Report By:

National TAB
105 Stone Village Drive
Fort Mill, SC 29708

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 01/21/2026

Completed By: National TAB

PROJECT

Palisades Episc School Classrooms (Charlotte, NC)

13120 Grand Palisades Pkwy

Charlotte, NC 28278

Client

Action Mechanical Inc.

PO Box 7325

CHARLOTTE, NC 28241

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

Table Of Contents

CERTIFICATION

PROJECT: Palisades Episc School Classrooms (Charlotte, NC)

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-Southeast
REGISTRATION NO: 3755
CERTIFIED BY: J. Scott Springer 23312
DATE: 1/21/2026

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-Southeast
REGISTRATION NO: 3755
CERTIFIED BY: J. Scott Springer 23312
DATE:

Submitted and Certified by:

NEBB TAB FIRM: National TAB-Southeast
TAB PROFESSIONAL: J. Scott Springer
SIGNATURE:
REGISTRATION NO: 3755 (NTAB) / 23312
CERTIFICATION EXP: 12/31/2026

National TAB

Testing, Adjusting, and Balancing Equipment

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 25D-00848	12/11/2025	12/11/2026
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	Evergreen S-PVF-1 S/N 25D-00848	12/11/2025	12/11/2026
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 3 % +/- 7 cfm	Evergreen 15D Flow Hood	12/11/2025	12/11/2026
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 081820093	9/30/2025	9/30/2026
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 5028	9/30/2025	9/30/2026
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 081820093	9/30/2025	9/30/2026
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 1075	9/30/2025	9/30/2026
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 081820093	9/30/2025	9/30/2026
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 4011	9/30/2025	9/30/2026
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper ATKINS - SRH77A S/N 090315046	9/30/2025	9/30/2026
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Dwyer CM-1 - S/N 190800099	9/30/2025	9/30/2026
	AMPERAGE MEASUREMENT	0 Amperers to 100 Amperes	2 % reading +/- 5 digits	Dwyer CM-1 - S/N 190800099	9/30/2025	9/30/2026
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	Dwyer TAC-L - S/N S1100123	9/30/2025	9/30/2026
HYDRONIC	PRESSURE MEASUREMENT	-30 in Hg to 200 psi	±2% of reading +/- 1 psi	Shortridge HDM 250 - S/N W25059	6/18/2025	6/18/2026
	DIFFERENTIAL PRESSURE MEASUREMENT	0 psi - 80 psi	±2% of reading +/- 1 psi	Shortridge HDM 250 - S/N W25059	6/18/2025	6/18/2026

