1 - Left	1
EF-0606-L2	Infinity Wall Sectional Spiral Slide Wall R5 Trim 2 - Left	1
EF-0606-L3	Infinity Wall Sectional Spiral Slide Wall R5 Trim 3 - Left	1
EF-0606-L4	Infinity Wall Sectional Spiral Slide Wall R5 Trim 4 - Left	1
EF-0606-R1	Infinity Wall Sectional Spiral Slide Wall R5 Trim 1 - Right	1
EF-0606-R2	Infinity Wall Sectional Spiral Slide Wall R5 Trim 2 - Left	1
EF-0606-R3	Infinity Wall Sectional Spiral Slide Wall R5 Trim 3 - Right	1
EF-0606-R4	Infinity Wall Sectional Spiral Slide Wall R5 Trim 4 - Right	1
FS-1706-S-IW-R5-L	Infinity Wall Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-IW-R5-R	Infinity Wall Sectional Spiral Slide Wall R5 - Right	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	28
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	28
9345002	Washer Flat SAE 1/2"	28
9443022-TR	Nut Barrel 3/8" x 5/8" BH	28

R3.5 INFINITY SPIRAL SLIDE		
Part #	**DESCRIPTION**	**QTY**
EG-0078-L1	Infinity Wall Sectional Spiral Slide Wall R35 Trim 1 - Left	1
EG-0078-L2	Infinity Wall Sectional Spiral Slide Wall R35 Trim 2 - Left	1
EG-0078-L3	Infinity Wall Sectional Spiral Slide Wall R35 Trim 3 - Left	1
EG-0078-L4	Infinity Wall Sectional Spiral Slide Wall R35 Trim 4 - Left	1
EG-0078-R1	Infinity Wall Sectional Spiral Slide Wall R35 Trim 1 - Right	1
EG-0078-R2	Infinity Wall Sectional Spiral Slide Wall R35 Trim 2 - Right	1
EG-0078-R3	Infinity Wall Sectional Spiral Slide Wall R35 Trim 3 - Right	1
EG-0078-R4	Infinity Wall Sectional Spiral Slide Wall R35 Trim 4 - Right	1
FS-1706-S-ENT-IW-R35-L	Infinity Wall Sectional Spiral Slide Wall R35 - Left	1
FS-1706-S-ENT-IW-R35-R	Infinity Wall Sectional Spiral Slide Wall R35 - Right	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	28
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	28
9345002	Washer Flat SAE 1/2"	28
9443022-TR	Nut Barrel 3/8" x 5/8" BH	28

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

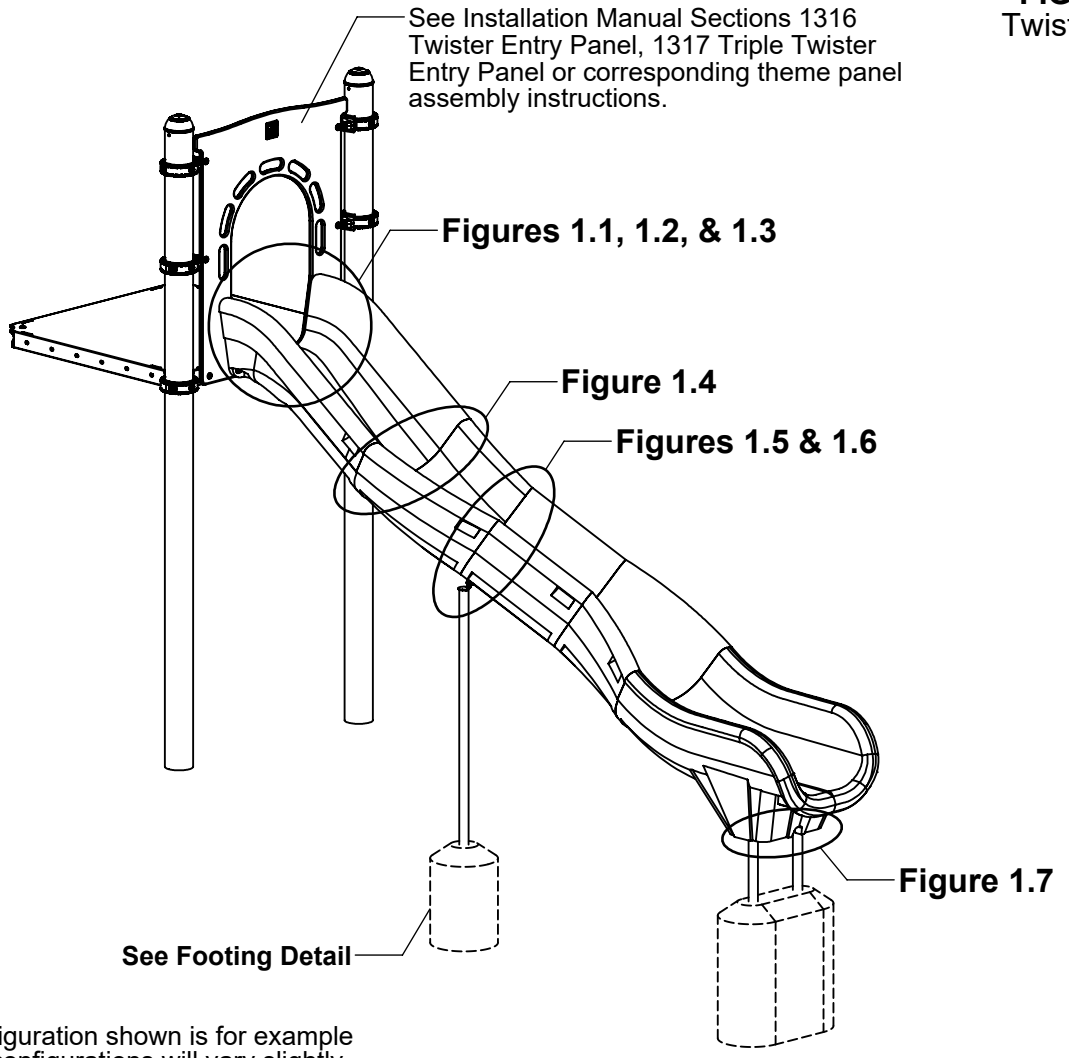
(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 1316 Twister Entry Panel, 1317 Triple Twister Entry Panel assembly instructions or corresponding theme panel assembly instructions.

(D) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.

(E) Exit height must be between 7" [180mm] and 15" [380mm] from finish grade for slides with an elevation greater than 48". For slide elevations no greater than 48", the exit height shall be no greater than 11". Exit region must also have a downward slope of 0 to 4°.

FIGURE 1
Twister Slide



NOTE: Configuration shown is for example only. Other configurations will vary slightly, but does not affect the assembly.

Step 1

Refer to structure Top View and Step 5 to determine footing locations. Dig (1) Ø12" footing hole for each Slide Support and (1) 12"x24" oblong footing hole for each Exit Leg. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

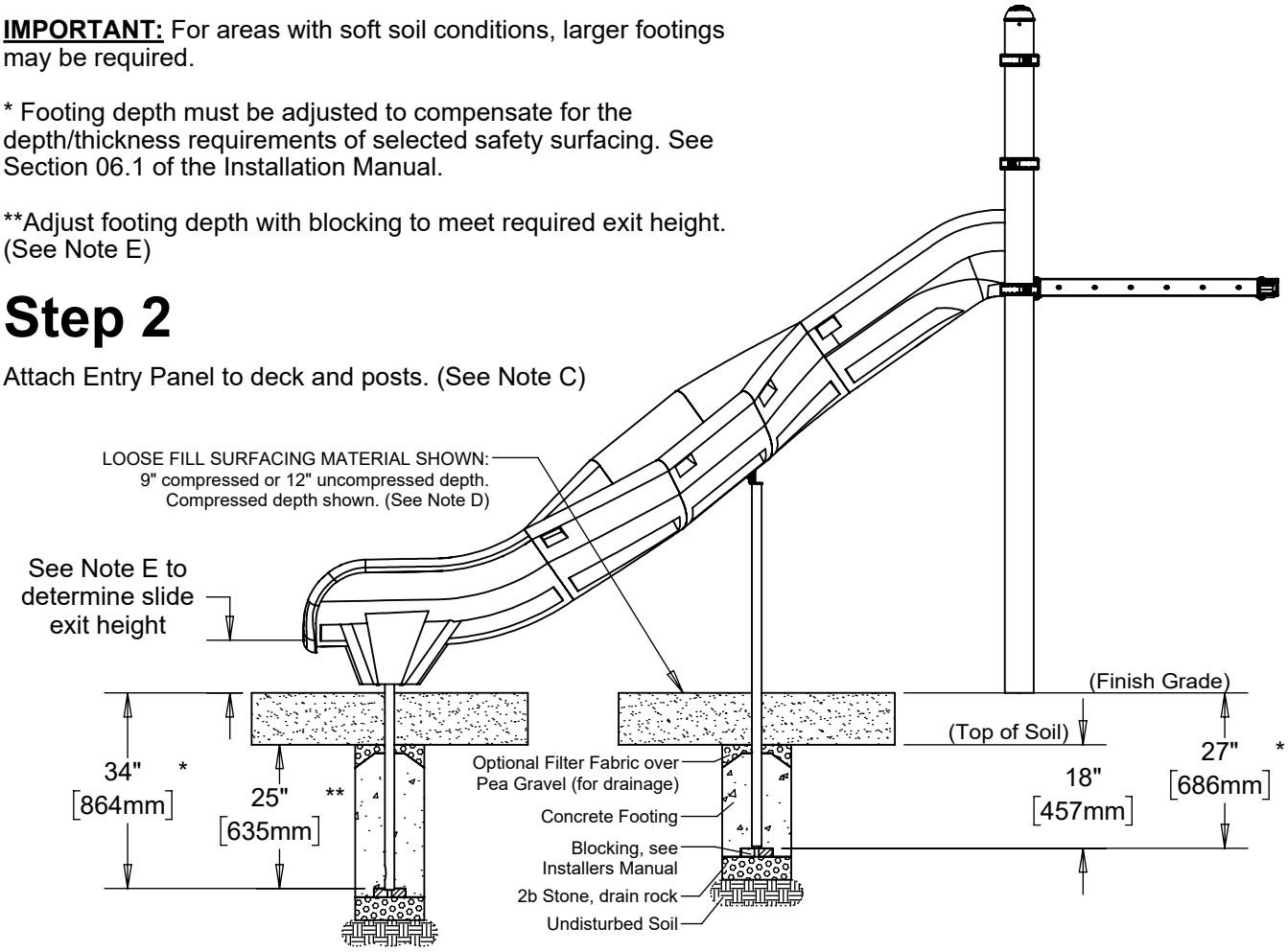
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

**Adjust footing depth with blocking to meet required exit height. (See Note E)

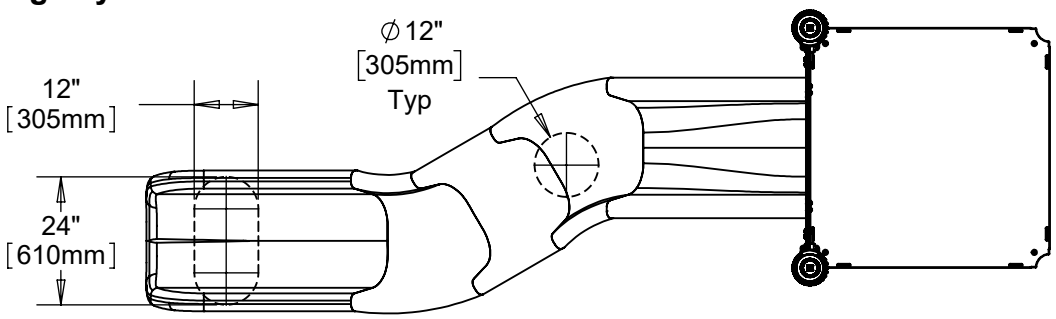
Step 2

Attach Entry Panel to deck and posts. (See Note C)

Elevation View - Footing Detail



Top View - Footing Layout



Step 3

Attach Entry Section(s) to Entry Panel as shown in Figure 1.1. (See Note A)

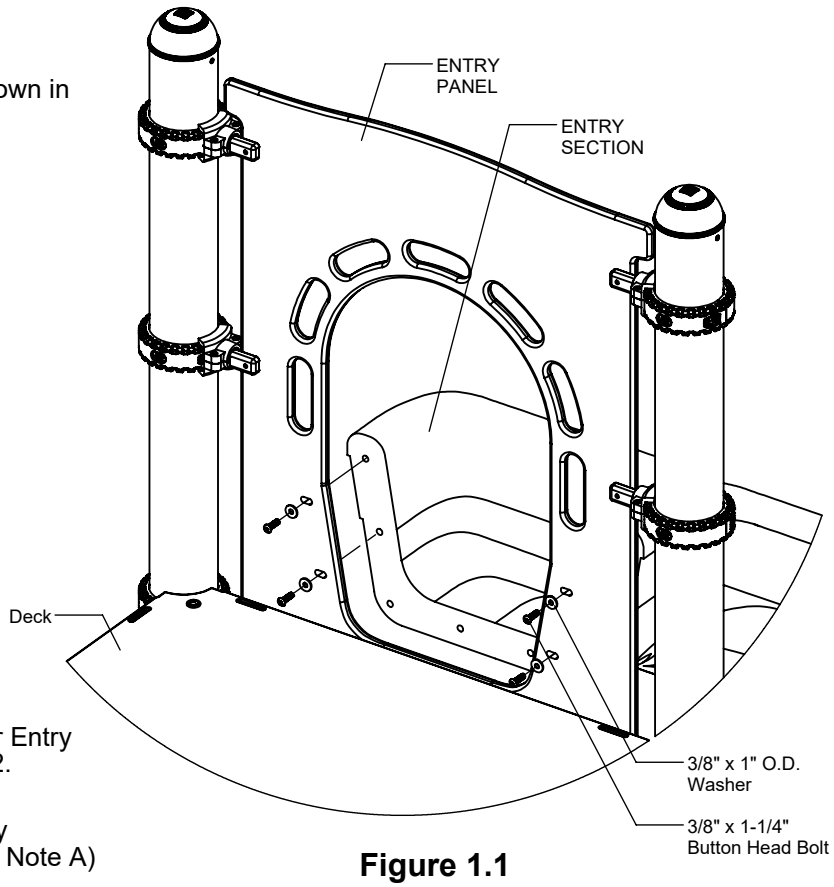


Figure 1.1

Step 4

For Entry Sections including all Triple Twister Entry Panels use the hardware shown in Figure 1.2. (See Note A)

For Single Canada Entry Panels, attach Entry Section to deck as shown in Figure 1.3. (See Note A)

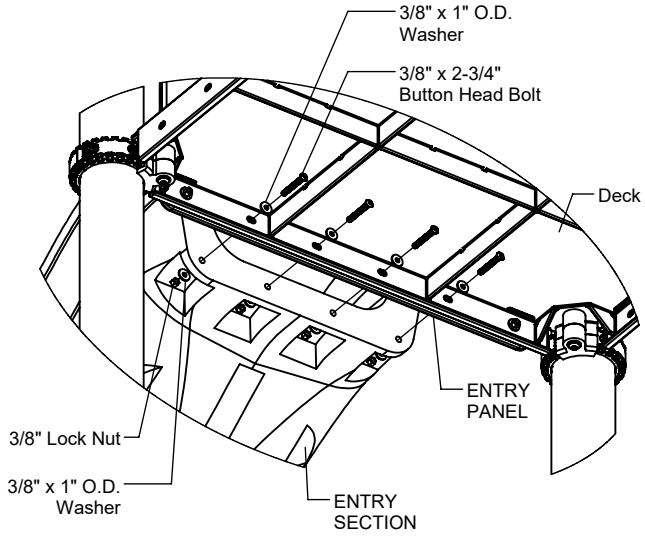


Figure 1.2

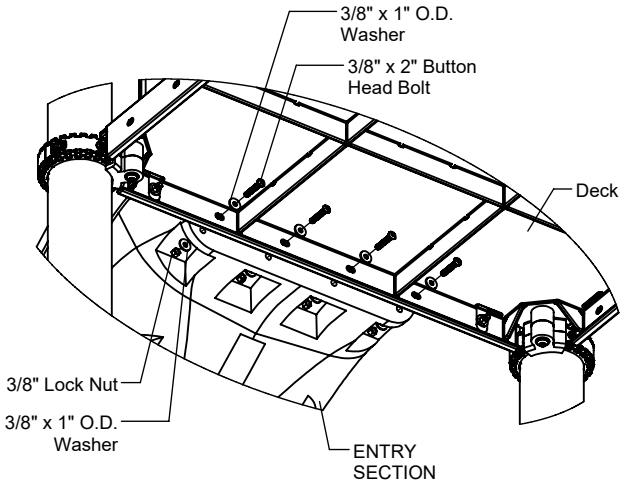


Figure 1.3

Step 5

Attach sections together as shown in Figure 1.4. Refer to structure Top View for configuration and support location. For section joints where Support Bracket is attached, see Figure 1.5. (See Note A)

Determine footing center location by dropping plumb bob from Support Bracket(s).

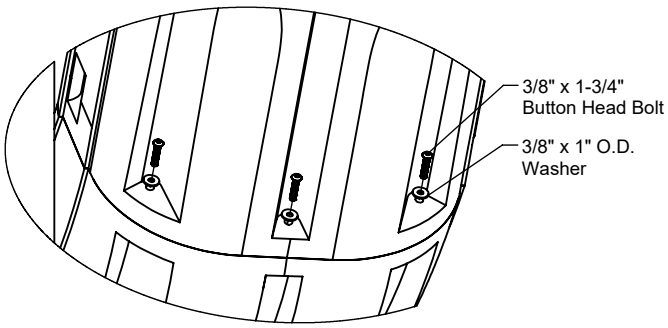


Figure 1.4

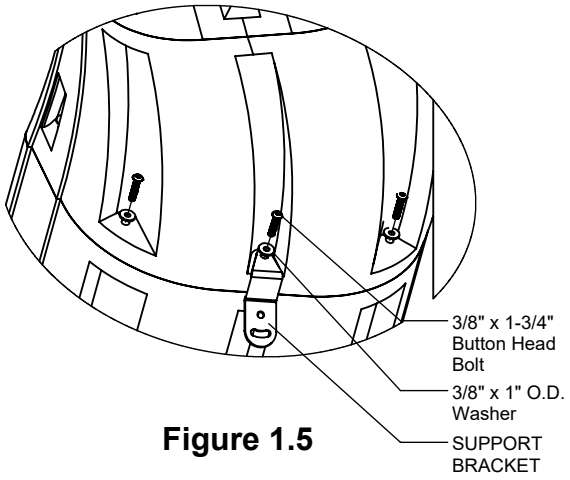


Figure 1.5

Step 6

Place Slide Support in footing hole and attach to Support Bracket as shown in Figure 1.6. (See Note A)

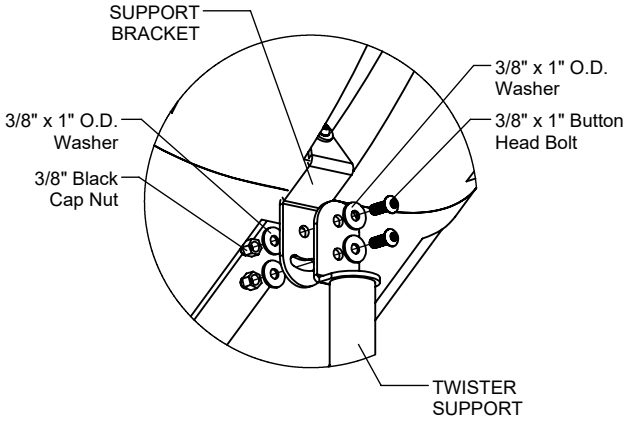


Figure 1.6

Step 7

Place Slide Leg in footing hole and attach to Exit Section as shown in Figure 1.7. (See Note A)

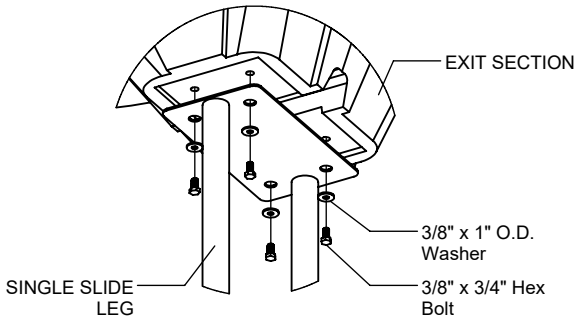


Figure 1.7

Step 8

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 9

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Notes B and E)

Step 10

Place appropriate compliant protective surfacing under and around Twister Slide. (See Note D)

Specifications

TWISTER SLIDE SECTIONS:
Shall be constructed of UV-stabilized rotationally molded linear low density polyethylene with an average wall thickness of .250".

TWISTER SLIDE SUPPORT:
Shall be fabricated of 1.660" O.D. 11 gauge steel tubing welded to a 3/16" formed and punched steel plate and will have a multi-stage baked-on powder coat finish.

SINGLE SLIDE LEG:
Shall be fabricated of 1.660" O.D. 11 gauge steel tubing welded to a 10 gauge steel plate and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

TWISTER SLIDE ROTO		
Part #	**DESCRIPTION**	**QTY**
DE-4339-ENT	Twister Slide - Entry	Varies
DE-4339-EXT	Twister Slide-Exit	Varies
DE-4339-L	Twister Slide-Left	Varies
DE-4339-R	Twister Slide-Right	Varies
DE-4339-S	Twister Slide-Straight	Varies

EACH ENTRY HARDWARE ASTM		
Part #	**DESCRIPTION**	**QTY**
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	4

EACH ENTRY HARDWARE CSA		
Part #	**DESCRIPTION**	**QTY**
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103092-TR	Bolt Button Head 3/8" x 2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	4

EACH SECTION JOINT		
Part #	**DESCRIPTION**	**QTY**
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	5
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5

EACH MID-SUPPORT		
Part #	**DESCRIPTION**	**QTY**
BE-4500	Sectional Slide Support Bracket #2	1
FS-1710-S	Sectional Slide Support	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413162-BLK	Nut Lock 3/8" w/ Black Cap	2

EACH EXIT LEG		
Part #	**DESCRIPTION**	**QTY**
FS-1701	Single Slide Leg	1
9123032	Bolt Hex 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

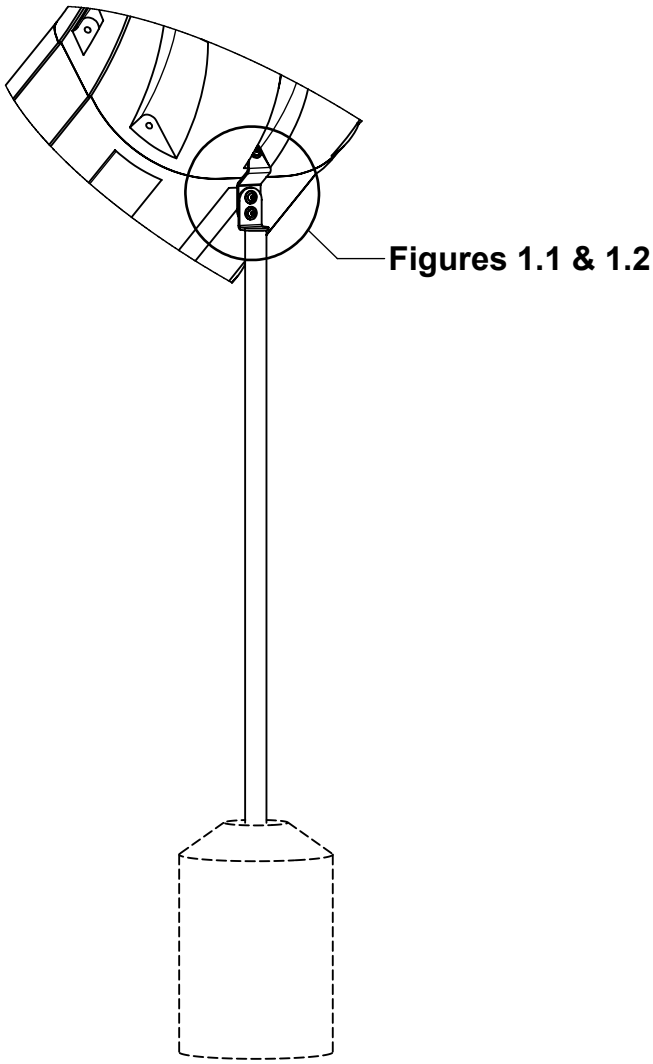
Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Twister Slide Support Assembly



Step 1

Attach Support Bracket to Twister Support as shown in Figure 1.1. (See Note A)

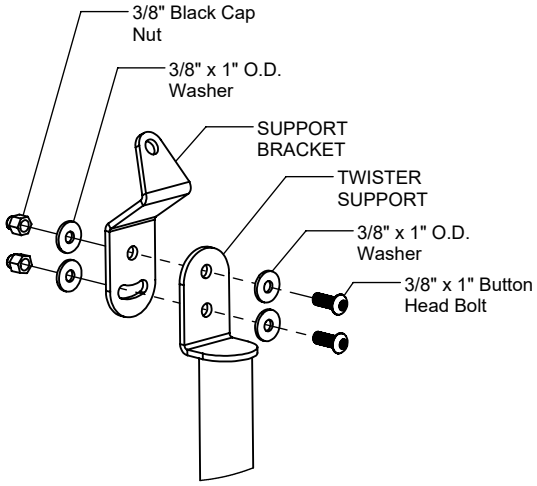


Figure 1.1

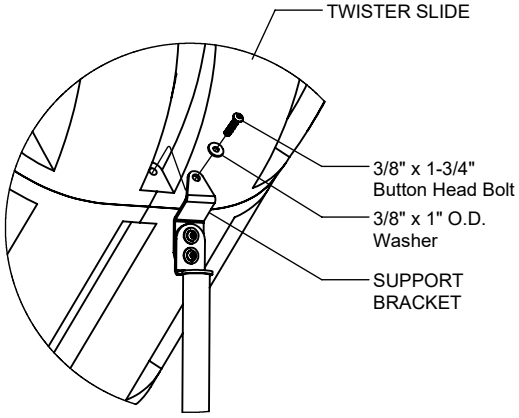


Figure 1.2

Step 2

Attach Twister Support to Twister Slide as shown in Figure 1.2. (See Note A)

Step 3

For Surface Mount Only

Attach Twister Support Top to Twister Support Bottom as shown in Figure 2. (See Note A)

NOTE: Do not secure with tek screws until correct support height is achieved with the Support Top conected to the slide and the Support Bottom secured to the concrete.

