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Old Saybrook Middle School
HVAC Verification and Evaluation

Old Saybrook Public Schools
Old Saybrook, CT

April 6th, 2026

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Old Saybrook Public Schools

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1 Executive Summary

The Old Saybrook Board of Education has requested a detailed assessment of the mechanical system's ventilation performance in accordance with new regulations set forth by the State of Connecticut. In 2025, the state of Connecticut codified ventilation assessment at each school building under jurisdiction of local and regional boards of education. Per substitute Senate Bill 287, "each local and regional board of education shall ensure that its heating, ventilation and air conditioning (HVAC) system is maintained and operated in accordance with the prevailing maintenance standards, such as ASHRAE Standard 62 at the time of installation or renovation of such system". These assessments must be completed by January 1, 2025, and every five years thereafter.

This report is an overview of findings from the HVAC systems evaluation performed at Old Saybrook Middle School ("the school"). The focus of this report is twofold: First, to identify to what extent the school's current ventilation system components are operational. Second, to evaluate if the system components are operating in such a manner as to provide adequate ventilation to the spaces within the building in accordance with the appropriate indoor ventilation standards.

It has been identified that most of the mechanical equipment serving the school is not operating at the intended design, as indicated by the 2005 and 1989 as-built drawings. As a result, most of the rooms are served below the minimum outside air requirements prescribed by ASHRAE Standard 62.1, as referenced in the state's building code.

Further investigation into the HVAC system should be conducted to determine if the current mechanical equipment can provide adequate ventilation for the school. Based on this report's findings, an engineered design should be prepared to correct the identified issues such as inoperable exhaust fans, improper pressurization of spaces, and ventilation shortcomings (see Section 3). It is also recommended that the duct system be cleaned, the outside air dampers adjusted, controls for each unit adjusted, supply air fans be evaluated for proper operation, and that exhaust fans be repaired and placed back into service.

1.1 Building Overview

Old Saybrook Middle School is located at 60 Sheffield Street, Old Saybrook, CT. The school is a one-story, 103,500 square foot building. The HVAC equipment designed to provide ventilation consists of the following equipment: four (4) roof top units (RTUs), two (2) air handling units (AHUs), two (2) makeup air units (MAU), and forty-six (46) exhaust fans (EF's). This equipment is aided further by variable air volume boxes (VAV) which modulate the conditioned air various spaces receive. Many of the spaces do not receive ventilation air, rather they are conditioned through the following equipment Fan Coil Units (FCU), Cabinet Unit Heaters (CUH), Unit Heaters (UH), and variations of ductless split systems which utilize indoor evaporator units and outdoor condensers. The ductless split systems are labeled DSE-1, DSCU-1.

The plans dated 1989 indicate the installation of gravity hood ventilators. The make, model, and size of this equipment is not indicated on the plans. Ventilation from this equipment is attributed to the exhaust systems serving connected spaces. The operation of the gravity ventilators should be verified to ensure the proper operation of the exhaust systems. Supplemental hydronic radiant heating is installed throughout the building. The information presented in this section is based upon the building plans dated 11/13/1989, the renovation plans dated 03/30/2005, and the F&O site walk-down on 04/14/2025. Some equipment makes and model numbers were not able to be verified, see Section 1.2 below. See Appendix C for the school's floor plans.

1.2 HVAC System Overview (Ventilation Equipment)

- RTU-1 is a Carrier model ER200. The unit is designed for 235.5 MBH of cooling and 243 MBH natural gas heating. The RTU utilizes direct expansion cooling and natural gas heating. The RTU ventilates and conditions the cafeteria and is located on the roof.
- RTU-2 is a Carrier model CUR350. The unit is designed for 413 MBH cooling and 390 MBH heating. The unit utilizes direct expansion cooling and natural gas heating. The RTU ventilates and conditions the Auditorium and is located on the roof.
- RTU-3 is a Carrier model CUR350. The unit is designed for 364.5 MBH cooling and 390 MBH heating. The RTU utilizes direct expansion cooling and natural gas heating. The RTU ventilates and conditions the administration spaces and is located on the roof.
- RTU-1 (NEW) is a Carrier model 48-HJT009GH-5. The unit is equipped with direct expansion designed for 116.43 MBH of cooling and natural gas providing 180 MBH of heating. The RTU ventilates and conditions the cafeteria. The unit is equipped with demand control ventilation through CO2 sensors. The unit is located on the roof.
- MAU-1 is a Greenheck BCF-212. The unit serves ventilation air to the kitchen and is located in the plenum. Outdoor air for the unit is drawn from an intake louver. The unit is not equipped with heating or cooling.
- GMU-1 is described as a PVE-175 gas fired makeup air unit in the 1989 plans. The unit's make and model were not verifiable. The unit is designed to provide 134.8 MBH of heating. The unit does not provide cooling. The unit is located on the roof.
- AHU-1,1A are unidentified air handlers. The units are identified on the buildings BMS as AHU-1/1A. Designs for these units were not recovered. These units both serve the band area. AHU-1 additionally serves the offices associated with the band room. AHU-1A additionally serves the home economics room and industrial arts room. These units are referred to as AHU-1,1A in this report and were analyzed together due to the lack of equipment information and shared spaces.
- GYM AHU is a Sterling AHU equipped with two Sterling QVSD400M duct furnace, labeled AHU-5 in the Gymnasium mechanical room. The plans dated 03/30/2005 specify the AHU serving the gym as a Trane Model 39MN. The plans specify the unit is equipped with hydronic heat providing 888.9 MBH. The existing Sterling unit is designed to provide 400 MBH of heating per duct furnace, for a total of 800 MBH.

The unit does not provide cooling. The unit is equipped with demand control ventilation through CO2 space sensors. The unit conditions and ventilates the gymnasium. The unit's outdoor air is drawn in through a ducted intake louver. This report and the associated TAB report refer to this unit as GYM AHU.

2 Evaluation

2.1 Code Compliance

In 2024, Senate Bill 287 codified ventilation assessments at each school building under jurisdiction of local and regional boards of education. These assessments must be completed during the period commencing July 1, 2025, and ending June 30, 2030. Each school shall be evaluated every five years thereafter. Per the requirements of sSB 278, the assessment included the following inspections and evaluations:

(A) Documenting for maximum filter efficiency (MERV ratings)
(B) Physical measurements of outside air delivery rate at the minimum damper position
(C) Verification of the appropriate condition and operation of ventilation components
(D) Measurement of air distribution through all system inlets and outlets,
(E) Verification of unit operation and that required maintenance has been performed in accordance with the most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers
(F) Verification of control sequences of damper operations
(G) Verification of carbon dioxide sensors does not apply.
(H) Identification of to what extent each school's current ventilation system components, including any existing central or noncentral mechanical ventilation system, are operating in such a manner as to provide appropriate ventilation to the school building in accordance with most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

The required supply of outside air into interior occupied spaces is governed by the 2022 Connecticut State Building Code, which adopts the 2021 International Mechanical Code (IMC), and ASHRAE Standard 62.1, which prescribes the flow rate of outdoor air required for occupied areas based on occupancy classification. Depending on the room classification and occupant density, the outdoor airflow rates in cubic feet per minute (CFM) per person are defined. When occupancy density is unknown, these documents define occupant density for each room classification in number of occupants per space floor area. The required airflow rate in CFM for every occupied space is then calculated based on this value. It shall be noted that although the occupancy classification is education, the IMC does not distinguish between an office within an office building, a school, or any other building classification. This applies to all rooms that are not considered traditional educational rooms such as healthcare offices, gymnasiums, theaters, and assembly halls. Table 1 below, from the 2021 IMC, indicates population density and required ventilation rates for each room classification.

Table 1

Room Type & Occupancy Summary

Room Types	Quantity[1]	Total Area[1] (SF)	Occupancy Rate[2] (People/1000 SF)	Occupancy Ventilation[2] (CFM/person)	Area Ventilation[2] (CFM/SF)	Exhaust Rate[2] (CFM)
Art Classroom	2	1,104	20	10	0.18	0.7
Auditorium	1	4,235	150	5	0.06	-
Cafeteria	3	4,120	100	7.5	0.18	-
Classroom	47	28,453	35	10	0.12	-
Computer Lab	2	1,612	25	10	0.12	-
Conference Room	2	615	50	5	0.06	-
Corridor	36	20,719	-	-	0.06	-
Custodial	3	164	-	-	-	-
Gymnasium	1	8,376	7	20	0.18	-
Kitchen	2	1,424	70	10	0.06	0.7
Library	2	4,633	10	5	0.12	-
Lobby	1	728	10	5	0.06	-
Locker Room	3	1,870	-	-	-	-
Music/Theater/Dance	7	3,237	35	10	0.06	-
Nurse	1	389	5	5	0.06	-
Office	14	3,829	5	5	0.06	-
Restroom	17	2,513	-	-	-	50/70*
Stage / Studio	1	2,056	70	10	0.06	-
Storage	22	7,370	-	-	0.12	-
Utility	12	2,571	-	-	-	-
Wood/ Metal shop	20	7.5	0.12	0.7	Wood/ Metal Shop	20
Vestibule	3	449	10	5	0.06	-

[1] Based on 2005 as-built drawings

[2] Based on 2021 International Mechanical Code

Some room types do not have an outside air requirement, as can be seen in Table 1, above. Alternatively, these rooms have exhaust rates that must be met and are evaluated separately in this report. Refer to the exhaust rate evaluation table in Appendix B for individual room exhaust rate evaluations.

In addition to providing mechanical ventilation to a given space, an alternative method approved by the building code allows for air to enter the occupied space naturally through operable windows. The code states that the minimum openable area to the outdoors shall be 4% of the floor area being ventilated. Although this is an acceptable means of providing outdoor air by code, it is not a realistic option during cold weather or hot weather months, as windows will typically be closed. Operable windows are not considered sources of ventilation in this analysis.

2.2 Field Study Findings and General Observations

F&O performed a walkdown of the school prior to the testing and balancing (TAB) testing activities and noted room measurements, observable maintenance concerns and general equipment condition. The following sections are a summary of these observations.

It should be noted that several rooms throughout the school have dirty and stained ceiling tiles. Dirty and stained ceiling tiles are not a purely cosmetic issue. Stains on ceiling tiles often indicate leaks or condensation in the plenum piping or ductwork.

2.2.1 Air Distribution

It was observed during the F&O walkdown that Corridor 317 experienced pressure changes resulting in noticeable air movement throughout the building. It was also mentioned by the client that some complaints of doors slamming throughout the school have been made. Large pressure differentials between spaces may be a result of an unbalanced HVAC system. These pressure changes can contribute to doors closing or being difficult to open. It was determined through TAB testing that the GYM AHU is supplying significantly less air than is being exhausted by the two gym exhaust fans. Section 3 discusses possible solutions and mitigation strategies.

2.2.2 Air Handling Units and Rooftop Units

The air handling units in the building are designed to operate by providing ventilation and conditioned air to the school, each serving specific spaces or groupings of spaces. Return air is mixed with outside air and circulated through the unit and distributed to the spaces served. The amount of outdoor air the units deliver is modulated through adjustable dampers. Mixing in return air allows the equipment to condition the space more efficiently, as the return air is typically closer to the controls setpoint.

Rooftop units are furnished with economizer dampers. These dampers adjust to provide cooling outside air to the spaces served to minimize the need for mechanical cooling. These dampers can be adjusted by the BMS or through stand-alone controls.

The tables in Section 2.3.1 indicate how much outdoor air and total supply air each unit is designed to condition. Some of the units are equipped with variable air volume boxes in their terminal ductwork. VAV boxes serve to regulate the amount of air delivered to each space in order to account for diversity in the heating, cooling, or ventilation load the spaces served require.

It was found that most of this equipment is not operating as designed. Improperly conditioning the space can lead to occupant discomfort as well as decrease the equipment's useful life. This is the current operation of "New RTU-1". Furthermore, operating below the design suggests the spaces served may not being properly ventilated. It was found that most of the equipment is operating in this condition. The design, measured, and calculated airflows are discussed in Section 2.3.1 of this report.

2.2.3 Exhaust Fans

Exhaust fans provide ventilation for the restrooms, storage rooms, custodial closets, and other spaces throughout the building. All exhaust fans looked to be in fair, operable condition. While there were no apparent issues noticed on the initial walkthrough, some exhaust fans were found inoperable during the TAB testing. See Appendix B, Table 2 for exhaust fan testing results.