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

AMCI
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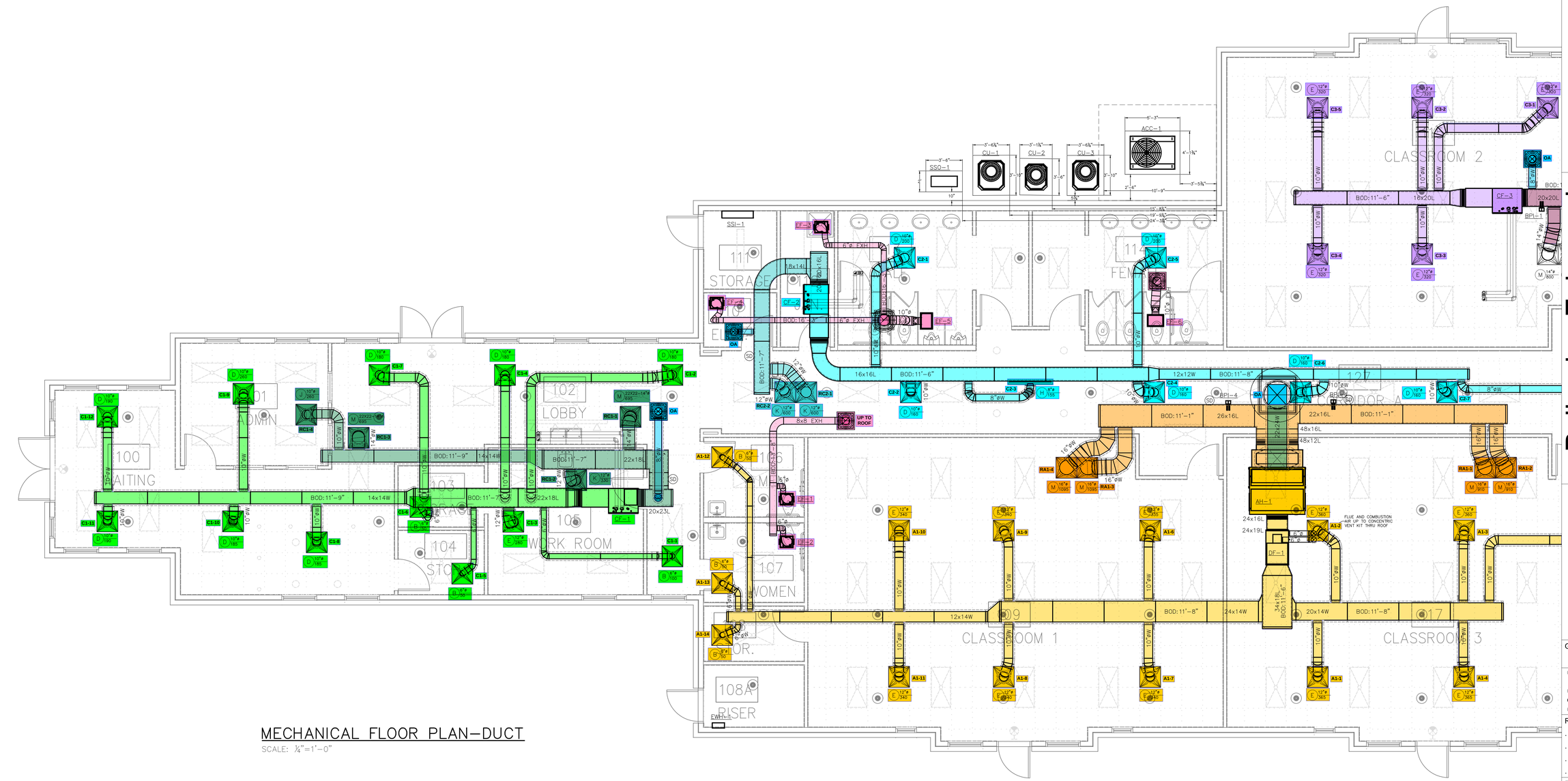
(704) 587-4450
FAX: 587-4451

THE SCALE SHOWN ON THIS DRAWING IS VALID ONLY WHEN PLOTTED AT 42"X30". SEE SCALE MARK IN THE LOWER LEFT HAND CORNER OF THIS SHEET.



MECHANICAL FLOOR PLAN–DUCT

SCALE: ¼"=1'-0"

Palisades Episcopal High School

13120 Grand Palisades Parkway
Charlotte, NC

GENERAL CONTRACTOR:
Metrolina

- ○ PRELIMINARY - NOT FOR CONSTRUCTION
- ○ FOR CONSTRUCTION
- ● SHOP DRAWINGS
- ○ AS-BUILT DRAWINGS

REVISIONS	DATE

DRAWN BY:	RJM
CHECKED BY:	RJM
PROJECT:	24-777
DATE:	xx/xx/xxxx
SHEET: 1	OF: 4

M1

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ACTION MECHANICAL CONTRACTORS, INC.
DESIGN-INSTALLATION-SERVICE
PO BOX 7325
CHARLOTTE, NC 28241
(704) 587-4450
FAX: 587-4451

THE SCALE SHOWN ON THIS DRAWING IS VALID ONLY WHEN PLOTTED AT 42"X30". SEE SCALE MARK IN THE LOWER LEFT HAND CORNER OF THIS SHEET.

