



CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE

1/5/2024

PROJECT

**SMALL AND ASSOCIATES
LITTLE ROCK, AR**

ENGINEER

**ENERGY ENGINEERING CONSULTANTS, INC.
10 CORPORATE HILL DRIVE, SUITE 100
LITTLE ROCK, AR 72205
(501)244-0511**

HVAC CONTRACTOR

**COMFORT SYSTEMS USA (AR)
9924 LANDERS ROAD
NORTH LITTLE ROCK, AR 72117
(501)834-3320**

NEBB TAB FIRM

**AIRETECH CORPORATION
7631 Northshore Place
North Little Rock, Arkansas 72118**

Certification Number: 2847



PROJECT: SMALL AND ASSOCIATES

THE DATA PRESENTED IN THIS REPORT IS A RECORD OF SYSTEM MEASUREMENTS & FINAL ADJUSTMENTS THAT HAVE BEEN OBTAINED IN ACCORDANCE WITH THE CURRENT ADDITION OF THE NEBB PROCEDURAL STANDARD FOR TESTING, ADJUSTING & BALANCING OF ENVIRONMENTAL SYSTEMS. THE MEASUREMENTS SHOWN, & THE INFORMATION GIVEN, IN THIS REPORT ARE CERTIFIED TO BE ACCURATE & COMPLETE, AT THE TIME & DATE INFORMATION WAS GATHERED. ANY VARIANCES FROM DESIGN QUANTITIES, WHICH EXCEED NEBB TOLERANCES, ARE NOTED IN THE TAB REPORT PROJECT SUMMARY.

SUBMITTED & CERTIFIED BY:
NEBB TAB FIRM: AIRETECH CORPORATION
REGISTRATION NUMBER: 2847
CERTIFIED BY (TAB SUPERVISOR): DANIEL J DRAPER
CERTIFICATION EXPIRATION DATE: 12/31/2024
SIGNATURE:

A handwritten signature in black ink that reads "Daniel J. Draper".





Firm Certification

AIRETECH CORPORATION

HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED
STATUS IN THE FOLLOWING DISCIPLINE

Testing, Adjusting and Balancing of Environmental Systems

2847

NEBB Certification Number

December 31, 2024

Expiration Date

A handwritten signature in black ink, appearing to read "James W. Smith, Jr.".

NEBB President

A handwritten signature in black ink, appearing to read "Michael J. Kelly".

NEBB President-Elect



Certification

DANIEL J. DRAPER

**HAS MET ALL REQUIREMENTS FOR NEBB CERTIFIED PROFESSIONAL
STATUS IN THE FOLLOWING DISCIPLINE**

Testing, Adjusting and Balancing of Environmental Systems

This Certificate, as well as individual affiliation with a NEBB Certified Firm and associated NEBB Certification Stamp are REQUIRED to provide a NEBB Certified Report. Participation in the NEBB Quality Assurance Program requires the Certificant be affiliated with a NEBB Certified Firm

CP-23442

NEBB Certification Number

December 31, 2024

Expiration Date

NEBB President

NEBB President-Elect



7631 Northshore Place
 North Little Rock, AR 72118
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Instrument Calibration List

	Function	Range	Accuracy	Make	Model #	Serial #	Calibration Date
AIR	Air Pressure Measurement	0 to 10.00 in.w.g.	± 2% of reading	Evergreen	S-PVF-1	1900682	6/12/2023
	Air Velocity Measurement	100 to 3500 fpm	± 5% of reading	Evergreen	S-PVF-1	1900682	6/12/2023
	Direct Reading Hood	25 to 2000 cfm	± 5% of reading, ± 7 cfm	Evergreen	S-PVF-1	1900682	6/12/2023
TEMPERATURE	Air Meter with Probe	0 to 200 °F	± 0.5% of reading	Cooper	SRH77A-E	10709022	10/24/2023
	Immersion Meter with probe	0 to 200 °F	± 0.5% of reading	Cooper	SRH77A-E	10709022	10/24/2023
HUMIDITY	Humidity Measurement	10 to 90% RH	± 3% RH	Cooper	SRH77A-E	10709022	10/24/2023
ELECTRICAL	Volts AC	0 to 600 VAC	± 2% of reading	Fluke	902	62201193MV	10/19/2023
	Amperes	0.1 to 100 Amps	± 2% of reading	Fluke	902	62201193MV	10/19/2023
ROTATION	Rotation Measurement	60 to 5000rpm	± 2% of reading	Extech	461995	H319421	11/21/2023
HYDRONIC	Hydronic Pressure Measurement	0.4 to 200 PSI	± 2% of reading	Dwyer	490W-6	01L67L	4/13/2022
	Hydronic Differential Pressure	0.4 to 75 PSI	± 2% of reading	Dwyer	490W-6	01L67L	4/13/2022