2.3 Outside Airflow and Air Change Rates

2.3.1 Airflow Design vs. Measurements

Tables 2 and 3 below display the equipment design parameters regarding total supply airflow and outdoor airflows. Design information for the units was obtained from the 2005 as-built mechanical schedule and the 1989 mechanical schedule. Airflow measurements were performed by Wings Testing and Balance (TAB). Using ASHRAE Standard 62.1, the required outdoor airflow rates were calculated.

Note the discrepancies between design airflow and measured airflow. NEW RTU-1 is the only equipment meeting design airflows, and it operates well outside the bounds of its design. Furthermore, Table 3 indicates that if the equipment was operating as designed, then RTU-1, NEW RTU-1, RTU-2, and RTU-3 would still be unable to serve adequate ventilation air to their associated spaces.

Table 2

Design vs. Measured Airflow

AHU	DESIGN AIRFLOW			MEASURED AIRFLOW		
	SUPPLY CFM	OA CFM	% OA	SUPPLY CFM	OA CFM	% OA
GYM AHU	12000	7100	59%	11826	11826	100%
RTU-1	6400	2500	39%	4552	196	4%
NEW RTU-1	3000	300	10%	4575	608	13%
RTU-2	12000	3000	25%	10931	0	0%
RTU-3	10000	2500	25%	4853	809	17%
MAU-1	4800	4800	100%	444	444	100%
GMU-1	1440	1440	100%	0	0	0%
AHU-1/1A	NO DESIGN	NO DESIGN	NO DESIGN	4151	91	2%

Table 3

Design vs. Calculated Outside Air

AHU	DESIGN AIRFLOW			CALCULATED AIRFLOW	
	SUPPLY CFM	OA CFM	% OA	OA CFM	% OA
GYM AHU	12000	7100	59%	2795.56	39%
RTU-1	6400	2500	39%	3932.62	61%
NEW RTU-1	3000	300	10%	1979.82	66%
RTU-2	12000	3000	25%	3514.1	29%
RTU-3	10000	2500	25%	7651.9	77%
MAU-1	4800	4800	100%	911.4	19%
GMU-1	1440	1440	100%	0	100%
AHU-1/1A	NO DESIGN	NO DESIGN	NO DESIGN	1771	N/A

As indicated by Tables 2 and 3, the current operation of the equipment is not compliant with the ASHRAE standard. In some cases the designed airflow does not meet the required airflow. The units not providing the design airflow should be evaluated to determine if they can still meet their design. Furthermore, action should be taken to supplement outdoor air to spaces requiring greater ventilation.

2.3.2 Individual Room Ventilation

Ventilation rates for each room at the minimum outdoor air damper position are itemized in Appendix A. At this position, most rooms lack appropriate ventilation based on ASHRAE ventilation rates described in Section 2.1. The room-by-room ventilation delta can be seen in Appendix B. In most cases supply fan speed and minimum damper positions cannot simply be increased so that adequate ventilation is provided. Operating outside of design will decrease the equipment's lifespan and the spaces served will be improperly conditioned. See Section 3 for recommended adjustments.

3 Discussion and Recommendations

3.1 General Recommendations to Improve Schools Performance

It is recommended that cleaning of the entire school's duct system be performed by a qualified professional. This cleaning will help improve the quality of air circulated throughout the school and reduce pressure drop in the system. Reduced airflow due to dirty coils and filters can also increase the electrical consumption of the fan motors and affect motor performance. This results in increased operating costs and possible motor failure. The ductwork should also be inspected for leaks and repaired if found.

To preserve the condition and capability of the HVAC equipment serving the building, it is recommended that a maintenance program following ASHRAE 180-2018: *Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems* be implemented. This standard provides a comprehensive guide, that when followed, can increase the HVAC system's ability to achieve acceptable thermal comfort, energy efficiency and indoor air quality within the building.

Recommissioning of the entire HVAC system should be performed to ensure all equipment and control components of the system are operating as designed. This service should be performed in 3–5-year intervals to optimize system performance, increase energy savings, and improve system efficiency.

3.2 Outside Airflow and Air Change Rates

As shown in Table 2 above, the measured outdoor airflow does not meet the designed airflow for most of the equipment. The equipment's outdoor air dampers should be adjusted to the designed position.

3.2.1 Air Distribution

Outside air supply airflow values are shown in Appendix B Table 1. Many of the rooms fail to meet the minimum outside air requirement based on ASHRAE standards. The duct system should be evaluated to determine whether the existing ductwork is capable of providing the minimum outside air required, and manual dampers adjusted to provide adequate outside air. VAVs should be adjusted to provide the required outside air at minimum damper position.

3.2.1 Air Handling Units and Rooftop Units

It can be seen in Table 2 above that most of the AHUs and RTUs are not providing adequate outside air. It can also be seen in Table 3 above, most of the AHUs and RTUs are designed to provide less outside air than is required. The equipment should be evaluated to determine if the correct amount of outside air can be provided. If found capable of providing additional outside air, adjustments should be made to the outside air damper to increase the outside air being delivered to the spaces served. If found incapable, new equipment should be designed to provide the required outside air.

Based on TAB testing results for the GYM AHU and exhaust fans serving the gym, the supply air being delivered to the gym is significantly less than the air being exhausted. The imbalance between supply air and exhaust air is causing the draft felt in Corridor 317 and contributing to the doors slamming throughout the building. An investigation into whether the exhaust fans operating speed can be reduced to match the supply air being delivered to the space.

3.2.2 Controls

It was noted that some of the equipment in the building uses stand-alone controls and is not communicating with the BMS. This does not allow for adjusting the equipment's operation schedules, set outside air damper positions, or adjust temperature setpoints through the BMS. Some equipment was also found unable to operate continuously when the building is occupied. Equipment not currently integrated into the school's BMS should have controls installed to allow monitoring and control of the unit. Design of a controls sequence of operations and controls points list should be designed and implemented for equipment lacking controllability through the BMS.

3.2.3 Exhaust Fans

TAB reported that LEF-2 serving room 219 does not energize. It should also be noted that many exhaust fans are not providing the exhaust required by ASHRAE, see Appendix B Table 2 for a full list of exhaust fans and measured airflow. These exhaust fans should be repaired and placed back into service. If the exhaust fans cannot be repaired, they should be replaced. All exhaust fans should be properly balanced to provide the minimum ventilation requirement and replaced if found not capable of meeting the minimum required exhaust airflow.

Appendix A

Testing and Balancing Report

WING'S TESTING & BALANCING CO., INC.

Old Saybrook Middle School

Ventilation Verification

* * * *

Fuss & O'Neill
Attn: Joshua Boudreau
One Financial Plaza
15th Floor
Hartford, CT 06103

July 23, 2025

94 North Branford Road • Suite One • Branford, CT 06405
(203) 481-4988 • wings@wingstesting.com

SM-1 License #6803

www.wingstesting.com

WING'S TESTING & BALANCING CO., INC.

July 23, 2025

Fuss & O'Neill
Attn: Joshua Boudreau
One Financial Plaza
15th Floor
Hartford, CT 06103

Re: Old Saybrook Middle School – Ventilation Verification

Dear Josh,

Ventilation verification for the above referenced location has been completed. All supply, return, exhaust, and outside air for the mechanical systems, serving the facility has been measured, unless otherwise noted. Ventilation worksheets for all areas have been completed.

During testing we discovered the following:

- Not all rooms on print are listed on the ventilation worksheet (we added them).
- Not all spaces are ducted as shown on the prints.
- Numerous pieces of equipment do not run continuously when the building is occupied.
- Numerous pieces of equipment are not on the BMS and have stand-alone controls.

The following pages are your record of current operating conditions. If you have any questions, or if we can be of further service, please do not hesitate to call.

Very truly yours,

Wing's Testing & Balancing Co., Inc.
ICB Certified Contractor for:
TAB—Cx—Indoor Air Quality—Sound & Vibration
Fire & Smoke Damper—Smoke Control Systems





John Flanagan
CT SM-2 License #771
MA Sheetmetal Journeyperson #6913
TABB Supervisor- TB950107S
TABB Technician BB950107T
Indoor Air Quality Technician- IAQ950107T
TABB Sound & Vibration Supervisor- SV060109S
Fire and Smoke Damper Technician- FLS1950107T
Fume Hood Performance Testing Technician- FHP950107T

July 23, 2025
Old Saybrook Middle School

Flow Calculation Worksheet

RTU	Min. Flow Measured
VAV-1	538 CFM
VAV-2	220 CFM
VAV-3	167 CFM
VAV-4	142 CFM
VAV-5	201 CFM
VAV-6	596 CFM
VAV-7	354 CFM
VAV-8	226 CFM
VAV-9	333 CFM
VAV-10	439 CFM
VAV-11	1304 CFM
VAV-12	505 CFM
TOTAL	5025 CFM

VELOCITY PRESSURE READINGS

PROJECT:	Old Saybrook Middle School - Ventilation Verification	**DATE:**	7/21/2025
AREA SERVED:	A11	**TECH:**	JF, OG

TRAVERSE LOCATIONS	DUCT SIZE "	AREA SQ.FT.	DESIGN		CENT. STAT. PRESS."	TEST		NOTES
			FPM	CFM		FPM	CFM	
RTU-1								
Minimum OA	61" x 17 1/2"	7.41	337	2,500	w/ Velgrid	27	200	(1)
RTU-2								
Minimum OA	84 3/4" x 22"	12.95	232	3,000	w/ Velgrid	33	427	
RTU-3								
Minimum OA	3 (36" x 22")	16.5	182	3,000	w/ Velgrid	57	941	
VAV-10								
Outlet 2, 3, 4	10" x 8"	0.56	464	260	+0.10"	648	363	
VAV-12								
Minimum	30" x 12"	2.5"	720	1,800	0.85"	203	508	
"New" RTU-1								(2)
Minimum OA	35 3/4" x 15"	3.72	81	300	w/ Velgrid	164	610	(1)
Bond								
AHU-1 Min OA	12"Ø	0.785	---	N/D	+0.012"	100	79	
AHU-1A Min OA	12"Ø	0.785	---	N/D	-0.03"	27	21	
Dust Collector								
DC-1	7"Ø	0.267	---	N/D	-0.66"	3,220	860	
LEF-2	40" x 14"	3.89	100	389	w/ Velgrid	0	0	(3)
LEF-3	40" x 14"	3.89	100	389	w/ Velgrid	155	603	
Gym EF								
Total @ Doors	91" x 70"	44.24	---	N/L	w/ Velgrid	403	17,829	
AHU-Gym								
Outlet #1	60" x 20"	8.33	---	N/D	+0.078"	803	6,692	

REMARKS

(1) Controls for economizer are stand alone
(2) Tagged as "Health and Wellness" on BMS
(3) Fan didn't energize

N/A Not Available | **N/D** No Design | **D/D** Direct Drive | **N/R** No Requirement

VELOCITY PRESSURE READINGS

PROJECT:	Old Saybrook Middle School - Ventilation Verification	**DATE:**	7/16/2025
AREA SERVED:	A11 Continued	**TECH:**	JF, OG

TRAVERSE LOCATIONS	DUCT SIZE "	AREA SQ.FT.	DESIGN		CENT. STAT. PRESS."	TEST		NOTES
			FPM	CFM		FPM	CFM	
Kitchen								
Hood #1	132" x 3 3/4"	3.44	---	N/D	w/ Airflow	997	3,430	
Hood #2	(1)	3.35	---	N/D	w/ Airflow	992	3,323	
Hood #3	54" x 3 3/4"	1.41	---	N/D	w/ Airflow	1,048	1,478	
							8,231	
Dishwasher								
IN	10" x 6"	0.42"	---	N/D	-0.31"	764	321	
OUT	10" x 6"	0.42"	---	N/D	-0.20"	596	250	
							571	
MUA	30" x 14"	2.92	1,644	4,800	+0.027"	152	444	
Finish Room 134								
Spray Booth	48" x 44"	14.67	109	1,600	w/ Velgrid	154	2,259	
GMU-1	22" x 10"	1.53	941	1,440	+0.003"	0	0	

REMARKS

(1) Duct size - 128 3/4" x 3 3/4"

N/A Not Available | **N/D** No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE / BOX REPORT