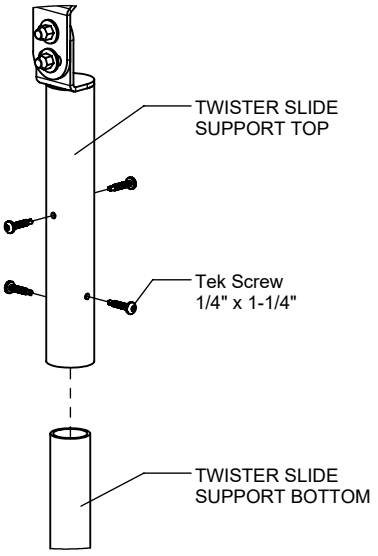


FIGURE 2

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

S-1710-SUP		
Part #	**DESCRIPTION**	**QTY**
BE-4500	Sectional Slide Support Bracket #2	1
FS-1710-S	Twister Slide Support	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9413162-BLK	Nut Lock 3/8" w/ Black Cap	2

S-1710-SUP-SM		
Part #	**DESCRIPTION**	**QTY**
BE-4500	Sectional Slide Support Bracket #2	1
FS-1710-S-SM-B	Twister Slide Support - Surface Mount - Bottom	1
FS-1710-S-SM-T	Twister Slide Support - Surface Mount - Top	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	1
9271062-TR	1/4" x 1-1/4" Tek Screw	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9413162-BLK	Nut Lock 3/8" w/ Black Cap	2

Specifications

SECTIONAL SLIDE SUPPORT BRACKET #2:
Shall be fabricated using 3/16"HR sheet steel and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SUPPORT:
Shall be fabricated using Ø1.660 steel tubing, 3/16" HR sheet steel and 5/8"round bar and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SUPPORT TOP:
Shall be fabricated using Ø2.000 steel tubing and 3/16" HR sheet steel and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SUPPORT BOTTOM:
Shall be fabricated using Ø1.660 steel tubing and 1/4" HR sheet steel and will have a multi-stage baked-on powder coat finish.

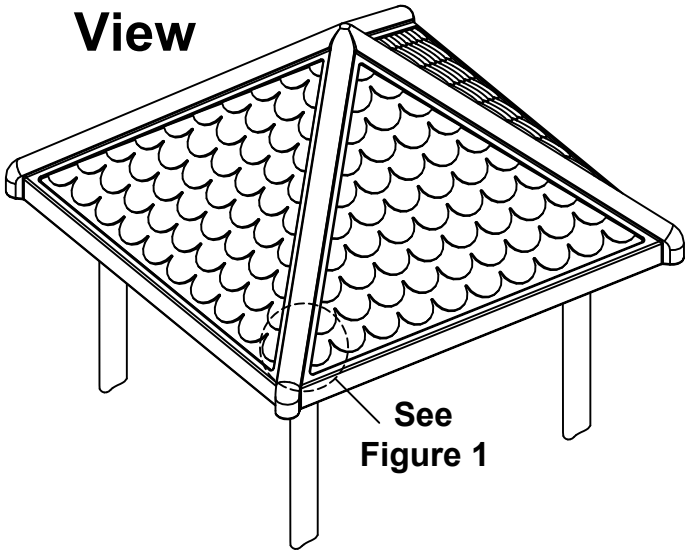
HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

POLY SHINGLED ROOF ASSEMBLY

Assembly View



Plan View

Roof Support Casting Layout

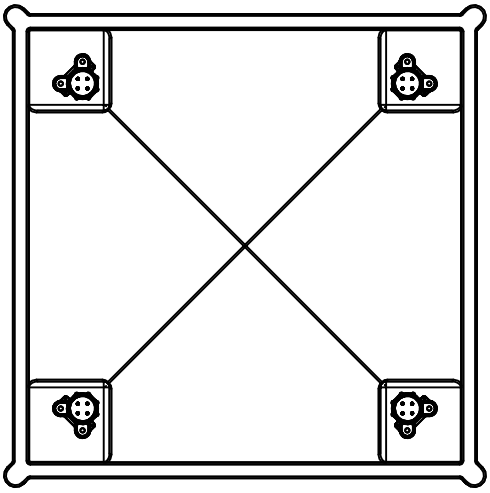
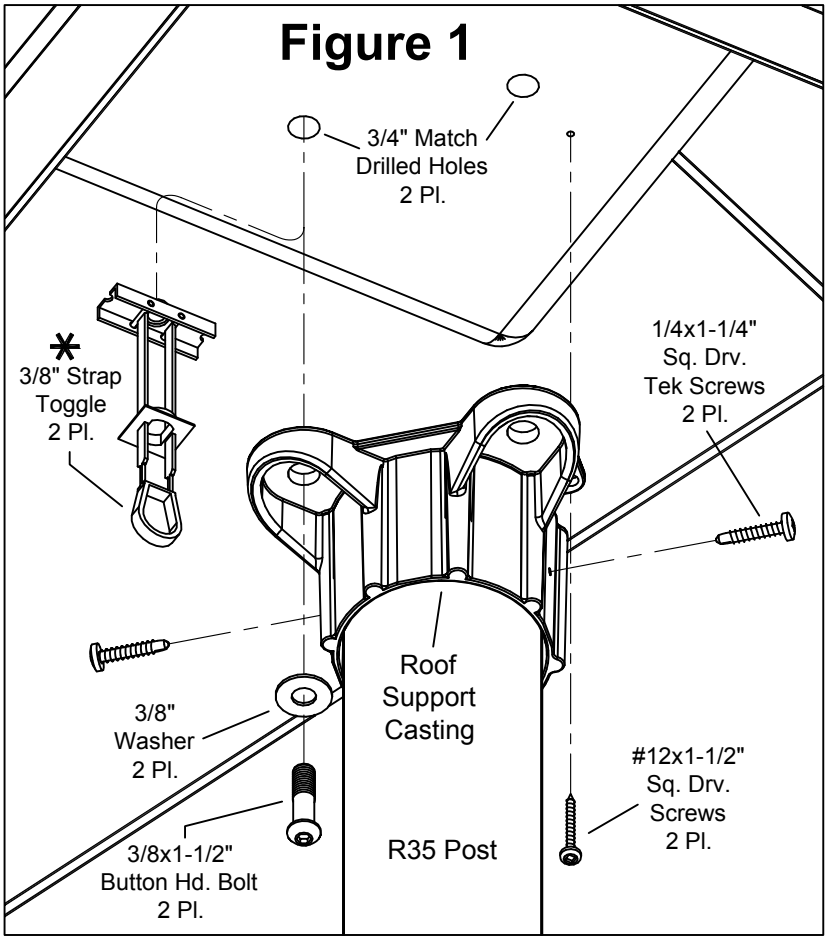


Figure 1



Parts List

QTY.	DESCRIPTION	PART #
1	Poly Shingled Roof	141020
4	Roof Support Castings 2-Ear	8164
8	3/8"x1-1/2" Button Hd. Bolts	9103072-TR
8	#12x1-1/2" Sq. Drv. Screws	9221272
8	1/4"x1-1/4" Sq. Drv. Tek Screws	9271060
8	3/8" Washers	9333002
8	3/8" Strap Toggle Fasteners	9643160

Specifications

ROOF:
Shall be roto-molded of UV-stabilized polyethylene with an average wall thickness of .250".

ROOF SUPPORT CASTING:
Shall be Die-Cast using a High-Strength Aluminum Alloy. To be finished with a baked on Powder Coating.

HARDWARE:
Shall be zinc/nickel plated, galvanized or stainless steel as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts.
A periodic inspection of all parts is necessary.
If a part is broken or worn, replace immediately.

Installation

Notes:
(A) Use Posts ***without caps.***

(B) Snug tighten all fasteners during assembly. After assembly, check position and tighten the fasteners fully.

(C) Use liquid thread lock (such as Loctite) with all threaded hardware that does not include self-locking nuts.

✳ **(D)** Caution must be given to Toggle Assembly as parts may become fragile during insertion and final securing.

Step 1.
Attach Roof Casting to the top of the Post using 1/4"x1-1/4" Sq. Drv. Tek Screws as shown in Figure 1.

Step 2.
Position & center the Shingled Roof on the Roof Support Castings.

Step 3.
Mark Roof Casting hole positions on Poly Roof.

Step 4.
Move Roof out of postion and match drill (2) 3/4" Dia. holes at each Casting location. Cinch the (2) Strap Toggle Fasteners into the roof through the 3/4" holes as shown in Figure 1. Re-position Shingled Roof.

Step 5.
Complete the attachment of the Roof to the Roof Castings using the 3/8"x1-1/2" Button Head Bolts and 3/8" Washers as shown in Figure 1.

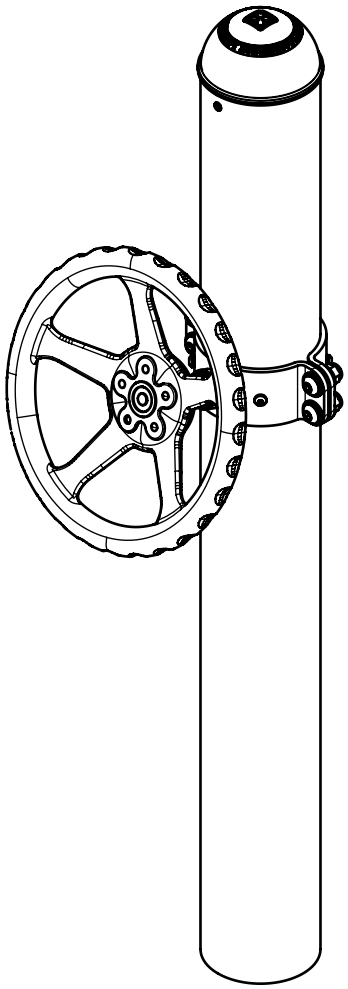
Step 6.
Fully tighten all fasteners.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Driver Wheel to Post



NOTE: R5 Driver Wheel to Post shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Press Bearings into Wheel Hub as shown in Figure 2.

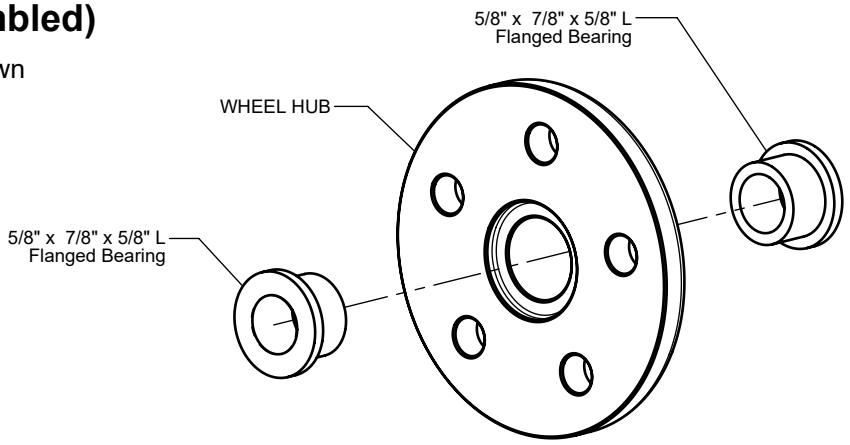


FIGURE 2

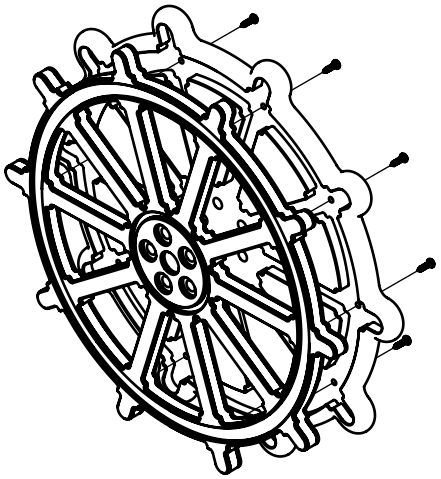


FIGURE 3

Step 2 (Factory Assembled)

For Ship Wheel only

Attache Wheel Insertto tWheel Base as shown in Figure 3.

Step 3

Locate Driver Wheel height and attach Steering Wheel Bracket as shown in Figure 4. (See Note A)

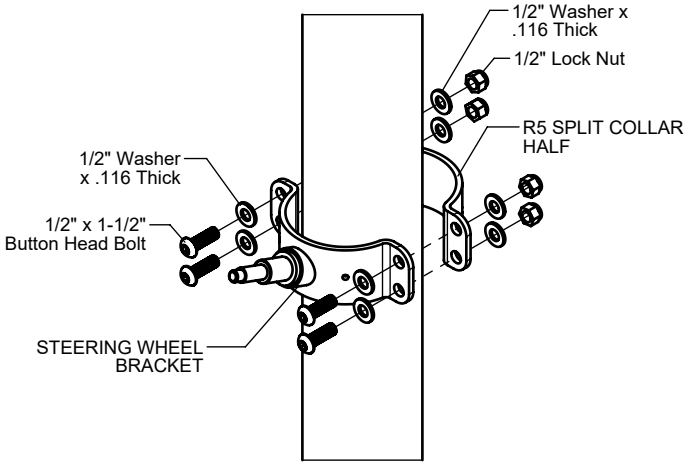


FIGURE 4

Step 4

Secure Steering Wheel Bracket to post as shown in Figure 5. (See Note A)

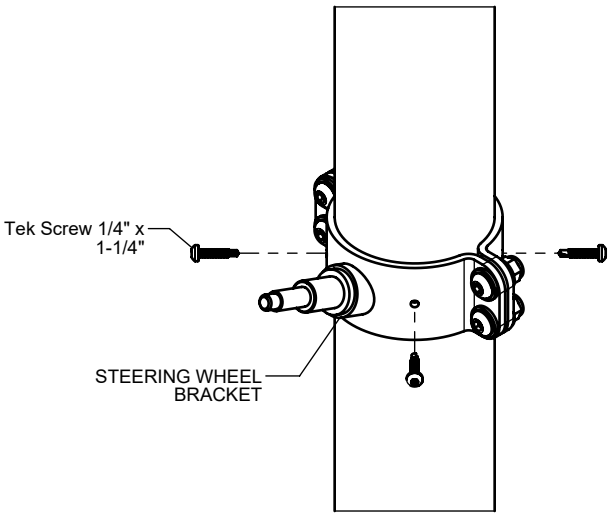


FIGURE 5

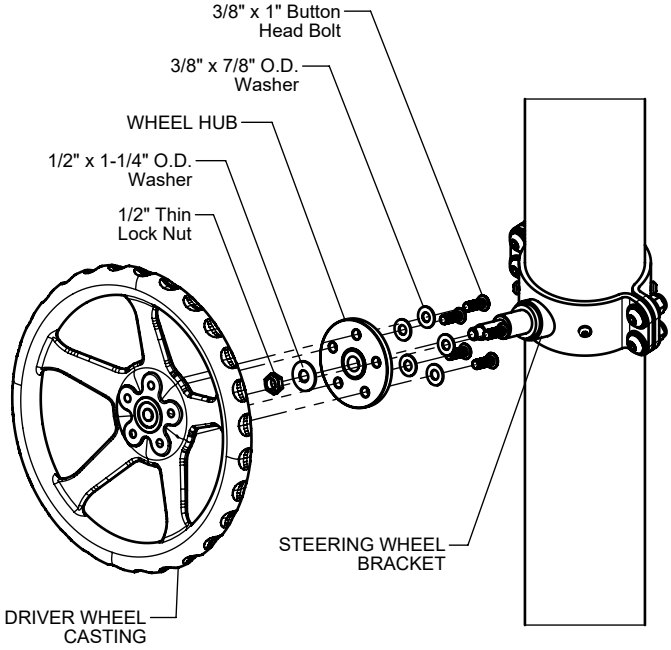


FIGURE 6

Step 5

Attach Driver Wheel Casting to Steering Wheel Bracket as shown in Figure 6. (See Note A)

Step 6

Attach Ships Wheel to Steering Wheel Bracket as shown in Figure 7.
(See Note A)

Step 7

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 8

Place required protective surfacing under and around Driver Wheel to Post.
(See Note B)

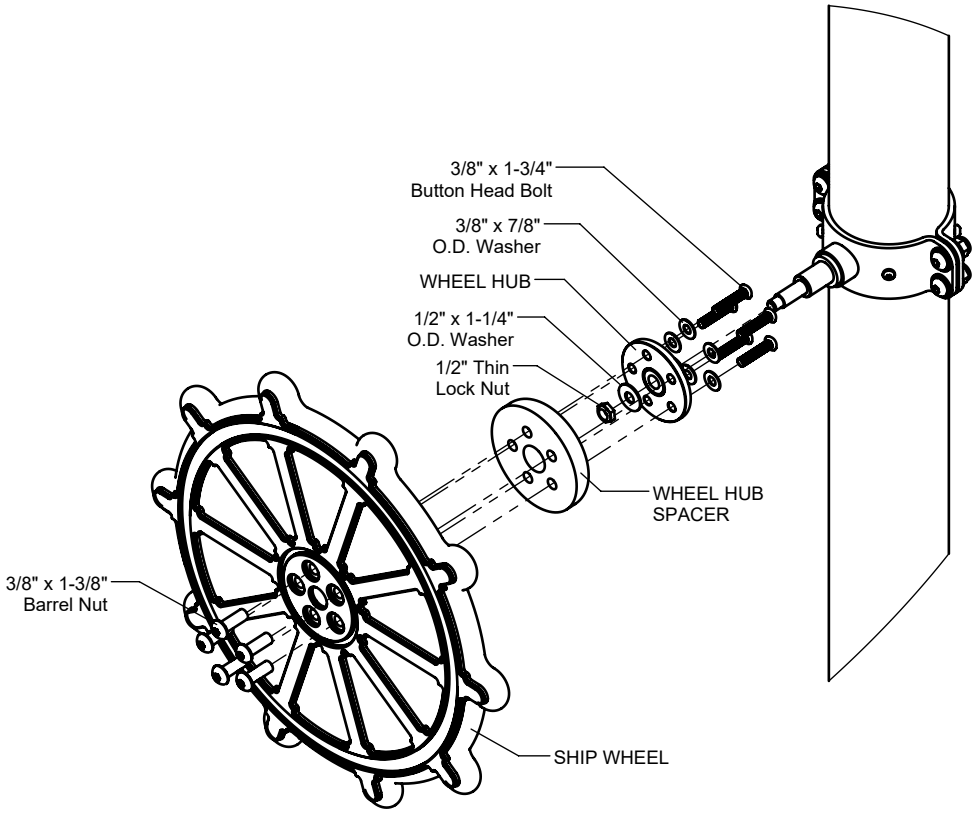


FIGURE 7

Parts List

S-1812-R35		
Part #	**DESCRIPTION**	**QTY.**
BG-8133	SPLIT COLLAR HALF R3.5	1
FS-1812-R35	Steering Wheel to Post Bracket R3.5	1
GE-4728	Driver Wheel Casting	1
9103052-TR	Bolt Button Head 3/8" x 1"	5
9105072	Bolt Button Head 1/2" x 1-1/2"	4
9271062-TR	1/4" x 1-1/4" Tek Screw	4
9333042	Washer Flat 3/8" x 7/8" O.D.	5
9335062	Washer Flat 1/2" x 1-1/4" OD	1
9415132	Nut Lock 1/2"	4
9425002	Nut Lock 1/2" Thin	1
9335002	Washer Flat 1/2" (.116" thick)	8

S-1812-R5		
Part #	**DESCRIPTION**	**QTY.**
BF-7068	Split Collar Half R5	1
FS-1812-R	Steering Wheel to Post Bracket	1
GE-4728	Driver Wheel Casting	1
9103052-TR	Bolt Button Head 3/8" x 1"	5
9105072	Bolt Button Head 1/2" x 1-1/2"	4
9271062-TR	1/4" x 1-1/4" Tek Screw	4
9333042	Washer Flat 3/8" x 7/8" O.D.	5
9335002	Washer Flat 1/2" (.116" thick)	8
9335062	Washer Flat 1/2" x 1-1/4" OD	1
9415132	Nut Lock 1/2"	4
9425002	Nut Lock 1/2" Thin	1

S-1812-RSHP		
Part #	**DESCRIPTION**	**QTY.**
BF-7068	Split Collar Half R5	1
EE-0156-H	Solid Driver Wheel Hub	1
FS-1812-RSHP	Ship Wheel to Post Bracket	1
481058-58	5/8" x 7/8" x 5/8" L Flanged Bearing	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	5
9105072	Bolt Button Head 1/2" x 1-1/2"	4
9271062-TR	1/4" x 1-1/4" Tek Screw	4
9333042	Washer Flat 3/8" x 7/8" O.D.	5
9335002	Washer Flat 1/2" (.116" thick)	8
9335062	Washer Flat 1/2" x 1-1/4" OD	1
9415132	Nut Lock 1/2"	4
9425002	Nut Lock 1/2" Thin	1
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	5

Assembled Parts List

WHEEL HUB		
Part #	**DESCRIPTION**	**QTY.**
IE-4662	Wheel Hub	1
481058-58	5/8" x 7/8" x 5/8" L Flanged Bearing	2

S-1812-RSHP		
PART #	**DESCRIPTION**	**QTY**
EE-0357	PIRATE SHIP WHEEL BASE	1
EE-0357-I	PIRATE SHIP WHEEL INSERT	1
9251032	SCREW SQ #10-12 X 3/4	10

Specifications

DRIVER WHEEL CASTING:
Shall be precision die-cast from a high strength aluminum alloy. The Driver Wheel Casting shall have a multi-stage baked-on powder coat finish coat finish.

WHEEL HUB:
Shall be machined from Ø 3-3/4" high strength aluminum alloy. The Wheel Hub shall have a multi-staged baked-on powder coat finish.

STEERING WHEEL TO POST BRACKET:
Shall be precision laser cut from 1/4" thick rolled sheet steel with welded 1.660" 11 gauge steel tubing and Ø 1" machined stainless steel spindle. The Steering Wheel to Post Bracket shall have a multi-stage baked-on powder coat finish.

SPLIT COLLAR HALF:
Shall be precision laser cut from 1/4" thick rolled sheet steel. The Split Collar Half shall have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for 09 Collars and R5-11 Socket Clamps installation instructions.

(C) The maximum height of rungs (at grasping point) from the top of the protective surfacing varies by age group: Ages 2-5: 60" [1524mm] above protective surfacing. Ages 5-12: 84" [2130mm] above protective surfacing.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Crunch Handle Assembly

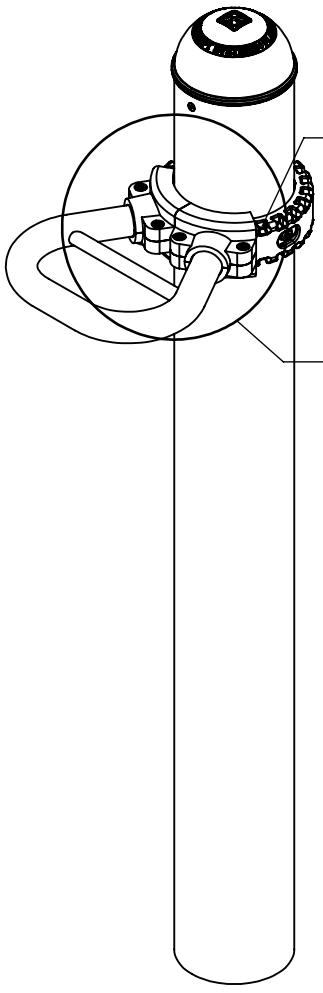


FIGURE 2
Attachment varies
based on system type

NOTE: R5 Crunch Handle shown.
Other configurations will vary slightly.

Step 1

For R5 and R3.5 Versions, locate and attach Collars at height designated on the Assembly View. (See Notes B & C)

Step 2

Attach Crunch Handle to Post as shown in Figure 2. (See Notes A & B)

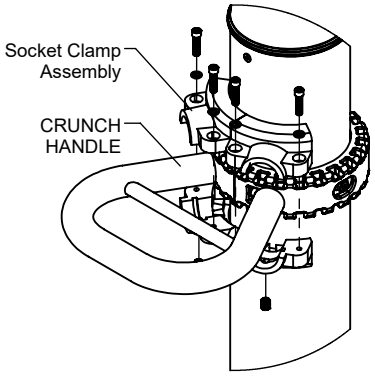
Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

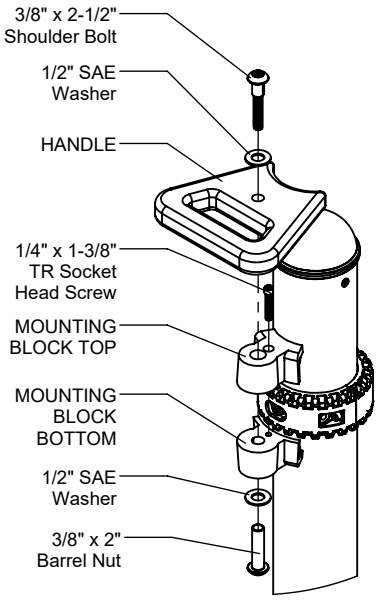
Step 4

Place required protective surfacing under and around Crunch Handle. (See Note D)

R5 Assembly



R3.5 Assembly



Revolution Assembly

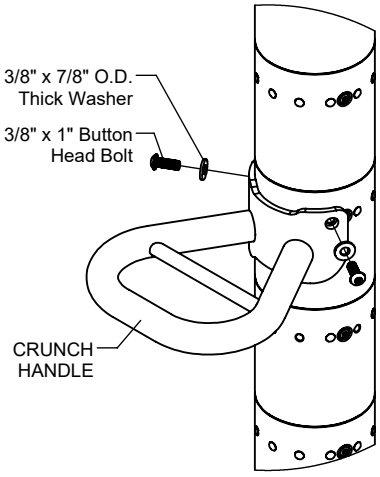


FIGURE 2

Parts Lists

R5 CRUNCH HANDLE		
Part #	**DESCRIPTION**	**QTY**
FS-1937-R5	Crunch Handle R5	1
HS-1001-R5	Socket Clamp Set R5	2

R3.5 CRUNCH HANDLE		
Part #	**DESCRIPTION**	**QTY**
EG-8328	Crunch Handle R3.5	1
GG-8110	Mounting Block 4 Top R3.5	1
GG-8111	Mounting Block 4 Bottom R3.5	1
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	1
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	1
9345002	Washer Flat SAE 1/2"	2
9443092-TR	Nut Barrel 3/8" x 2" BH	1

REVOLUTION CRUNCH HANDLE		
Part #	**DESCRIPTION**	**QTY**
FS-1937-RV	Crunch Handle RV	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	2

Specifications

CRUNCH HANDLE R5:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with a welded 0.625" H.R. round bar crossbar. The Crunch Handle R5 shall have a multi-stage baked-on powder coat finish.

CRUNCH HANDLE R35:
Shall be made from high density 1" sheet plastic specially formulated for optimum UV stability and color retention.

