Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 12/09/2025

Completed By: National TAB

PROJECT

Tobias Funeral Home (Dayton, OH)

5471 FAR HILLS AVE

DAYTON, OH 45429

Client

Detmer Mechanical

9181 Dixie Drive

Dayton, OH 45414

National TAB

Project: Tobias Funeral Home (Dayton, OH)

Table Of Contents

CERTIFICATION

PROJECT: Tobias Funeral Home (Dayton, OH)

The data presented in this report is a record of system measurements and final adjustments that have been obtained in accordance with the current edition of the NEBB *Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems.* Any variances from design quantities, which exceed NEBB tolerances, are noted in the Test-Adjust-Balance Report Project Summary.

The air distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

NEBB TAB FIRM:	National TAB
REGISTRATION NO:	3629
CERTIFIED BY:	Joe Hertenstein
DATE:	12/9/2025

The hydronic distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

NEBB TAB FIRM:	National TAB
REGISTRATION NO:	3629
CERTIFIED BY:	Joe Hertenstein
DATE:	

Submitted and Certified by:

NEBB TAB FIRM:	National TAB
TAB PROFESSIONAL:	Joe Hertenstein
SIGNATURE:	
REGISTRATION NO:	3629
CERTIFICATION EXP:	12/31/2025

Function		Range	Minimum Accuracy	Instrument Information	Calibration Date	Date Due
AIR	AIR PRESSURE	0 in wg to 10 in wg	2% +/- 0.001 in wg	Evergreen S-PVF-1 S/N 2200484C	3/24/2025	3/24/2027
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	Evergreen S-PVF-1 S/N 2200484C	3/24/2025	3/24/2027
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 5 % +/- 7 cfm	Evergreen S-PVF-1 S/N 2200484C	3/24/2025	3/24/2027
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 071118034	9/9/2025	9/9/2026
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 5028	9/9/2025	9/9/2026
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 071118034	9/9/2025	9/9/2026
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 1075	9/9/2025	9/9/2026
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 071118034	9/9/2025	9/9/2026
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 4011	9/9/2025	9/9/2026
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper ATKINS - SRH77A S/N 071118034	9/9/2025	9/9/2026
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Fluke 373 True RMS, S/N: 33290686	9/8/2025	9/8/2026
	AMPERAGE MEASUREMENT	0 Amperers to 100 Amperes	2 % reading +/- 5 digits	Fluke 373 True RMS, S/N: 33290686	9/8/2025	9/8/2026
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	SHIMPO DT-207LR S/N: D1530081R	9/9/2025	9/9/2026
HYDRONIC	PRESSURE MEASUREMENT	-30 in Hg to 200 psi	±2% of reading +/- 1 psi	Evergreen Water Module S/N: 2500210B	8/11/2025	8/11/2026
	DIFFERENTIAL PRESSURE MEASUREMENT	0 psi - 80 psi	±2% of reading +/- 1 psi	Evergreen Water Module S/N: 2500210B	8/11/2025	8/11/2026