PROJECT: Old Saybrook Middle School | **DATE:** 7/21/2025

AREA SERVED: RTU-3/ Administration | **TECH:** JF, OG

LOCATION	NO.	SIZE	AK	DESIGN CFM		TEST	FINAL		PRESS. DIFF.		NOTES
				MIN	MAX	CFM	MIN	MAX	MIN	MAX	
VAV-1		8"									
Corridor 323	1	6" x 6"	FH	---	100	56					
Disc. 325	2	6" x 6"	FH	---	75	88					
Office 324	3	9" x 9"	FH	---	150	72					
Office 324	4	9" x 9"	FH	---	150	125					
Office 324	5	9" x 9"	FH	---	150	103					
Office 324	6	9" x 9"	FH	---	150	94					
				475	775	538					
VAV-2		8"									
Vice Prin. 329	1	9" x 9"	FH	---	200	85					
Storage 327	2	9" x 9"	FH	---	160	39					
Prin. 326	3	9" x 9"	FH	---	200	96					
				170	560	220					
VAV-3		6"									
Conf. 330	1	9" x 9"	FH	---	200	90					
Conf. 330	2	9" x 9"	FH	---	200	77					
				120	400	167					
VAV-4		4"									
Files 331	1	9" x 9"	FH	100	170	142					
VAV-5		6"									
Conf. 332	1	9" x 9"	FH	---	200	104					
Conf. 332	2	9" x 9"	FH	---	200	97					
				200	400	201					
VAV-6		11" x 8"									
Fac. 333	1	9" x 9"	FH	---	280	154					
Fac. 333	2	9" x 9"	FH	---	280	142					
Fac. L. 334	3	9" x 9"	FH	---	280	149					
Fac. L. 334	4	9" x 9"	FH	340	280	151					
					1,120	596					

REMARKS

N/A Not Available | **N/D** No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE / BOX REPORT

PROJECT: Old Saybrook Middle School | **DATE:** 7/21/2025

AREA SERVED: RTU-3/ Administration Continued | **TECH:** JF, OG

LOCATION	NO.	SIZE	AK	DESIGN CFM		TEST	FINAL		PRESS. DIFF.		NOTES
				MIN	MAX	CFM	MIN	MAX	MIN	MAX	
VAV-7		8"									
Nurse 335	1	9" x 9"	FH	---	200	158					
Exam 336	2	6" x 6"	FH	---	90	44					
Nurse 335	3	9" x 9"	FH	---	200	152					
				150	490	354					
VAV-8		11" x 8"									
Comp. 345	1	9" x 9"	FH	---	175	39					
Comp. 345	2	9" x 9"	FH	---	175	36					
Comp. 345	3	9" x 9"	FH	---	175	41					
Comp. 345	4	9" x 9"	FH	---	175	36					
Comp. 345	5	9" x 9"	FH	---	175	38					
Comp. 345	6	9" x 9"	FH	---	175	36					
				600	1,050	226					
VAV-9		8"									
Speech 341	1	6" x 6"	FH	---	110	45					
Soc. 340	2	6" x 6"	FH	---	75	50					
Psych 339	3	6" x 6"	FH	---	75	44					
Stor. 338	4	6" x 6"	FH	---	50	49					
Com. Stor. 345A	5	6" x 6"	FH	---	50	56					
EF Stor. 342	6	6" x 6"	FH	---	100	43					
EF Stor. 342	7	6" x 6"	FH	---	100	46					
				320	560	333					
VAV-10		8"									
P. Stor. 322	1	6" x 6"	FH	---	100	76					
P. Stor. 322	2	6" x 6"	FH	---	100	161					(2)
Men 321	3	6" x 6"	FH	---	80	126					
Women 320	4	6" x 6"	FH	---	80	76					(1)
				260	360	439					

REMARKS

(1) Summation of distribution does not match schedule

(2) Calculated based on VPT

N/A Not Available | **N/D** No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE / BOX REPORT

PROJECT: Old Saybrook Middle School | **DATE:** 7/21/2025

AREA SERVED: RTU-3/ Administration Continued | **TECH:** JF, OG

LOCATION	NO.	SIZE	AK	DESIGN CFM		TEST	FINAL		PRESS. DIFF.		NOTES
				MIN	MAX	CFM	MIN	MAX	MIN	MAX	
VAV-11		20" x 8"									
Bond 307	1	9" x 9"	FH	---	160	92					
Bond 307	2	9" x 9"	FH	---	160	115					
Office 304	3	6" x 6"	FH	---	120	65					
Chorus 301	4	9" x 9"	FH	---	135	74					
Chorus 301	5	9" x 9"	FH	---	135	109					
Chorus 301	6	9" x 9"	FH	---	135	85					
Chorus 301	7	9" x 9"	FH	---	135	81					
Chorus 301	8	9" x 9"	FH	---	135	94					
Chorus 301	9	9" x 9"	FH	---	135	65					
Prac. 306	10	6" x 6"	FH	---	50	34					
Prac. 308	11	6" x 6"	FH	---	50	50					
Ensemble 305	12	6" x 6"	FH	---	100	52					
Band 307	13	9" x 9"	FH	---	160	101					
Band 307	14	9" x 9"	FH	---	160	92					
Band 307	15	9" x 9"	FH	---	160	101					
Band 307	16	9" x 9"	FH	---	160	94					
				1200	2,090	1,304					

REMARKS

N/A Not Available | **N/D** No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE / BOX REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/21/2025

AREA SERVED: RTU-3/ Administration | **TECH:** JF, OG

LOCATION	NO.	SIZE	AK	DESIGN			TEST 1		FINAL			DP		NOTES
				MIN	FPM	CFM	FPM	CFM	MIN	FPM	CFM	MIN	MAX	
VAV-12														
Library 311	1	10" x 10"	0.29	---	517	150	80	23						
Library 311	2	10" x 10"	0.29	---	517	150	80	23						
Library 311	3	10" x 10"	0.29	---	517	150	120	35						
Library 311	4	10" x 10"	0.29	---	517	150	135	39						
Library 311	5	10" x 10"	0.29	---	517	150	125	36						
Library 311	6	10" x 10"	0.29	---	517	150	75	22						
Library 311	7	10" x 10"	0.29	---	517	150	85	25						
Library 311	8	10" x 10"	0.29	---	517	150	135	39						
Library 311	9	10" x 10"	0.29	---	517	150	125	36						
Library 311	10	10" x 10"	0.29	---	517	150	110	32						
Library 311	11	10" x 10"	0.29	---	517	150	130	38						
Library 311	12	10" x 10"	0.29	---	517	150	125	36						
Library 311	13	10" x 10"	0.29	---	517	150	125	36						
AV Equip 313	14	6" x 6"	FH	---	---	100	---	21						
Class 312	15	9" x 9"	FH	---	---	200	---	30						
Class 312	16	9" x 9"	FH	---	---	200	---	34						
				1800		2,450		505						

REMARKS

NA Not Available | **ND** No Design | **DD** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/14/2025

SYSTEM / AREA: RTU-1/ Cafeteria | **TECH:** JF

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
RTU-1/ Supply										
Off.	1	6"x 6"	FH	---	80	---	66			
Café 120	2	12"x 12"	FH	---	350	---	280			
Café 120	3	12"x 12"	FH	---	350	---	200			
Café 120	4	12"x 12"	FH	---	350	---	250			
Café 120	5	12"x 12"	FH	---	350	---	261			
Café 120	6	12"x 12"	FH	---	350	---	235			
Café 120	7	12"x 12"	FH	---	350	---	310			
Café 120	8	12"x 12"	FH	---	350	---	282			
Café 120	9	12"x 12"	FH	---	350	---	275			
Café 120	10	12"x 12"	FH	---	350	---	250			
Café 120	11	12"x 12"	FH	---	350	---	320			
Café 120	12	12"x 12"	FH	---	350	---	283			
Café 120	13	12"x 12"	FH	---	350	---	269			
Café 120	14	12"x 12"	FH	---	350	---	345			
Café 120	15	12"x 12"	FH	---	350	---	242			
Café 120	16	12"x 12"	FH	---	350	---	245			
T&G 151	17	12"x 12"	FH	---	250	---	230			
T&G 151	18	12"x 12"	FH	---	250	---	275			
Total					5,830		4,618			
Return							4,418			(1)
Minimum OA							200			(3)
RTU-2										
Auditorium	R1	2(46"x 30)	14.38	209	3,000	216	3,106			
Stage	R2	36"x 18"	3.375	444	1,500	527	1,779			
Auditorium	R3	2(46"x 30")	14.38	209	3,000	258	3,710			
Stage	R4	36"x 18"	3.375	444	1,500	692	2,336			
Return Total					9,000		10,931			
Minimum OA					3,000		427			(3)
RTU-2 Supply Total					12,000		11,358			(2)

REMARKS

(1) Duct not accessible, calculated
(2) Calculated. No accessible location for total
(3) See VPT sheet

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/16/2025

SYSTEM / AREA: RTU-1 "New"/ Cafeteria Addition | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
RTU-1 "New"										
Supply										
Café Add. 150	1	12" x 12"	FH	---	230	---	241			
Café Add. 150	2	12" x 12"	FH	---	230	---	274			
Café Add. 150	3	12" x 12"	FH	---	230	---	339			
Café Add. 150	4	12" x 12"	FH	---	230	---	318			
Café Add. 150	5	12" x 12"	FH	---	230	---	484			
Café Add. 150	6	12" x 12"	FH	---	230	---	508			
Café Add. 150	7	12" x 12"	FH	---	230	---	311			
Café Add. 150	8	12" x 12"	FH	---	230	---	359			
Café Add. 150	9	12" x 12"	FH	---	230	---	434			
Café Add. 150	10	12" x 12" LD	FH	---	110	---	184			
Café Add. 150	11	12" x 12" LD	FH	---	110	---	114			
Café Add. 150	12	12" x 12" LD	FH	---	110	---	178			
Café Add. 150	13	12" x 12" LD	FH	---	110	---	145			
Café Add. 150	14	12" x 12" LD	FH	---	110	---	181			
Café Add. 150	15	12" x 12" LD	FH	---	110	---	181			
Café Add. 150	16	12" x 12" LD	FH	---	110	---	186			
Café Add. 150	17	12" x 12" LD	FH	---	110	---	138			
					2950		4575			
Return										
Café Add. 150	R1	20" x 20"	FH	---	1,000	---	1,174			
Café Add. 150	R2	20" x 20"	FH	---	1,000	---	1,067			
Café Add. 150	R3	20" x 20"	FH	---	1,000	---	711			
					3,000		2,952			
Minimum OA					300		610			(1)
REF-9										
Café Add. 150	E1	12" x 12"	FH	---	320	---	165			
T&G 151	E2	12" x 12"	FH	---	255	---	214			
							379			

REMARKS

(1) See VPT sheet

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/15/2025

SYSTEM / AREA: AHU-1, 1A, Band Room | **TECH:** JF

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
AHU-1 Supply										
Band	A-1	2414	FH	---	N/L	---	686			
Band	A-2	2414	FH	---	N/L	---	695			
Band	A-3	2414	FH	---	N/L	---	744			
Off.	A-4	2412	FH	---	N/L	---	489			
Off.	A-5	10" x 10"	FH	---	N/L	---	225			
Off.	A-6	10" x 10"	FH	---	N/L	---	259			
							3098			
AHU-1 Return										
Band	AR-1	20" x 20"	FH	---	N/L	---	1973			
Off.	AR-2	12" x 12"	FH	---	N/L	---	330			
Off.	AR-3	10" x 10"	FH	---	N/L	---	153			
Off.	AR-4	10" x 10"	FH	---	N/L	---	168			
							2624			
Minimum OA							79			(2)
AHU-1A										
Band	B-1	2414	FH	---	N/L	---	503			
Band	B-2	2414	FH	---	N/L	---	550			
Home Econ 143	B-3	2414	FH	---	N/L	---	322			(1)
IA	B-4	10" x 10"	FH	---	N/L	---	140			
							1515			
Return										
Bond	BR-1	20" x 20"	FH	---	N/L	---	1583			
143	BR-2	12" x 12"	FH	---	N/L	---	543			
							2126			
Existing EXH N/L										
Bond	E1	24" x 24"	FH	---	N/L	---	0			
REF-1										
IA 133	E1	24" x 14"	FH	---	1600	---	1750			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/15/2025