CRUNCH HANDLE RV:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with a welded 0.625" H.R. round bar crossbar and 1/4" thick stainless steel mounting bracket. The Crunch Handle RV shall have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

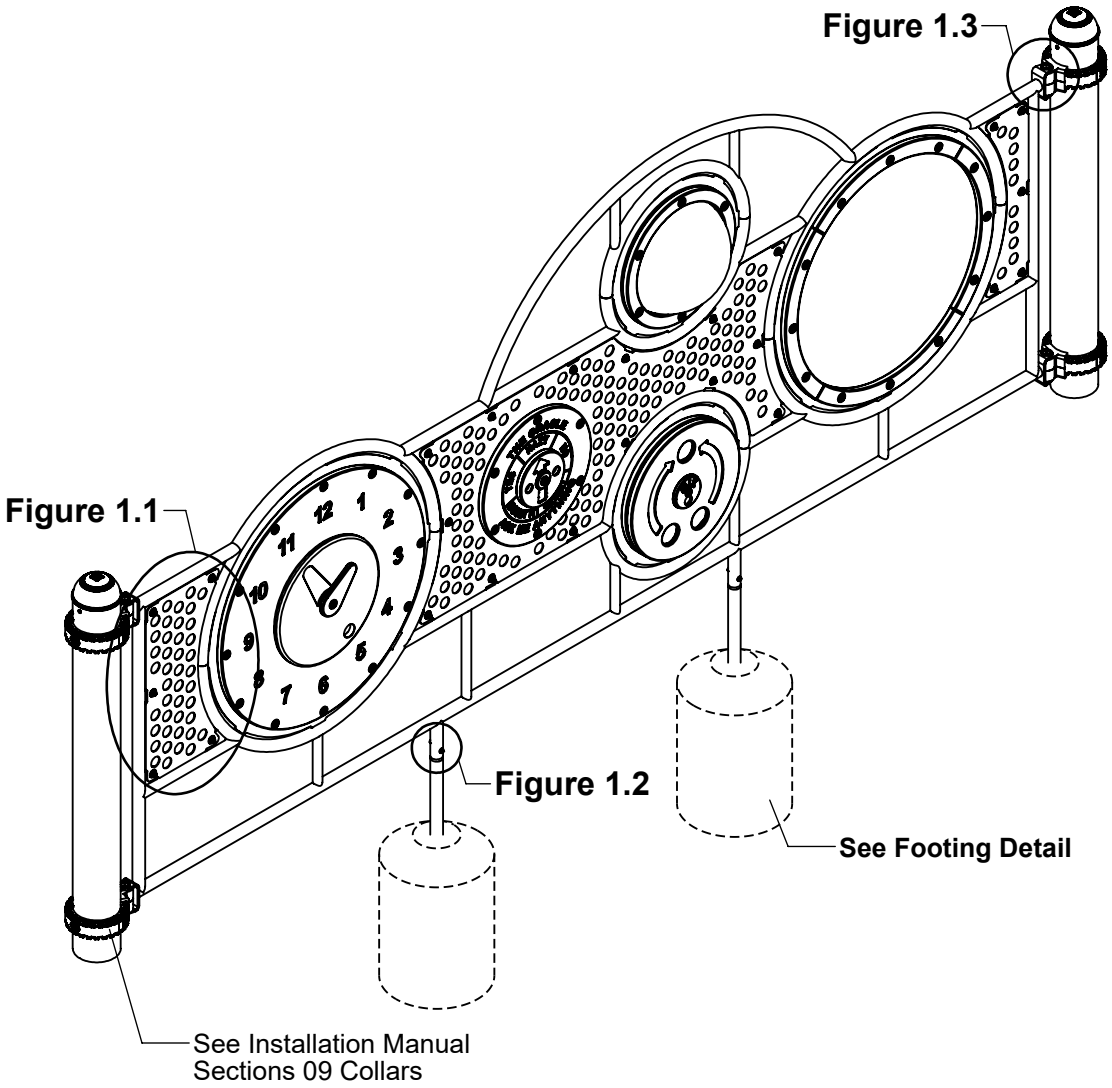
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 09 Collars installation instructions.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Sensory Wall



Step 1

Refer to Footing Layout and mark footing hole locations. Dig (2) Ø 12" footing holes. Refer to Footing Detail for depth and details.

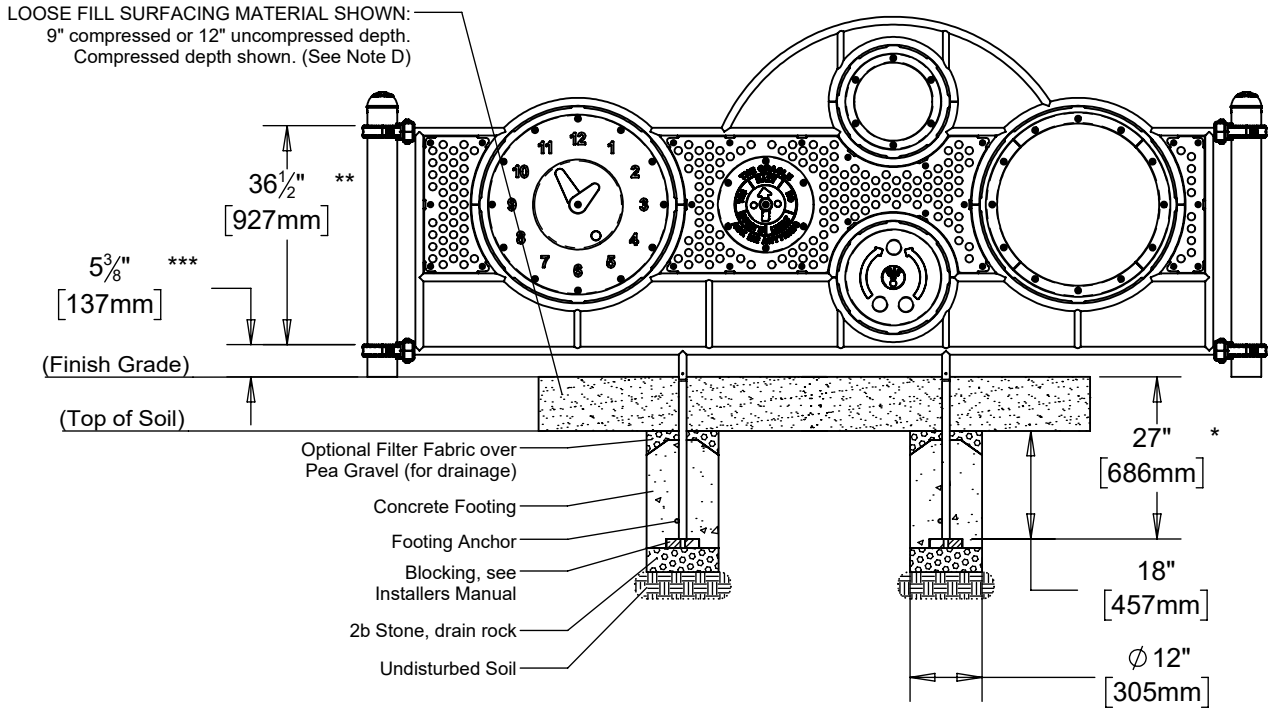
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

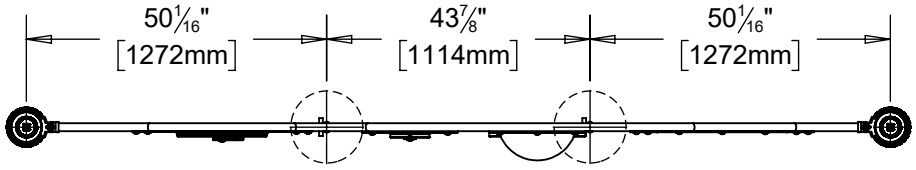
** Height shown from top of collar to top of collar.

*** Height shown from finish grade to top of collar.

Elevation View - Footing Detail



Top View - Footing Layout



Step 2 (Factory Assembled)

Attach Inserts to Sensory Wall as shown in Figure 1.1. (See Note A)

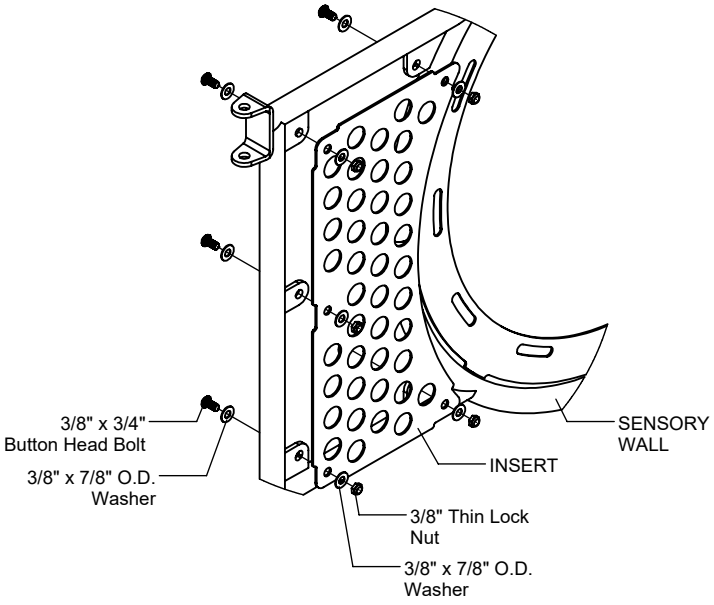


Figure 1.1

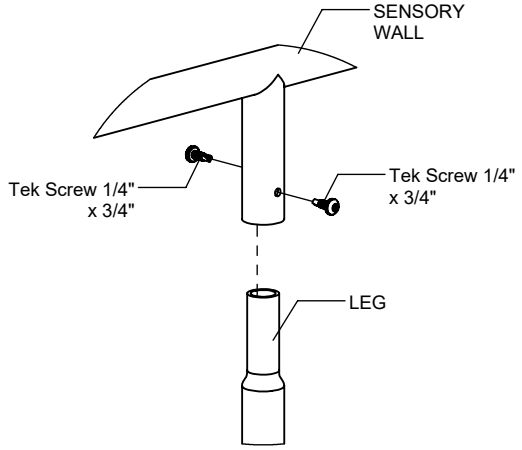


Figure 1.2

Step 3

Locate and attach collars at heights shown in Elevation View. (See Note B)

Step 4

Attach Legs to Sensory Wall as shown in Figure 1.2. (See Note A)

Step 5

Attach Sensory Wall to Collars as shown Figure 1.3. (See Note A)

Step 6

Attach Games to Sensory Wall as specified in additional instructions.

Step 7

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 8

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 9

Place required protective surfacing under and around Sensory Wall. (See Note D)

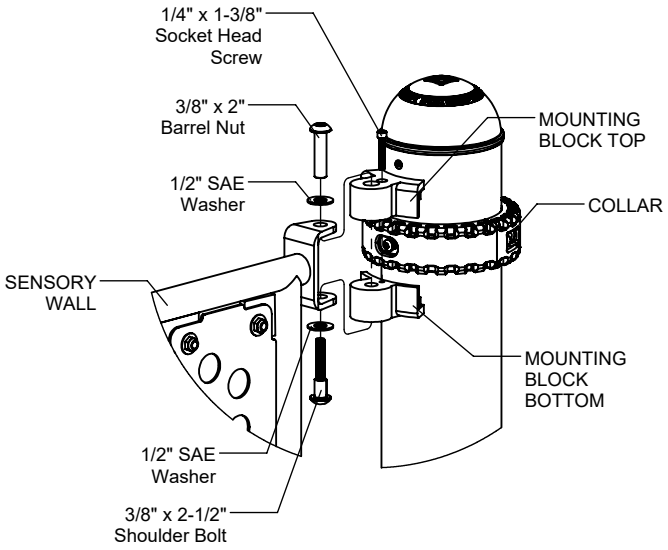


Figure 1.3

Parts List

IN-GROUND		
Part #	**DESCRIPTION**	**QTY**
FS-1981-LEG	Sensory Wall Leg	2
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	4
9271032-TR	1/4" x 3/4" Tek Screw	4
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9345002	Washer Flat SAE 1/2"	8
9443092-TR	Nut Barrel 3/8" x 2" BH	4

SURFACE MOUNT		
Part #	**DESCRIPTION**	**QTY**
FS-1981-LEG-SM	Sensory Wall Leg - Surface Mount	2
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	4
9271032-TR	1/4" x 3/4" Tek Screw	4
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9345002	Washer Flat SAE 1/2"	8
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Assembled Parts List

Part #	DESCRIPTION	QTY
AF-1220-L	Sensory Ramp Insert Large	1
AF-1221-L	Sensory Platform Insert Large	1
AF-1221-S	Sensory Platform Insert Small	1
FS-1981	Sensory Wall	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	24
9333042	Washer Flat 3/8" x 7/8" O.D.	48
9423002	Nut Lock Thin 3/8"	24

Specifications

SENSORY WALL LEG:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 5/8" O.D. steel anchor and will have a multi-stage baked-on powder coat finish.

SENSORY WALL LEG - SURFACE MOUNT:
Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1/4" thick steel plate and will have a multi-stage baked-on powder coat finish.

SENSORY RAMP INSERTS:
Shall be precision cut from 12 gauge sheet steel and will have a multi-stage baked-on powder coat finish.

SENSORY WALL:
Shall be fabricated using 1.029" O.D. 14 gauge and 1.315" O.D. 12 gauge steel tubing with welded 12 gauge and 1/4" thick steel tabs and flanges and will have a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:
Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

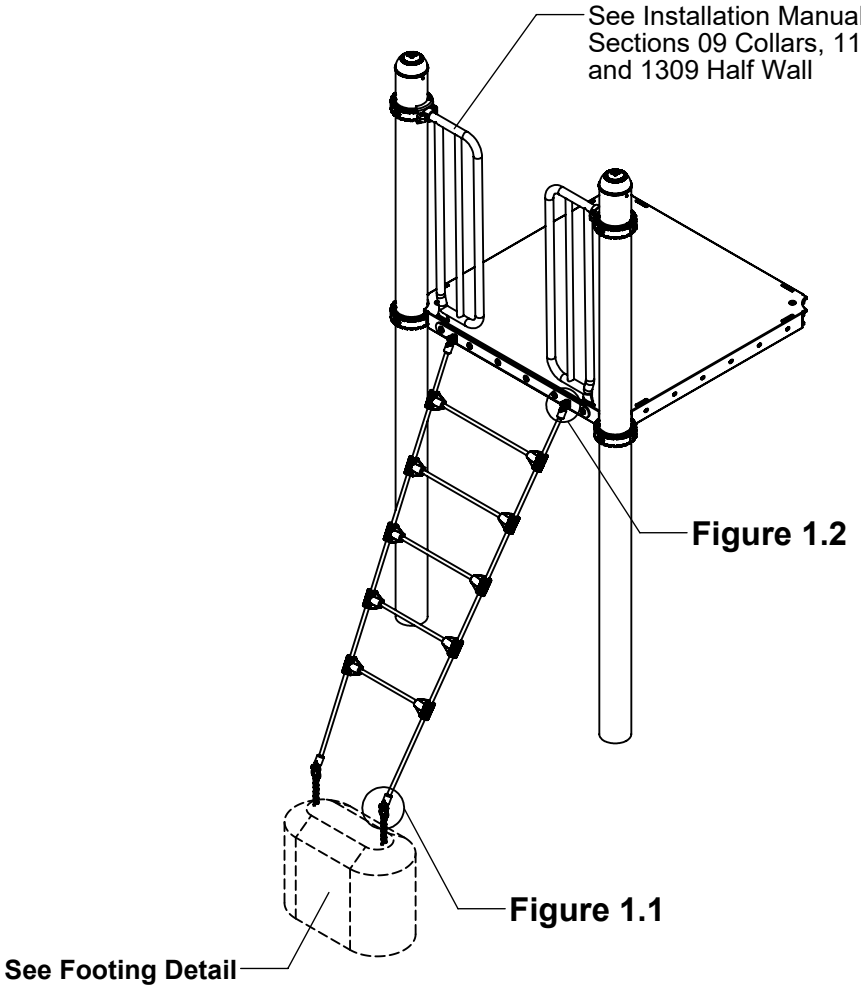
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 09 Collars, 11 Socket Clamps, and 1309 Half Wall installation instructions.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Narrow Net Climber



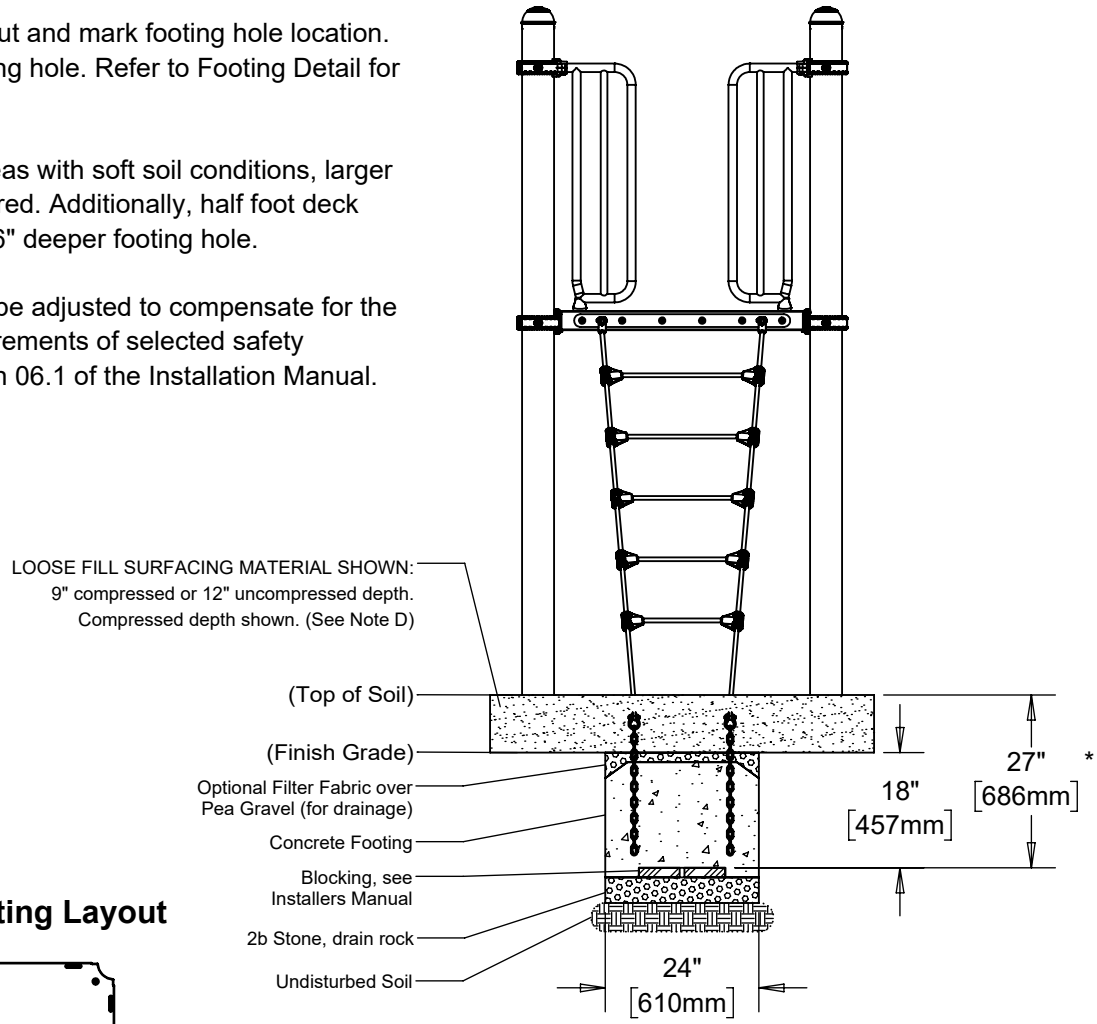
Step 1

Refer to Footing Layout and mark footing hole location. Dig (1) 12" x 24" footing hole. Refer to Footing Detail for depth and details.

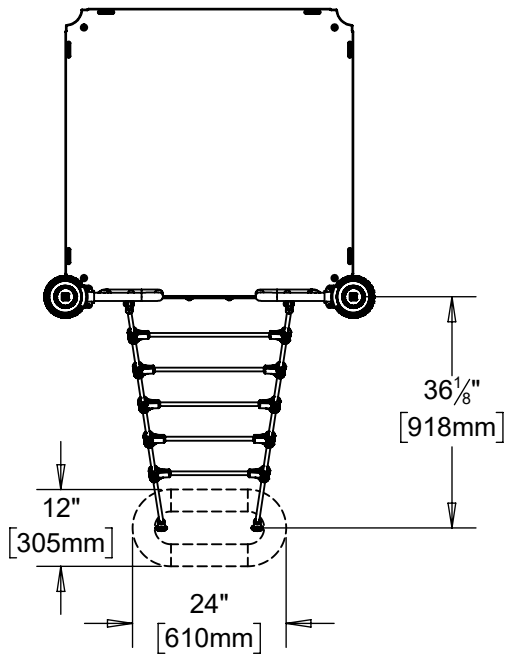
IMPORTANT: For areas with soft soil conditions, larger footings may be required. Additionally, half foot deck heights will require a 6" deeper footing hole.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Elevation View - Footing Detail



Top View - Footing Layout



Step 2

Attach Chains to Narrow Net Climber as shown in Figure 1.1. (See Note A)

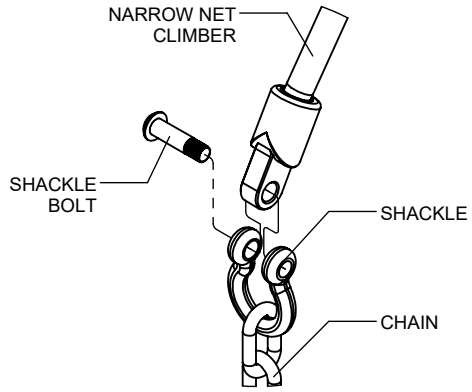


Figure 1.1

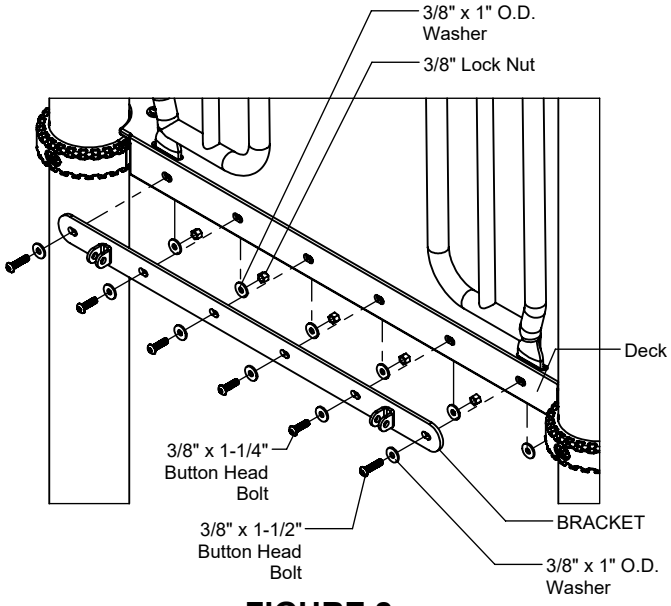


FIGURE 2

Step 3

Attach Bracket to Deck as shown in Figure 2. (See Note A)

Step 4

Attach Narrow Net Climber to Bracket as shown in Figure 1.2. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 6

Plumb and level entire component. Place chains tight into footing hole. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 7

Place required protective surfacing under and around Narrow Net Climber. (See Note D)

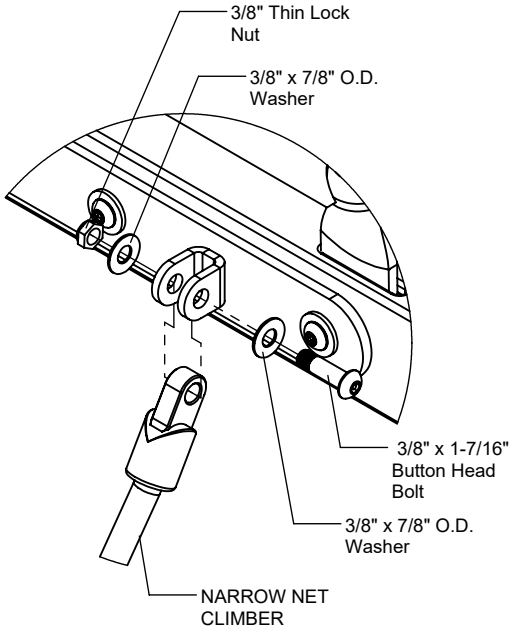


Figure 1.2

Parts List

Part #	DESCRIPTION	QTY
FS-12462-BRKT	Narrow Net Climber Bracket	1
HE-0008-16	16-Link Galvanized Chain	2
HE-0145	Narrow Net Climber-Net	1
451161-SS	Swing Shackle - Stainless Steel	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	2
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9333042	Washer Flat 3/8" x 7/8" O.D.	4
9413002	Nut Lock 3/8"	6
9423002	Nut Lock Thin 3/8"	2

Specifications

NARROW NET CLIMBER BRACKET:
Fabricated using 1/4" thick steel plate with welded 3/16" thick steel anchors and will have a multi-stage baked-on powder coat finish.

16-LINK GALVANIZED CHAIN:
Fabricated from 5/0 galvanized steel chain with silver shield finish.

NARROW NET CLIMBER-NET:
Fabricated from 16mm steel-reinforced rope with high-strength polymer intersections and machined aluminum end ferrules.