Abbreviation List

A = Area (ft^2)	S.F. = Service Factor
AHU = Air Handling Unit	SF = Supply Fan
A_k = Effective Area	SP = Static Pressure
BHP = Brake Horsepower (IP) HP	SR = Supply Register
Btu = British Thermal Unit	T = Temperature
Btu/h = Btuh = BTUH = BTU/Hour	T_{ma} = Mixed Air Temperature
CL = Center Distance (used in belt formula)	T_{oa} = Outside Air Temperature
CD = Ceiling Diffuser	T_{ra} = Return Air Temperature
CF = Correction Factor	H = Head (in wc, ft wc, psi)
CFM = Volumetric Flow: Cubic Feet Per Minute	h = Enthalpy
CO2 = Carbon Dioxide	HP = Horsepower
CO = Carbon Monoxide	hr = Hour
C_v = Flow Constant	K_v = Flow constant (SI)
d = Diameter (in.) IP	kW = Kilowatt = 1000 Watts
Δ = Difference or Change (Final - Initial)	LAT = Leaving Air Temperature
DB = Dry Bulb	lb = Pounds
EA = Exhaust Air	LWT = Leaving Water Temperature
EAT = Entering Air Temperature	ma = Mixed Air
EF = Exhaust Fan	MIN = Minimum
Eff = Efficiency	MAX = Maximum
EG = Exhaust Grille	N/A = Not Applicable
ESP = External Static Pressure	NA = No Access
EWT = Entering Water Temperature	NL = Not Listed
°F = Degrees Fahrenheit, °F	NPSHA = Net Positive Suction Head Available
FPB = Fan Powered Box	NS = Not Specified
FLA = Full Load Amps	OA = Outside Air
fpm = Feet per Minute (fpm)	OAT = Outside Air Temperature
ft = Foot	PD = Sheave Pitch Diameter
gal = Gallons	P.D. = Pressure Drop
GPM = Gallons Per Minute (GPM)	PF = Power Factor
h = Enthalpy (BTU/lb dry air)	SG = Supply Grille
P = Pressure	SR = Supply Register
ppm = parts per million	TP = Total Pressure
psi = Pounds Per Square Inch	T_{ra} = Return Air Temperature
psid = PSI Differential	TS = Tip Speed (fpm) IP, (m/s) SI
r = Radius (in)	TSP = Total Static Pressure
$\%_{ra}$ = % of Return Air	V = Velocity
RA = Return Air	VAV = Variable Air Volume
RAT = Return Air Temperature	VD = Volume Damper
RF = Return Fan	VFD = Variable Frequency Drive
RG = Return Grille	W = Watt
RH = Relative Humidity	WB = Wet Bulb
RPM = Revolutions Per Minute	wg = wc = water gauge = water column
RTU = Roof Top Unit	WHP = Water Horsepower (IP)
SA = Supply Air	ω = Humidity Ratio

OUTDOOR AIR SCHEDULE

NUMBER	NAME	ROOM AREA (SQ. FT.)	NO. OF PEOPLE	NO. OF FIXTURES	ASHRAE 62.1-2019/ 2013 HEALTH CARE GUIDELINE REQ. EST. MAX. OCCUPANCY (P/1000 SQ. FT.)	ASHRAE 62.1-2019/ 2013 HEALTH CARE GUIDELINE REQ. OA CFM / PERSON	ASHRAE 62.1-2019/ 2013 HEALTH CARE GUIDELINE REQ. OA CFM / SQ. FT.	AIR DISTRIBUTION OA CFM - CODE MINIMUM	AIR DISTRIBUTION OA CFM - DESIGN	AIR DISTRIBUTION SUPPLY AIRFLOW (CFM)	AIR DISTRIBUTION RETURN AIRFLOW (CFM)	AIR DISTRIBUTION EXHAUST AIRFLOW (CFM)
F1/AC1 & F2/AC2: MAIN LOBBY							O/A Damper @ 10%					
101	VESTIBULE	79					.06	5	21	210	210	
102	MAIN LOBBY	1,558	50		150	5	.06	344	376	3,760	3,760	
						SYSTEM TOTALS =		348	397	3,970	3,970	

SYSTEM SUMMARY:
CONDITIONED AREA: 1,637 SF
DESIGN AIRFLOW: 3,970 CFM
DESIGN CFM/SF: 2.43 CFM/SF
EST. OCCUPANCY: 50 PEOPLE
MIN. O/A REQ'D: 348 CFM
DESIGN O/A: 397 CFM, 8.0 CFM/PERSON, 0.24 CFM/SF
MINIMUM COMBINED OUTDOOR AIR RATE PER ASHRAE 62.1-2019, TABLE 6-1, IS 5.0 CFM PER PERSON FOR LOBBIES.