Palisades Episcopal High School

13120 Grand Palisades Parkway
Charlotte, NC

MECHANICAL FLOOR PLAN–DUCT

SCALE: ¼"=1'-0"

GENERAL CONTRACTOR:
Metrolina

- ○ PRELIMINARY - NOT FOR CONSTRUCTION
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REVISIONS	DATE
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DRAWN BY:	RJM
CHECKED BY:	RJM
PROJECT:	24-777
DATE:	xx/xx/xxxx
SHEET: 2	OF: 4

M2

SCALE MARK
3"
2"
1"
0"

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: AH-1 AREA:109,117

Unit Data	
	Actual
MFG	TRANE
Model Num	TWE12041BAA07B1
Serial Num	23303216BA
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	CENTURY
Frame	56HZ
Horsepower	2
Motor Rpm	1725
Phase	1
Voltage	208
Amperage	10.50

Test Data		
	Design	**Actual**
SF CFM	4000	3833
Motor Speed SetPt	-	60 Hz
RL Voltage	208	208
RL Amperage	10.5	10.50
RA CFM	3635	3433
OA CFM	365	400

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.37"
Discharge ESP	-	0.16"
Total ESP	0.40	0.53"
RA Temp (db/wb)	-	72 F
SA Temp (db/wb)	-	124 F

Completed By: Antonio Flores-De La Cruz on 06/26/2025

National TAB

Project:Palisades Episc School Classrooms (Charlotte, NC)

Split Sys Furnace

Diffuser Supply (GRD)

AH-1/109,117

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	117	E	12	365	263	329	90.1
SGRD2	117	E	12	360	330	347	96.4
SGRD3	117	E	12	360	366	343	95.3
SGRD4	117	E	12	365	355	354	97.0
SGRD5	117	E	12	365	315	357	97.8
SGRD6	109	E	10	335	309	320	95.5
SGRD7	109	E	10	340	287	337	99.1
SGRD8	109	E	10	340	312	323	95.0
SGRD9	109	E	10	340	332	327	96.2
SGRD10	109	E	10	340	308	313	92.1
SGRD11	109	E	10	340	308	333	97.9
SGRD12	16	A	6	50	100	50	100.0
SGRD13	107	B	6	50	106	50	100.0
SGRD14	108	A	6	50	114	50	100.0
Total				4000	3805	3833	95.82%

Diffuser Ret/Exh (GRD)

AH-1/109,117

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	117	M	16	825	1	745	798	96.7
EGRD2	117	M	16	825	1	563	772	93.6
EGRD3	109	M	16	995	1	663	936	94.1
EGRD4	109	M	16	990	1	769	927	93.6
Total				3635		2740	3433	94.44%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: AH-2 AREA:121,125

Unit Data	
	Actual
MFG	TRANE
Model Num	TWE09041BAA07B1
Serial Num	24221805BA
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	MARATHON
Frame	56H
Horsepower	1.5
Motor Rpm	1725
Phase	1
Voltage	208
Amperage	7.50

Test Data		
	Design	**Actual**
SF CFM	3000	2984
Motor Speed SetPt	-	60 Hz
RL Voltage	208	208
RL Amperage	7.5	6.4
RA CFM	2650	2621
OA CFM	350	363

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.51"
Discharge ESP	-	0.11"
Total ESP	0.40	0.62"
RA Temp (db/wb)	-	71 F
SA Temp (db/wb)	-	136.5 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

National TAB

Project:Palisades Episc School Classrooms (Charlotte, NC)

Split Sys Furnace

Diffuser Supply (GRD)