HARDWARE:
Fabricated from stainless steel, zinc/nickel plated or galvanized to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

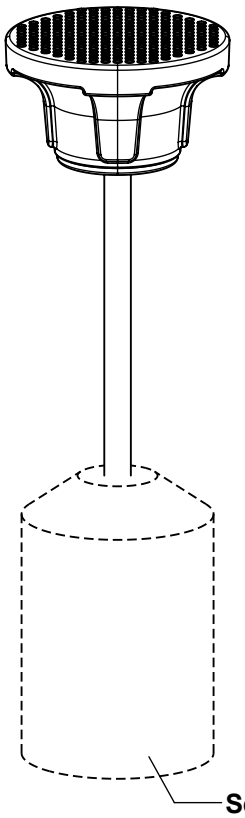
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) When installing multiple steps, the distance between steps varies by age group: Ages 2-5: 12" [305mm] apart. Ages 5-12: 18" [457mm] apart.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Lily Pad Seat-Step



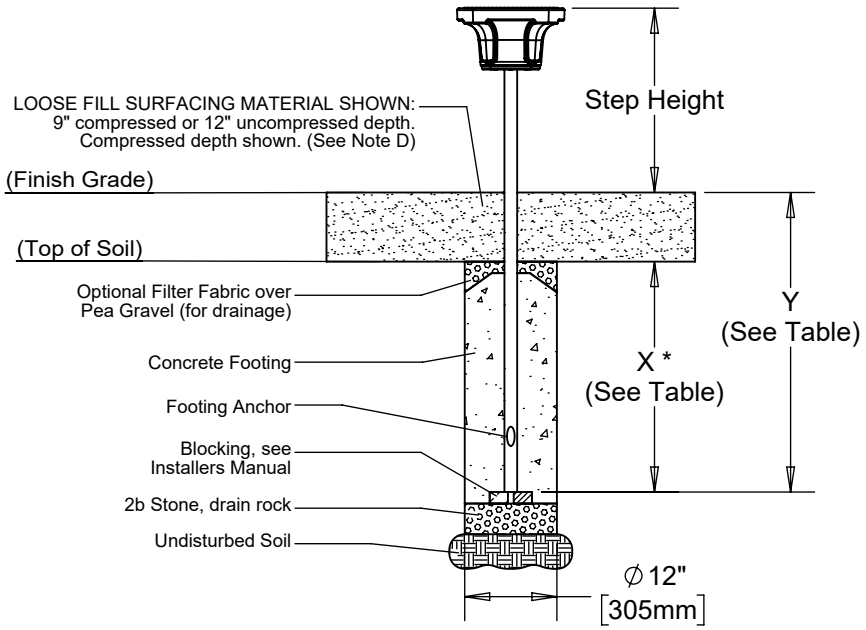
Step 1

Refer to Post Footings Layout in the Playground Equipment Manual and mark footing hole location.
Dig (1) Ø 12" footing hole. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

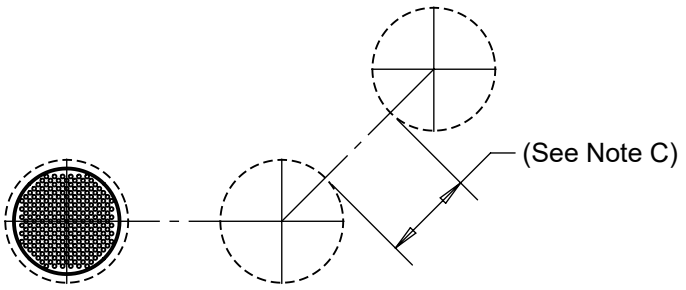
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Footing Detail



Footing Depth Table Top of Soil to Top of Blocking				
Step Height	X (in.) *	X (mm) *	Y (in.)	Y (mm)
12"	18"	457	27"	686
15"	18"	457	27"	686
18"	18"	457	27"	686
21"	18"	457	27"	686
24"	30"	762	39"	991
30"	30"	762	39"	991
39"	30"	762	39"	991

Top View
Lily Pad Seat-Step Orientation



Step 2

Attach Lily Pad to Step Pad Leg as shown in Figure 2. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Place Lily Pad Seat-Step into footing hole. Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 5

Place required protective surfacing under and around Lily Pad Seat-Step. (See Note D)

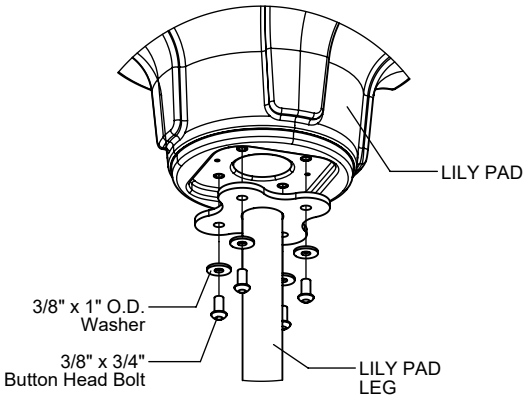


FIGURE 2

Parts List

S-1414-12		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG	Lily Pad Step Leg	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

S-1414-15		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG15	Lily Pad Step Leg 15"	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

S-1414-18		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG18	Lily Pad Step Leg 18"	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

S-1414-21		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG21	Lily Pad Step Leg 21"	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

S-1414-24		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG24	Lily Pad Step Leg 24"	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

S-1414-30		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG30	Lily Pad Step Leg 30"	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

S-1414-39		
PART #	**DESCRIPTION**	**QTY**
DE-4367	Lily Pad No Hole	1
FS-1414-LEG39	Lily Pad Step Leg 39"	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

Specifications

LILY PAD NO HOLE:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

STEP PAD STEP LEG:
Shall be fabricated using 1.660" O.D. 11 gauge steel tubing with welded 1/4" thick steel mounting plate and will have a multi-stage baked-on powder coat finish.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Small 3-In-A-Row Panel

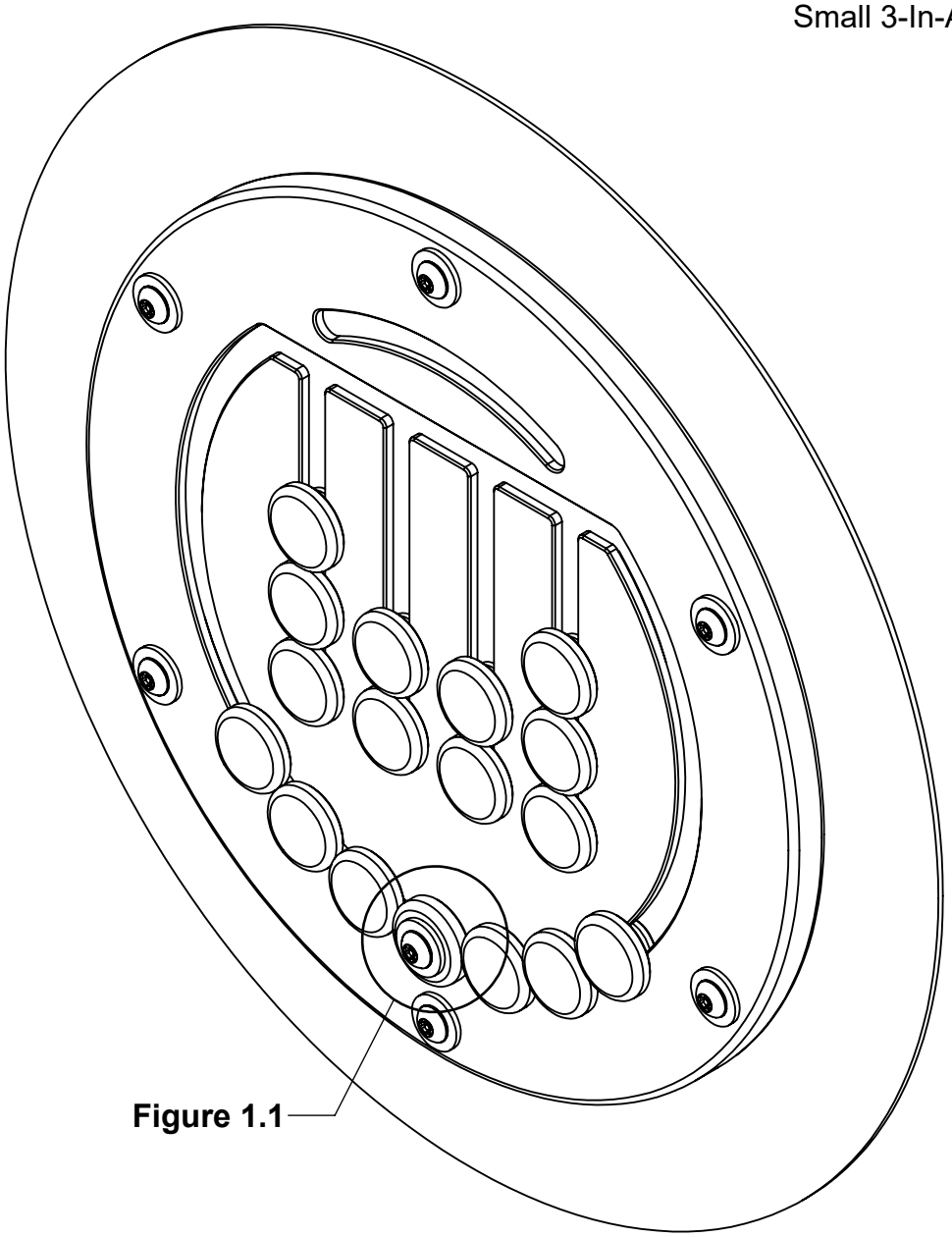


Figure 1.1

NOTE: Small 3-In-A-Row Panel to steel panel shown. Other configurations will vary slightly, but does not affect assembly.

Step 1 (Factory Assembled)

Install Sliders into slot at cut in bottom of Panel.
Attach Stop as shown in Figure 1.1. (See Note A)

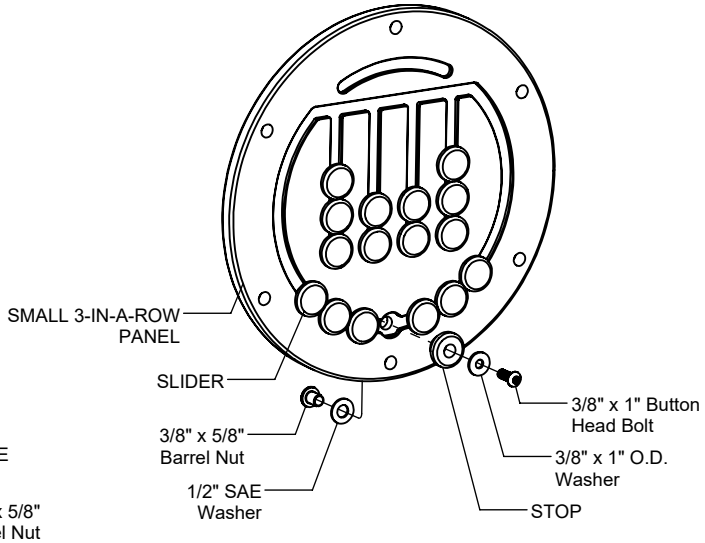


Figure 1.1

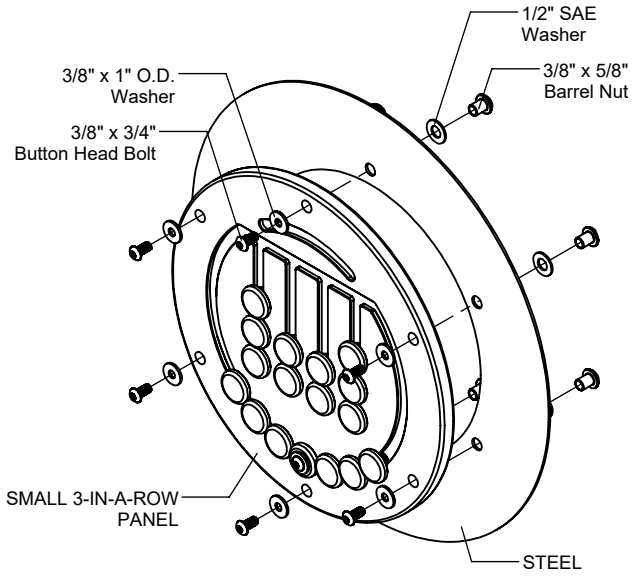


FIGURE 2

Step 2a

For Steel Event Panel Only

Attach Small-3-In-A-Row Panel to Steel Event Panel as shown in Figure 2. (See Note A)

Step 2b

For HDPE Event Panel Only

Attach Small-3-In-A-Row Panel to HDPE Event Panel as shown in Figure 3. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

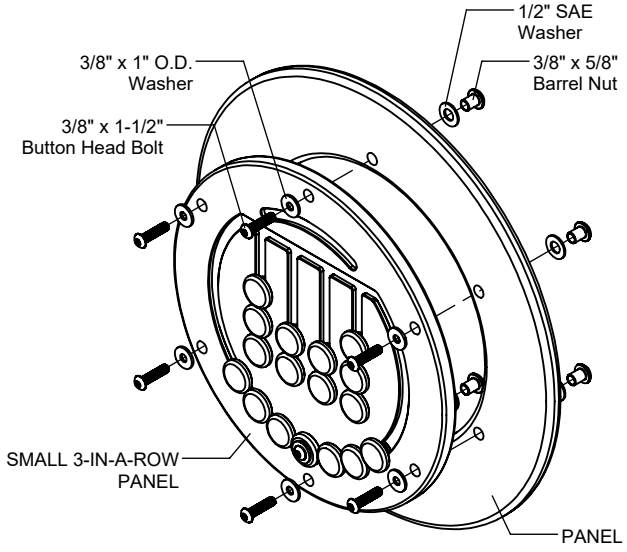


FIGURE 3

Parts List

STEEL MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

HDPE MOUNT		
Part #	**DESCRIPTION**	**QTY**
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	6

Assembled Parts List

Part #	DESCRIPTION	QTY
EE-0684	Small 3-in-a-Row Panel	1
EE-0684-SLD	Small 3-in-a-Row Slider	16
EE-0684-STOP	Small 3-in-a-Row Stop	1
9103052-TR	Bolt Button Head 3/8" x 1"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	1
9345002	Washer Flat SAE 1/2"	1
9443022-TR	Nut Barrel 3/8" x 5/8" BH	1

Specifications

PANEL, SLIDER & STOP:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

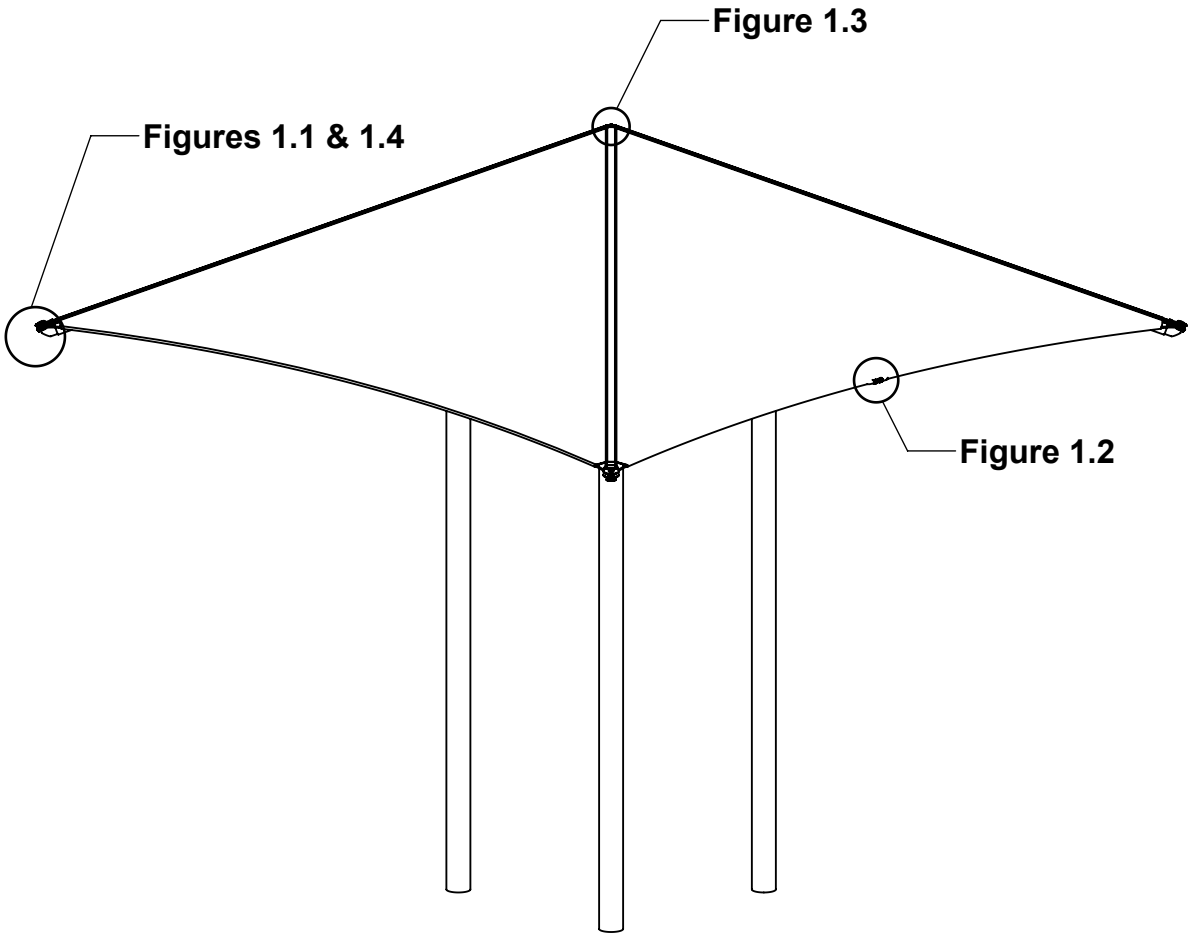
IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) When installing Shade Canopy Square Roof, make sure that the lowest point of the roof is a minimum of 84" [2130mm] above the underlying play surface.

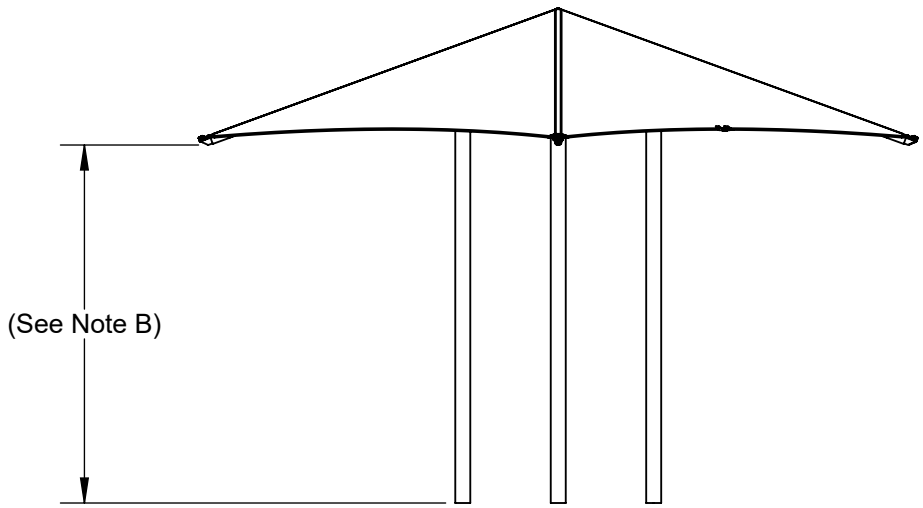
(C) Remove canopy from Shade Canopy Roof in high wind and heavy snow conditions. Block protrusions while canopy is removed to maintain CPSC/ASTM compliance.

FIGURE 1
Shade Canopy
Square Roof

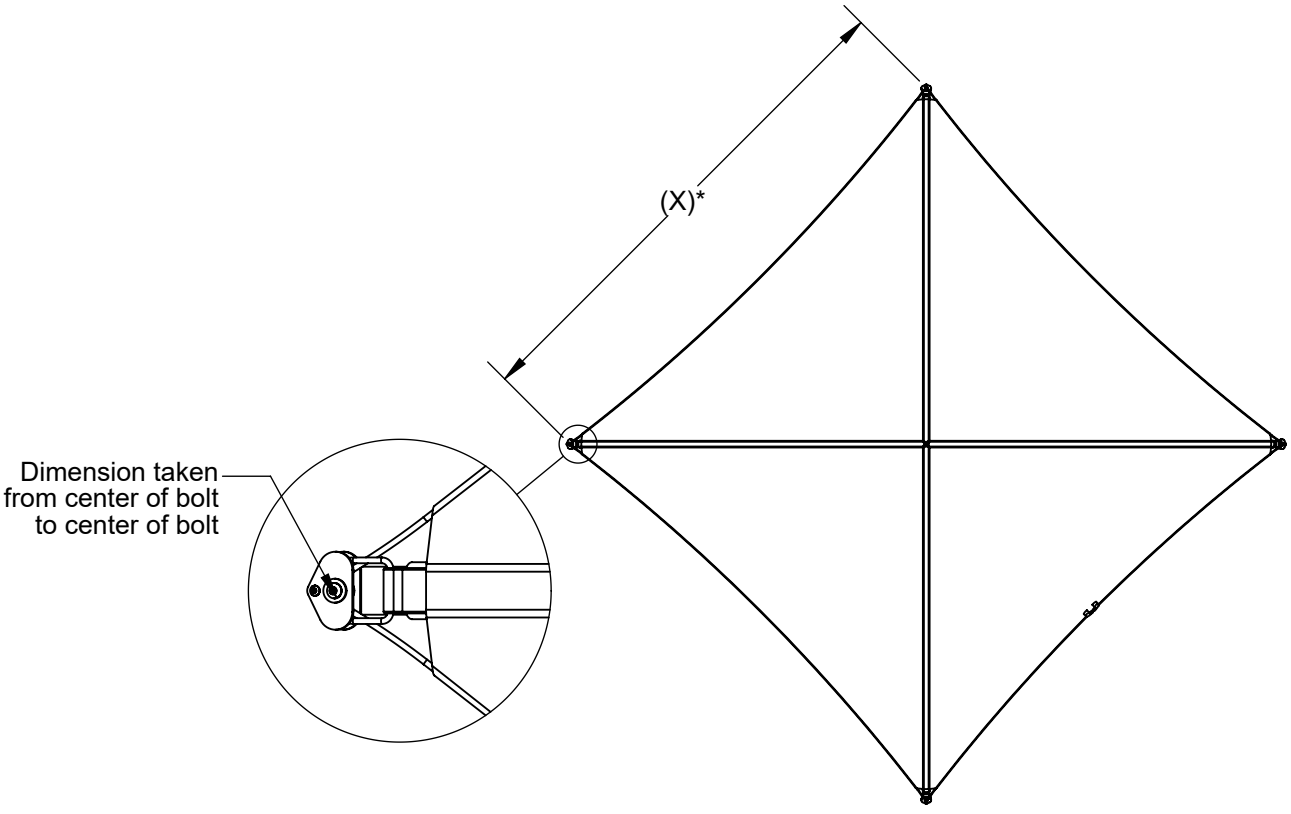


NOTE: R5 14' Shade Canopy Square Roof shown. Other configurations will vary slightly, but does not affect assembly.

Elevation View



Top View



* Dimension indicated should be equal on all sides.

Step 1 (Factory Assembled)

Assemble Canopy Jack Screws. Apply grease to Canopy Jack Screws and attach to Rafters as shown in Figure 1.1. (See Note A)

NOTE: Do not use liquid thread lock (such as Loctite®) on 1/4" x 1-1/2" Button Head Bolt, 1/4" Lock Nut and Canopy Jack Screw in this step.

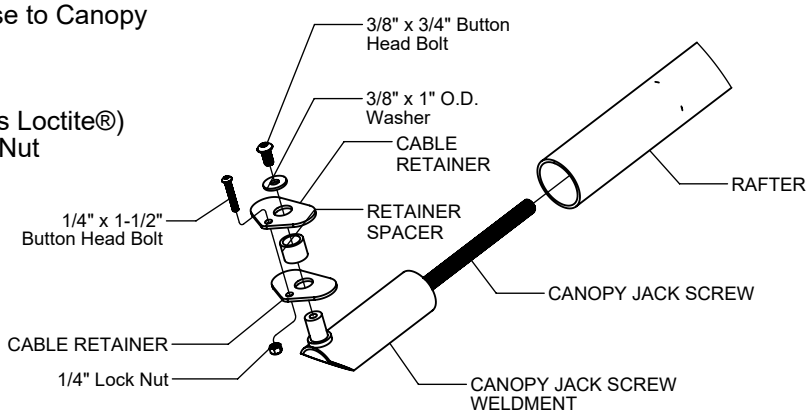


Figure 1.1

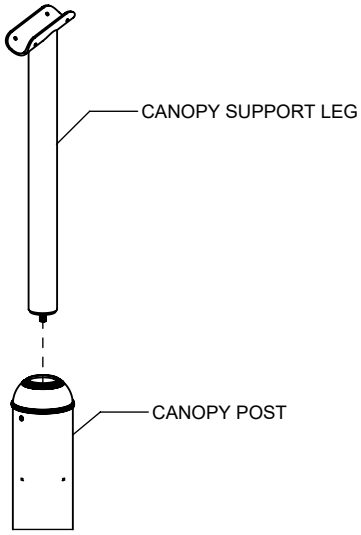


FIGURE 2

Step 2

Screw Canopy Support Legs into Canopy Posts as shown in Figure 2. Canopy Support Legs should be pointed at an upward angle to center of deck.

NOTE: Insure all Canopy Support Legs are at same height.

Step 3

Insert Rafters into Rafter Hub until Rafters contact the rafter stops. Secure Rafters to Rafter Hub as shown in Figure 3.

IMPORTANT: Do not use impact driver to install tek screws. Over torquing will damage hardware and lead to failure.

NOTE: Insure the lower end of all Rafters are at same length when attached to Rafter Hub.

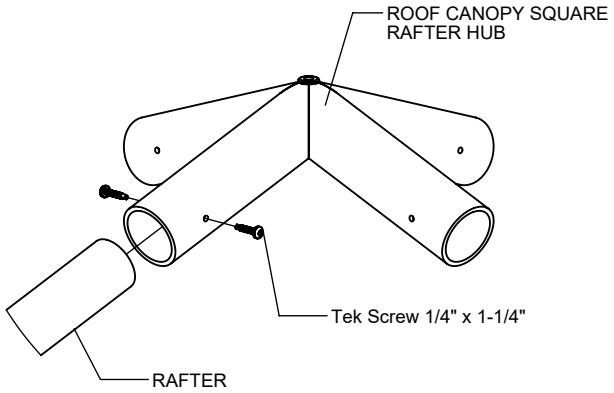


FIGURE 3

Step 4

Set Rafters into Canopy Support Legs and center above deck. Secure Rafters to Canopy Support Legs as shown in Figure 4.

IMPORTANT: Do not use impact driver to install tek screws. Over torquing will damage hardware and lead to failure.

NOTE: Refer to table for rafter overhang dimensions.See Figure 4b.
Insure all lower ends of Rafters are level and at same height after attached to Canopy Support Legs.

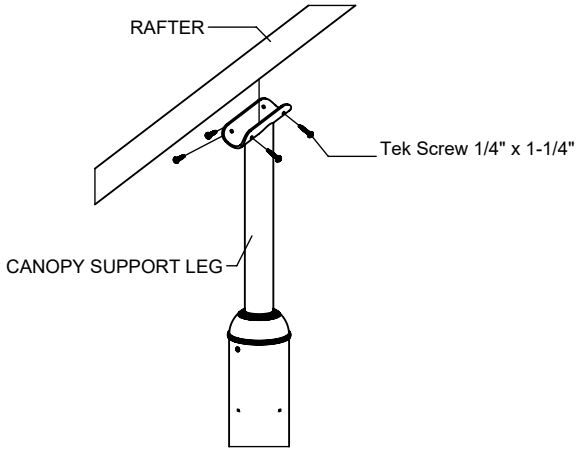


FIGURE 4a

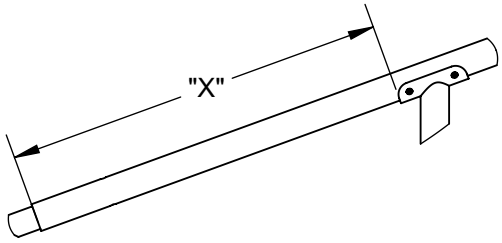


FIGURE 4b

RAFTER OVERHANG	
Canopy Version	DIM X
18021-R5 10'	31 13/16" [808mm]
18021-R5 12'	58 13/16" [1494mm]
18021-R5 14'	85 9/16" [2173mm]
18021-R35 10'	31 13/16" [808mm]
18021-R35 12'	58 13/16" [1494mm]

Step 5

Insert Wire Cable through perimeter of Canopy Square.