F3/AC3 & F4/AC4: CHAPEL ONE							O/A Damper @ 21%					
103	CHAPEL ONE	1,781	138		120	5	.06	797	834	3,970	3,970	
	(MAX. OCC IS 189-OMC 402.2 NAT. VENT. IS CODE COMPLIANT)											
						SYSTEM TOTALS =		797	834	3,970	3,970	

SYSTEM SUMMARY:
CONDITIONED AREA: 1,781 SF
DESIGN AIRFLOW: 3,970 CFM
DESIGN CFM/SF: 2.23 CFM/SF
EST. OCCUPANCY: 138 PEOPLE
MIN. O/A REQ'D: 797 CFM
DESIGN O/A: 834 CFM, 6.0 CFM/PERSON, 0.47 CFM/SF
MINIMUM COMBINED OUTDOOR AIR RATE PER ASHRAE 62.1-2019, TABLE 6-1, IS 6.0 CFM PER PERSON FOR PLACES OF RELIGIOUS WORSHIP.

F5/AC5							O/A Damper @ 17.55%					
104	HALLWAY	336					.06	20	61	350	350	
105	UTILITY/MECH/JANITOR	57					.12	7	17	95	95	
107	HOSPITALITY	253	10		50	5	.12	80	86	490	490	
113	HALLWAY	175					.06	10	26	150	150	
117	MEN'S RESTROOM	200		4			.06		30	200		300
118	WOMEN'S RESTROOM	200		4			.06		30	200		300
119	SERVICE CORRIDOR	331					.06	20	35	200	200	
126	TOILET	45		1			.06		13	75		110
127	TOILET	45		1			.06		13	75		110
132	CASKET ROOM	54					.12	6	26	150	150	
						SYSTEM TOTALS =		144	347	1,985	1,435	820

SYSTEM SUMMARY:
CONDITIONED AREA: 1,696 SF
DESIGN AIRFLOW: 1,985 CFM
DESIGN CFM/SF: 1.17 CFM/SF
EST. OCCUPANCY: 10 PEOPLE
MIN. O/A REQ'D: 144 CFM
DESIGN O/A: 347 CFM, 34.7 CFM/PERSON, 0.20 CFM/SF
MINIMUM COMBINED OUTDOOR AIR RATE PER ASHRAE 62.1-2019, TABLE 6-1, IS 6.0 CFM PER PERSON FOR PLACES OF RELIGIOUS WORSHIP.

F6/AC6 & F7/AC7: CHAPEL TWO							O/A Damper @ 23%					
109	CHAPEL TWO	1,824	152		120	5	.06	869	828	3,600	3,600	
	(MAX. OCC IS 96 FOR CATERED GATHERING-OMC 402.2 NAT. VENT. IS CODE COMPLIANT)											
110	HALLWAY	290					.06	17	43	185	185	
112	STORAGE	228					.12	27	43	185	185	
						SYSTEM TOTALS =		914	913	3,970	3,970	