SYSTEM / AREA: AHU-1, 1A, Band Room Continued | **TECH:** JF

				DESIGN		TEST		FINAL		
LOCATION	NO.	SIZE	A K	FPM	CFM	FPM	CFM	FPM	CFM	NOTES
Finish 134										
Spray Booth	E1	48" x 44"	14.67	109	1600	154	2259			
REF-4										
Finish 134	E1	8" x 8"	0.33	545	180	745	246			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: AHU-5/ Gymnasium | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
AHU-5 Supply										
Gym	1	72" x 24"	FH	---	9200		6692			(1)
Boys Locker	2	24" x 10"	1.2	500	600	480	576			
Boys Locker	3	24" x 10"	FH	---	600		373			
Girls Locker	4	24" x 10"	FH	---	600		422			
	5	24" x 10"	FH	---	900	405	486			
Gym	6	84" x 20"	8.4	---	N/D	390	3276			
							11825			(2)

REMARKS

(1) See VPT sheet

(2) 100% OA

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: FCU's | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN FPM	DESIGN CFM	TEST FPM	TEST CFM	FINAL FPM	FINAL CFM	NOTES
FCU-D Supply										
Home Encon 143	1	9" x 9"	FH	---	200	---	0			
Home Encon 143	2	9" x 9"	FH	---	200	---	0			
Home Encon 143	3	9" x 9"	FH	---	200	---	0			
Home Encon 143	4	9" x 9"	FH	---	200	---	0			
					800					
Return	R1	24" x 24"	FH	---	800	---	0			
FCU-D Supply										
Art 146	1	9" x 9"	FH	---	N/L	---	0			
Art 146	2	9" x 9"	FH	---	N/L	---	0			
Art 146	3	9" x 9"	FH	---	N/L	---	0			
Art 146	4	9" x 9"	FH	---	N/L	---	0			
Stor. 147	5	2408	FH	---	N/L	---	0			
FCU-B										
Mens 105	1	8" x 6"	0.33	455	150	0	0			
Womens 106	2	8" x 6"	0.33	455	150	0	0			
Storage	3	8" x 6"	FH	---	150	---	0			
FCU-D Supply										
Science 207	1	9" x 9"	FH	---	200	---	59			
Science 207	2	9" x 9"	FH	---	200	---	66			
Science 207	3	9" x 9"	FH	---	200	---	44			
Science 207	4	9" x 9"	FH	---	200	---	50			
					800		219			
Return	R1	24" x 24"	FH	---	800	---	133			
FCU-B Supply										
Girls 213	1	10" x 10"	0.69	507	350	0	0			
Cust. 210	2	6" x 6"	FH	507	100	0	0			
Women 212	3	6" x 6"	FH	507	50	0	0			
					500		0			
Return	R1	24" x 24"	FH	---	500	---	0			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
FCU-B										
Guidance 218	1	8" x 8"	FH	---	175	---	0			
Mens 215	2	6" x 6"	FH	---	50	---	0			
Boys 216	3	10" x 10"	0.69	507	350	0	0			
					575					
FCU-E Supply										
Science 219	1	9" x 9"	FH	---	200	---	105			
Science 219	2	9" x 9"	FH	---	200	---	101			
Science 219	3	9" x 9"	FH	---	200	---	103			
Science 219	4	9" x 9"	FH	---	200	---	90			
					800		399			
Return	R1	18" x 18"	FH	---	800	---	149			
FCU-5 Supply										
Science 219	1	9" x 9"	FH	---	175	---	167			
Science 219	2	9" x 9"	FH	---	175	---	181			
					350		348			
Return	R1	12" x 12"	FH	---	350	---	291			
FCU-E Supply										
Science 227	1	9" x 9"	FH	---	200	---	117			
Science 227	2	9" x 9"	FH	---	200	---	130			
Science 227	3	9" x 9"	FH	---	200	---	124			
Science 227	4	9" x 9"	FH	---	200	---	139			
					800		510			
Return	R1	18" x 18"	FH	---	800	---	159			
FCU-5 Supply										
	1	9" x 9"	FH	---	175	---	203			
	2	9" x 9"	FH	---	175	---	293			
					350		496			
Return	R1	12" x 12"	FH	---	350	---	496			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
FCU-4 Supply										
Prep Rm 226	1	9" x 9"	FH	---	250	---	248			
Prep Rm 226	2	6" x 6"	FH	---	100	---	76			
					350		324			
Return	R1	12" x 12"	FH	---	350	---	193			
LEF-1										
Prep 226	E1	12" x 12"	FH	---	350	---	294			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/16/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
FCU-A										
Boys 426	1	10" x 6"	0.42	476	200	0	0			
Girls 423	2	10" x 6"	0.42	476	200	0	0			
Return	R1	24" x 24"	FH	---	400	---	0			
FCU-A Supply										
Girls 509	1	8" x 6"	0.33	455	150	0	0			
Women 510	2	6" x 6"	FH	---	50	---	0			
Men 514	3	6" x 6"	FH	---	50	---	0			
Boys 513	4	8" x 6"	0.33	455	150	0	0			
					400		0			
FCU-E Supply										
Art 516	1	9" x 9"	FH	---	300	---	52			
Art 516	2	9" x 9"	FH	---	300	---	65			
Art 516	3	9" x 9"	FH	---	300	---	57			
Art 516	4	9" x 9"	FH	---	300	---	57			
Stor. 517	5	9" x 9"	FH	---	N/L	---	35			
							266			
Return	R1	24" x 16"	FH	---	N/D	---	170			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
REF-2										
Home Econ 143	E1	12" x 12"	FH	---	500	---	543			
Art 146	E2	12" x 12"	FH	---	500	---	420			
					1000		963			
REF-3										
Kiln 148	E1	12" x 12"	FH	---	150	---	0			
REF-5										
Men 106	E1	8" x 8"	FH	---	225	---	96			
Men 105	E2	8" x 8"	FH	---	225	---	95			
					500		191			
REF-6										
Food Storage 124	E1	9" x 9"	FH	---	200	---	0			
REF-7										
Toilet 123	E1	6" x 6"	FH	---	75	---	0			
Locker 121	E2	8" x 8"	FH	---	175	---	0			
					250		0			
REF-8										
Dish 119	E1	8" x 8"	FH	---	250	---	115			
REF-10										
Conf. 330	E1	12" x 12"	FH	---	320	---	0			
REF-11										
Conf. 332	E1	12" x 12"	FH	---	320	---	0			
REF-12										
FAC Lounge 334	E1	12" x 12"	FH	---	450	---	70			
REF-13										
Lav 337	E1	6" x 6"	FH	---	100	---	0			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN FPM	DESIGN CFM	TEST FPM	TEST CFM	FINAL FPM	FINAL CFM	NOTES
REF-14										
Elec. 316	E1	8" x 8"	FH	---	160	---	0			
REF-15										
Class 343	E1	18" x 6"	0.75	---	600	807	605			
Class 344	E2	18" x 6"	0.75	---	600	1212	909			
Class 346	E3	18" x 6"	0.75	---	600	942	707			
					1800	2961	2221			
REF-16										
TLT & Gift 102	E1	18" x 6"	0.75	---	600	765	574			
201	E2	10" x 8"	FH	---	250	---	214			
Lang. 203	E3	18" x 6"	0.75	---	600	645	484			
Math 205	E4	18" x 6"	0.75	---	600	690	518			
Science 207	E5	18" x 6"	FH	---	600	---	274			
					2650		2064			
REF-17										
Spec. Ed 103	E1	18" x 6"	0.75	---	600	728	546			
LRC 202	E2	10" x 8"	FH	---	250	---	341			
Social 204	E3	18" x 6"	0.75	---	600	1233	925			
Read 204	E4	18" x 6"	0.75	---	600	714	536			
English 208	E5	18" x 6"	0.75	---	600	807	605			
					2650		2953			
REF-18										
Boys 216	E1	10" x 10"	FH	---	375	---	0			
Men 215	E2	6" x 6"	FH	---	75	---	0			
					450		0			
REF-19										
Cust. 210	E1	6" x 6"	FH	---	100	---	44			
Girls 213	E2	10" x 10"	0.67	---	375	515	358			
					475		402			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN FPM	DESIGN CFM	TEST FPM	TEST CFM	FINAL FPM	FINAL CFM	NOTES
REF-20										
English 225	E1	18" x 6"	0.75	---	600	208	156			
Read 223	E2	18" x 6"	0.75	---	600	216	162			
Social 221	E3	18" x 6"	0.75	---	600	127	95			
					1800		413			
REF-21										
F Lang. 224	E1	18" x 6"	0.75	---	600	952	714			
Spec. Ed. 222	E2	18" x 6"	0.75	---	600	922	692			
Spec. Ed. 222	E3	18" x 6"	0.75	---	600	537	403			
					1800		1809			
REF-22										(2)
Science 219	E1	18" x 10"	FH	---	600	---	445			
Science 227	E2	18" x 10"	FH	---	600	---	398			
					1200		843			
REF-23										
Social 231	E1	18" x 6"	0.75	---	600	552	414			
Read 233	E2	18" x 6"	0.75	---	600	497	373			
Engl. 235	E3	18" x 6"	0.75	---	600	610	456			
					1800		1243			
REF-24										
Math 230	E1	18" x 6"	0.75	---	600	808	606			
Spec. Ed 232	E2	18" x 6"	0.75	---	600	1207	905			
F. Lang.321	E3	18" x 6"	0.75	---	600	953	715			
					1800		2226			
EF-4										(1)
Greenhouse	E1	14" x 14"	FH	---	500	---	0			

REMARKS

(1) Formally REF-25

(2) New fan EF-6

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 5/17/2025

SYSTEM / AREA: Existing/ Varuous | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
REF-26										
Class 403	E1	18" x 6"	0.75	---	600	382	287			
Class 428	E2	18" x 6"	0.75	---	600	568	426			
Class 504	E3	18" x 6"	0.75	---	600	906	680			
Class 504	E4	18" x 6"	0.75	---	600	831	587			
Class 506	E5	18" x 6"	0.75	---	600	615	461			
					3000		2441			
REF-27										
LRC 424	E1	12" x 6"	0.50	---	300	310	155			
Class 429	E2	18" x 6"	0.75	---	600	585	439			
Class 503	E3	18" x 6"	0.75	---	600	1422	1067			
Class 505	E4	18" x 6"	0.75	---	600	530	398			
					2100		2059			
REF-28										
Class 507	E1	18" x 6"	0.75	---	600	627	470			
Class 515	E2	18" x 6"	0.75	---	600	1422	1067			
Art 516	E3	18" x 10"	FH	---	300	---	550			
Music 518	E4	18" x 6"	0.75	---	600	673	505			
					2100		2592			
REF-29										
Girls 509	E1	10" x 6"	0.42	---	225	290	122			
Boys 513	E2	10" x 6"	0.42	---	225	245	103			
Women 510	E3	6" x 6"	FH	---	75	---	36			
Men 514	E4	6" x 6"	FH	---	75	---	23			
Elec. R 511	E5	6" x 6"	FH	---	75	---	21			
					675		305			
REF-30										
Girls 423	E1	10" x 6"	0.42	536	225	630	265			
Boys 426	E2	10" x 6"	0.42	536	225	700	294			
Cust. 427	E3	8" x 6"	FH	---	75	---	48			
					525		607			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/17/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
REF-31										
Girls L 408	E1	16" x 16"	FH	---	500	---	0			
REF-32										
Boys L 417	E1	16" x 16"	FH	---	500	---	575			
REF-39										
Men 321	E1	6" x 6"	FH	---	150	---	148			o
Women 320	E2	6" x 6"	FH	---	150	---	150			
					300		298			
EF-2										
Class 356	E1	12" x 12"	FH	---	360	---	321			
Comp Lab 357	E2	12" x 12"	FH	---	300	---	300			
Faculty 358	E3	36" x 12"	FH	---	300	---	235			
8th G Cl 359	E4	14" x 14"	FH	---	250	---	296			
8th G Cl 359	E5	30" x 12"	FH	---	300	---	324			
8th G Cl 360	E6	36" x 12"	FH	---	300	---	245			
8th G Cl 360	E7	36" x 12"	FH	---	300	---	255			
8th G Cl 360	E8	10" x 10"	FH	---	300	---	247			
					2410		2223			
EF-3										
G Lav 361	E1	12" x 12"	FH	---	250	---	232			
G Lav 361	E2	12" x 12"	FH	---	325	---	205			
B Lav 363	E3	12" x 12"	FH	---	250	---	245			
B Lav 363	E4	12" x 12"	FH	---	325	---	198			
EVS	E5	6" x 6"	0.18	---	75	105	19			
					1225		899			
EF-5										
Stor. 364	E1	6" x 6"	FH	---	125	---	0			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