Step 6

Attach Wire Cable Clamp to Wire Cable as shown in Figure 1.2.

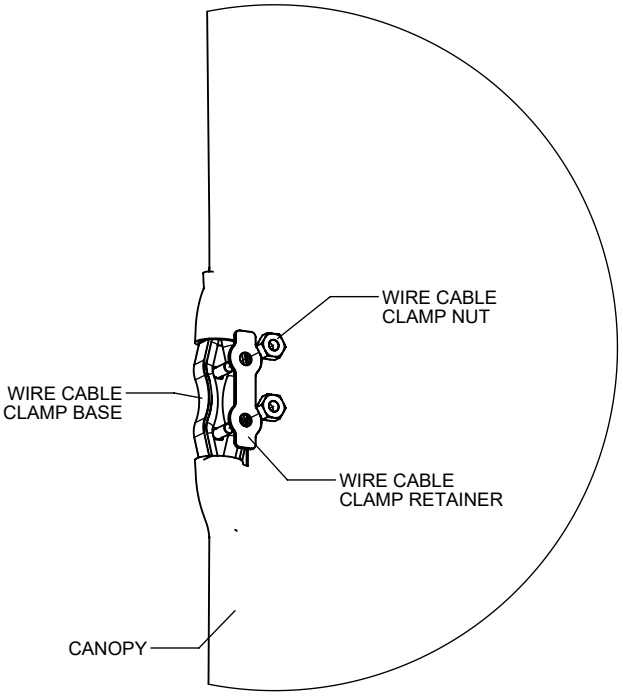


Figure 1.2

Step 7

Attach Canopy to Rafter Hub as shown in Figure 1.3.

NOTE: Do not use liquid thread lock (such as Locktite®) on 3/8" x 3/4" Button Head Bolt and Rafter Hub in this step.

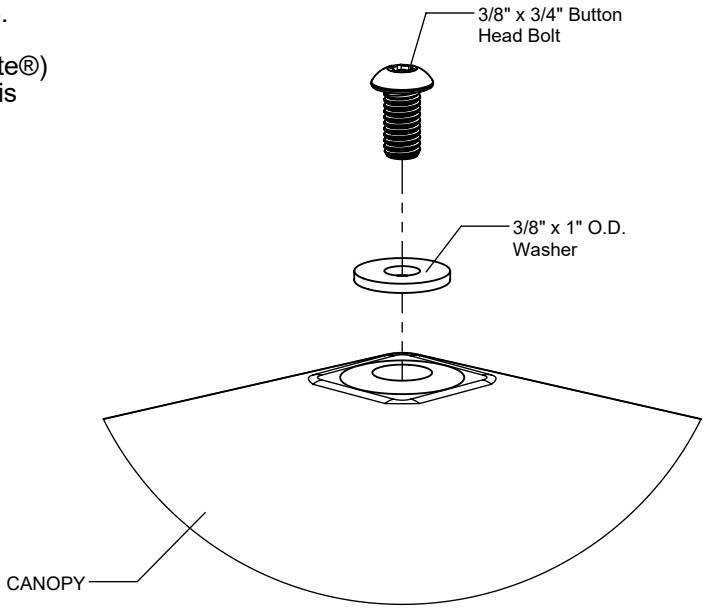


Figure 1.3

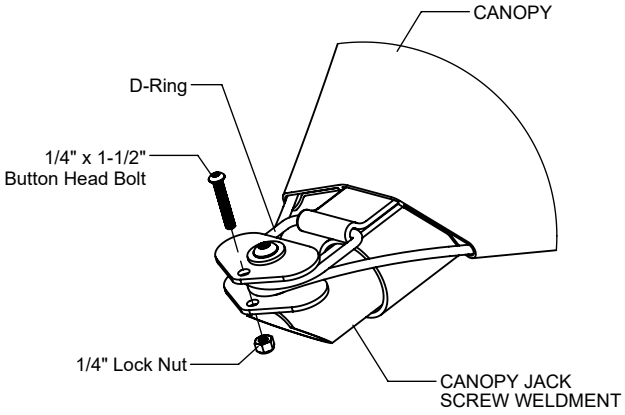


Figure 1.4

Step 8

Remove 1/4" x 1-1/2" Button Head Bolt and 1/4" Lock Nut From Canopy Jack Screw. Hook D-Rings and Wire Cable over Cable Retainers. Secure to Canopy Jack Screws as shown in Figure 1.4.

Step 9

Adjust Wire Cable overlap and Wire Clamp until Canopy is taut and D-Rings are secure against retainers. Slide Wire Cable around until Wire Cable Clamp is hidden inside of Canopy.

Step 10

Evenly tighten Canopy Jack Screws to adjust Canopy tension and maintain a uniform dimension on all sides. (See Top View)

Step 11

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Parts List

Part #	DESCRIPTION	QTY.
FS-18021-HUB	ROOF CANOPY SQUARE RAFTER HUB	1
FS-18022-LEG	Roof Canopy Support Leg	4
Varies	Shade Canopy Square	1
451003	1/4" WIRE CABLE CLAMP	1
455114	1/4" Canopy Wire Rope	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	1
9271062-TR	1/4" x 1-1/4" Tek Screw	24
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	1

Assembled Parts List

Part #	DESCRIPTION	QTY.
Varies	Roof Canopy Sq. Rafter	4
FS-18022-JAC	Roof Canopy Jack Screw	4

Specifications

ROOF CANOPY JACK SCREW:
Shall be fabricated using 2" O.D. 10 gauge steel tube with welded 3/16" thick steel plugs, welded 1" O.D. machined steel retainer stub, 1" O.D. 11 gauge steel cable spacer and punched 10 gauge steel retainers and will have a multi-staged baked-on powder coated finish.

ROOF CANOPY SQUARE RAFTER HUB:
Shall be fabricated using 2.50" O.D. schedule 40 pipe with welded zinc nut and stainless steel stop and will have a multi-stage baked-on powder coat finish.

ROOF CANOPY SQUARE RAFTER:
Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1/2" thick steel plug and will have a multi-stage baked-on powder coat finish.

ROOF CANOPY SUPPORT LEG:
Shall be fabricated using 2.375" O.D. 10 gauge steel tubing welded to a formed 3/16" thick steel cradle and will have a multi-stage baked-on powder coat finish.

SHADE CANOPY SQUARE:
Shall be UV & mildew resistant woven acrylic fabric, folded and stitched for strength and to accommodate steel cable.

1/4" CANOPY WIRE CABLE:
Shall be Ø1/4" steel cable with a clear vinyl coating.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1
Panel Pal Roto R5

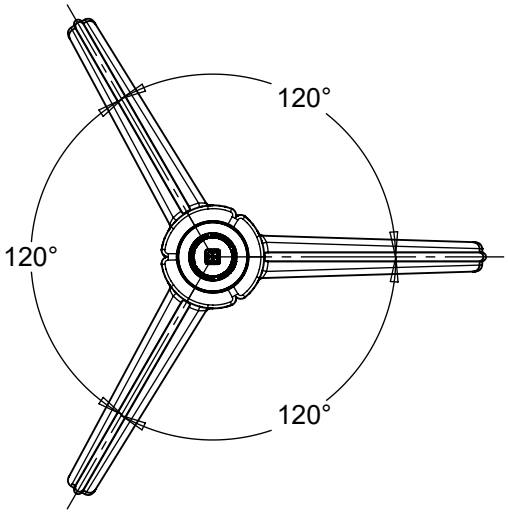


FIGURE 2
3 Frame Single Post Configuration

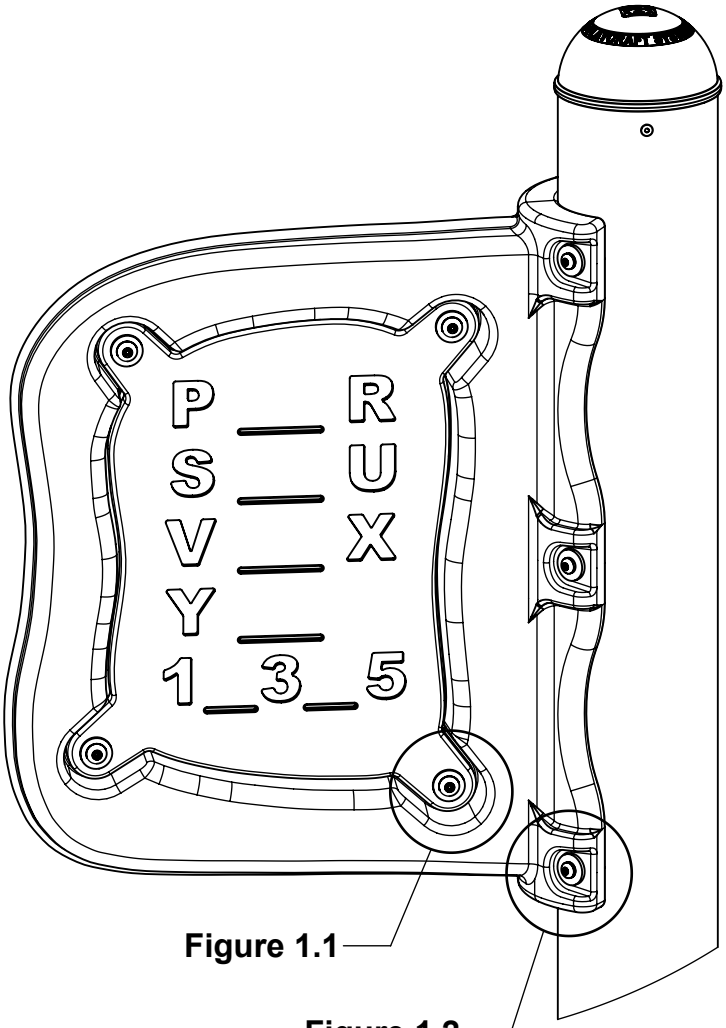


Figure 1.1

Figure 1.2

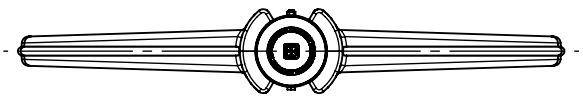


FIGURE 3
2 Frame Single Post Configuration

Bell Panel

Step 2 (Factory Assembled)

Attach Small Bell and Hammer to Bell Panel Pal as shown in Figure 4. (See Note A)

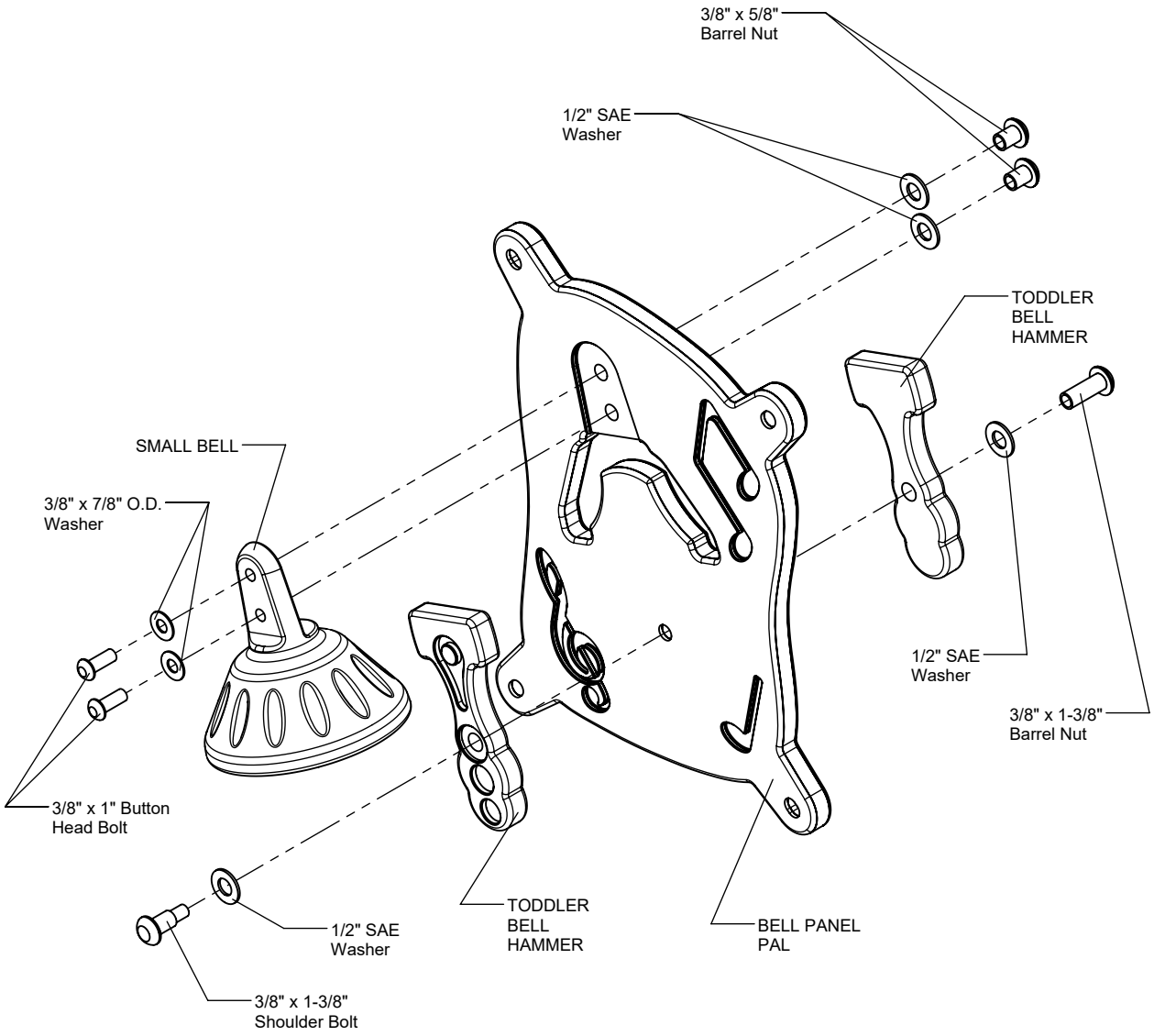


FIGURE 4

Tic-Tac-Toe Panel

Step 3 (Factory Assembled)

Attach Panel Knobs to Panel Pal Tic Tac Toe as shown in Figure 5. (See Note A)

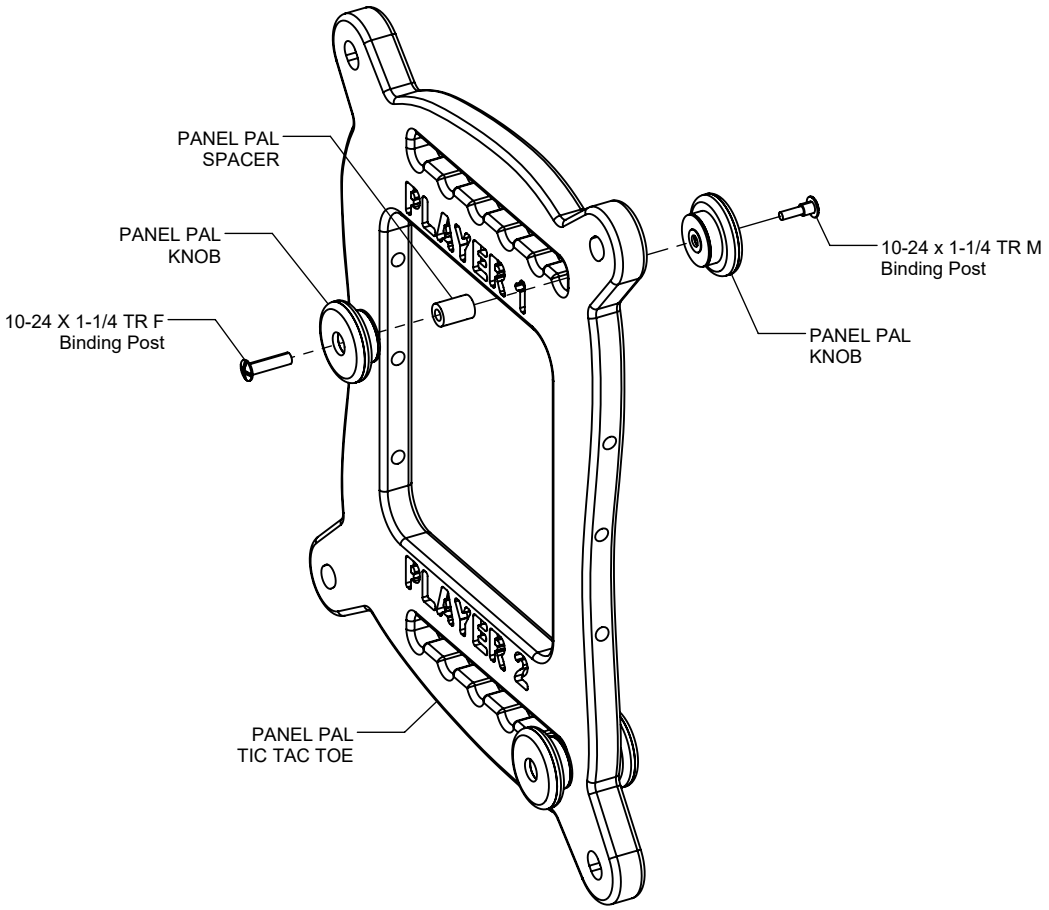


FIGURE 5

Step 4 (Factory Assembled)

Attach Tic Tac Toe Pieces to Panel Pal Tic Tac Toe as shown in Figures 6a and 6b.

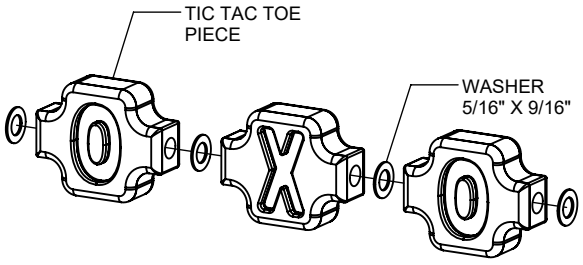


FIGURE 6a

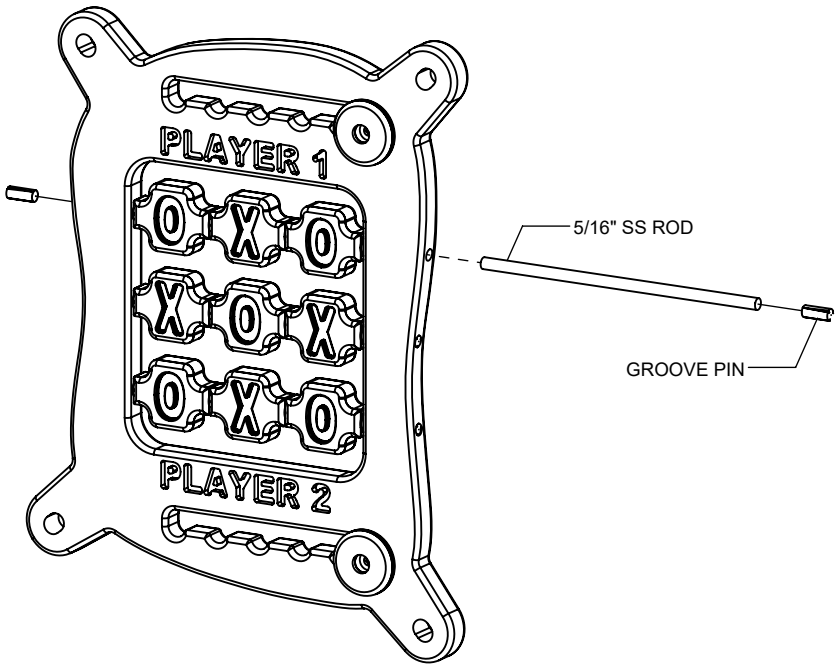


FIGURE 6b

Dialer Panel

Step 5 (Factory Assembled)

Attach Panel Knobs to Panel Pal Dialer as shown in Figure 7. (See Note A)

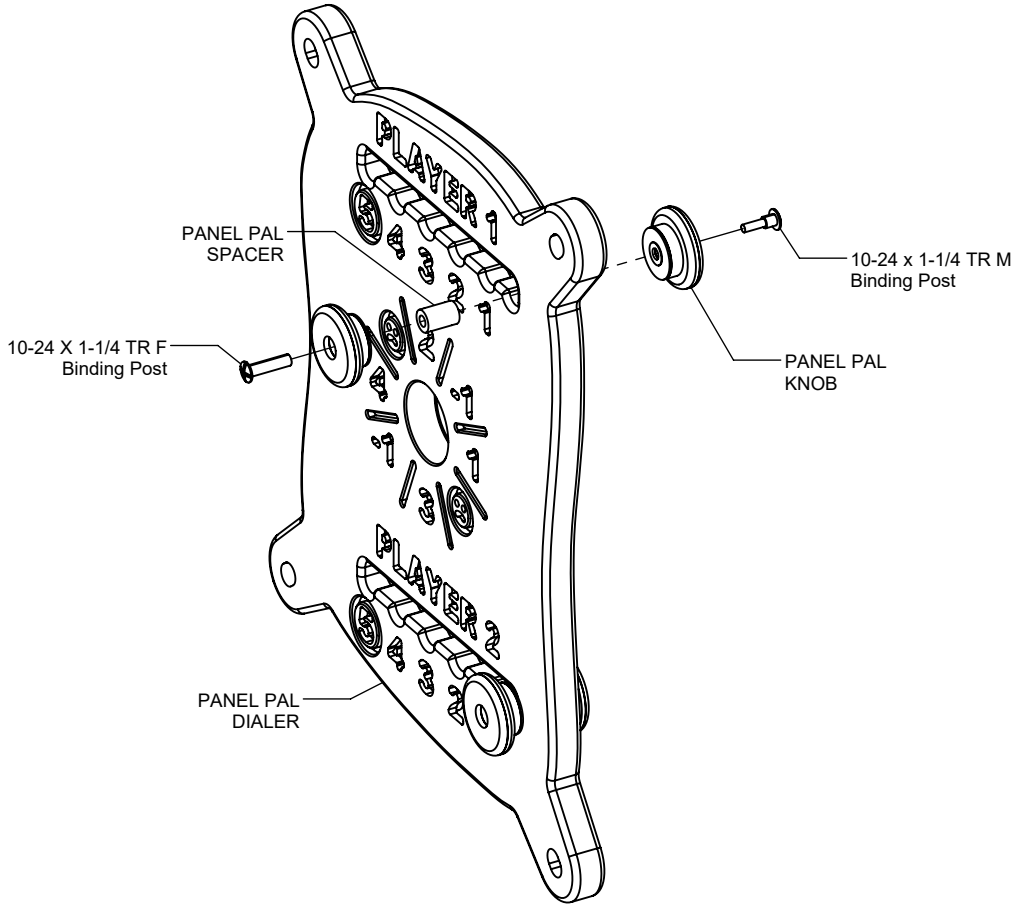


FIGURE 7

Step 6 (Factory Assembled)

Press Roll Pin Slot into Panel Pal Spinner Spacer as shown in Figure 8.