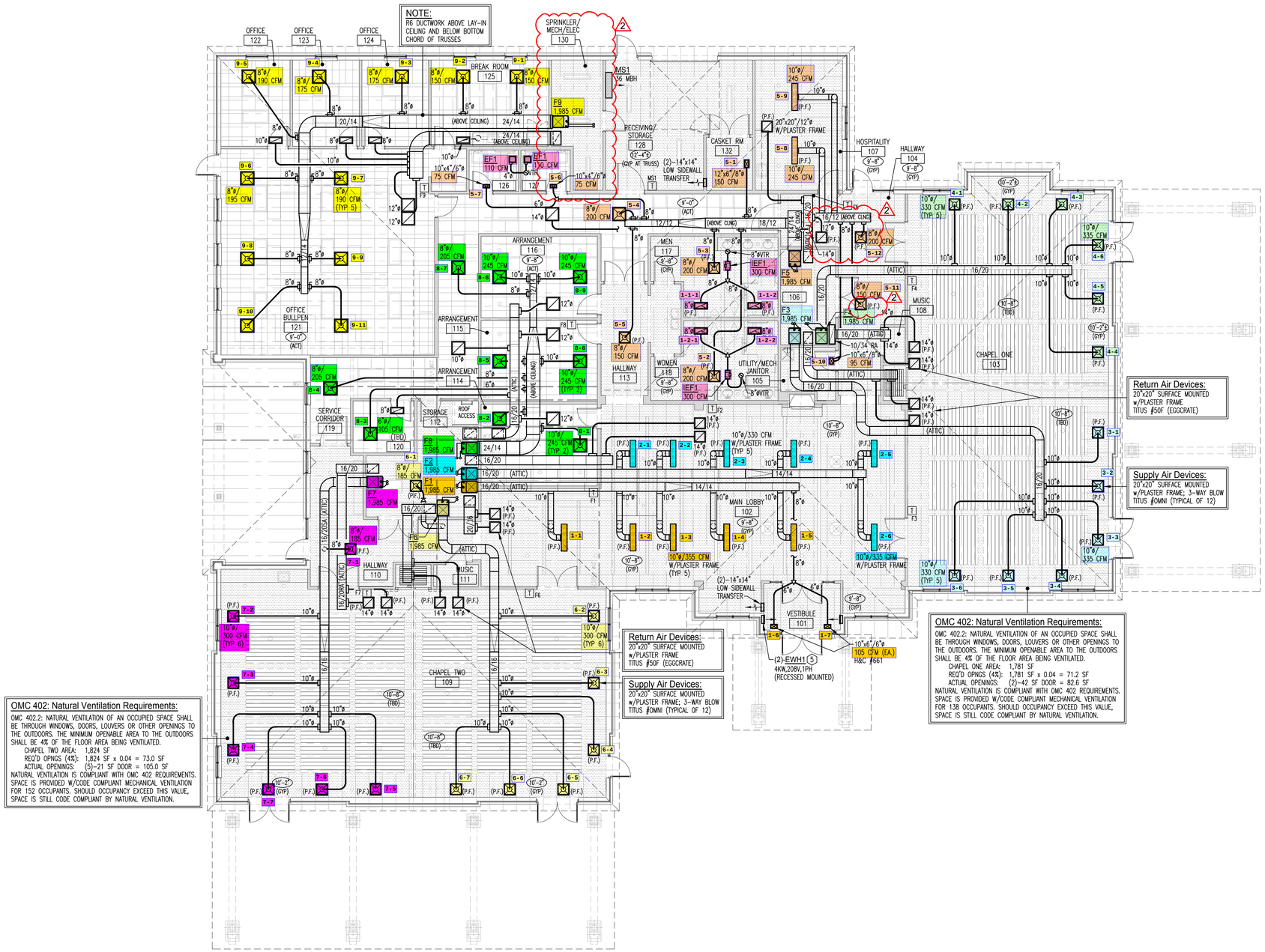
SYSTEM SUMMARY:
CONDITIONED AREA: 2,342 SF
DESIGN AIRFLOW: 3,970 CFM
DESIGN CFM/SF: 1.70 CFM/SF
EST. OCCUPANCY: 152 PEOPLE
MIN. O/A REQ'D: 914 CFM
DESIGN O/A: 913 CFM, 6.0 CFM/PERSON, 0.39 CFM/SF
MINIMUM COMBINED OUTDOOR AIR RATE PER ASHRAE 62.1-2019, TABLE 6-1, IS 6.0 CFM PER PERSON FOR PLACES OF RELIGIOUS WORSHIP.

F8/AC8							O/A Damper @ 12.5%					
114	ARRANGEMENT	212	8		50	5	.06	53	61	490	490	
115	ARRANGEMENT	212	8		50	5	.06	53	61	490	490	
116	ARRANGEMENT	212	8		50	5	.06	53	61	490	490	
119	SERVICE CORRIDOR	320					.06	19	51	410	410	
120	TBD	70					.12	8	13	105	105	
						SYSTEM TOTALS =		186	248	1,985	1,985	

SYSTEM SUMMARY:
CONDITIONED AREA: 1,027 SF
DESIGN AIRFLOW: 1,985 CFM
DESIGN CFM/SF: 1.93 CFM/SF
EST. OCCUPANCY: 24 PEOPLE
MIN. O/A REQ'D: 186 CFM
DESIGN O/A: 248 CFM, 6.0 CFM/PERSON, 0.24 CFM/SF
MINIMUM COMBINED OUTDOOR AIR RATE PER ASHRAE 62.1-2019, TABLE 6-1, IS 6.0 CFM PER PERSON FOR MEETING SPACES.