AIR DEVICE REPORT

PROJECT: Old Saybrook Middle School, Old Saybrook CT | **DATE:** 7/18/2025

SYSTEM / AREA: Existing/ Various | **TECH:** JF, OG

LOCATION	NO.	SIZE	A K	DESIGN		TEST		FINAL		NOTES
				FPM	CFM	FPM	CFM	FPM	CFM	
Existing EF										
Girls Locker	E1	18" x 12"	FH	---	425	---	300			
Girls Locker	E2	18" x 12"	FH	---	425	---	0			
Office 408	E3	12" x 12"	FH	---	100	---	151			
TLT 409	E4	12" x 12"	FH	---	250	---	74			
					1200		525			
Existing EF										
Shower 420		12" x 12"	FH	---	350	---	0			
Shower 420		12" x 12"	FH	---	350	---	0			
Locker 417		12" x 12"	FH	---	150	---	0			
Office 419		12" x 12"	FH	---	100	---	0			
TLT 418		12" x 12"	FH	---	250	---	0			
					1200		0			

REMARKS

N/A Not Available | N/D No Design | **D/D** Direct Drive | **N/R** No Requirement

Old Saybrook Middle School

From General Data						TAB MEASUREMENTS						
Location	Room Number	Room Type	Terminal Equipment	AHU/RTU	EXHAUST FAN	TAB Measured SA	TAB MEASURED RETURN	TAB MEASURED EXHAUST	Calc. OA CFM @ Min.	Meas. unit OA %	BAS Damper Command	Notes
			VAV/FCU/UV			(cfm)	(cfm)	(cfm)	(OA cfm)	(OA cfm)	(pos. %)	
Area 1	100	VESTIBULE	---	---	---	---	---	---	---	---	---	
Area 1	101	LOBBY	UH	---	---	---	---	---	---	---	---	
Area 1	102	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	
Area 1	102	TALENTED AND GIFTED	---	---	REF-16	---	---	574	---	---	---	FCU is heating only, no ducted OA
Area 1	104	SPECIAL ED	---	RTU-1	REF-17	---	---	546	---	---	---	
Area 1	105	MEN	FCU-B	---	REF-5	0	0	101	---	---	---	FCU is heating only, no ducted OA
Area 1	106	WOMEN	FCU-B	---	REF-5	0	0	96	---	---	---	FCU is heating only, no ducted OA
Area 1	107	CORRIDOR	(2) FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no ducted OA
Area 1	108	STAGE	---	RTU-2	---	10931	4115	---	---	3.75	0	No access to supply total for both spaces
Area 1	109	AUDITORIUM	---	RTU-2	---	---	6816	---	---	3.75	0	No access to supply total for both spaces
Area 1	110	PROJECTION ROOM	---	---	CEF-1	---	---	0	---	---	---	
Area 1	111	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no ducted OA, not on BMS
Area 1	113	STUDENT STORE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	118	KITCHEN	FCU-B	MAU-1	KEF-1	444	---	8231	444	100%	100%	
Area 1	119	DISHWASHER	---	---	REF-8	---	---	686	---	---	---	Includes pot sink area
Area 1	120	CAFETERIA	---	"E" RTU-1	---	4047	4418 (1)	---	174	4.3	---	Economizer control is stand alone
Area 1	121	LOCKER	---	---	REF-7	---	---	0	---	---	---	
Area 1	123	TOILETS	---	---	REF-7	---	---	0	---	---	---	
Area 1	123	OFFICE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	124	FOOD STORAGE	---	---	REF-6	---	---	0	---	---	---	
Area 1	125	CUST	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	126	ELEC	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	127	RECIVING	UH	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	129	MECH	---	---	EF-NL	---	---	0	---	---	---	
Area 1	131	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no ducted OA
Area 1	134	FINISH	---	---	REF-4, SprB	---	---	246	---	---	---	Spraybooth exhaust is switch operated
Area 1	140	WASH	---	---	---	---	---	---	---	---	---	Space is diffent. No mech ventilation
Area 1	143	HOME ECONOMICS	FCU-D	---	REF-2	0	0	543	---	---	---	FCU is heating only, no ducted OA
Area 1	144	CLOSET	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	145	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no OA
Area 1	146	ART	FCU-D	---	REF-2	0	0	420	---	---	---	FCU is heating only, no OA
Area 1	147	STO	FCU-D	---	---	0	---	---	---	---	---	FCU is heating only, no ducted OA
Area 1	148	KILN	---	---	REF-3	---	---	0	---	---	---	
Area 1	150	CAFETERIA ADDITION	---	New RTU-1	REF-9	4575	2952	165	608	13.3	---	Economizer control is stand alone
Area 1	151	TALENTED AND GIFTED	---	RTU-1	REF-9	505	---	214	22	4.3	---	Economizer control is stand alone
Area 1	152	DISPLAY	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	105A	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 1	106A	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 2	200	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no ducted OA
Area 2	201	L.R.C	---	---	REF-16	---	---	214	---	---	---	
Area 2	202	L.R.C	---	---	REF-17	---	---	341	---	---	---	
Area 2	203	FOREIGN LANGUAGE	---	---	REF-16	---	---	484	---	---	---	
Area 2	204	SOCIAL STUDIES	---	---	REF-17	---	---	925	---	---	---	
Area 2	205	MATH	---	---	REF-16	---	---	518	---	---	---	
Area 2	206	READING	---	---	REF-17	---	---	536	---	---	---	

Old Saybrook Middle School

From General Data						TAB MEASUREMENTS						
Location	Room Number	Room Type	Terminal Equipment	AHU/RTU	EXHAUST FAN	TAB Measured SA	TAB MEASURED RETURN	TAB MEASURED EXHAUST	Calc. OA CFM @ Min.	Meas. unit OA %	BAS Damper Command	Notes
			VAV/FCU/UV			(cfm)	(cfm)	(cfm)	(OA cfm)	(OA cfm)	(pos. %)	
Area 2	207	SCIENCE	FCU-D	---	REF-16	219	133	274	---	---	---	No ducted OA
Area 2	208	ENGLISH	---	---	REF-17	---	---	605	---	---	---	
Area 2	208	ENGLISH	---	---	---	---	---	---	---	---	---	
Area 2	210	CUST.	FCU-B	---	REF-19	0	---	45	---	---	---	No ducted OA
Area 2	211	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 2	212	WOMEN	FCU-B	---	REF-19	0	---	37	---	---	---	
Area 2	213	GIRLS	FCU-B	---	REF-19	0	---	358	---	---	---	
Area 2	214	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 2	215	MENS	FCU-B	---	REF-18	0	---	0	---	---	---	
Area 2	216	BOYS	FCU-B	---	REF-18	0	---	0	---	---	---	
Area 2	217	CORRIDOR	(2) FCU-B	---	---	540	306	---	---	---	---	FCU is heating only, no ducted OA, not on BMS
Area 2	218	GUIDANCE	FCU-B	---	---	0	---	---	---	---	---	
Area 2	219	7TH GR SCIENCE	FCU-E, 5	---	EF-6, LEF-2	747	440	445	---	---	---	No ducted OA
Area 2	220	MATH	---	---	REF-21	---	---	403	---	---	---	
Area 2	221	SOCIAL STUDIES	---	---	REF-20	---	---	95	---	---	---	
Area 2	222	SPECIAL ED	---	---	REF-21	---	---	692	---	---	---	
Area 2	223	READING	---	---	REF-20	---	---	162	---	---	---	
Area 2	224	FOREIGN LANGUAGE	---	---	REF-21	---	---	714	---	---	---	
Area 2	225	ENGLISH	---	---	REF-20	---	---	156	---	---	---	
Area 2	226	PREP ROOM	FCU-4	---	LEF-1	324	193	294	---	---	---	No ducted OA
Area 2	227	8th GRADE SCIENCE	FCU-E, G	---	EF-6, LEF-1	1006	598	1001	---	---	---	No ducted OA
Area 2	230	MATH	---	---	REF-24	---	---	606	---	---	---	
Area 2	231	SOCIAL STUDIES	---	---	REF-23	---	---	414	---	---	---	
Area 2	232	SPECIAL ED	---	---	REF-24	---	---	905	---	---	---	
Area 2	233	READING	---	---	REF-23	---	---	373	---	---	---	
Area 2	234	FOREIGN LANGUAGE	---	---	REF-24	---	---	715	---	---	---	
Area 2	235	ENGLISH	---	---	REF-23	---	---	456	---	---	---	
Area 2	236	GREENHOUSE	UH-6	---	EF-4	---	---	0	---	---	---	
Area 3	300	CORRIDOR	FCU-3	---	---	0	---	0	---	---	---	
Area 3	301	CHORUS	VAV-11	RTU-3	---	508	---	---	---	18.70%	5%	
Area 3	302	STO	---	---	---	---	---	---	---	---	---	
Area 3	303	STO	---	---	---	---	---	---	---	---	---	
Area 3	304	OFFICE	VAV-11	RTU-3	---	65	---	---	12	18.70%	5%	
Area 3	305	ENSEMBLE	VAV-11	RTU-3	---	52	---	---	10	18.70%	5%	
Area 3	306	PRAC	VAV-11	RTU-3	---	34	---	---	6	18.70%	5%	
Area 3	307	BAND	VAV-11	RTU-3	---	595	---	---	111	18.70%	5%	
Area 3	308	PRAC	VAV-11	RTU-3	---	50	---	---	9	18.70%	5%	
Area 3	309	INSTRUMENT RM	VAV-10	RTU-3	---	76	---	---	14	18.70%	5%	
Area 3	310	STORAGE	---	---	---	---	---	---	---	---	---	
Area 3	311	LIBRARY	VAV-12	RTU-3	---	428	---	---	80	18.70%	5%	
Area 3	312	CLASSROOM	VAV-12	RTU-3	---	64	---	---	12	18.70%	5%	
Area 3	313	AV EQUIPMENT	VAV-12	RTU-3	---	21	---	---	4	18.70%	5%	
Area 3	314	MECHANICAL	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 3	315	MECHANICAL	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 3	316	ELECTRICAL	---	---	REF-14	---	---	0	---	---	---	