AH-2/121,125

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	121	E	12	300	173	294	98.0
SGRD2	121	E	12	300	252	296	98.7
SGRD3	121	E	12	300	223	310	103.3
SGRD4	121	E	12	300	255	311	103.7
SGRD5	121	E	12	300	247	290	96.7
SGRD6	125	E	12	300	176	299	99.7
SGRD7	125	E	12	300	223	292	97.3
SGRD8	125	E	12	300	203	325	108.3
SGRD9	125	E	12	300	212	296	98.7
SGRD10	125	E	12	300	234	271	90.3
Total				3000	2198	2984	99.47%

Diffuser Ret/Exh (GRD)

AH-2/121,125

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	121	M	16	663	1	598	654	98.6
EGRD2	121	M	16	663	1	616	666	100.5
EGRD3	125	M	16	662	1	459	650	98.2
EGRD4	125	M	16	662	1	525	651	98.3
Total				2650		2198	2621	98.91%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: AH-3 AREA:120,123

Unit Data	
	Actual
MFG	TRANE
Model Num	TWE09041BAA07B1
Serial Num	23302438BA
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	MARATHON
Frame	56H
Horsepower	1.5
Motor Rpm	1725
Phase	1
Voltage	208
Amperage	7.5

Test Data		
	Design	**Actual**
SF CFM	3000	2970
Motor Speed SetPt	-	60 Hz
RL Voltage	208	208
RL Amperage	7.5	5.6
RA CFM	2650	2614
OA CFM	350	356

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.43"
Discharge ESP	-	0.19"
Total ESP	0.40	0.62"
RA Temp (db/wb)	-	70 F
SA Temp (db/wb)	-	126.3 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

National TAB

Project:Palisades Episc School Classrooms (Charlotte, NC)

Split Sys Furnace

Diffuser Supply (GRD)

AH-3/120,123

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	120	E	12	300	228	302	100.7
SGRD2	120	E	12	300	285	302	100.7
SGRD3	120	E	12	300	256	292	97.3
SGRD4	120	E	12	300	316	300	100.0
SGRD5	120	E	12	300	275	302	100.7
SGRD6	123	E	12	300	241	303	101.0
SGRD7	123	E	12	300	245	290	96.7
SGRD8	123	E	12	300	208	274	91.3
SGRD9	123	E	12	300	238	315	105.0
SGRD10	123	E	12	300	273	290	96.7
Total				3000	2565	2970	99%

Diffuser Ret/Exh (GRD)

AH-3/120,123

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	120	M	16	663	1	541	666	100.5
EGRD2	120	M	16	662	1	553	662	100.0
EGRD3	123	M	16	663	1	444	621	93.7
EGRD4	123	M	16	662	1	551	665	100.5
Total				2650		2089	2614	98.64%

Completed By: Antonio Flores-De La Cruz on 06/24/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: CF-1 AREA:

Unit Data	
	Actual
MFG	TRANE
Model Num	S9X1D120U5PSBAB
Serial Num	24234MY7KG
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	NA
Frame	NA
Horsepower	1
Motor Rpm	NA
Phase	1
Voltage	115
Amperage	14.1

Test Data		
	Design	**Actual**
SF CFM	2030	1905
Motor Speed SetPt	-	SPEED TAP 9
RL Voltage	115	120
RL Amperage	14.1	6.7
RA CFM	1890	1759
OA CFM	140	146

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.18"
Discharge ESP	-	0.15"
Total ESP	0.50	0.33"
RA Temp (db/wb)	-	74 F
SA Temp (db/wb)	-	154 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

National TAB

Project:Palisades Episc School Classrooms (Charlotte, NC)

Split Sys Furnace

Diffuser Supply (GRD)

CF-1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	CORR	B	6	100	85	91	91.0
SGRD2	102	D	10	180	173	173	96.1
SGRD3	105	E	12	280	252	261	93.2
SGRD4	102	D	10	180	163	173	96.1
SGRD5	104	B	6	50	50	51	102.0
SGRD6	103	B	6	50	50	51	102.0
SGRD7	102	D	10	180	156	174	96.7
SGRD8	100	D	10	185	156	172	93.0
SGRD9	101	D	10	260	235	242	93.1
SGRD10	100	D	10	185	162	173	93.5
SGRD11	100	D	10	190	161	172	90.5
SGRD12	100	D	10	190	161	172	90.5
Total				2030	1804	1905	93.84%