F9/AC9: OFFICES							O/A Damper @ 20%					
121	OFFICE BULLPEN	1,014	4		5	5	.06	81	229	1,145	1,145	
122	OFFICE	132	1		5	5	.06	13	38	190	190	
123	OFFICE	127	1		5	5	.06	13	35	175	175	
124	OFFICE	127	1		5	5	.06	13	35	175	175	
125	BREAK ROOM	225	6		50	5	.12	57	60	300	300	
						SYSTEM TOTALS =		176	397	1,985	1,985	

SYSTEM SUMMARY:
CONDITIONED AREA: 1,625 SF
DESIGN AIRFLOW: 1,985 CFM
DESIGN CFM/SF: 1.22 CFM/SF
EST. OCCUPANCY: 13 PEOPLE
MIN. O/A REQ'D: 176 CFM
DESIGN O/A: 397 CFM, 30.5 CFM/PERSON, 0.24 CFM/SF
MINIMUM COMBINED OUTDOOR AIR RATE PER ASHRAE 62.1-2019, TABLE 6-1, IS 17.0 CFM PER PERSON FOR OFFICES.



MECHANICAL PLAN

SCALE: 1/8"=1'-0"

NORTH

DETMER
MECHANICAL SERVICES
9181 N. Dixie Dr., Dayton, OH 45414
T: (937) 709-3877

SEAL:

STATE OF OHIO
THERESA A. ROOT
E68169
REGISTERED PROFESSIONAL ENGINEER
Digitally Signed by Theresa A. Root
License No. E68169, Exp. Date 12-31-25

NO.	REVISIONS	DATE
	ISSUED FOR PERMIT	1-21-25
1	PLAN REVIEW CLARIFICATIONS	4-2-25
2	PLAN REVISIONS	4-22-25

General Contractor:

DRYDEN BUILDERS
1741 Thomas Paine Parkway
Centerville, OH 45459
T: (937) 439-2728
www.DrydenBuilders.com

Proposed HVAC for
Tobias Funeral Home
New Far Hills Chapel
5471 Far Hills Ave.
Dayton, OH 45429

Project No.: 131609195
Date: 1-21-25 (Permit)
Scale: AS NOTED

Sheet Title:
MECHANICAL PLAN & DETAILS

Sheet No.:
M2

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	25191K803G
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1985	1843
Motor Speed SetPt	-	TP9
RL Voltage	-	122
RL Amperage	-	11.3
RA CFM	1786	1626
OA CFM	199	217

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.4165
Discharge ESP	-	0.2846
Total ESP	0.50	0.7011

Completed By: Nathan Denney on 11/20/2025

Notes:
Unable to hit design on 2 diffusers in vestibule 101, both dampers 100% open. Unit running at max, all other diffusers dampered down to equal or less than design. No obstructions found in the ductwork.

Written By: Nathan Denney on 11/20/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	102	LSD	10	355	371	336	94.6
SGRD2	102	LSD	10	355	315	321	90.4
SGRD3	102	LSD	10	355	399	334	94.1
SGRD4	102	LSD	10	355	297	357	100.6
SGRD5	102	LSD	10	355	344	320	90.1
SGRD6	101	SD	6	105	56	75	71.4
SGRD7	101	SD	6	105	61	85	81.0
Total				1985	1843	1828	92.09%

Completed By: Nathan Denney on 11/19/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	25174N8CKG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1985	1762
Motor Speed SetPt	-	TP9
RL Voltage	-	122
RL Amperage	-	9.6
RA CFM	1787	1550
OA CFM	198	212

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.3060
Discharge ESP	-	0.2517
Total ESP	0.50	0.5577

Notes:
F-2 was running at 88.7% of design for total flow at the unit. The blower is running 1A lower than similar units running at same speed on site. Balanced dampers based on the decreased flow.