Old Saybrook Middle School

From General Data						TAB MEASUREMENTS						
Location	Room Number	Room Type	Terminal Equipment	AHU/RTU	EXHAUST FAN	TAB Measured SA	TAB MEASURED RETURN	TAB MEASURED EXHAUST	Calc. OA CFM @ Min.	Meas. unit OA %	BAS Damper Command	Notes
			VAV/FCU/UV			(cfm)	(cfm)	(cfm)	(OA cfm)	(OA cfm)	(pos. %)	
Area 3	317	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	
Area 3	318	CORRIDOR	---	---	---	---	---	---	---	---	---	
Area 3	319	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	
Area 3	320	WOMEN	VAV-10	---	REF-39	126	---	148	24	18.70%	5%	
Area 3	321	MEN	VAV-10	---	REF-39	76	---	115	14	18.70%	5%	
Area 3	322	PAPER/ BOOKSTG.	VAV-10	RTU-3	---	161	---	---	30	18.70%	5%	
Area 3	323	CORRIDOR	VAV-1	RTU-3	---	56	---	---	10	18.70%	5%	
Area 3	324	OFFICE	VAV-1	RTU-3	---	394	---	---	74	18.70%	5%	
Area 3	325	DICIPLINE	VAV-1	RTU-3	---	88	---	---	16	18.70%	5%	
Area 3	326	PRINICIPAL	VAV-2	RTU-3	---	96	---	---	18	18.70%	5%	
Area 3	327	STORAGE	VAV-2	RTU-3	---	39	---	---	7	18.70%	5%	
Area 3	328	VAULT	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 3	329	VICE PRINCIPAL	VAV-2	RTU-3	---	85	---	---	16	18.70%	5%	
Area 3	330	CONFERENCE	VAV-3	RTU-3	REF-10	167	---	0	31	18.70%	5%	
Area 3	331	FILES	VAV-4	RTU-3	---	142	---	---	27	18.70%	5%	
Area 3	332	CONFERENCE	VAV-5	RTU-3	REF-11	201	---	0	38	18.70%	5%	
Area 3	333	FACULTY ROOM	VAV-6	RTU-3	---	296	---	---	55	18.70%	5%	
Area 3	334	FACULTY LOUNGE	VAV-6	RTU-3	REF-12	300	---	70	56	18.70%	5%	
Area 3	335	NURSE	VAV-7	RTU-3	---	310	---	---	58	18.70%	5%	
Area 3	336	EXAM	VAV-7	RTU-3	---	44	---	---	8	18.70%	5%	
Area 3	337	LAV	---	---	REF-13	---	---	0	---	---	---	
Area 3	338	STORAGE	VAV-9	RTU-3	---	49	---	---	9	18.70%	5%	
Area 3	339	PSYCH	VAV-9	RTU-3	---	44	---	---	8	18.70%	5%	
Area 3	340	SOC	VAV-9	RTU-3	---	50	---	---	9	18.70%	5%	
Area 3	341	SPEECH	VAV-9	RTU-3	---	45	---	---	8	18.70%	5%	
Area 3	342	EQUIPMENT STG.	VAV-9	RTU-3	---	89	---	---	17	18.70%	5%	
Area 3	343	CLASSROOM	---	---	REF-15	---	---	605	---	---	---	
Area 3	344	CLASSROOM	---	---	REF-15	---	---	909	---	---	---	
Area 3	345	COMPUTER ROOM	VAV-8	RTU-3	---	226	---	---	42	18.70%	5%	
Area 3	346	CLASSROOM	---	---	REF-15	---	---	707	---	---	---	
Area 3	350	CORRIDOR	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 3	351	CORRIDOR	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 3	352	CORRIDOR	FCU-1, 2	---	EF-2	0	0	109	---	---		
Area 3	353	CORRIDOR	CUH	---	---	0	0	---	---	---		CUH is heating only, no OA
Area 3	354	STOR	---	---	EF-1	---	---	12	---	---		
Area 3	355	STORAGE	---	---	EF-1	---	---	33	---	---		
Area 3	356	TITLE 1 CLASS	---	---	EF-2	---	---	321	---	---		
Area 3	357	COMPUTER LAB	---	---		---	---		---	---		
Area 3	358	FACULTY OFFICE	---	---	EF-2	---	---	296	---	---		
Area 3	359	8th GRADE CLASS	---	---	EF-2	---	---	569	---	---		
Area 3	360	8TH GRADE CLASS	---	---	EF-2	---	---	502	---	---		
Area 3	361	GIRLS LAVATORY	FCU-3	---	EF-3	232	---	205	---	---		
Area 3	362	CLOSET	---	---	EF-3	---	---	19	---	---		
Area 3	363	BOYS LAVATORY	FCU-3	---	EF-3	245	---	198	---	---		
Area 3	364	STORAGE	FCU-3	---	EF-5	70	---	0	---	---		

Old Saybrook Middle School

From General Data						TAB MEASUREMENTS						
Location	Room Number	Room Type	Terminal Equipment	AHU/RTU	EXHAUST FAN	TAB Measured SA	TAB MEASURED RETURN	TAB MEASURED EXHAUST	Calc. OA CFM @ Min.	Meas. unit OA %	BAS Damper Command	Notes
			VAV/FCU/UV			(cfm)	(cfm)	(cfm)	(OA cfm)	(OA cfm)	(pos. %)	
Area 3	365	VESTIBULE	CUH-1	---	---	0	0	---	---	---		CUH is heating only, no OA
Area 3	310A	TELEPHONE ROOM	---	---	---	---	---	---	---	---		No mechanical ventilation
Area 3	314 A	PASSAGE	---	---	---	---	---	---	---	---		No mechanical ventilation
Area 3	345A	COMP STO	VAV-9	---	RTU-3	56	---	---	10	18.70%	5%	
Area 4	400	VESTIBULE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	401	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no OA
Area 4	402	CORRIDOR	CUH-1	---	---	0	0	---	---	---	---	CUH is heating only, no OA
Area 4	403	CLASSROOM	---	---	REF-26	---	---	287	---	---	---	
Area 4	404	GYM LOBBY	CUH-2	---	---	---	---	---	---	---	---	CUH is heating only, no OA
Area 4	405	CORRIDOR	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	406	OFFICE	---	---	Exg REF	---	---	151	---	---	---	
Area 4	408	GIRL'S LOCKER	---	AHU-Gym	REF-31, Exg REF	909	---	306	909	100%	100%	
Area 4	409	TOILET	---	---	Exg REF	---	---	74	---	---	---	
Area 4	410	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation (part of Gym)
Area 4	411	GYMNASIUM	---	AHU-Gym	2 N/L	9968	---	17829	0	0	100%	HVAC does not run continuously
Area 4	412	STORAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	413	STORAGE	UH	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	415	MECHANICAL	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	416	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation (part of Gym)
Area 4	417	BOYS LOCKER	---	AHU-Gym	REF-32, Exg REF	949	---	575	949	100%	100%	Exg REF did not run
Area 4	418	TOILET	---	---	Exg REF	---	---	0	---	---	---	Exg REF did not run
Area 4	419	OFFICE	---	---	Exg REF	---	---	0	---	---	---	Exg REF did not run
Area 4	420	CLASSROOM	---	---	Exg REF	---	---	0	---	---	---	Exg REF did not run
Area 4	421	CORRIDOR	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	422	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	423	GIRLS	FCU-A	---	REF-30	0	---	265	---	---	---	FCU is heating only, no OA
Area 4	424	L.R.C	---	---	REF-27	---	---	155	---	---	---	
Area 4	425	PASSAGE	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 4	426	BOYS	FCU-A	---	REF-30	0	---	294	---	---	---	FCU is heating only, no OA
Area 4	427	CUST.	---	---	REF-30	---	---	48	---	---	---	
Area 4	428	CLASSROOM	FCU-A	---	REF-26	---	0	426	---	---	---	Return for FCU serving 423/ 426
Area 4	429	CLASSROOM	---	---	REF-27	---	---	439	---	---	---	
Area 5	502	CLASSROOM	---	---	REF-26	---	---	680	---	---	---	
Area 5	503	CLASSROOM	---	---	REF-27	---	---	1067	---	---	---	
Area 5	504	CLASSROOM	---	---	REF-26	---	---	587	---	---	---	
Area 5	505	CLASSROOM	---	---	REF-27	---	---	398	---	---	---	
Area 5	506	CLASSROOM	---	---	REF-26	---	---	461	---	---	---	
Area 5	507	CLASSROOM	---	---	REF-28	---	---	470	---	---	---	
Area 5	508	CORRIDOR	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 5	509	GIRLS	FCU-A		REF-29	0	---	122	---	---	---	
Area 5	510	WOMEN	FCU-A		REF-29	0	---	36	---	---	---	
Area 5	512	CORRIDOR	---	---	---	---	---	---	---	---	---	No mechanical ventilation
Area 5	513	BOYS	FCU-A	---	REF-29	0	---	103	---	---	---	
Area 5	514	MENS	FCU-A	---	REF-29	0	---	23	---	---	---	
Area 5	515	CLASSROOM	---	---	REF-28	---	---	1067	---	---	---	

Old Saybrook Middle School

From General Data						TAB MEASUREMENTS						
Location	Room Number	Room Type	Terminal Equipment	AHU/RTU	EXHAUST FAN	TAB Measured SA	TAB MEASURED RETURN	TAB MEASURED EXHAUST	Calc. OA CFM @ Min.	Meas. unit OA %	BAS Damper Command	Notes
			VAV/FCU/UV			(cfm)	(cfm)	(cfm)	(OA cfm)	(OA cfm)	(pos. %)	
Area 5	516	ART	FCU-E	---	REF-28	231	170	550	---	---	---	FCU is heating only, no OA
Area 5	517	STO	FCU-E	---	REF-38	35	0	0	---	---	---	FCU is heating only, side wall return is sealed
Area 5	518	MUSIC	---	---	REF-28	---	---	505	---	---	---	
Area 5	520	CORRIDOR	FCU-B	---	---	0	0	---	---	---	---	FCU is heating only, no OA
Area 1	133	IA	---	GMU-1	REF-1, DC-1	0	---	2610	---	---	---	DC-1 is switch operated
Area 1		Band	---	AHU-1, 1A	Exg EXH	3178	3026	0	67	AHU-1/ 2,5	10%	
Area 1		Office "A"	---	AHU-1	---	489	330	---	12	AHU-1A/1.3	10%	
Area 1		Office "B"	---	AHU-1	---	225	153	---	6	2.50%	10%	
Area 1		Office "C"	---	AHU-1	---	259	168	---	6	2.50%	10%	
Area 1	345A	Stor.	VAV-9	RTU-3	---	66	---	---	12	18.70%	5%	

Appendix B

Ventilation Data Calculations

Project Name: OS Middle School HVAC Verifiaction & Evaluation
School Name: OS Middle School
Project Number: P20210255
Scope: HVAC Verification and Evaluation
Data Collection By: TAB Data F&O Data
Date: 6/28/2025 4/14/2025
OUTSIDE AIR VERIFICATION CALCULATION

OS Middle School OUTSIDE AIR VERIFICATION CALCULATION											
ROOM IDENTIFICATION					AIR HAND. EQUIPMENT		CALCULATED VENTILATION REQUIREMENT				VENTILATION DELTA
DRAWING ROOM NUMBER	DRAWING ROOM NAME	ROOM TYPE	AREA	VOLUME	AHU/RTU/MAU	Measured OA	OCCUPANCY DENSITY	PEOPLE OA RATE (RP)	AREA OA CFM RATE (RA)	Vbz	
			(ft^2)	(ft^3)		(cfm)	(ppl/1000ft^2)	(cfm/person)	(cfm/ft^2)	(cfm)	MEAS. - CALC.
100	VESTIBULE	Vestibule	214	1931	-	0	0	15	13	28	-28
101	LOBBY	Library	1712	39376	-	0	17	180	103	283	-283
102	CORRIDOR	Corridor	656	5909	-	0	-	0	39	39	-39
103	SPECIAL EDUCATION	Classroom	689	6890	RTU-1	0	24	250	83	333	-333
105	MEN	Restroom	113	1022	-	0	-	0	0	150	-150
106	WOMEN	Restroom	140	1265	-	0	-	0	0	150	-150
107	CORRIDOR	Corridor	1073	9662	-	0	-	0	64	64	-64
108	STAGE	Stage/ Studio	2056	53463	RTU-2	0	-	70	10	80	-80
109	AUDITORIUM	Auditorium	4235	131285	RTU-2	0	635	3180	254	3434	-3,434
110	PROJECTION ROOM	Office	156	1409	-	0	1	5	9	14	-14
111	CORRIDOR	Corridor	752	6773	-	0	-	0	45	45	-45
113	STUDENT STORE	Office	220	1985	-	0	1	10	13	23	-23
118	KITCHEN	Kitchen	1190	10714	MAU-1	444	83	840	71	911	-467
119	DISHWASHER	Kitchen	234	2110	-	0	16	170	14	184	-184
120	CAFETERIA	Cafeteria	3005	36063	RTU-1	174	301	2258	541	2798	-2,624
121	LOCKER	Locker Room	72	648	-	0	-	0	4	4	-4
123	OFFICE	Restroom	84	672	-	0	-	0	0	50	-50
123	OFFICE	Restroom	84	672	-	0	-	0	0	50	-50
124	FOOD STORAGE	Storage	177	1597	-	0	-	0	21	21	-21
125	CUST	Custodial	55	495	-	0	-	0	0	0	0
126	ELEC	Utility	144	1300	-	0	0	0	0	0	0
127	RECIVING	Storage	253	3795	-	0	-	0	30	30	-30
129	MECH	Utility	126	1138	-	0	0	0	0	0	0
131	CORRIDOR	Corridor	601	5414	-	0	-	0	36	36	-36
134	FINISH	Classroom	150	2250	-	0	5	60	18	78	-78
140	WASH	Utility	77	1155	-	0	0	0	0	0	0
143	HOME ECONOMICS	Classroom	732	7325	-	0	26	260	88	348	-348
144	CLOSET	Utility	34	272	-	0	0	0	0	0	0
145	CORRIDOR	Music/Theater/Dance	680	7480	-	0	24	240	41	281	-281
146	ART	Storage	942	10362	-	0	-	0	113	113	-113
147	STO	Corridor	122	1342	-	0	-	0	7	7	-7
148	KILN	Classroom	52	572	-	0	2	20	6	26	-26
150	CAFETERIA ADDITION	Cafeteria	2124	21243	NEW RTU-1	608	212	1598	382	1980	-1,372
151	TALENTED AND GIFTED	Art Classroom	373	3733	RTU-1	22	7	80	67	147	-125
152	DISPLAY	Cafeteria	556	5565	-	0	56	420	100	520	-520
105A	PASSAGE	Classroom	47	428	-	0	2	20	6	26	-26
106A	PASSAGE	Corridor	39	471	-	0	-	0	2	2	-2
-	BAND	Music/Theater/Dance	2500	22500	AHU-1	67	88	100	150	250	-183
-	BAND	Music/Theater/Dance	2500	22500	AHU-1	12	88	100	150	250	-238
-	BAND	Music/Theater/Dance	2500	22500	AHU-1	6	88	100	150	250	-244
-	BAND	Music/Theater/Dance	2500	22500	AHU-1	6	88	100	150	250	-244
-	BAND	Music/Theater/Dance	2500	22500	AHU-1	12	88	100	150	250	-238