Diffuser Ret/Exh (GRD)

CF-1/

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	102	M	14	663	1	657	619	93.4
EGRD2	105	K	12	315	1	398	291	92.4
EGRD3	102	M	14	663	1	379	620	93.5
EGRD4	101	J	10	249	1	178	229	92.0
Total				1890		1612	1759	93.07%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: CF-2 AREA:

Unit Data	
	Actual
MFG	TRANE
Model Num	S9V2B080U4PSBDA
Serial Num	23404LHTKG
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	NA
Frame	NA
Horsepower	0.75
Motor Rpm	NA
Phase	1
Voltage	115
Amperage	12.6

Test Data		
	Design	**Actual**
SF CFM	1355	1361
Motor Speed SetPt	-	MED-HIGH
RL Voltage	115	120
RL Amperage	12.6	5.2
RA CFM	1255	1258
OA CFM	100	103

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.16"
Discharge ESP	-	0.12"
Total ESP	0.50	0.28"
RA Temp (db/wb)	-	70 F
SA Temp (db/wb)	-	123 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

Diffuser Supply (GRD)

CF-2/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	113	D	10	200	151	204	102.0
SGRD2	CORR A	D	10	160	181	162	101.3
SGRD3	CORR A	H	8	155	82	152	98.1
SGRD4	CORR A	D	10	160	176	158	98.8
SGRD5	114	D	10	200	195	204	102.0
SGRD6	CORR A	D	10	160	207	163	101.9
SGRD7	CORR A	D	10	160	228	162	101.3
SGRD8	CORR A	H	8	160	97	156	97.5
Total				1355	1317	1361	100.44%

Diffuser Ret/Exh (GRD)

CF-2/

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	127	K	12	630	1	625	635	100.8
EGRD2	127	K	12	625	1	548	623	99.7
Total				1255		1173	1258	100.24%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: CF-3 AREA:114

Unit Data	
	Actual
MFG	TRANE
Model Num	S9V2C100U5PSBDA
Serial Num	23332UFJKG
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	NA
Frame	NA
Horsepower	0.75
Motor Rpm	NA
Phase	1
Voltage	115
Amperage	12.9

Test Data		
	Design	**Actual**
SF CFM	1600	1659
Motor Speed SetPt	-	MED-HIGH
RL Voltage	115	120
RL Amperage	12.9	5.6
RA CFM	1425	1497
OA CFM	175	162

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.15"
Discharge ESP	-	0.13"
Total ESP	0.50	0.28"
RA Temp (db/wb)	-	71 F
SA Temp (db/wb)	-	119.4 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

Diffuser Supply (GRD)

CF-3/114

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	115	E	12	320	356	334	104.4
SGRD2	115	E	12	320	432	334	104.4
SGRD3	115	E	12	320	375	335	104.7
SGRD4	115	E	12	320	63	335	104.7
SGRD5	115	E	12	320	437	321	100.3
Total				1600	1663	1659	103.69%

Diffuser Ret/Exh (GRD)

CF-3/114

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	115	M	14	713	1		742	104.1
EGRD2	115	M	14	712	1		755	106.0
Total				1425		0	1497	105.05%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: CF-4 AREA:CORR B & C

Unit Data	
	Actual
MFG	TRANE
Model Num	S9V2C100U4VSADA
Serial Num	23324KJ5KG
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	NA
Frame	NA
Horsepower	1
Motor Rpm	NA
Phase	1
Voltage	115
Amperage	12.6

Test Data		
	Design	**Actual**
SF CFM	1380	1410
Motor Speed SetPt	-	MED
RL Voltage	115	120
RL Amperage	12.6	5.2
RA CFM	1280	1307
OA CFM	100	103

