



CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE

AUGUST 18, 2023

PROJECT

**CAMP ROBINSON
BUILDING 2602**

ARCHITECT

**LEWIS ARCHITECTS ENGINEERS
11225 HURON LANE, SUITE 104
LITTLE ROCK, AR 72211
(501)223-9302**

HVAC CONTRACTOR

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

NEBB TAB FIRM

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

Certification Number: 2847



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, 2023

Expiration Date

NEBB President

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

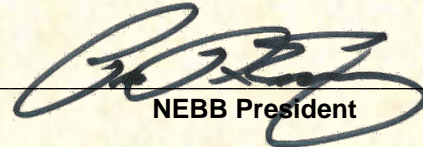
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CP-23442

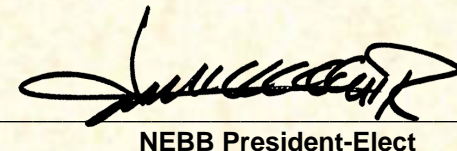
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NEBB President



NEBB President-Elect



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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	2200600A	12/14/2022
	Air Velocity Measurement	100 to 3500 fpm	± 5% of reading	Evergreen	S-PVF-1	2200600A	12/14/2022
	Direct Reading Hood	25 to 2000 cfm	± 5% of reading, ± 7 cfm	Evergreen	S-PVF-1	2200600A	12/14/2022
TEMPERATURE	Air Meter with Probe	0 to 200 °F	± 0.5% of reading	Cooper	SRH77A-E	10709022	10/26/2022
	Immersion Meter with probe	0 to 200 °F	± 0.5% of reading	Cooper	SRH77A-E	10709022	10/26/2022
HUMIDITY	Humidity Measurement	10 to 90% RH	± 3% RH	Evergreen	S-H-3-5	2000197	12/21/2022
ELECTRICAL	Volts AC	0 to 600 VAC	± 2% of reading	Fluke	323	34730682WS	10/27/2022
	Amperes	0.1 to 100 Amps	± 2% of reading	Fluke	323	34730682WS	10/27/2022
ROTATION	Rotation Measurement	60 to 5000rpm	± 2% of reading	Extech	461995	Q083294	10/26/2022
HYDRONIC	Hydronic Pressure Measurement	0.4 to 200 PSI	± 2% of reading	Dwyer	490W-6	01L6RK	3/6/2023
	Hydronic Differential Pressure	0.4 to 75 PSI	± 2% of reading	Dwyer	490W-6	01L6RK	3/6/2023

(N.E.B.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		



PROJECT: CAMP ROBINSON BUILDING 2602 RENOVATION

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: 12/31/2023

SIGNATURE:

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





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LOCATION: North Little Rock, AR
PROJECT #: 70324

DATE: 8/18/2023
CONTACT: Elizabeth Amador

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REPORT SUMMARY

Test and Balance consisted of 1 exhaust fan, 1 furnace unit and 1 unit heater.

EF-01 is serving a restroom and was tested to verify proper operation. Fan total was determined at inlet using a direct reading flow hood and fan speed was adjusted to design. All fan and motor operating data were measured and recorded.

F-01 is serving the recovery shop area. Unit was tested in both cooling/heating modes and all entering/leaving air temperatures were measured and recorded. Fan total was determined at supply outlets using a direct reading flow hood, fan speed was adjusted, and outlets were balanced to design. F-01 has a minimum fresh air requirement that was measured/set via pitot tube duct traverse. All unit and motor operating data were measured and recorded.

UH-01 is serving the storage area and was tested to verify proper operation. Entering/leaving air temperatures were measured and recorded in heating mode.



Fan Unit

PROJECT: Camp Robinson Building 2602 Renovation
LOCATION: North Little Rock, AR
PROJECT #: 70324

DATE: 8/18/2023
CONTACT: Elizabeth Amador

SYSTEM/UNIT: EF-01
AREA: 103

Tested By: Patrick McBride
Date: 7/25/2023

Unit Data	
Fan Manufacturer	BROAN
Fan Model Number	T150H

Test Data	
Design Airflow	75 CFM
Actual Airflow	80 CFM
Motor Volts T1-T2	121 Volts
Motor Amps T1	3.3 Amps

Motor Data	
Rated Airflow Capacity	75 CFM
Motor HP	1/6 HP
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	4.4 Amps
Corrected FL Amps	4.18 Amps
Motor Type	Direct Drive
Direct Drive Speed	High

Log:	EF-01	7/25/2023	Patrick McBride	Nameplate tag is inaccessible and all information were obtained via fan submittal.
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Fan Coil

PROJECT: Camp Robinson Building 2602 Renovation
LOCATION: North Little Rock, AR
PROJECT #: 70324

DATE: 8/18/2023
CONTACT: Elizabeth Amador

SYSTEM/UNIT: F-01
AREA: 101

Tested By: Patrick McBride
Date: 7/25/2023

Unit Data	
Unit Manufacturer	Daikin
Unit Model Number	DM96VC0603BNAC
Unit Serial Number	2209270935
Filter Type	Pleated
Filter Qty - S1	1
Filter Size - S1	20x25x2

Test Data	
Cool Ent Air DB Temp Design	80.0 Deg F
Cool Ent Air WB Temp Design	67.0 Deg F
Cool Ent Air DB Temp Actual	71.0 Deg F
Cool Ent Air WB Temp Actual	61.0 Deg F
Cool Leav Air DB Temp Actual	52.0 Deg F
Cool Leav Air WB Temp Actual	50.0 Deg F
Heat Ent Air Temp Actual	72.0 Deg F
Heat Leav Air Temp Actual	98.0 Deg F
Heating Air Delta T	26.0 Deg F

Electrical Test Data	
Motor Volts T1-T2	121 Volts
Motor Amps T1	5.70 Amps

Motor Data	
Motor HP	1/2 HP
Motor RPM	1075 RPM
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	7.1 Amps
Motor Type	Direct Drive
Direct Drive Speed	High

Air Test Data	
Design Airflow	1000 CFM
Actual Airflow	962 CFM
Design OSA	100 CFM
Actual OSA	106 CFM
Design Rtn Airflow	900 CFM
Actual Rtn Airflow	856 CFM

F-01 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	101	A	12/10	500	473	94.6	473	94.6	Evergreen
Outlet-02	101	A	12/10	500	489	97.8	489	97.8	Evergreen
	Totals:	-	-	1000	962	96.2	962	96.2	-



Unit Heater

PROJECT: Camp Robinson Building 2602 Renovation
LOCATION: North Little Rock, AR
PROJECT #: 70324

DATE: 8/18/2023
CONTACT: Elizabeth Amador

SYSTEM/UNIT: UH-01
AREA: 102

Tested By: David DeMarco
Date: 8/7/2023

Unit Data	
Unit Manufacturer	Reznor
Model Number	UDX-75
Serial Number	BVL3062147993
Motor Volts	115 Volts
Motor Amps	3.10 Amps
Actual Volts	120 Volts
Actual Amps	2.60 Amps

Air Test Data	
Design Airflow	961 CFM
Actual Airflow	961 CFM

Log:	UH-01	7/25/2023	Patrick McBride	Heat is coming on and gets warm, but will not stay on when fan comes on.
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