OS Middle School OUTSIDE AIR VERIFICATION CALCULATION

ROOM IDENTIFICATION					AIR HAND. EQUIPMENT		CALCULATED VENTILATION REQUIREMENT				VENTILATION DELTA
DRAWING ROOM NUMBER	DRAWING ROOM NAME	ROOM TYPE	AREA	VOLUME	AHU/RTU/MAU	Measured OA	OCCUPANCY DENSITY	PEOPLE OA RATE (RP)	AREA OA CFM RATE (RA)	Vbz	
			(ft^2)	(ft^3)		(cfm)	(ppl/1000ft^2)	(cfm/person)	(cfm/ft^2)	(cfm)	MEAS. - CALC.
133	INDUSTRIAL ARTS	Wood/ Metal shop	989	14835	GMU-1	0	70	10	0	178	-178
200	CORRIDOR	Corridor	2029	18266		0	-	0	122	122	-122
201	L.R.C	Corridor	313	3130	-	0	-	0	19	19	-19
202	L.R.C	Corridor	292	2920	-	0	-	0	18	18	-18
203	FOREIGN LANGUAGE	Classroom	718	7180	-	0	25	260	86	346	-346
204	SOCIAL STUDIES	Classroom	677	6770	-	0	24	240	81	321	-321
205	MATH	Classroom	722	7220	-	0	25	260	87	347	-347
206	READING	Classroom	674	6740	-	0	24	240	81	321	-321
207	SCIENCE	Classroom	760	7600	-	0	27	270	91	361	-361
208	ENGLISH	Classroom	684	6840	-	0	24	240	82	322	-322
208	ENGLISH	Classroom	684	6840	-	0	24	240	82	322	-322
210	CUST.	Classroom	55	440	-	0	2	20	7	27	-27
211	PASSAGE	Custodial	33	264	-	0	-	0	0	0	0
212	WOMEN	Corridor	39	312	-	0	-	0	2	2	-2
213	GIRLS	Restroom	254	2032	-	0	-	0	0	250	-250
214	PASSAGE	Corridor	36	288	-	0	-	0	2	2	-2
215	MENS	Corridor	36	288	-	0	-	0	2	2	-2
216	BOYS	Restroom	221	1768	-	0	-	0	0	250	-250
217	CORRIDOR	Corridor	2651	26510	-	0	-	0	159	159	-159
218	GUIDANCE	Corridor	94	940	-	0	-	0	6	6	-6
219	7TH GRADE SCIENCE	Office	1172	11720	-	0	6	30	70	100	-100
220	MATH	Classroom	675	6750	-	0	24	240	81	321	-321
221	SOCIAL STUDIES	Classroom	679	6790	-	0	24	240	81	321	-321
222	SPECIAL EDUCATION	Classroom	659	6590	-	0	23	240	79	319	-319
223	READING	Classroom	681	6810	-	0	24	240	82	322	-322
224	FOREIGN LANGUAGE	Classroom	662	6620	-	0	23	240	79	319	-319
225	ENGLISH	Classroom	657	6570	-	0	23	230	79	309	-309
226	PREP ROOM	Classroom	351	3510	-	0	12	130	42	172	-172
227	8th GRADE SCIENCE	Classroom	1136	11360	-	0	40	400	136	536	-536
230	MATH	Classroom	705	6345	-	0	25	250	85	335	-335
231	SOCIAL STUDIES	Classroom	709	6381	-	0	25	250	85	335	-335
232	SPECIAL EDUCATION	Classroom	711	7110	-	0	25	250	85	335	-335
233	READING	Classroom	739	7390	-	0	26	260	89	349	-349
234	FOREIGN LANGUAGE	Classroom	716	7160	-	0	25	260	86	346	-346
235	ENGLISH	Classroom	723	7230	-	0	25	260	87	347	-347
236	GREENHOUSE	Utility	216	2160	-	0	0	0	0	0	0
300	CORRIDOR	Corridor	1476	13289	-	0	-	0	89	89	-89
301	CHORUS	Music/Theater/Dance	907	9977	RTU-3	0	32	320	54	374	-374
302	STO	Storage	36	396	-	0	-	0	4	4	-4
303	STO	Storage	39	429	-	0	-	0	5	5	-5
304	OFFICE	Office	188	2068	RTU-3	12	1	5	11	16	-4
305	ENSEMBLE	Music/Theater/Dance	156	1716	RTU-3	10	5	60	9	69	-59
306	PRAC	Music/Theater/Dance	53	583	RTU-3	6	2	20	3	23	-17
307	BAND	Music/Theater/Dance	1347	14817	RTU-3	111	47	480	81	561	-450
308	PRAC	Music/Theater/Dance	51	561	RTU-3	9	2	20	3	23	-14
309	INSTRUMENT ROOM	Storage	145	1595	RTU-3	14	-	0	17	17	-3
310	STORAGE	Storage	163	1793	-	0	-	0	20	20	-20
311	LIBRARY	Library	2921	40894	RTU-3	80	29	300	175	475	-395
312	CLASSROOM	Classroom	440	4400	RTU-3	12	15	160	53	213	-201
313	AV EQUIPMENT	Utility	168	1680	RTU-3	4	0	0	0	0	4
314	MECHANICAL	Utility	449	3592	-	0	0	0	0	0	0

OS Middle School OUTSIDE AIR VERIFICATION CALCULATION

ROOM IDENTIFICATION					AIR HAND. EQUIPMENT		CALCULATED VENTILATION REQUIREMENT				VENTILATION DELTA
DRAWING ROOM NUMBER	DRAWING ROOM NAME	ROOM TYPE	AREA	VOLUME	AHU/RTU/MAU	Measured OA	OCCUPANCY DENSITY	PEOPLE OA RATE (RP)	AREA OA CFM RATE (RA)	Vbz	
			(ft^2)	(ft^3)		(cfm)	(ppl/1000ft^2)	(cfm/person)	(cfm/ft^2)	(cfm)	MEAS. - CALC.
315	MECHANICAL	Utility	207	1656	-	0	0	0	0	0	0
316	ELECTRICAL	Utility	108	1080	-	0	0	0	0	0	0
317	CORRIDOR	Corridor	693	6242	-	0	-	0	42	42	-42
318	CORRIDOR	Corridor	1019	8152	-	0	-	0	61	61	-61
319	CORRIDOR	Corridor	750	6005	-	0	-	0	45	45	-45
320	WOMEN	Restroom	113	904	-	24	-	0	0	50	-26
321	MEN	Restroom	116	928	-	14	-	0	0	50	-36
322	PAPER/BOOKSTORAGE	Storage	255	2040	RTU-3	30	-	0	31	31	-1
323	CORRIDOR	Corridor	441	3974	RTU-3	10	-	0	26	26	-16
324	OFFICE	Office	344	2752	RTU-3	74	2	10	21	31	43
325	DICIPLINE	Office	92	736	RTU-3	16	0	5	6	11	5
326	PRINICIPAL	Office	187	1496	RTU-3	18	1	5	11	16	2
327	STORAGE	Storage	91	728	RTU-3	7	-	0	11	11	-4
329	VICE PRINCIPAL	Office	181	1448	RTU-3	16	1	5	11	16	0
330	CONFERENCE	Conference Room	280	2240	RTU-3	31	14	70	17	87	-56
331	FILES	Storage	245	1960	RTU-3	27	-	0	29	29	-2
332	CONFERENCE	Conference Room	335	2680	RTU-3	38	17	85	20	105	-67
333	FACULTY ROOM	Office	536	4288	RTU-3	55	3	15	32	47	8
334	FACULTY LOUNGE	Cafeteria	559	4472	RTU-3	56	56	420	101	521	-465
335	NURSE	Nurse	389	3112	RTU-3	58	2	10	23	33	25
337	LAV	Restroom	40	320	-	0	-	0	0	50	-50
338	STORAGE	Storage	166	1328	RTU-3	9	-	0	20	20	-11
339	PSYCH	Office	122	976	RTU-3	8	1	5	7	12	-4
340	SOC	Classroom	121	968	RTU-3	9	4	50	15	65	-56
341	SPEECH	Classroom	167	1336	RTU-3	8	6	60	20	80	-72
342	EQUIPMENT STORAGE	Storage	691	5528	RTU-3	17	-	0	83	83	-66
343	CLASSROOM	Classroom	734	7340	-	0	26	260	88	348	-348
344	CLASSROOM	Classroom	718	7180	-	0	25	260	86	346	-346
345	COMPUTER ROOM	Computer Lab	751	6008	RTU-3	42	19	190	90	280	-238
346	CLASSROOM	Classroom	727	7270	-	0	25	260	87	347	-347
350	CORRIDOR	Corridor	696	10440	-	0	-	0	42	42	-42
351	CORRIDOR	Corridor	594	0	-	0	-	0	36	36	-36
352	CORRIDOR	Corridor	1076	0	-	0	-	0	65	65	-65
353	CORRIDOR	Corridor	277	0	-	0	-	0	17	17	-17
354	STOR	Storage	138	0	-	0	-	0	17	17	-17
355	STORAGE	Storage	81	0	-	0	-	0	10	10	-10
356	TITLE 1 CLASSROOM	Classroom	512	0	-	0	18	180	61	241	-241
357	COMPUTER LAB	Computer Lab	861	0	-	0	22	220	103	323	-323
358	FACULTY OFFICE	Office	399	0	-	0	2	10	24	34	-34
359	8th GRADE CLASSROOM	Classroom	763	0	-	0	27	270	92	362	-362
360	8TH GRADE CLASSROOM	Classroom	755	0	-	0	26	270	91	361	-361
361	GIRLS LAVATORY	Restroom	200	0	-	0	-	0	0	0	0
362	CLOSET	Storage	16	0	-	0	-	0	2	2	-2
363	BOYS LAVATORY	Restroom	192	0	-	0	-	0	0	0	0
364	STORAGE	Storage	204	0	-	0	-	0	24	24	-24
365	VESTIBULE	Vestibule	120	0	-	0	0	10	7	17	-17
310A	TELEPHONE ROOM	Utility	41	328	-	0	0	0	0	0	0
314A	PASSAGE	Corridor	108	864	-	0	-	0	6	6	-6
345A	COMP STO	Storage	90	720	RTU-3	10	-	0	11	11	-1
400	VESTIBULE	Vestibule	115	1150	-	0	0	10	7	17	-17
401	CORRIDOR	Corridor	970	9700	-	0	-	0	58	58	-58