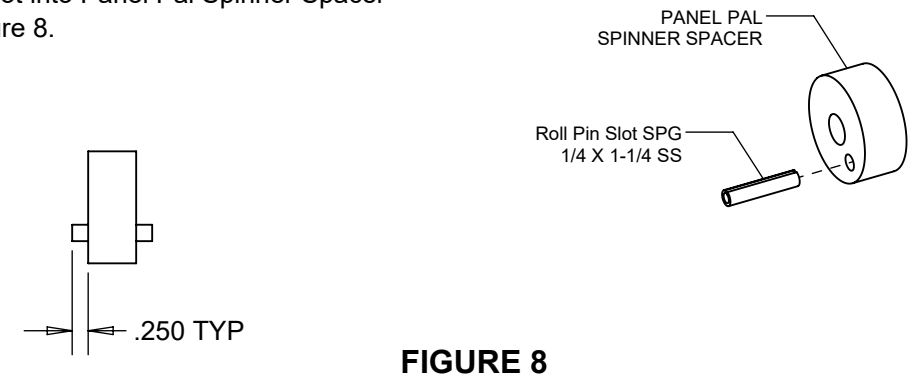


FIGURE 8

Step 7 (Factory Assembled)

Attach Spinner and Spinner Spacer to Panel Pal Dialer as shown in Figure 9. (See Note A)

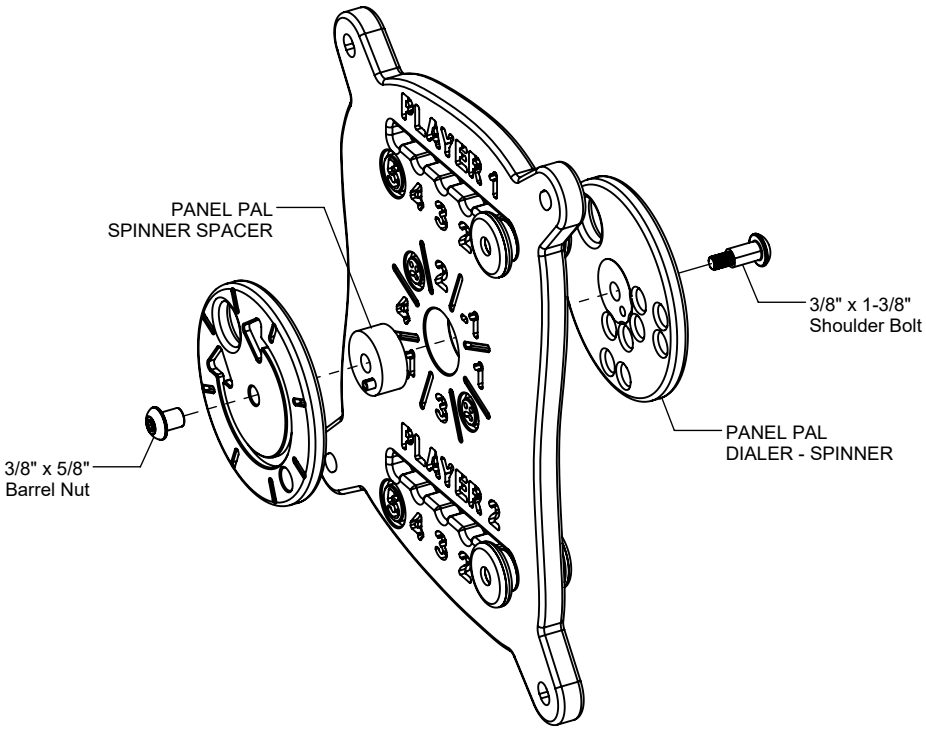


FIGURE 9

Spinner Panel

Step 8 (Factory Assembled)

Attach Spinners to Panel Pal Spinner as shown in Figure 10. (See Note A)

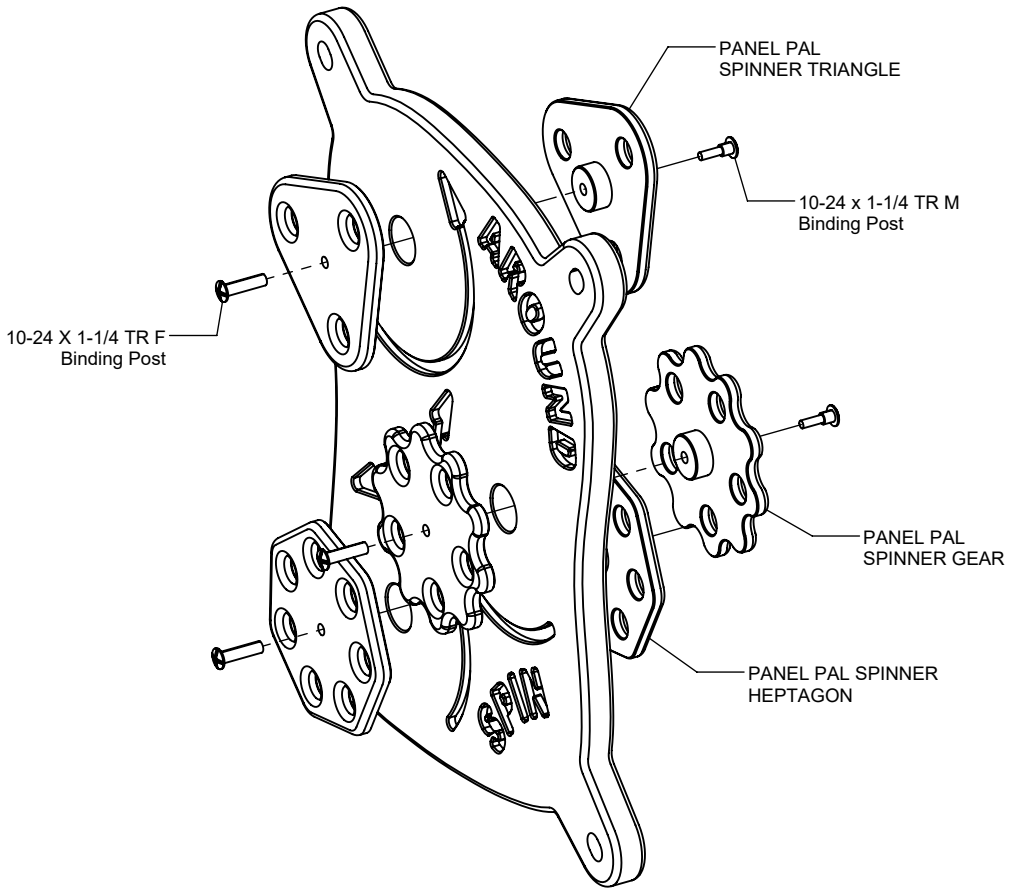


FIGURE 10

Driver Panel

Step 9 (Factory Assembled)

Attach Driver Wheel to Panel Pal Driver as shown in Figure 11. (See Note A)

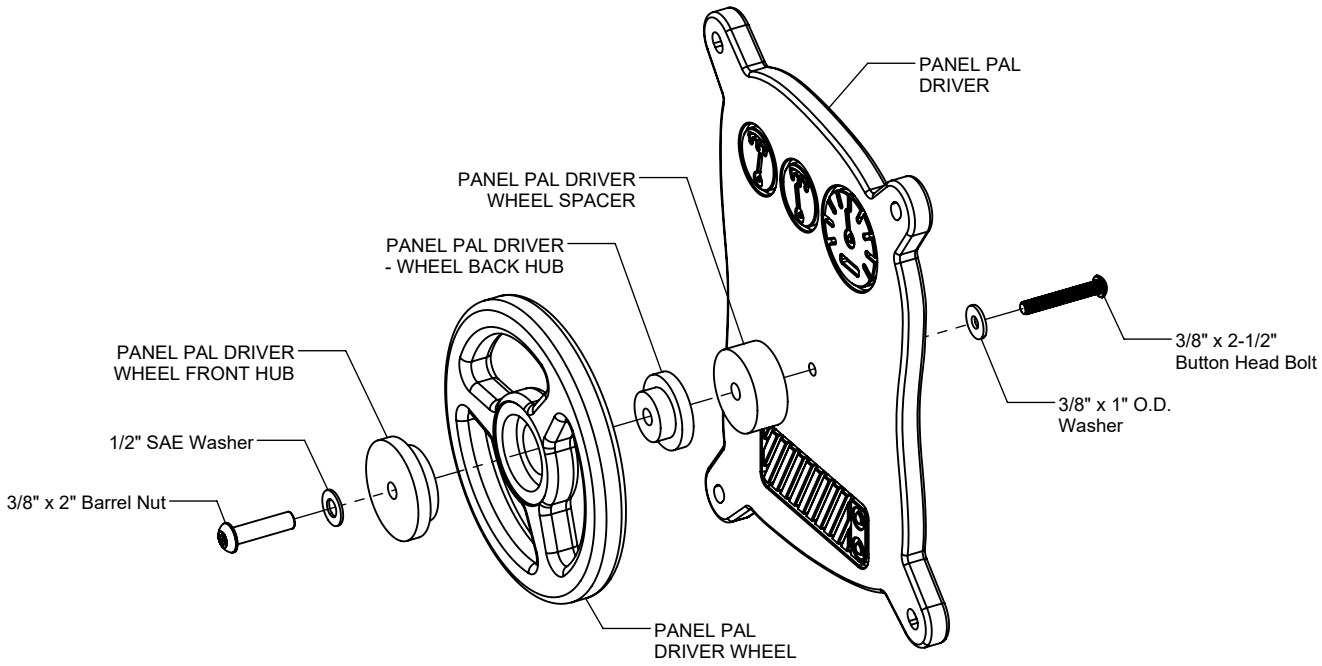


FIGURE 11

Match Panel

Step 10 (Factory Assembled)

Attach Match Pieces to Panel Pal Match as shown. in Figures 12a and 12b.

Note: Refer to Figure 12b for proper location of Match Pieces.

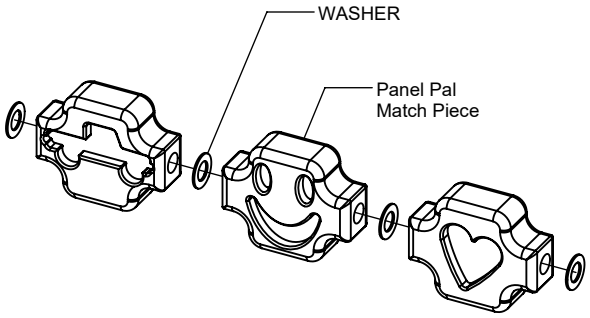


FIGURE 12a

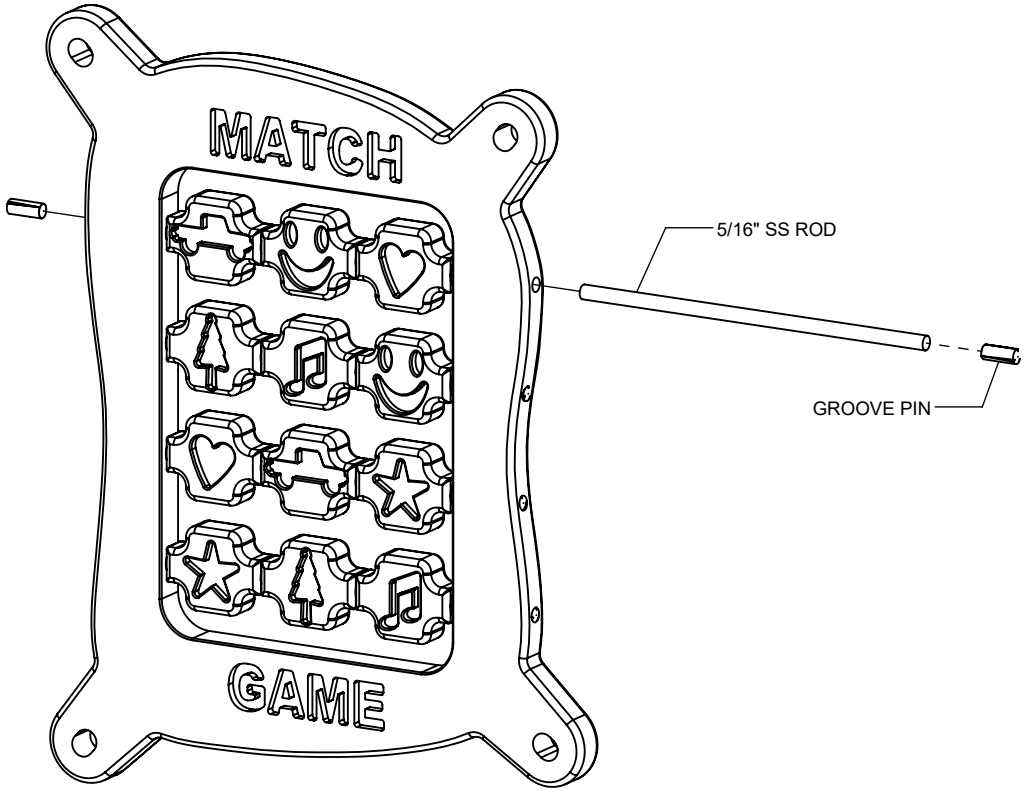


FIGURE 12b

Mirror Panel

Step 11 (Factory Assembled)

Attach Panel Pal Steel Mirror and Panel Pal Mirror Cover Pieces to Panel Pal Roto Mirror as shown in Figure 13. (See Note A)

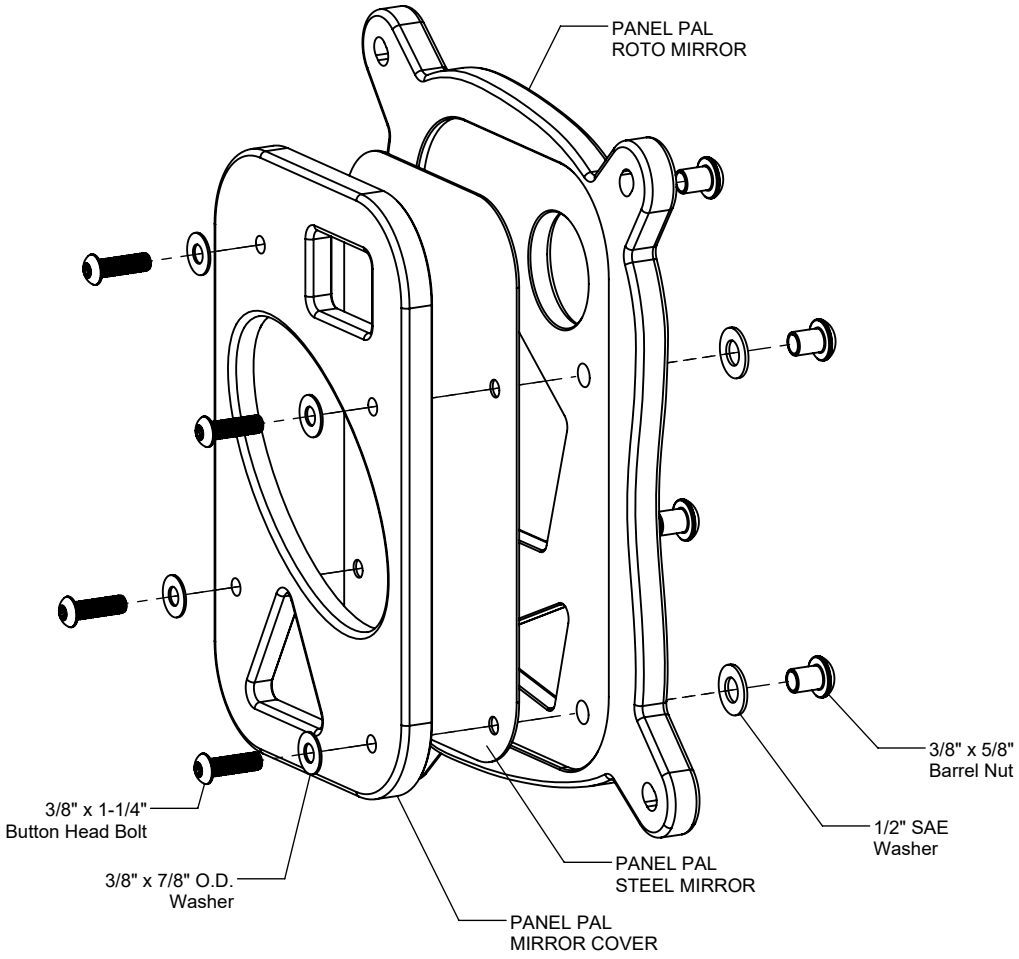


FIGURE 13

Step 12 (Factory Assembled)

Attach Panel Pal Panel to Roto Panel Pal Frame as shown in Figure 1.1. (See Note A)

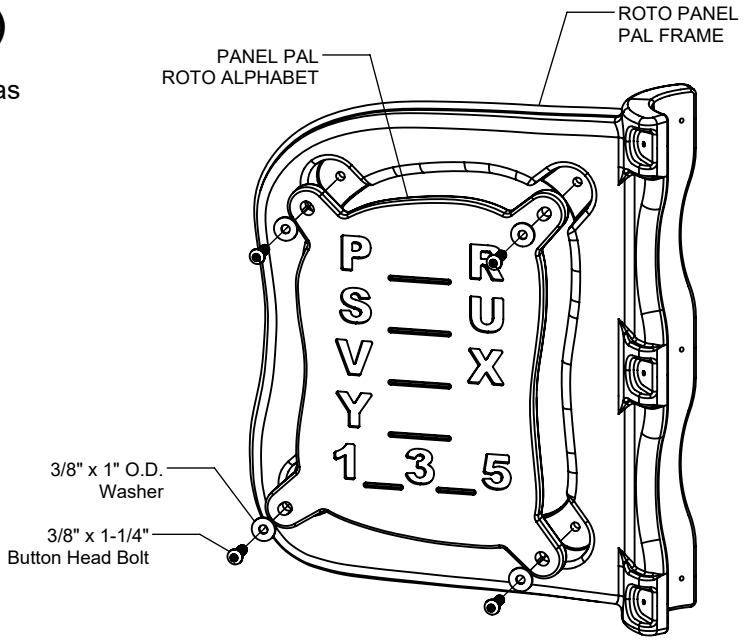


Figure 1.1

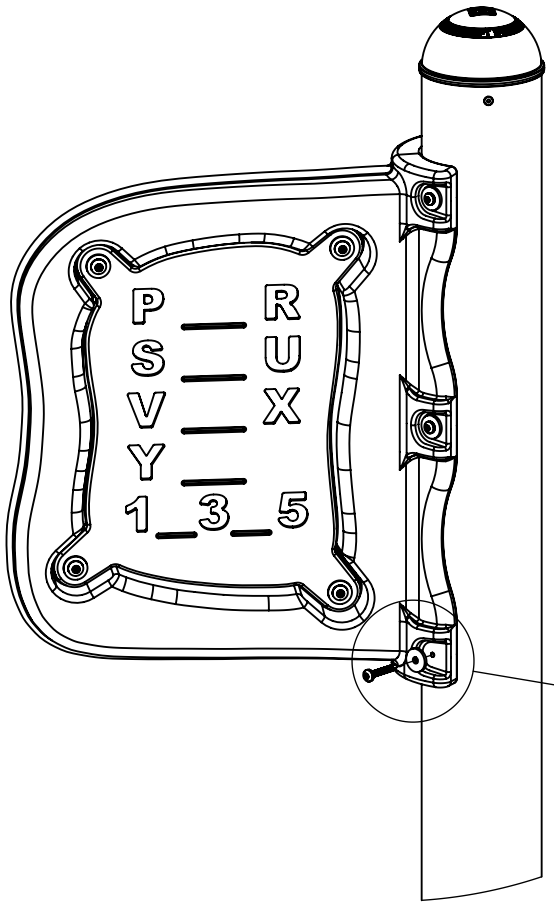


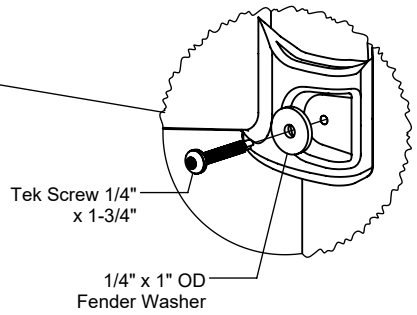
Figure 1.2

Step 13

Attach the Roto Panel Pal Frame to the Post as shown in Figure 1.2. (See Note A)

Step 14

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.



DETAIL C
SCALE 1 : 4

Parts List

PART #	DESCRIPTION	QTY
9271082-TR	1/4" x 1-3/4" Tek Screw	6
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	6

Assembled Parts Lists

R5-1660 PANEL PAL ROTO ALPHABET		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EF-0015	Panel Pal Roto Alphabet	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

R5-1661 PANEL ROTO BELL AND HAMMER		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EF-0046	PANEL PAL BELL R5	1
EI-0061	Toddler Bell Hammer	2
GE-0005	Small Bell	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9333042	Washer Flat 3/8" x 7/8" O.D.	2
9345002	Washer Flat SAE 1/2"	4
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	1

R5-1663 PANEL PAL ROTO MAZE		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EF-0007	Panel Pal Roto Maze	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

R5-1664 PANEL PAL ROTO TIC-TAC-TOE		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EE-4545-K	Panel Pal - Knob	4
EE-4545-KS	Panel Pal - Knob Spacer	2
EE-4545-PXO	Panel Pal Tic Tac - Part X O	9
EF-7307	Panel Pal Tic Tac Toe	1
LE-0092	5/16" Dia SS Rod	3
581600	Washer 5/16" x 9/16"	12
581700	Groove Pin Type A	6
581800	Binding Post 10-24 X 1-1/4 TR	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

R5-1665 PANEL PAL ROTO DIALER		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EE-4545-K	Panel Pal - Knob	4
EE-4545-KS	Panel Pal - Knob Spacer	2
EE-7309-S	Panel Pal Dialer - Spinner	2
EE-7309-SS	Panel Pal Dialer - Spinner Spacer	1
EF-7309	Panel Pal Dialer	1
453213	Roll Pin Slot SPG 1/4 X 1-1/4 SS	1
581800	Binding Post 10-24 X 1-1/4 TR	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9443022-TR	Nut Barrel 3/8" x 5/8" BH	1

R5-1666 PANEL PAL ROTO SPINNER		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EE-4544-G	Panel Pal Spinner - Gear	2
EE-4544-H	Panel Pal Spinner - Heptagon	2
EE-4544-T	Panel Pal Spinner - Triangle	2
EF-7310	Panel Pal Roto Spinner	1
581800	Binding Post 10-24 X 1-1/4 TR	3
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

R5-1667 PANEL PAL ROTO DRIVER		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EE-4627-BH	Panel Pal Driver - Wheel Back Hub	1
EE-4627-FH	Panel Pal Driver - Wheel Front Hub	1
EE-4627-W	Panel Pal Driver - Wheel	1
EE-4627-WS	Panel Pal Driver - Wheel Spacer	1
EF-7315	Panel Pal Roto Driver	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9345002	Washer Flat SAE 1/2"	1
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Assembled Parts List

R5-1668 PANEL PAL ROTO MATCH		
PART #	**DESCRIPTION**	**QTY**
DF-7278	Roto Panel Pal Frame	1
EE-4542-PC	Panel Pal Match - Piece Car	2
EE-4542-PF	Panel Pal Match - Piece Face	2
EE-4542-PH	Panel Pal Match - Piece Heart	2
EE-4542-PN	Panel Pal Match - Piece Note	2
EE-4542-PS	Panel Pal Match - Piece Star	2
EE-4542-PT	Panel Pal Match - Piece Tree	2
EF-7308	Panel Pal Roto Match Game	1
LE-0092	5/16" Dia SS Rod	4
581600	Washer 5/16" x 9/16"	16
581700	Groove Pin Type A	8
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

R5-1669 PANEL PAL ROTO MIRROR		
PART #	**DESCRIPTION**	**QTY**
AE-4741	Panel Pal Mirror Steel	1
DF-7278	Roto Panel Pal Frame	1
EE-4543-C	Panel Pal Mirror - Cover	1
EF-7316	Panel Pal Roto Mirror	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9333042	Washer Flat 3/8" x 7/8" O.D.	4
9345002	Washer Flat SAE 1/2"	4
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

Specifications

SMALL BELL:
Shall be die-cast using 356.1 aluminum alloy and will have a multi-stage baked-on powder coat finish.

HDPE PARTS (ALL):
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

PANEL PAL ROTO FRAME:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

PANEL PAL MIRROR STEEL:
Shall be fabricated using 16 ga. 304 #8 HPSS.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

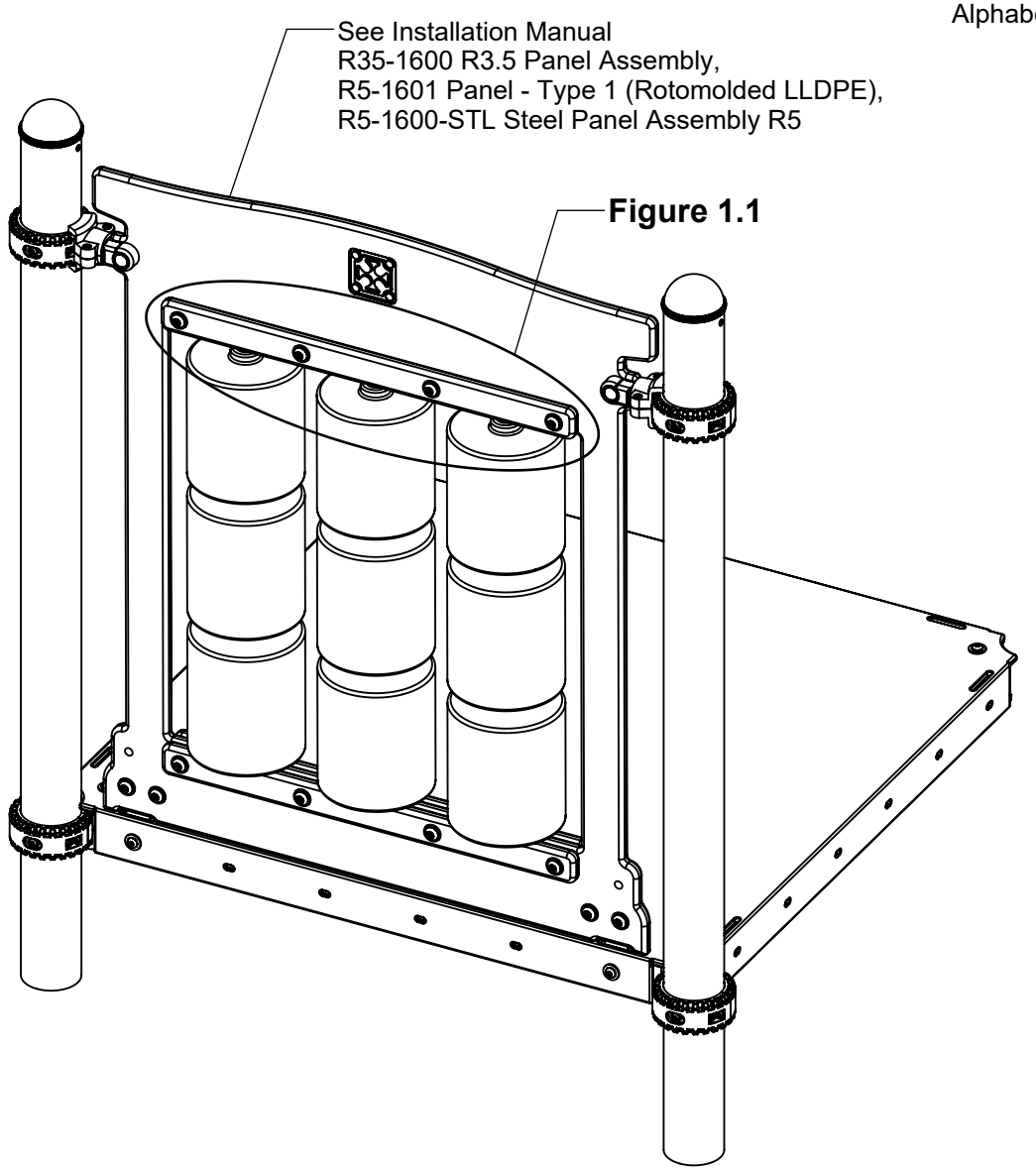
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R35-1600 R3.5 Panel Assembly, R5-1601 Panel - Type 1 (Rotomolded LLDPE) and R5-1600-STL Steel Panel Assembly R5 installation instructions.

FIGURE 1
Dino, Tic-Tac-Toe & Alphabet Panel



NOTE: R35 Dino, Tic-Tac-Toe & Alphabet Panel deck mount shown. Other configurations will vary slightly, but does not affect assembly.

R35 Panel

Step 1 (Factory Assembled)

Place Turn Blocks onto Activity Panel Tubes. Attach tubes and Retainers to Activity Panel as shown in Figure 1.1. (See Note A)

NOTE: See assembly instruction R35-1600 R3.5 Panel Assembly for complete deck mount or ground mount assembly.