Written By: Nathan Denney on 11/20/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F2/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	102	LSD	10	330	252	311	94.2
SGRD2	102	LSD	10	330	251	284	86.1
SGRD3	102	LSD	10	330	320	275	83.3
SGRD4	102	LSD	10	330	356	308	93.3
SGRD5	102	LSD	10	330	232	285	86.4
SGRD6	102	LSD	10	335	357	309	92.2
Total				1985	1768	1772	89.27%

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F3 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	25162JM3KG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1655	1664
Motor Speed SetPt	-	TP9
RL Voltage	-	122
RL Amperage	-	10.9
RA CFM	1307	1315
OA CFM	348	349

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.2817
Discharge ESP	-	0.2216
Total ESP	0.50	0.5033

Completed By: Nathan Denney on 11/19/2025

Notes:
Diffuser 3-5 deleted from design.
CFM taken off unit total.

Written By: Nathan Denney on 11/20/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F3/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	103	SD	10	330	330	330	100.0
SGRD2	103	SD	10	330	302	302	91.5
SGRD3	103	SD	10	335	371	365	109.0
SGRD4	103	SD	10	330	314	314	95.2
SGRD6	103	SD	10	330	353	353	107.0
Total				1655	1670	1664	100.54%

Completed By: Nathan Denney on 11/19/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F4 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	251732MSJG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1655	1645
Motor Speed SetPt	-	TP9
RL Voltage	-	122
RL Amperage	-	10.9
RA CFM	1307	1290
OA CFM	348	355

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.2803
Discharge ESP	-	0.4420
Total ESP	0.50	0.7223

Completed By: Nathan Denney on 11/19/2025

Notes:
Diffuser 4-2 deleted from design.
CFM taken off unit total.

Written By: Nathan Denney on 11/20/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F4/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	103	SD	10	330	406	320	97.0
SGRD3	103	SD	10	330	393	315	95.5
SGRD4	103	SD	10	335	353	333	99.4
SGRD5	103	SD	10	330	310	341	103.3
SGRD6	103	SD	10	330	284	336	101.8
Total				1655	1746	1645	99.4%

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F5 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	25191LJFJG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1985	1906
Motor Speed SetPt	-	TP9
RL Voltage	-	122
RL Amperage	-	11.8
RA CFM	1638	1541
OA CFM	347	365

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.2606
Discharge ESP	-	0.1010
Total ESP	0.50	0.3616

Completed By: Nathan Denney on 11/19/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F5/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	132	SD	8	150	120	136	90.7
SGRD2	118	SD	8	200	145	181	90.5
SGRD3	117	SD	8	200	173	191	95.5
SGRD4	CORR	SD	8	200	175	194	97.0
SGRD5	113	SD	8	150	161	141	94.0
SGRD6	127	SD	6	75	71	77	102.7
SGRD7	126	SD	6	75	54	75	100.0
SGRD8	107	LSD	10	245	249	237	96.7
SGRD9	107	LSD	10	245	320	230	93.9
SGRD10	105	SD	8	95	101	102	107.4
SGRD11	104	SD	8	150	179	140	93.3
SGRD12	104	SD	8	200	157	190	95.0
Total				1985	1905	1894	95.42%

Completed By: Nathan Denney on 11/19/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F6 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	251732BMJG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1685	1634
Motor Speed SetPt	-	TP8
RL Voltage	-	122
RL Amperage	-	10.7
RA CFM	1298	1285
OA CFM	387	349

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.3627
Discharge ESP	-	0.3625
Total ESP	0.50	0.7252

Completed By: Nathan Denney on 11/19/2025

Notes:
Diffuser 6-3 deleted from design.
CFM taken off unit total.