OS Middle School OUTSIDE AIR VERIFICATION CALCULATION											
ROOM IDENTIFICATION					AIR HAND. EQUIPMENT		CALCULATED VENTILATION REQUIREMENT				VENTILATION DELTA
DRAWING ROOM NUMBER	DRAWING ROOM NAME	ROOM TYPE	AREA	VOLUME	AHU/RTU/MAU	Measured OA	OCCUPANCY DENSITY	PEOPLE OA RATE (RP)	AREA OA CFM RATE (RA)	Vbz	
			(ft^2)	(ft^3)		(cfm)	(ppl/1000ft^2)	(cfm/person)	(cfm/ft^2)	(cfm)	MEAS. - CALC.
402	CORRIDOR	Corridor	198	1980	-	0	-	0	12	12	-12
403	CLASSROOM	Classroom	789	7890	-	0	28	280	95	375	-375
404	GYM LOBBY	Lobby	728	7280	-	0	7	80	44	124	-124
405	CORRIDOR	Corridor	280	2800	-	0	-	0	17	17	-17
406	OFFICE	Office	86	774	-	0	0	5	5	10	-10
408	GIRL'S LOCKER	Locker Room	939	8451	GYM AHU	909	-	0	56	56	853
409	TOILET	Restroom	70	630	-	0	-	0	0	100	-100
410	PASSAGE	Corridor	29	261	-	0	-	0	2	2	-2
411	GYMNASIUM	Gymnasium	8376	201024	GYM AHU	9968	59	1180	1508	2688	7,280
412	STORAGE	Storage	63	567	-	0	-	0	8	8	-8
413	STORAGE	Storage	476	4284	-	0	-	0	57	57	-57
415	MECHANICAL	Utility	904	8136	-	0	0	0	0	0	0
416	PASSAGE	Corridor	27	243	-	0	-	0	2	2	-2
417	BOYS LOCKER	Locker Room	859	7731	GYM AHU	949	-	0	52	52	897
418	TOILET	Restroom	73	657	-	0	-	0	0	100	-100
419	OFFICE	Office	93	837	-	0	0	5	6	11	-11
421	CORRIDOR	Corridor	501	5010	-	0	-	0	30	30	-30
421	CORRIDOR	Corridor	501	5010	-	0	-	0	30	30	-30
422	PASSAGE	Corridor	54	540	-	0	-	0	3	3	-3
423	GIRLS	Restroom	248	2480	-	0	-	0	0	150	-150
424	L.R.C	Classroom	396	3960	-	0	14	140	48	188	-188
425	PASSAGE	Corridor	64	640	-	0	-	0	4	4	-4
426	BOYS	Restroom	212	2120	-	0	-	0	0	150	-150
427	CUST.	Custodial	76	608	-	0	-	0	0	0	0
428	CLASSROOM	Classroom	735	7350	-	0	26	260	88	348	-348
429	CLASSROOM	Classroom	732	7320	-	0	26	260	88	348	-348
502	CLASSROOM	Classroom	723	7230	-	0	25	260	87	347	-347
503	CLASSROOM	Classroom	733	7330	-	0	26	260	88	348	-348
504	CLASSROOM	Classroom	718	7180	-	0	25	260	86	346	-346
505	CLASSROOM	Classroom	732	7320	-	0	26	260	88	348	-348
506	CLASSROOM	Classroom	709	7090	-	0	25	250	85	335	-335
507	CLASSROOM	Classroom	728	7280	-	0	25	260	87	347	-347
508	CORRIDOR	Corridor	73	584	-	0	-	0	4	4	-4
509	GIRLS	Restroom	199	1990	-	0	-	0	0	150	-150
510	WOMEN	Restroom	37	296	-	0	-	0	0	50	-50
512	CORRIDOR	Corridor	72	720	-	0	-	0	4	4	-4
513	BOYS	Restroom	201	1608	-	0	-	0	0	150	-150
514	MENS	Restroom	35	350	-	0	-	0	0	50	-50
515	CLASSROOM	Art Classroom	731	7310	-	0	15	150	132	282	-282
516	ART	Storage	942	9420	-	0	-	0	113	113	-113
517	STO	Music/Theater/Dance	43	430	-	0	2	20	3	23	-23
518	MUSIC	Corridor	896	8960	-	0	-	0	54	54	-54
520	CORRIDOR	Corridor	1692	16920	-	0	-	0	102	102	-102

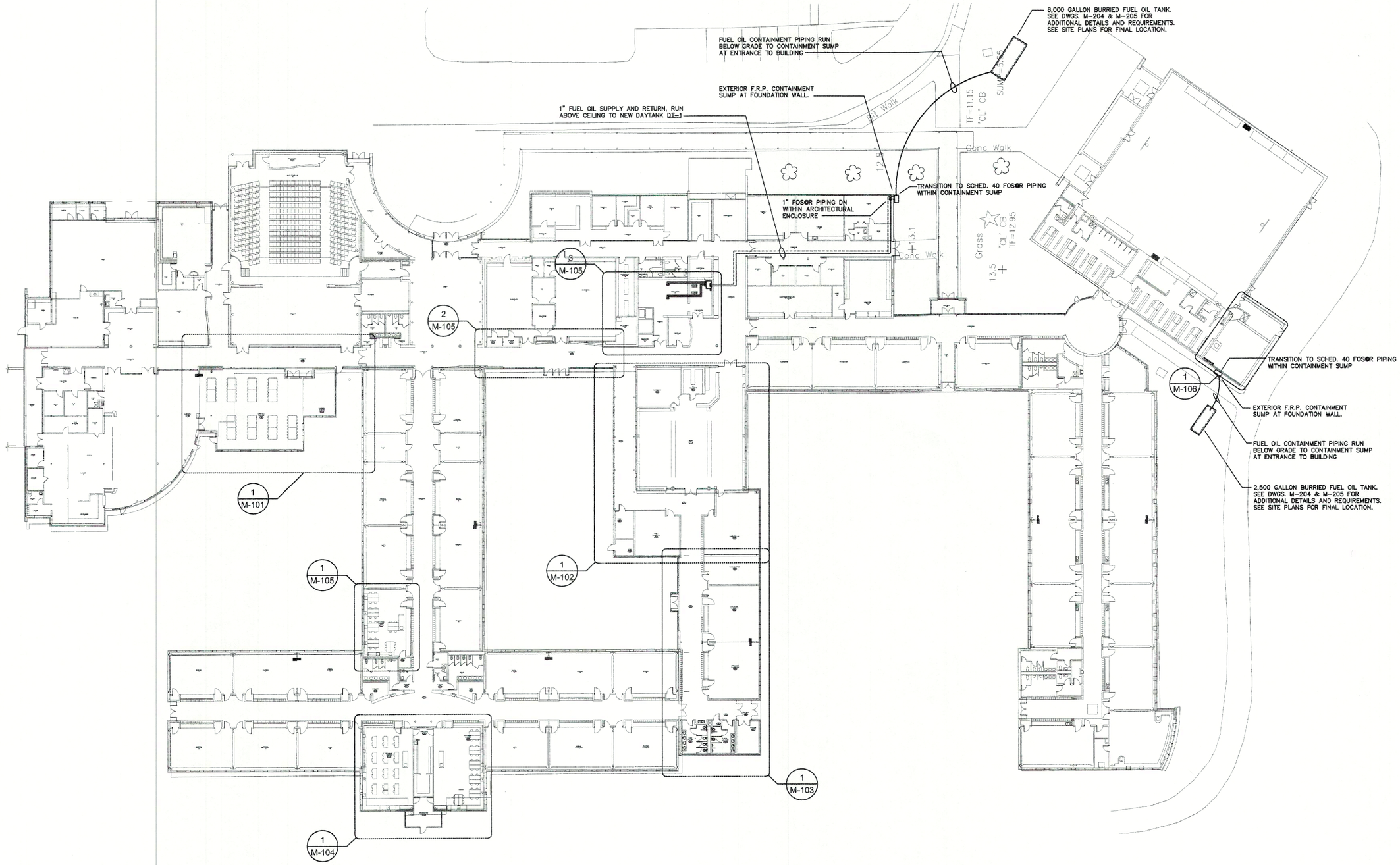
Project Name: OS Middle School HVAC Verifiaction & Evaluation
Project Number: P20210255
School Name OS Middle School
Scope: HVAC Verification and Evaluation
Data Collection By: TAB Data F&O Data
Date: 6/28/2025 4/14/2025
EXHAUST FAN CALCULATION

OS Middle School EXHAUST FAN CALCULATION

ROOM CHARACTERISTICS						TAB DATA		EXHAUST CALCULATIONS	
DRAWING ROOM NUMBER	DRAWING ROOM NAME	ROOM TYPE	AREA	VOLUME	PLUMBING FIXTURES	EXHAUST FAN	MEASURED EXHAUST	ASHRAE 62.1 REQUIRED EXHAUST	EXHAUST REQUIREMENT DELTA
			(ft^2)	(ft^3)	QTY.		(cfm)	(cfm)	MEAS. - CALC.
105	MEN	Restroom	113	1022	3	REF-5	101	150	-49
106	WOMEN	Restroom	140	1265	3	REF-5	96	150	-54
119	DISHWASHER	Kitchen	234	2110	0	REF-8	686	184	502
120	CAFETERIA	Cafeteria	3005	36063	0	-	0	2798	-2,798
123	OFFICE	Restroom	84	672	1	REF-7	0	50	-50
123	OFFICE	Restroom	84	672	1	REF-7	0	50	-50
124	FOOD STORAGE	Storage	177	1597	9	REF-6	0	21	-21
133	INDUSTRIAL ARTS	Wood/ Metal Shop	989	13846	0	REF-1, DC-1	2610	692	1,918
140	WASH	Utility	77	1155	0	-	0	0	0
144	CLOSET	Utility	34	272	0	-	0	0	0
147	STO	Corridor	122	1342	0	-	0	7	-7
202	L.R.C	Corridor	292	2920	0	REF-17	341	18	323
213	GIRLS	Restroom	254	2032	5	REF-19	358	250	108
216	BOYS	Restroom	221	1768	5	REF-18	0	250	-250
236	GREENHOUSE	Utility	216	2160	0	EF-4	0	0	0
321	MEN	Restroom	116	928	1	REF-39	115	50	65
322	PAPER/BOOKSTORAGE	Storage	255	2040	0	-	0	31	-31
331	FILES	Storage	245	1960	0	-	0	29	-29
333	FACULTY ROOM	Office	536	4288	0	-	0	47	-47
338	STORAGE	Storage	166	1328	0	-	0	20	-20
408	GIRL'S LOCKER	Locker Room	939	8451	0	REF-31, EXG REF	306	56	250
409	TOILET	Restroom	70	630	2	EXG REF	74	100	-26
418	TOILET	Restroom	73	657	2	EXG REF	0	100	-100
419	OFFICE	Office	93	837	0	EXG REF	0	11	-11
423	GIRLS	Restroom	248	2480	3	REF-30	265	150	115
424	L.R.C	Classroom	396	3960	0	REF-16REF-17REF-27	710	188	522
426	BOYS	Restroom	212	2120	3	REF-30	294	150	144
427	CUST.	Custodial	76	608	0	REF-30	48	0	48
509	GIRLS	Restroom	199	1990	3	REF-29	122	150	-28
510	WOMEN	Restroom	37	296	1	REF-29	36	50	-14
513	BOYS	Restroom	201	1608	3	REF-29	103	150	-47
514	MENS	Restroom	35	350	1	REF-29	23	50	-27
516	ART	Storage	942	9420	0	REF-28	550	113	437
517	STO	Music/Theater/Dance	43	430	0	REF-38	0	23	-23

Appendix C

Floor Plans



1 / M-100 OVERALL – MECHANICAL PLAN

SCALE: 1"=20'-0"

BIANCO | GIOLITTO | WESTON ARCHITECTS LLC
500 PLAZA MIDDLESEX, MIDDLETOWN, CT 06457

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Structural and Geotechnical Engineers
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Consulting Engineers, Inc.
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Fax: (860)388-4613

Mechanical Electrical Plumbing Engineers
Legnos & Cramer
74 Forest Street
Hartford, CT 06103
Tel: (860)246-8875
Fax: (860)525-2544

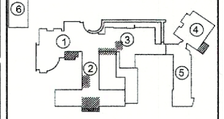
OLD SAYBROOK MIDDLE SCHOOL
OLD SAYBROOK, CONNECTICUT

- DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS IN FIELD. PRIOR TO STARTING ANY WORK.
- CALL 1-800-922-4455 BEFORE YOU DIG, PRIOR TO ANY EXCAVATION OF ANY TYPE.

NORTH

PROJECT NORTH

KEY PLAN



DATE : 03/30/05

BGW JOB NO.: 04171

REFERENCE FLOOR PLAN MECHANICAL

SDE PROJECT NO.
1060035 EA

DRAWING NO.
M-100