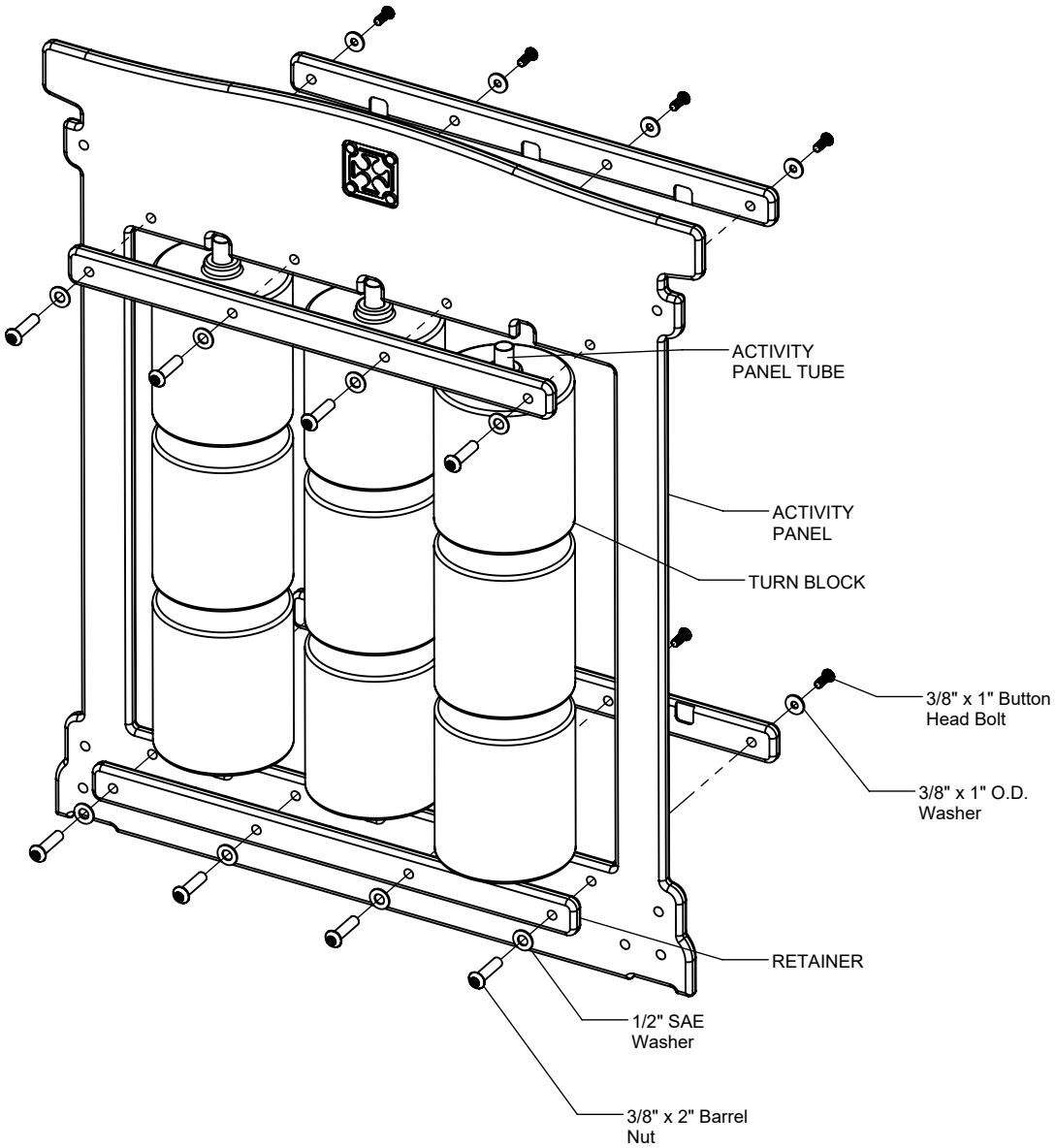


Figure 1.1

R5 Panel

Step 2 (Factory Assembled)

Place Nylon Washers, Blocks and Activity Panel Bracket onto Activity Panel Weldment as shown in Figure 3.

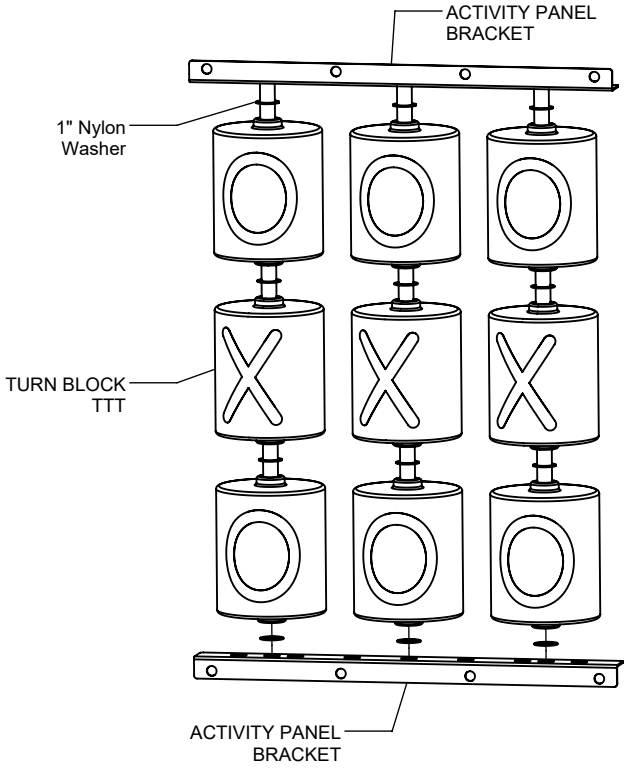


FIGURE 3

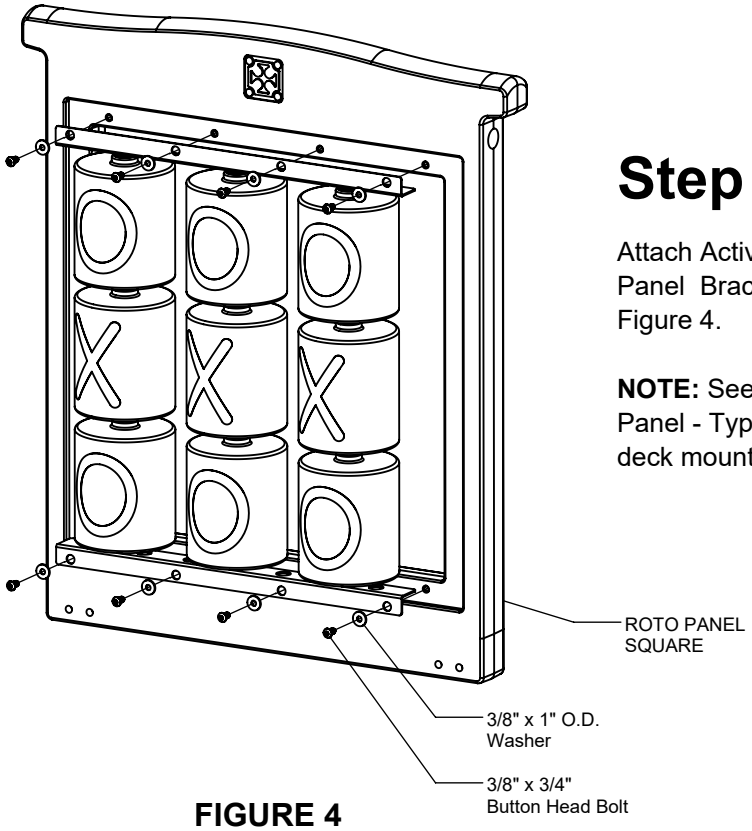


FIGURE 4

Step 3 (Factory Assembled)

Attach Activity Panel Weldment Bracket and Activity Panel Bracket to ROTO Panel Square as shown in Figure 4.

NOTE: See assembly instruction R5-1601 Panel - Type 1 (ROTOMOLDED LLDPE) for complete deck mount or ground mount assembly.

R5 Steel Panel

Step 4 (Factory Assembled)

Attach Steel Turn Block Cap to Steel Turn Block as shown in Figure 5.

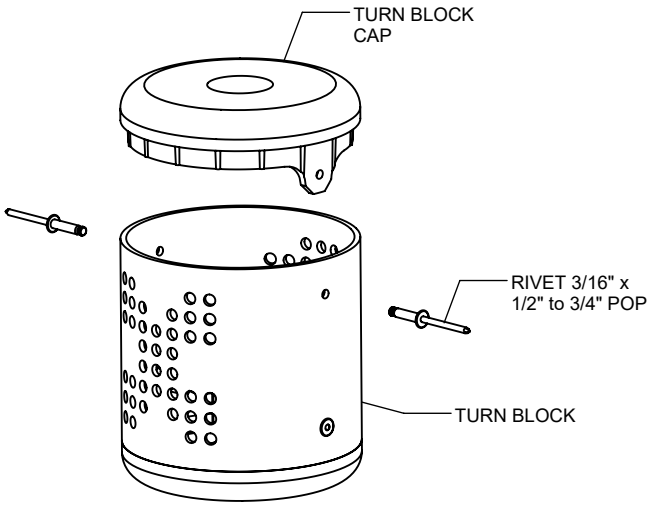


FIGURE 5

Step 5 (Factory Assembled)

Place Turn Blocks onto Turn Block Axle as shown in Figure 6.

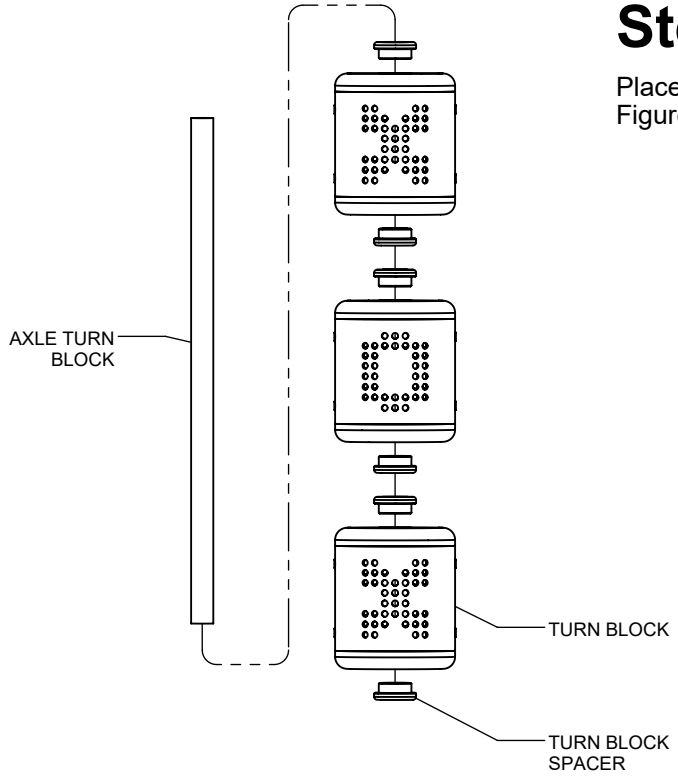


FIGURE 6

Step 6 (Factory Assembled)

Place Nylon Washers, Blocks and Activity Panel Bracket onto Activity Panel Weldment as shown in Figure 7.

NOTE: See assembly instruction R5-1600-STL Steel Panel Assembly R5 for complete deck mount or ground mount assembly.

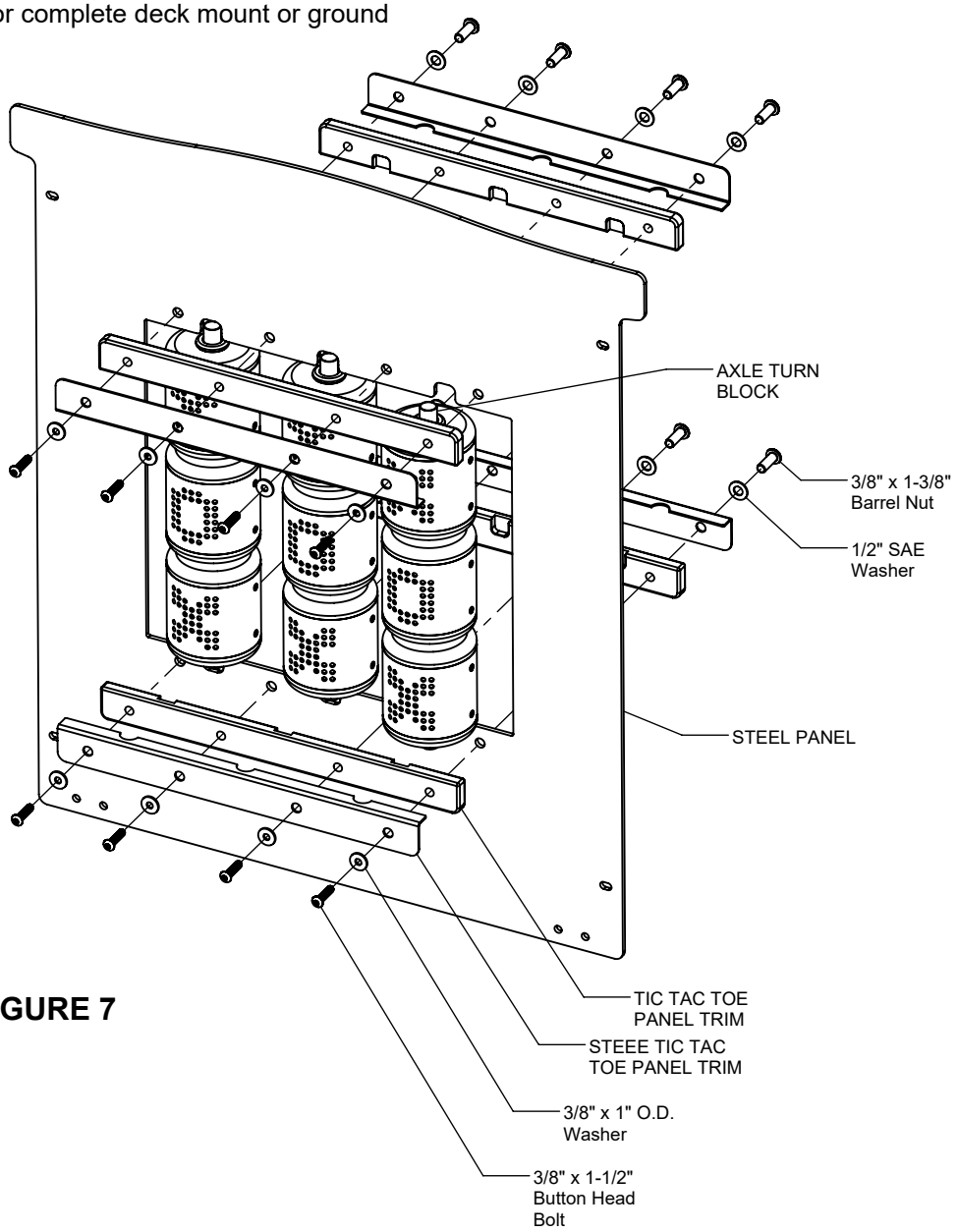


FIGURE 7

Step 7

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Assembled Parts List

R35 DINO		
Part #	**DESCRIPTION**	**QTY**
DE-0005-DNO	Turn Block Dino	9
EG-8105	Activity Panel R3.5	1
EG-8105-R	Activity Panel Retainer R3.5	4
LE-0075-2950	Activity Panel Tube 29.5"	3
9103052-TR	Bolt Button Head 3/8" x 1"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	8
9443092-TR	Nut Barrel 3/8" x 2" BH	8

R35 TIC-TAC-TOE		
Part #	**DESCRIPTION**	**QTY**
DE-0005-TTT	Turn Block Tic Tac Toe	9
EG-8105	Activity Panel R3.5	1
EG-8105-R	Activity Panel Retainer R3.5	4
LE-0075-2950	Activity Panel Tube 29.5"	3
9103052-TR	Bolt Button Head 3/8" x 1"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	8
9443092-TR	Nut Barrel 3/8" x 2" BH	8

R35 ALPHABET		
Part #	**DESCRIPTION**	**QTY**
DE-0005-AIE	Turn Block AIE	3
DE-0005-PBM	Turn Block PBM	3
DE-0005-PMT	Turn Block PMT	3
EG-8105	Activity Panel R3.5	1
EG-8105-R	Activity Panel Retainer R3.5	4
LE-0075-2950	Activity Panel Tube 29.5"	3
9103052-TR	Bolt Button Head 3/8" x 1"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	8
9443092-TR	Nut Barrel 3/8" x 2" BH	8

R5 DINO		
PART #	**DESCRIPTION**	QTY
BE-4053	Activity Panel Bracket	1
DE-0005-DNO	Turn Block Dino	9
FS-1616	Activity Panel Weldment	1
S-1601-R5	Square Panel R5	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9369060	1" nylon washer	14

R5 TIC-TAC-TOE		
PART #	**DESCRIPTION**	**QTY**
BE-4053	Activity Panel Bracket	1
DE-0005-TTT	Turn Block Tic Tac Toe	9
FS-1616	Activity Panel Weldment	1
S-1601-R5	Square Panel R5	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9369060	1" nylon washer	12

R5 ALPHABET		
PART #	**DESCRIPTION**	**QTY.**
BE-4053	Activity Panel Bracket	1
DE-0005-AIE	Turn Block AIE	3
DE-0005-PBM	Turn Block PBM	3
DE-0005-PMT	Turn Block PMT	3
FS-1616	Activity Panel Weldment	1
S-1601-R5	Square Panel R5	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9369060	1" nylon washer	12

R5 STEEL TIC-TAC-TOE		
PART #	**DESCRIPTION**	**QTY**
AF-0392	Steel Turn Block Panel R5	1
BE-0387	Steel Tic Tac Toe Panel Trim	4
EE-0225	Steel Turn Block Spacer	18
EE-0232	Tic Tac Toe Panel Trim	4
GF-7001-STB	Steel Turn Block Cap	18
IE-0042-B	Steel Tic-Tac-Toe Turn Block	9
LF-0003	Steel Turn Block Axle	3
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	8
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	8
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	36

Assembled Parts List

R5 STEEL ALPHABET		
PART #	DESCRIPTION	QTY
AF-0392	Steel Turn Block Panel R5	1
BE-0387	Steel Tic Tac Toe Panel Trim	4
EE-0225	Steel Turn Block Spacer	18
EE-0232	Tic Tac Toe Panel Trim	4
GF-7001-STB	Steel Turn Block Cap	18
IE-0039-B	Steel ABC Turn Block 2 - Block	3
IE-0040-B	Steel ABC Turn Block 3 - Block	3
IE-0041-B	Steel ABC Turn Block 1 - Block	3
LF-0003	Steel Turn Block Axle	3
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	8
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	8
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	36

Specifications

TURN BLOCK:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

ACTIVITY PANEL R35 &
ACTIVITY PANEL RETAINER R35:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

R35 PANEL BRACKET:
Shall be fabricated using 3/16" sheet steel and will have a multi-stage baked-on powder coat finish.

ACTIVITY PANEL BRACKET:
Shall be fabricated using 12ga HR Sheet Steel A36 and will have a multi-stage baked-on powder coat finish.

ACTIVITY PANEL WELDMENT:
Shall be fabricated using 12ga HR Sheet Steel A36 with 0.75" Galv. EMT 18ga. and will have a multi-stage baked-on powder coat finish.

ACTIVITY PANEL TUBE 29.5":
Shall be fabricated using 0.75" galvanized EMT 18ga. steel tubing.

STEEL TURN BLOCK PANEL R5:
Shall be fabricated using 1/4" HR Sheet Steel A36 and will have a multi-stage baked-on powder coat finish.

STEEL TIC-TAC-TOE PANEL TRIM:
Shall be fabricated using 12ga HR Sheet Steel A36 and will have a multi-stage baked-on powder coat finish.

STEEL TURN BLOCK SPACER & TIC TAC TOE PANEL TRIM:
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

STEEL TIC TAC TOR TURN BLOCK & STEEL ABC TURN BLOCKS 1, 2 AND 3:
Shall be fabricated from 5" OD Galv T.S. 11 ga and will have a multi-stage baked-on powder coat finish.

STEEL TURN BLOCK AXLE:
Shall be fabricated using 0.75" Galv EMT 18ga. and will have a multi-stage baked-on powder coat finish.

STEEL TURN BLOCK CAP:
Shall be precision die-cast from a high-strength aluminum alloy.

MOUNTING LUGS & SOCKET CLAMPS:
Shall be precision die-cast from a high-strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

1" NYLON WASHER:
Shall be fabricated from Nylon 6/10.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

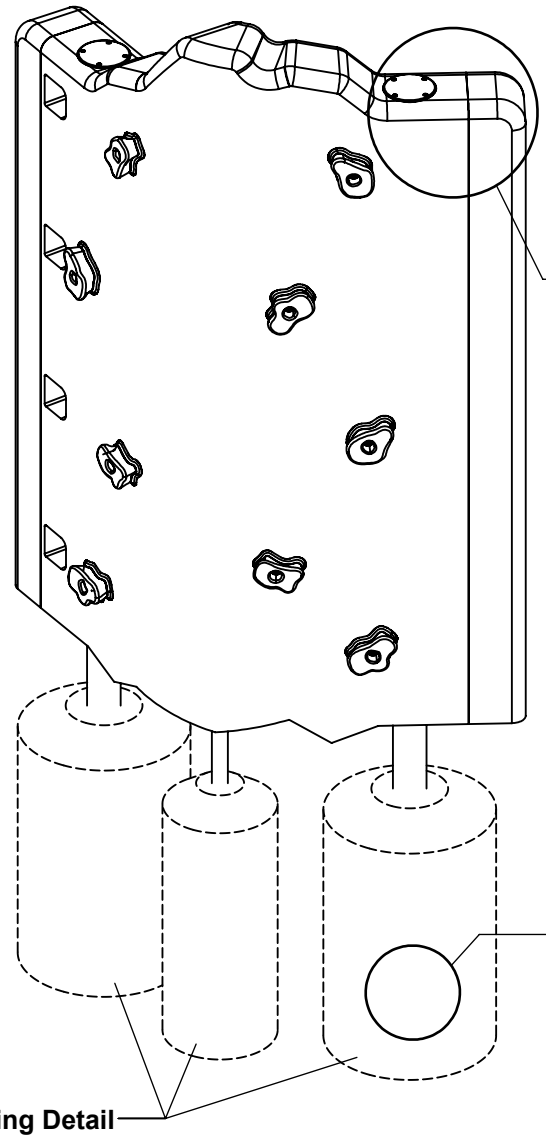
(B) Caution must be given to toggle installation as parts may become fragile during insertion and final securing.

(C) When assembling multiple Erector Rock Walls, End Caps are only attached to the end walls.

(D) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(E) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Curved Erector Rock



NOTE: Single Erector Rock shown. Modular configurations will vary slightly, but does not affect assembly.

Step 1

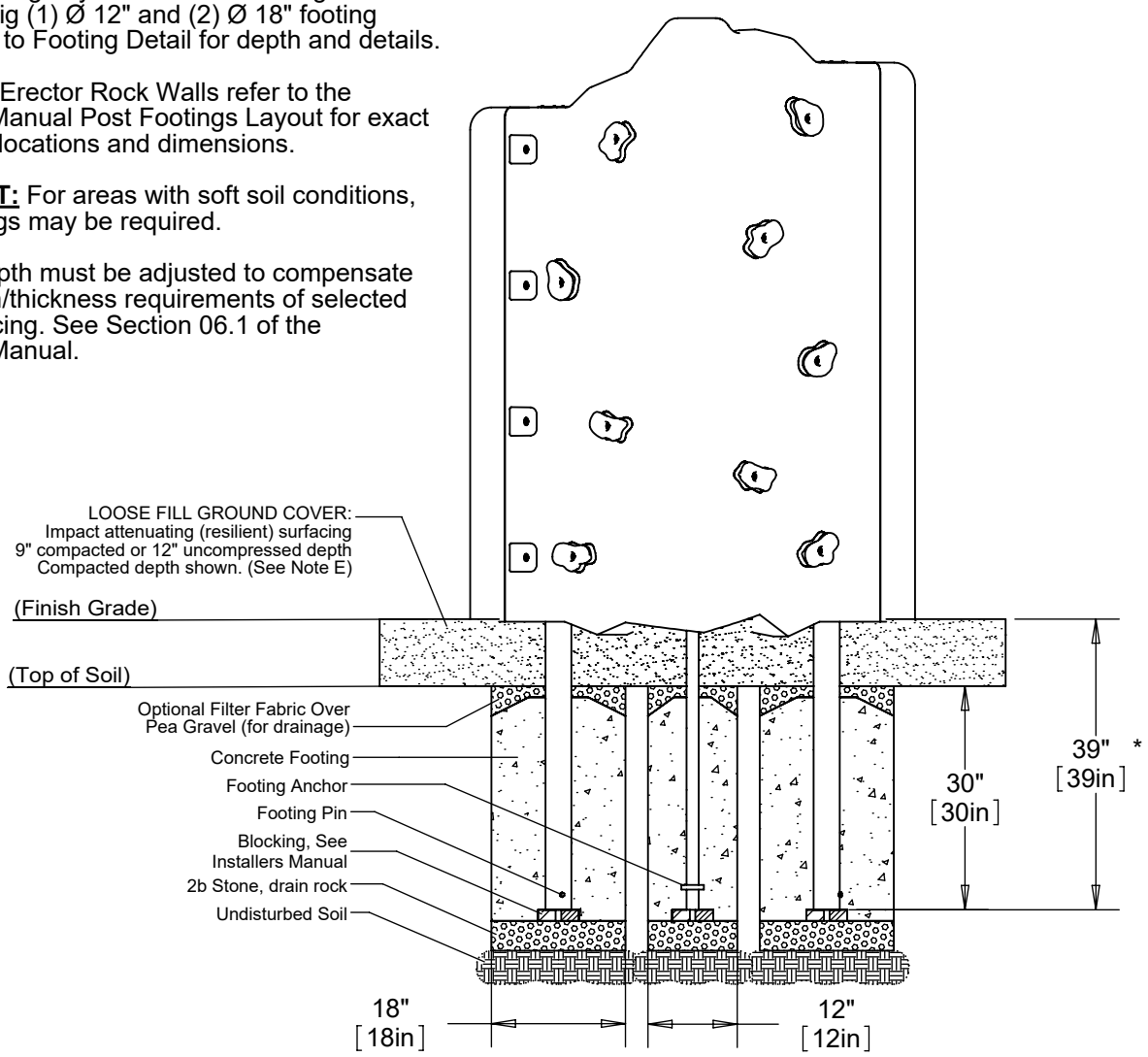
Refer to Footing Layout and mark footing hole locations. Dig (1) Ø 12" and (2) Ø 18" footing holes. Refer to Footing Detail for depth and details.

For multiple Erector Rock Walls refer to the Installation Manual Post Footings Layout for exact footing hole locations and dimensions.