RA reduced to force more OA in order to hit design, resulting in slightly high unit pressure.

Written By: Nathan Denney on 11/20/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F6/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	112	SD	8	185	216	180	97.3
SGRD2	109	SD	10	300	349	280	93.3
SGRD4	109	SD	10	300	309	290	96.7
SGRD5	109	SD	10	300	338	299	99.7
SGRD6	109	SD	10	300	294	307	102.3
SGRD7	109	SD	10	300	272	278	92.7
Total				1685	1778	1634	96.97%

Completed By: Nathan Denney on 11/19/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F7 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	251732BSJG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1685	1678
Motor Speed SetPt	-	TP7
RL Voltage	-	122
RL Amperage	-	8.7
RA CFM	1298	1319
OA CFM	387	359

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.3053
Discharge ESP	-	0.1306
Total ESP	0.50	0.4359

Completed By: Nathan Denney on 11/19/2025

Notes:
Diffuser 7-3 deleted from design.
CFM taken off unit total.

Written By: Nathan Denney on 11/20/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F7/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	110	SD	8	185	188	195	105.4
SGRD2	109	SD	10	300	391	293	97.7
SGRD4	109	SD	10	300	319	304	101.3
SGRD5	109	SD	10	300	315	302	100.7
SGRD6	109	SD	10	300	339	313	104.3
SGRD7	109	SD	10	300	271	271	90.3
Total				1685	1823	1678	99.58%

Completed By: Nathan Denney on 11/19/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F8 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	25174PEWKG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1985	1929
Motor Speed SetPt	-	TP9
RL Voltage	-	123
RL Amperage	-	10.5
RA CFM	1737	1660
OA CFM	248	269

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.4092
Discharge ESP	-	.0133
Total ESP	0.50	0.4225

Completed By: Nathan Denney on 11/18/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F8/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	114	SD	10	245	220	249	101.6
SGRD2	114	SD	10	245	241	233	95.1
SGRD3	120	SD	6	105	81	99	94.3
SGRD4	119	SD	8	205	130	193	94.1
SGRD5	116	SD	10	245	267	247	100.8
SGRD6	116	SD	10	245	336	237	96.7
SGRD7	115	SD	8	205	162	205	100.0
SGRD8	116	SD	10	245	233	225	91.8
SGRD9	116	SD	10	245	264	241	98.4
Total				1985	1934	1929	97.18%

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: Split Sys Furnace

Asset: F9 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	S9X1C100U5PSBBA
Serial Num	-	251732T8JG
Configuration	HORIZONTAL	HORIZONTAL
Filter Size Size 1	-	20"x24"x2"

Motor Data		
	Design	**Actual**
Horsepower	1.0	1.0
Motor Rpm	-	1075
Phase	-	1
Voltage	-	120
Amperage	-	14.5

Test Data		
	Design	**Actual**
SF CFM	1985	1965
Motor Speed SetPt	-	TP9
RL Voltage	-	122
RL Amperage	-	11.6
RA CFM	1588	1605
OA CFM	397	360

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.1251
Discharge ESP	-	0.1736
Total ESP	0.50	0.2987

Completed By: Nathan Denney on 11/19/2025

National TAB

Project:Tobias Funeral Home (Dayton, OH)

Split Sys Furnace

Diffuser Supply (GRD)

F9/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	125	SD	8	150	185	141	94.0
SGRD2	125	SD	8	150	214	154	102.7
SGRD3	124	SD	8	175	187	163	93.1
SGRD4	123	SD	8	175	198	178	101.7
SGRD5	122	SD	8	190	134	173	91.1
SGRD6	121	SD	8	195	195	187	95.9
SGRD7	121	SD	8	190	198	187	98.4
SGRD8	121	SD	8	190	115	190	100.0
SGRD9	121	SD	8	190	210	200	105.3
SGRD10	121	SD	8	190	173	191	100.5
SGRD11	121	SD	8	190	184	174	91.6
Total				1985	1993	1938	97.63%

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: FAN - Exhaust

Asset: EF1-1 AREA:126

Unit Data		
	Design	**Actual**
MFG	NA	BROAN
Model Num	NA	AE110K
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	110	52

Motor Data		
	Design	**Actual**
Motor MFG	-	INACCESSIBLE
Phase	-	1
Voltage (rated)	-	120

Completed By: Nathan Denney on 11/20/2025

Notes:
Ceiling fan with no available adjustment or label other than brand.