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.15"
Discharge ESP	-	0.14"
Total ESP	0.50	0.29"
RA Temp (db/wb)	-	71 F
SA Temp (db/wb)	-	121.5 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

National TAB

Project:Palisades Episc School Classrooms (Charlotte, NC)

Split Sys Furnace

Diffuser Supply (GRD)

CF-4/CORR B & C

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	CORR B	C	8	175	190	170	97.1
SGRD2	CORR B	H	8	155	112	153	98.7
SGRD3	CORR B	C	8	175	147	178	101.7
SGRD4	CORR B	C	8	175	159	176	100.6
SGRD5	CORR C	C	8	175	160	181	103.4
SGRD6	CORR C	C	8	175	169	175	100.0
SGRD7	CORR C	C	8	175	146	188	107.4
SGRD8	CORR C	C	8	175	147	189	108.0
Total				1380	1230	1410	102.17%

Diffuser Ret/Exh (GRD)

CF-4/CORR B & C

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	128	M	14	640	1	659	659	103.0
EGRD2	128	M	14	640	1	610	648	101.3
Total				1280		1269	1307	102.11%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: CF-5 AREA:131 CLASS 9

Unit Data	
	Actual
MFG	TRANE
Model Num	S9V2C100U4VSADA
Serial Num	23324JXHKG
Configuration	HORIZONAL

Motor Data	
	Actual
Motor MFG	NA
Frame	NA
Horsepower	0.75
Motor Rpm	NA
Phase	1
Voltage	120
Amperage	12.9

Test Data		
	Design	**Actual**
SF CFM	1600	1565
Motor Speed SetPt	-	MED-HIGH
RL Voltage	120	120
RL Amperage	12.9	5.6
RA CFM	1440	1401
OA CFM	160	164

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.21"
Discharge ESP	-	0.08"
Total ESP	0.50	0.29"
RA Temp (db/wb)	-	70 F
SA Temp (db/wb)	-	121.5 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

National TAB

Project:Palisades Episc School Classrooms (Charlotte, NC)

Split Sys Furnace

Diffuser Supply (GRD)

CF-5/131 CLASS 9

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	131	E	12	320	213	315	98.4
SGRD2	131	E	12	320	267	308	96.3
SGRD3	131	E	12	320	259	318	99.4
SGRD4	131	E	12	320	280	306	95.6
SGRD5	131	E	12	320	276	318	99.4
Total				1600	1295	1565	97.81%

Diffuser Ret/Exh (GRD)

CF-5/131 CLASS 9

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	131	M	16	720	1	630	678	94.2
EGRD2	131	M	16	720	1	698	723	100.4
Total				1440		1328	1401	97.29%

Completed By: Antonio Flores-De La Cruz on 06/25/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: Split Sys Furnace

Asset: CF-6 AREA:130 CLASS 8

Unit Data	
	Actual
MFG	TRANE
Model Num	S9V2C100U4VSADA
Serial Num	23302S1NKG
Configuration	HORIZONTAL

Motor Data	
	Actual
Motor MFG	NA
Frame	NA
Horsepower	0.75
Motor Rpm	NA
Phase	1
Voltage	115
Amperage	12.9

Test Data		
	Design	**Actual**
SF CFM	1600	1620
Motor Speed SetPt	-	MED-HIGH
RL Voltage	115	120
RL Amperage	12.9	5.5
RA CFM	1440	1457
OA CFM	160	163

Performance Data		
	Design	**Actual**
Suction ESP	-	-0.19"
Discharge ESP	-	0.08"
Total ESP	0.50	0.27"
RA Temp (db/wb)	-	72 F
SA Temp (db/wb)	-	118.3 F

Completed By: Antonio Flores-De La Cruz on 06/25/2025

Diffuser Supply (GRD)