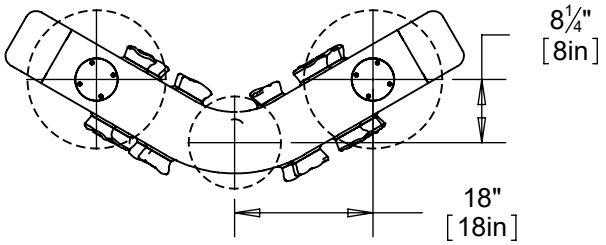
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Footing Detail



Top View - Footing Layout



Step 2 (Factory Assembled)

FOR TALL END CAP ONLY

Attach Erector Rock End Cap Tall to Wall as shown in Figure 1.1. (See Notes B & C)

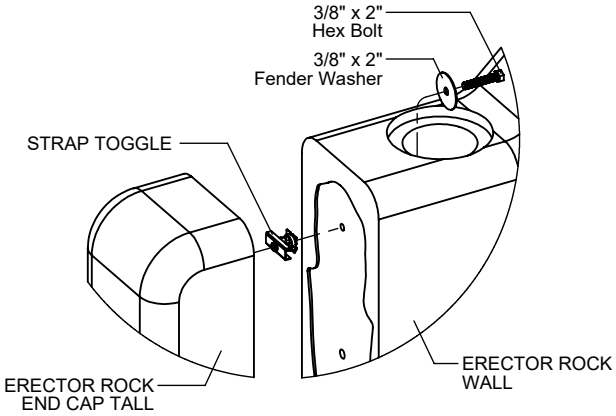


Figure 1.1

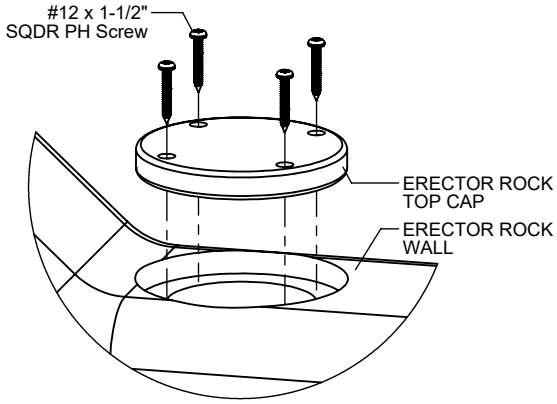


Figure 1.2

Step 3 (Factory Assembled)

Attach Erector Rock Top Caps to Wall as shown in Figure 1.2.

Step 4 (Factory Assembled)

Attach Erector Rock End Cap to Wall as shown in Figure 1.3. (See Notes A & C)

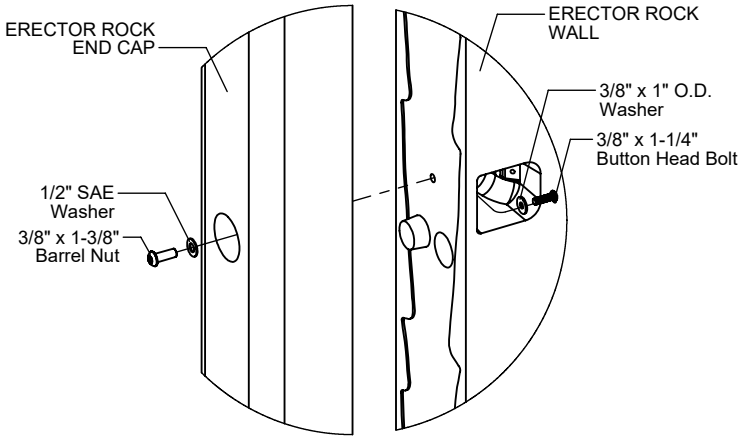


Figure 1.3

Step 5

Attach Grips to corresponding slots in Erector Rock Wall as shown in Figure 2. (See Note A)

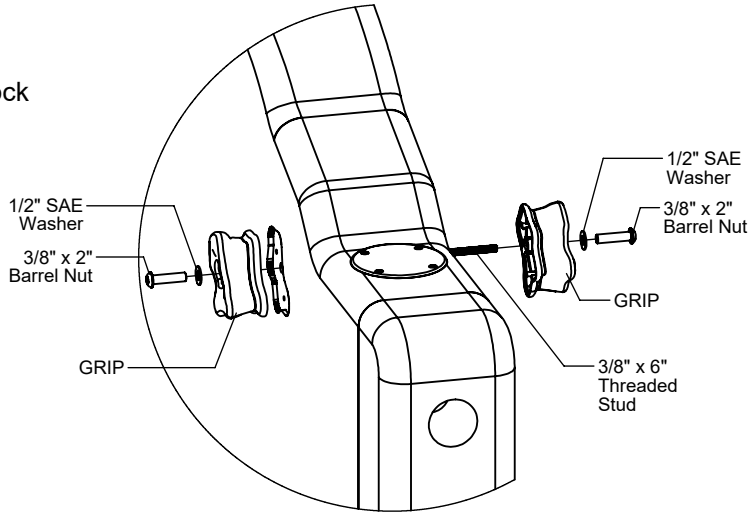


FIGURE 2

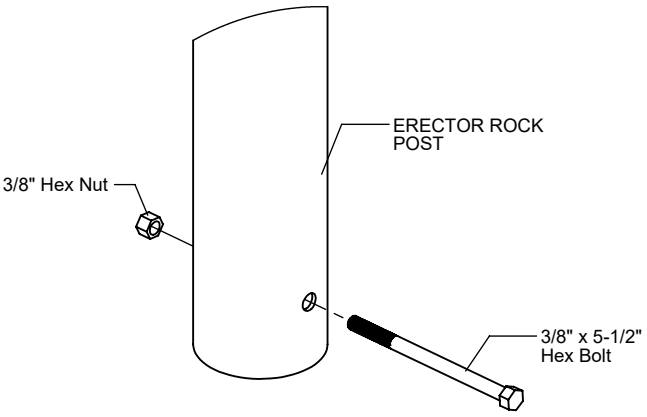


Figure 1.4

Step 6

Attach Footing Pin to Erector Rock Post as shown in Figure 1.4. (See Note A)

Step 7

Attach Erector Rock Leg and Posts to Wall as shown in Figure 3. Place Curved Erector Rock into footing holes. (See Notes A & D)

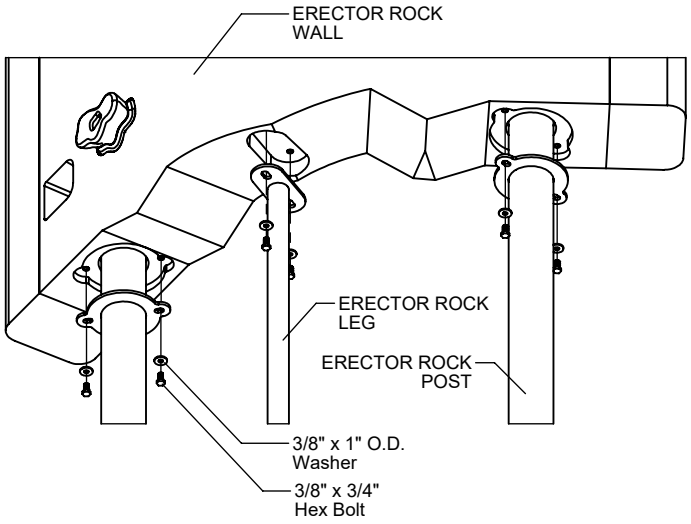


FIGURE 3

Step 8 (Modular Assembly)

Assemble modular Erector Rock Wall attachments. See additional assembly instructions for each modular attachment.

Step 9

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 10

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note D)

Step 11

Place appropriate compliant protective surfacing under and around Curved Erector Rock. (See Note E)

Parts List

S-1236-3 ERECTOR ROCK WALL CURVED		
Part #	**DESCRIPTION**	**QTY**
FS-1236-2	Erector Rock Medium Post	1
FS-1236-3	Erector Rock Tall Post	1
FS-1236-LEG	Erector Rock Leg	1
GE-4586	Wall Grip #1	6
GE-4587	Wall Grip #2	6
GE-4588	Wall Grip #3	6
581386	3/8" x 6" Threaded Stud	9
9123032	Bolt Hex 3/8" x 3/4"	6
9123231	Bolt Hex 3/8" x 5-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	18
9443092-TR	Nut Barrel 3/8" x 2" BH	18
9483602	Nut Hex 3/8"	2

Assembled Parts List

S-1236-3 ERECTOR ROCK WALL CURVED		
Part #	**DESCRIPTION**	**QTY**
DE-4564	Erector Rock Wall Curved	1
DE-4592	Erector Rock Top Cap	2
9221272	Screw #12 x 1-1/2" SQDR PH	8

S-1236-CM ERECTOR ROCK CAP MEDIUM		
Part #	**DESCRIPTION**	**QTY**
DE-4566	Erector Rock End Cap Medium	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	4

S-1236-CT ERECTOR ROCK CAP TALL		
Part #	**DESCRIPTION**	**QTY**
DE-4567	Erector Rock End Cap Tall	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9123092	Bolt Hex 3/8" x 2"	1
9323092	Washer Fender 3/8" x 2"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	4
9643160	Strap Toggle 3/8"-16	1

Specifications

ERECTOR ROCK LEG:
Shall be fabricated using 1.660" O.D. steel tubing with welded 1/4" thick steel mounting plate. The Erector Rock Leg shall have a multi-stage baked-on powder coat finish.

ERECTOR ROCK POST:
Shall be fabricated using 3.5" O.D. steel tubing with welded 1/4" thick steel mounting plate. The Erector Rock Steel Post shall have a multi-stage baked-on powder coat finish.

ERECTOR ROCK WALL & CAPS:
Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

WALL GRIP:
Shall be two-part and precision die-cast from a high strength aluminum alloy. The Wall Grips will be Play-Tuff™ coated after fabrication.

HARDWARE:
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

BALANCE BEAM SNAKE

FIGURE 1

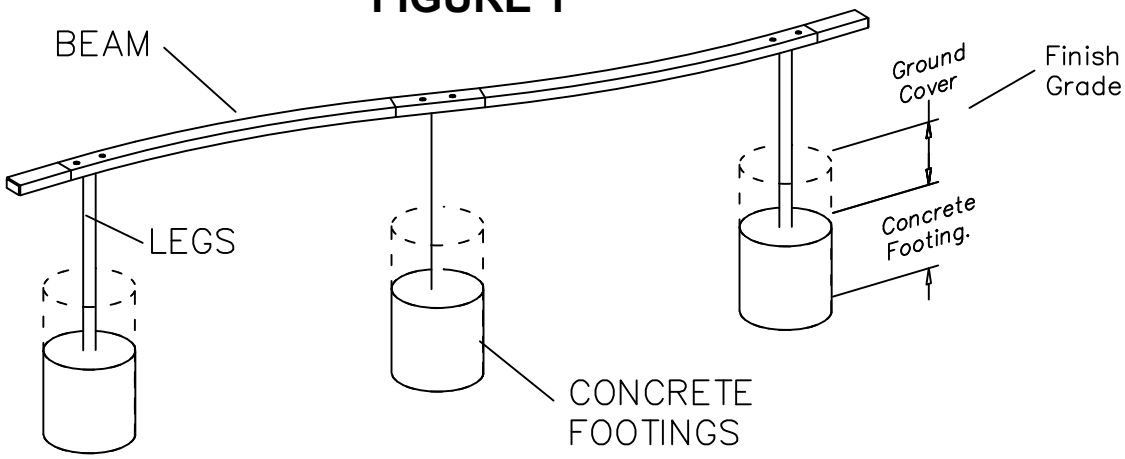


FIGURE 2 - Top View

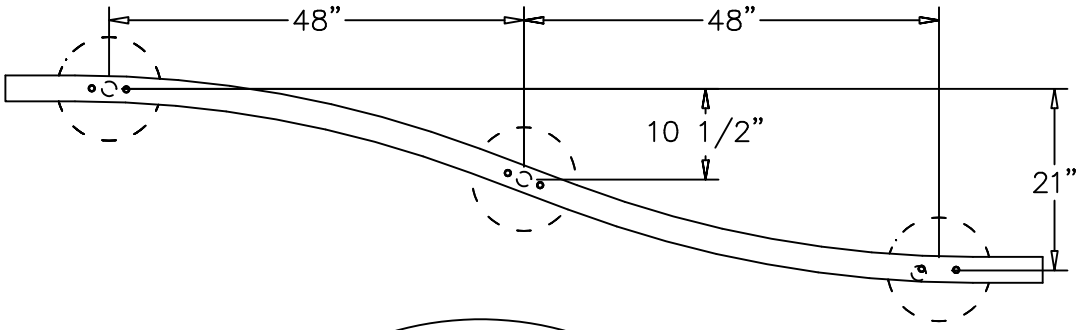
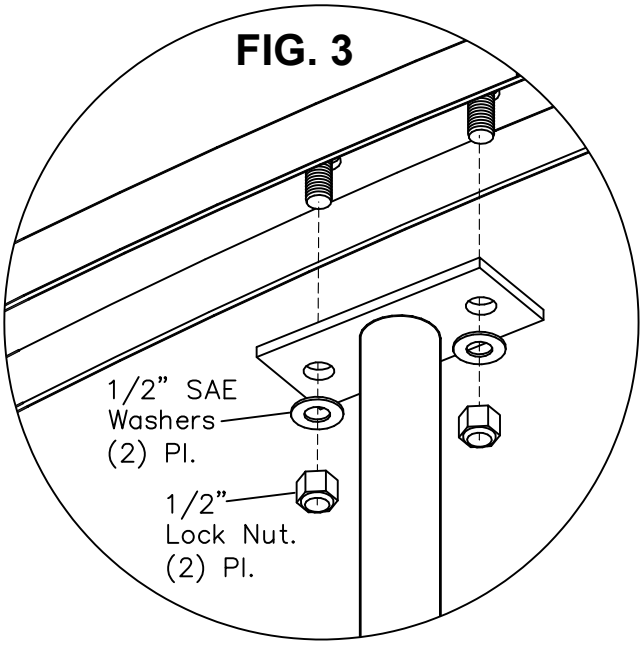


FIG. 3



BALANCE BEAM SNAKE

Parts List

QTY.	DESCRIPTION	PART #
1	Balance Beam Snake	FS-PC2410
3	Balance Beam Legs	FS-PC2400-LEG
6	1/2" SAE Washers	9345002
6	1/2" Lock Nuts	9415132

Specifications

Balance Beam:
Top Rail shall be fabricated from 3"x1-1/2" rectangular steel tubing with carriage bolts surface welded six places. Finished with vinyl coating.

Legs:
Legs shall be fabricated from 1¼" Galv. pipe with 3/16" steel mounting flanges. Finished with a baked-on powdercoat.

HARDWARE:
Shall be stainless steel as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts.
A periodic inspection of all parts is necessary.
If a part is broken or worn, replace immediately.

Installation

NOTES:

(A) According to safety guidelines, the top surface of the balance beam shall be no greater than the following heights above the protective surfacing:
Ages 2-5: 12 inches maximum
Ages 5-12: 16 inches maximum

(B) Use liquid thread lock (such as Loctite) with all threaded hardware that does not include self-locking nuts.

Step 1.
Dig 3 footing holes Approx. 12" Dia. Refer to Figure 2 for layout. See Note A to determine footing depth with consideration to ages and ground cover thickness.

Step 2.
Attach Legs to the Beam with hardware shown in Figure 3.

Step 3.
Place Balance Beam assembly in position. Check for level and finished height considering ground cover.

Step 4.
Pour concrete footings and allow at least 72 hours to cure.

Step 5.
Place protective ground cover over footings and surrounding area.

INDUSTRY LEADING WARRANTY

Every product we manufacture is designed with quality, safety and value in mind. Every project we undertake is an opportunity to prove that Playcraft Systems is setting a new standard and raising the bar in all ELEMENTS OF QUALITY.



Playcraft Systems® warrants its products to be free from defects in materials and workmanship, when properly used, serviced and installed in accordance with published specifications, for a period of one (1) year from the original date of invoice. Playcraft Systems® further warrants as follows:

LIFETIME LIMITED WARRANTY

on all stainless steel hardware, metal posts, aluminum posts, aluminum caps and aluminum clamps against structural failure due to natural deterioration or corrosion, or defects in materials or workmanship.

TWENTY- FIVE (25) YEAR LIMITED WARRANTY

on all cast aluminum Spring Rider castings against structural failure due to defects in materials or workmanship.

FIFTEEN (15) YEAR LIMITED WARRANTY

on all metal rails, metal slides, handles, rungs, loops and walls, all Play-Tuff™ coated perforated steel decks, steps, and bridges, all rotationally molded and HDPE sheet plastic components, excluding recycled plastic components, against structural failure due to defects in materials or workmanship.

TEN (10) YEAR LIMITED WARRANTY

on all shade canopy fabric made of UV Stabilized HDPE monofilament yarn and tape against significant fading.

FIVE (5) YEAR LIMITED WARRANTY

on all Play-Cord™ and Net-Effects™ cables and connectors against breakage and failure due to defects in materials or workmanship.

FIVE (5) YEAR LIMITED WARRANTY

on all Playcraft System® powder coating against cracking and/or peeling due to normal climatic exposure.

THREE (3) YEAR LIMITED WARRANTY

on all springs, Net-Effects™ rubber belting, moving swing parts, swing seats and other swing components, as well as all recycled plastic components against failure due to defects in materials or workmanship.

ONE (1) YEAR LIMITED WARRANTY

on all moving parts, and their integrated components, and on any other product or part not specifically covered above against failure due to defects in materials and workmanship.

All warranties above commence on the date of the original invoice from Playcraft Systems® For the purpose of this warranty, the term LIFETIME encompasses no specific number of years, but rather that Playcraft Systems® warrants to its original customer, for as long as the original customer owns the Products and uses the Products for their intended purpose, that any Products and all components will be free from defects in materials and workmanship. The warranty stated above is valid only if the products and finishes: (1) are assembled and installed in conformity with the layout plan and installation instructions furnished by Playcraft Systems®; (2) have been maintained and inspected in accordance with Playcraft Systems® maintenance information and other normal and prudent practices; (3) have been subjected to normal use for the purpose for which the products were designed and intended; (4) have not been subjected to misuse, abuse, vandalism, accident or neglect; (5) have not been altered in any manner including, but not limited to, incorporating unauthorized or unapproved parts; and (6) have not been modified, altered, or repaired by persons other than Seller's designees in any respect which, in the judgment of Seller, affects the condition or operation of the equipment. This warranty does not cover: (1) cosmetic damages or defects resulting from scratches, dents, marring, rough handling, improper installation methods, fading, discoloring or weathering; (2) damage due to extreme or prolonged exposure to "Environmental Factors", such as wind-blown sand, salt water, salt spray and airborne emissions from industrial sources (sulfur, acids, chemicals, or corrosive agents, other than normal photochemical smog); (3) damage caused by environmental hazards and "Acts of God", such as hail, flooding, lightning, tornadoes, sandstorms, earthquakes, windstorms, and other extreme weather conditions; or (4) normal wear and tear. No warranty is made with regard to gloss retention or uniformity of gloss and color retention. If any products covered by this warranty fail within the time period applicable to a defective product, Playcraft Systems® shall, upon being notified of the defect in writing, at its sole option, either repair the defective products or replace the defective products within 90 days of receipt of the written notification. Repair or replacement as provided in this section shall be the purchaser's exclusive remedy and purchaser expressly agrees that Playcraft Systems® shall not be responsible for any other damages, losses, or costs, including consequential and incidental damages, claimed by purchaser. Playcraft Systems® shall deliver the repaired or replacement products to the purchaser free of charge, but shall not provide labor, reimbursements for labor or reimburse any other costs associated with the removal or disposal of the defective products and/or the installation of any replacement products. Notwithstanding the previous sentence, Playcraft Systems® shall not pay for any costs of shipping replacement parts outside of the continental United States. Any products replaced or repaired consistent with this paragraph shall be guaranteed for the balance of the original warranty period. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES PROVIDED HEREIN SHALL BE THE EXCLUSIVE AND SOLE REMEDIES OF THE ORIGINAL PURCHASER. PLAYCRAFT SYSTEMS® IS NOT LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY ARISE FROM THE PURCHASE, USE OR MISUSE OF ITS PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION MAY NOT APPLY. PLAYCRAFT SYSTEMS® NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME OR IMPLY ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OR USE OF THE EQUIPMENT SOLD. To make a claim under the terms of this warranty, purchaser must submit a written statement detailing the nature of the warranty claim, including an itemization of each defective condition, along with a copy of the original invoice, maintenance records and supporting photographs to Playcraft Systems®, 123 North Valley Drive, Grants Pass, Oregon 97526. Due to our ongoing commitment to product development and Improvement, Playcraft Systems® reserves the right to change, modify or discontinue certain products without notice. (Rev. R)

EVERY PRODUCT WE MANUFACTURE IS DESIGNED WITH SAFETY, QUALITY AND VALUE IN MIND.

Our highly experienced engineering team continually develops new products while refining existing ones with the latest materials and CAD/CAM - computer-aided drafting and manufacturing technology. After design and fabrication, each new product is tested for conformance with safety and performance standards for public playground equipment by the American Society of Testing Materials International (ASTM F1487) and the U.S. Consumer Product Safety Commission (USCPSC).
All of our products meet or exceed the design and safety guidelines found in the ASTM F1487 and USCPSC publications for playground equipment designed for public use.

We also offer a wide range of accessible equipment designed to meet the latest guidelines developed by the Federal Access Board. For detailed information on these guidelines, please feel free to contact us at 1-800-333-8519. You can also contact the U.S. Architectural and Transportation Barriers Compliance Board at 1-800-872-2253 or visit them online at www.access-board.gov

Playcraft Systems® is a member of the International Play Equipment Manufacturers Association (IPEMA), a member-driven organization whose mission is to assist in providing safe environments for children's play. In the interest of playground safety, IPEMA provides a Third Party Certification Service whereby a designated independent laboratory validates a manufacturer's certification of conformance to ASTM F1487 (excluding sections 10 and 12.6.1) Standard Consumer Safety Performance Specification for Playground Equipment for Public use and CSA-Z614 Standards. The use of the IPEMA certification logo in the Playcraft Systems® buyer's guide signifies that Playcraft Systems® has received written validation from the independent laboratory that the products associated with the use of the logo conform with the requirements of the indicated standard (excluding Sections 10 and 12.6.1). Please understand that development of new and existing products and certification of these products is an ongoing process. For a list of our currently IPEMA CERTIFIED products, please visit the IPEMA website at www.ipema.org or visit our website at www.playcraftsystems.com

Standards and Development Organizations

The American Society of Testing & Materials International (ASTM) is one of the largest voluntary standards development organizations in the world, a trusted source for technical standards for materials, products, systems, and services. Known for their high technical quality and market relevancy, ASTM standards have an important role in the information infrastructure that guides design, manufacturing and trade in the global economy. In 1993, ASTM published Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use, designated as F1487-93. The standard was reprinted in 1995 and 1998 and revised in 2001, 2005, 2007, 2011 and 2017 with the new designation F1487-17. The ASTM establishes minimum acceptable performance specifications for everything from access components to surfacing.

The United States Consumer Product Safety Commission (USCPSC) is charged with protecting the public from unreasonable risks of serious injury or death from more than 15,000 types of consumer products under the agency's jurisdiction. The USCPSC is committed to protecting consumers and families from products that pose a fire, electrical, chemical, or mechanical hazard or can injure children. The USCPSC's work to ensure the safety of consumer products - such as playground equipment - contributed significantly to the decline in the rate of deaths and injuries associated with consumer products over the past 30 years. The USCPSC's Handbook for Public Playground Safety is a key reference tool for the playground industry, including specifications for the use of playground equipment and recommendations concerning age-related designs and play components.

CSA International is a Nationally Recognized Testing Laboratory (NRTL) accredited by OSHA and ANSI in the United States and by SCC in Canada. CSA International tests and certifies products following standardized test protocols-in laboratories across North America. As a solutions-oriented organization, CSA works in Canada and around the world to develop standards that address real needs, such as enhancing public safety and health, advancing the quality of life, helping to preserve the environment and facilitating trade.

TUV Product Service, an international testing and certification organization, is a European Union Notified and Competent Body providing services which include product testing and certification. The European Harmonized Standard for Commercial Playground Equipment, EN 1176, is the TUV standard for commercial playgrounds. For complete EN 1176 details, contact your Playcraft representative.

For more information, contact the ASTM at:
100 Barr Harbor Drive,
West Conshohocken, PA
19428-2959
Tel: (610) 832-9585 or
visit the ASTM online at
www.astm.org

For more information, contact the USCPSC at:
U.S. Consumer Product
Safety Commission
Washington, D.C.
20207-0001
Tel. (800) 638-2772
or online at www.cpsc.gov

For more information, contact CSA at:
Tel. (866) 797-4272
(416) 747-2661 or online at
www.csa-international.org

For more information, contact TUV America at:
Tel. (800) 888-0123
(978) 573-2500 or online at
www.tuvam.com

EXHIBIT G
SCHEDULE

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

SCHEDULE FOLLOWS

EXHIBIT CONTENT

Bid-phase milestones, anticipated District-furnished equipment delivery, construction activities, and required final-completion dates for the Project.

SOURCE / RESPONSIBLE PARTY: **DISTRICT / CONSTRUCTION MANAGER**

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

SCHEDULE

BID NO. 26-27-02

DESCRIPTION	START	END
Advertisement	8/21/2026	8/21/2026
Non-Mandatory Pre-Bid Job Walk (at 2:00 PM)	9/2/2026	9/2/2026
Last Day for Pre-Bid RFIs/Questions	9/4/2026	9/4/2026
Sealed Bids Due Date (by 2:00 PM)	9/10/2026	9/10/2026
Award by AUSD Board	9/23/2026	9/23/2026
Issue Notice of Award to Prime Contractor	9/25/2026	9/25/2026
Anticipated Delivery of Playground Equipment	9/28/2026	9/28/2026
School Not in Session	9/28/2026	10/2/2026
Demolition and Backfill/Compaction Work	9/28/2026	10/2/2026
Installation of Playground Equipment & Rubber Surfacing	10/12/2026	10/23/2026
Final Completion of Project	10/23/2026	10/23/2026

CONSTRUCTION PERIOD: 26 calendar days, September 28 through October 23, 2026

EXHIBIT I

PLAYCRAFT INSTALLER CERTIFICATE

MARSH ELEMENTARY SCHOOL UPPER PLAYGROUND REPLACEMENT & REFRESH

BID NO. 26-27-02

REFERENCE SAMPLE - NOT FOR BIDDER SUBMITTAL

EXHIBIT CONTENT

This exhibit provides a watermarked reference sample of the playground-equipment manufacturer's Certified Installer certificate required by Scope of Work A-1. Playground-equipment installation must be performed by, or under the direct on-site supervision of, an individual holding a current installer certification recognized by the equipment manufacturer. The Contractor must submit a completed and valid certificate for the individual assigned to this Project before beginning installation. If a reference sample is attached below, it may not be copied, altered, or submitted as evidence of the Contractor's certification.

SOURCE / RESPONSIBLE PARTY: **CONTRACTOR**

WATERMARKED SAMPLE - REFERENCE ONLY - NOT FOR SUBMITTAL

CERTIFICATE of ACHIEVEMENT

SAMPLE REFERENCE ONLY NOT FOR SUBMITTAL

THIS ACKNOWLEDGES THAT

Loren Jessop

SIERRA PLAY PARTNERS

HAS SUCCESSFULLY COMPLETED THE

Certified Installer Program

Issue Date: 4/26/2024

Exp. Date: 12/31/2028

CJ Schatza, VP/General Manager

PLAYCRAFT SYSTEMS

A PLAYCORE company