(N.E.B. # 2847)



ABBREVIATIONS

<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>
A	AMPS	HP	HEAT PUMP
AHU	AIR HANDLING UNIT	HW	HEATING WATER
BCU	BLOWER COIL UNIT	KEF	KITCHEN EXHAUST FAN
BTU	BRITISH THERMAL UNIT	LAT	LEAVING AIR TEMPERATURE
CD	CEILING DIFFUSER	LWT	LEAVING WATER TEMPERATURE
CFM	CUBIC FEET PER MINUTE	M/N	MODEL NUMBER
CH	CHILLER	MAT	MIXED AIR TEMPERATURE
CHW	CHILLED WATER	MAU	MAKE UP AIR UNIT
CW	CONDENSER WATER	NA	NOT APPLICABLE
COMP	COMPRESSOR	NL	NOT LISTED
COND	CONDENSER	NLA	NO LOAD AMPS
CRAC	COMPUTER ROOM AIR CONDITIONING	OAT	OUTSIDE AIR TEMPERATURE
CW	CHILL WATER	OAU	OUTSIDE AIR UNIT
DALT	DUCT AIR LEAKAGE TEST	OED	OPEN ENDED DUCT
DB	DRY BULB	PH	PRE-HEAT
DP	DIFFERENTIAL PRESSURE	RG	RETURN GRILLE
DP	DISCHARGE PRESSURE	RH	RE-HEAT
EAT	ENTERING AIR TEMPERATURE	RLA	RUN LOAD AMPS
EF	EXHAUST FAN	RTU	ROOF TOP UNIT
EG	EXHAUST GRILLE	S/N	SERIAL NUMBER
ERU	ENERGY RECOVERY UNIT	SF	SUPPLY FAN
ERV	ENERGY RECOVERY VENTILATOR	SG	SIDEWALL GRILLE
ESP	EXTERNAL STATIC PRESSURE	SP	SUCTION PRESSURE
EVAP	EVAPORATOR	TSP	TOTAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE	V	VOLTS
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME
FP	FAN POWERED	VRF	VARIABLE REFRIGERANT
FPM	FEET PER MINUTE	WB	WET BULB
GPM	GALLONS PER MINUTE		



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LOCATION: Little Rock, AR
PROJECT #: 74741

DATE: 1/5/2024
CONTACT: Elizabeth Amador
AUTHOR:

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REPORT SUMMARY

Test, adjust, and balance work was performed at Small & Associates in Little Rock, Arkansas. The scope of work was to measure and balance the supply grille airflows for the existing roof top unit. The supply grille airflows were measured with a direct reading flowhood, totaled, and proportionally balanced. There was no thermostat in the area served, there appeared to be a wall temperature sensor, the space was maintaining 70 degrees with an outdoor ambient temperature of 40 degrees.



Roof Top Unit

PROJECT: Small and Associates
 LOCATION: Little Rock, AR
 PROJECT #: 74741

DATE: 1/5/2024
 CONTACT: Elizabeth Amador
 AUTHOR:

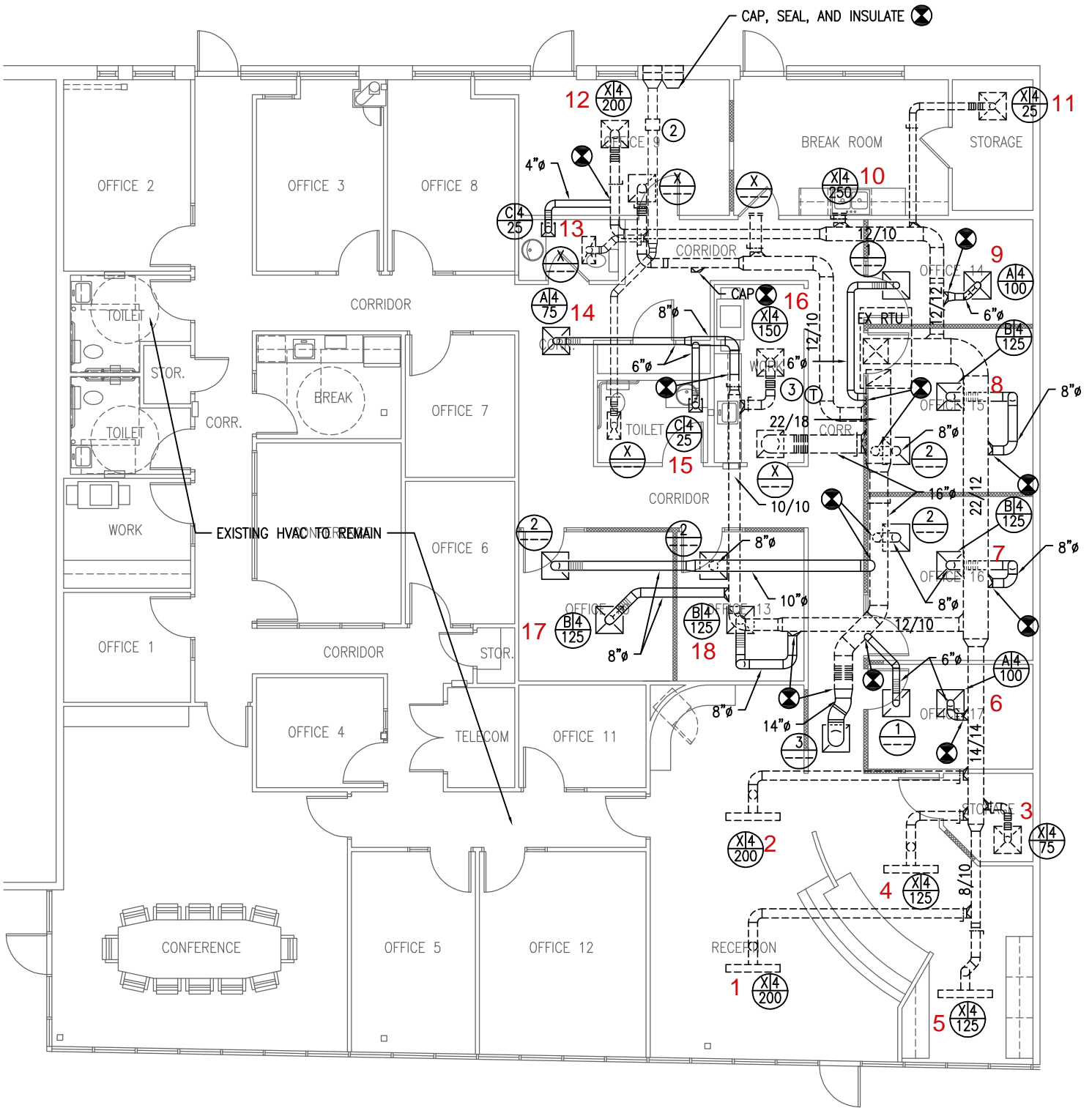
SYSTEM/UNIT: EX RTU

Tested By: Patrick McBride
 Date: 12/18/2023

Test Data	
Design Airflow	2175 CFM
Actual Airflow	2129 CFM

EX RTU Supply Outlet Summary

System/Unit	Area Served	Outlet Type	Size LxW / D	Design Airflow	Prelim Airflow	% Prelim Diff.	Final Airflow	% Final Diff.	Instrument
Outlet-01	RECEPTION	X4	NL	200	188	94.0	192	96.0	Evergreen
Outlet-02	RECEPTION	X4	NL	200	182	91.0	188	94.0	Evergreen
Outlet-03	STORAGE	X4	NL	75	55	73.3	69	92.0	Evergreen
Outlet-04	RECEPTION	X4	NL	125	115	92.0	120	96.0	Evergreen
Outlet-05	RECEPTION	X4	NL	125	110	88.0	118	94.4	Evergreen
Outlet-06	OFFICE 17	A4	6	100	105	105.0	107	107.0	Evergreen
Outlet-07	OFFICE 16	B4	8	125	106	84.8	127	101.6	Evergreen
Outlet-08	OFFICE 15	B4	8	125	206	164.8	123	98.4	Evergreen
Outlet-09	OFFICE 14	A4	6	100	122	122.0	98	98.0	Evergreen
Outlet-10	BREAK ROOM	X4	NL	250	257	102.8	262	104.8	Evergreen
Outlet-11	STORAGE	X4	NL	25	15	60.0	26	104.0	Evergreen
Outlet-12	OFFICE 9	X4	NL	200	115	57.5	184	92.0	Evergreen
Outlet-13	TOILET	C4	4	25	24	96.0	27	108.0	Evergreen
Outlet-14	CORRIDOR	A4	6	75	93	124.0	79	105.3	Evergreen
Outlet-15	TOILET	C4	6	25	65	260.0	24	96.0	Evergreen
Outlet-16	WORK	X4	NL	150	128	85.3	141	94.0	Evergreen
Outlet-17	OFFICE 10	B4	8	125	138	110.4	120	96.0	Evergreen
Outlet-18	OFFICE 13	B4	8	125	142	113.6	124	99.2	Evergreen
Totals:	-	-	-	2175	2166	99.6	2129	97.9	-



2 MECHANICAL PLAN 

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