CF-6/130 CLASS 8

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	130	E	12	320	211	323	100.9
SGRD2	130	E	12	320	276	331	103.4
SGRD3	130	E	12	320	258	314	98.1
SGRD4	130	E	12	320	292	326	101.9
SGRD5	130	E	12	320	298	326	101.9
Total				1600	1335	1620	101.25%

Diffuser Ret/Exh (GRD)

CF-6/130 CLASS 8

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	130	M	16	720	1	740	741	102.9
EGRD2	130	M	16	720	1	630	716	99.4
Total				1440		1370	1457	101.18%

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-1 AREA:106

Unit Data		
	Design	**Actual**
MFG	Cook	COOK
Model Num	NA	GC-146
Serial Num	-	NL
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	100	91
RL Voltage	115	115
RL Amperage	0.313	0.313
Total ESP	0.14	0.09"

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	35W	15W
Motor Rpm	894	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.313
Service Factor	-	1

Completed By: Antonio Flores-De La Cruz on 06/26/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-2 AREA:107

Unit Data		
	Design	**Actual**
MFG	Cook	COOK
Model Num	NA	GC-146
Serial Num	-	NL
Type	-	CEILING

Test Data		
	Design	**Actual**
CFM	100	108
RL Voltage	115	120
RL Amperage	0.313	0.313
Total ESP	0.14	0.12"

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	35W	15W
Motor Rpm	894	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.313
Service Factor	-	1

Completed By: Antonio Flores-De La Cruz on 06/26/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-3 AREA:112

Unit Data		
	Design	**Actual**
MFG	Cook	COOK
Model Num	NA	GC-146
Serial Num	-	NL
Type	-	CEILING

Test Data		
	Design	**Actual**
CFM	100	110
RL Voltage	115	120
RL Amperage	0.313	0.313
Total ESP	0.14	0.09"

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	35W	15W
Motor Rpm	894	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.313
Service Factor	-	1

Completed By: Antonio Flores-De La Cruz on 06/26/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-4 AREA:110

Unit Data		
	Design	**Actual**
MFG	Cook	COOK
Model Num	NA	GC-146
Serial Num	-	NL
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	100	109
RL Voltage	115	120
RL Amperage	0.313	0.313
Total ESP	0.14	0.12"

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	35W	15W
Motor Rpm	894	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.313
Service Factor	-	1

Completed By: Antonio Flores-De La Cruz on 06/26/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-5 AREA:113

Unit Data		
	Design	**Actual**
MFG	Cook	COOK
Model Num	NA	GCC-542
Serial Num	-	NL
Type	-	CEILING

Test Data		
	Design	**Actual**
CFM	300	357
RL Voltage	115	120
RL Amperage	0.99	0.99
Total ESP	0.15	0.17"

Motor Data		
	Design	**Actual**
Motor MFG	-	MCMILLAN
Frame	-	NL
Horsepower	102W	0.0625
Motor Rpm	1318	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.99
Service Factor	-	1

Completed By: Antonio Flores-De La Cruz on 06/26/2025

Notes:
2 SPEED MOTOR. ON LOW SPEED, CFM VALUE WAS 190 CFM. LEFT ON HIGH SPEED

Written By: Antonio Flores-De La Cruz on 06/26/2025

National TAB

Project: Palisades Episc School Classrooms (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-6 AREA:114

Unit Data		
	Design	**Actual**
MFG	Cook	COOK
Model Num	NA	GCC-542
Serial Num	-	NL
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	300	356
RL Voltage	115	120
RL Amperage	0.99	0.99
Total ESP	0.15	0.19"

Motor Data		
	Design	**Actual**
Motor MFG	-	MCMILLAN
Frame	-	NL
Horsepower	102W	0.0625
Motor Rpm	1318	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.99
Service Factor	-	1

Completed By: Antonio Flores-De La Cruz on 06/26/2025

Notes:
2 SPEED MOTOR. ON LOW SPEED, CFM VALUE WAS 190 CFM. LEFT ON HIGH SPEED

Written By: Antonio Flores-De La Cruz on 06/26/2025