Written By: Nathan Denney on 11/20/2025

Unit Data - PHOTO LOG

11/20/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: FAN - Exhaust

Asset: EF1-2 AREA:127

Unit Data		
	Design	**Actual**
MFG	NA	BROAN
Model Num	NA	AE110K
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	110	54

Motor Data		
	Design	**Actual**
Motor MFG	-	INACCESSIBLE
Phase	-	1
Voltage (rated)	-	120

Completed By: Nathan Denney on 11/20/2025

Notes:
Ceiling fan with no available adjustment or label other than brand.

Written By: Nathan Denney on 11/20/2025

Unit Data - PHOTO LOG

11/20/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: FAN - Exhaust

Asset: IEF1-1 AREA:MENS RR

Unit Data		
	Design	**Actual**
MFG	NA	SOLAR
Model Num	NA	200S
Serial Num	-	1025704684
Type	INLINE	INLINE

Test Data		
	Design	**Actual**
CFM	300	302
Motor Frequency	-	60

Motor Data		
	Design	**Actual**
Motor MFG	-	INACCESSIBLE
Phase	1	1
Voltage (rated)	-	120
Amperage (rated)	-	1A

Completed By: Nathan Denney on 11/20/2025

Notes:
Inline fan above drywall ceiling with no available adjustment or access to motor.

Written By: Nathan Denney on 11/20/2025

Unit Data - PHOTO LOG

11/20/2025

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National TAB

Project:Tobias Funeral Home (Dayton, OH)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

IEF1-1/MENS RR

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	117	EG	8	150	1	144	144	96.0
EGRD2	117	EG	8	150	1	158	158	105.3
Total				300		302	302	100.67%

Completed By: Nathan Denney on 11/20/2025

National TAB

Project: Tobias Funeral Home (Dayton, OH)

System/Unit: FAN - Exhaust

Asset: IEF1-2 AREA:WOMENS RR

Unit Data		
	Design	**Actual**
MFG	NA	SOLAR
Model Num	NA	200S
Serial Num	-	1025704468
Type	INLINE	INLINE

Test Data		
	Design	**Actual**
CFM	300	325

Motor Data		
	Design	**Actual**
Motor MFG	-	INACCESSIBLE
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1A

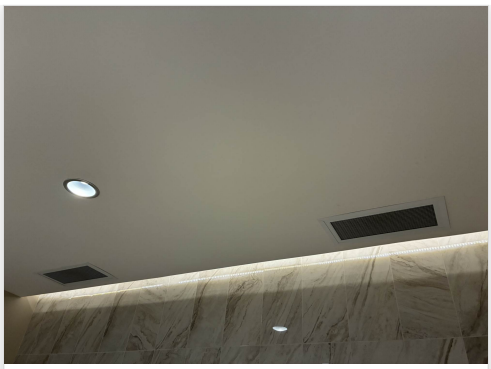
Completed By: Nathan Denney on 11/20/2025

Notes:
Inline fan above drywall ceiling with no available adjustment or access to motor.

Written By: Nathan Denney on 11/20/2025

Unit Data - PHOTO LOG

11/20/2025



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National TAB

Project:Tobias Funeral Home (Dayton, OH)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

IEF1-2/WOMENS RR

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	118	EG	8	150	1	158	158	105.3
EGRD2	105	EG	8	150	1	167	167	111.3
Total				300		325	325	108.33%

Completed By: Nathan Denney on 11/20/2025