



CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE

9/7/2023

PROJECT

**CHICOT ELEMENTARY SCHOOL
NEW ENTRY**

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North Little Rock, Arkansas 72118**

Certification Number: 2847



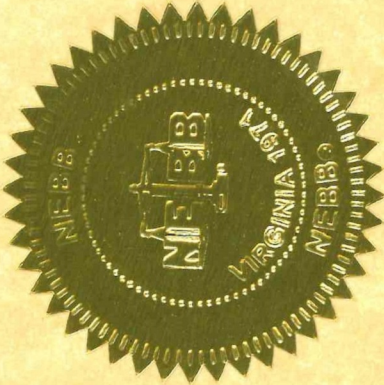
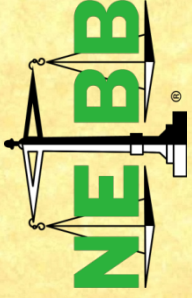
PROJECT: CHICOT ELEMENTARY SCHOOL

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.

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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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AIRETECH CORPORATION

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

Testing, Adjusting and Balancing of Environmental Systems

2847

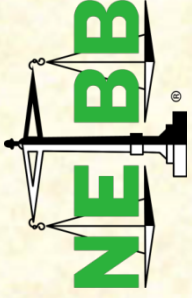
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Certification

DANIEL J. DRAPER

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Testing, Adjusting and Balancing of Environmental Systems

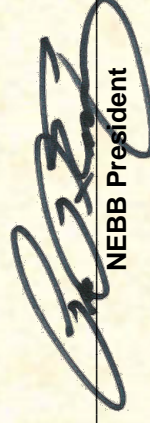
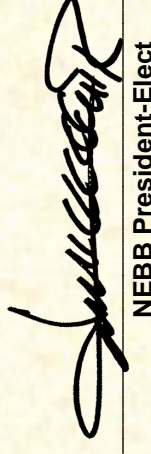
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Instrument Calibration List

	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		



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LOCATION: Mabelvale, AR
PROJECT #: 72727

DATE: 9/7/2023
CONTACT: Elizabeth Amador
AUTHOR:

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REPORT SUMMARY

Test, adjust, and balance work was performed at this project, an entry remodel at Chicot Elementary School in Mabelvale, Arkansas. The scope of work was to TAB new grilles added to two existing furnace units.

The supply grille airflows were measured with a direct reading flowhood, totaled, and proportionally balanced. The furnace units were tested in cooling mode, heating could not be tested due to high outdoor ambient lockout.



Fan Coil

PROJECT: Chicot Elementary New Entry
 LOCATION: Mabelvale, AR
 PROJECT #: 72727

DATE: 9/7/2023
 CONTACT: Elizabeth Amador
 AUTHOR:

SYSTEM/UNIT: EXISTING FCU-01

Tested By: Greg Rinehart
 Date: 8/8/2023

Unit Data	
Unit Manufacturer	Carrier
Unit Model Number	58SC0A110E311220
Unit Serial Number	4622A32275
Filter Type	Pleated
Filter Qty - S1	1
Filter Size - S1	20x25x2

Motor Data	
Motor HP	1 HP
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	13.4 Amps
Motor Type	Direct Drive
Direct Drive Speed	Low

Test Data	
Cool Ent Air DB Temp Actual	75.0 Deg F
Cool Ent Air WB Temp Actual	64.0 Deg F
Cool Leav Air DB Temp Actual	54.0 Deg F
Cool Leav Air WB Temp Actual	52.0 Deg F

Air Test Data	
Design Airflow	975 CFM
Actual Airflow	952 CFM

Electrical Test Data	
Motor Volts T1-T2	121 Volts
Motor Amps T1	8.40 Amps

Log: EXISTING FCU-01 8/8/2023 Greg Rinehart Can not test heat, ambient temperature too high.

EXISTING FCU-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	103	B4	8	175	239	136.6	161	92.0	Evergreen
Outlet-02	104	C4	10.	250	258	103.2	231	92.4	Evergreen
Outlet-03	102	B4	8	125	206	164.8	122	97.6	Evergreen
Outlet-04	111	B4	8	125	271	216.8	129	103.2	Evergreen
Outlet-05	112	A4	6	75	116	154.7	78	104.0	Evergreen
Outlet-06	114	A4	6	75	115	153.3	81	108.0	Evergreen
Outlet-07	114	A4	6	75	140	186.7	73	97.3	Evergreen
Outlet-08		A4	6	75	105	140.0	77	102.7	Evergreen
Totals:		-	-	975	1450	148.7	952	97.6	-

Fan Coil

PROJECT: Chicot Elementary New Entry
 LOCATION: Mabelvale, AR
 PROJECT #: 72727

DATE: 9/7/2023
 CONTACT: Elizabeth Amador
 AUTHOR:

SYSTEM/UNIT: EXISTING FCU-02

Tested By: Greg Rinehart
 Date: 8/18/2023

Unit Data	
Unit Manufacturer	TRANE
Filter Type	Pleated
Filter Qty - S1	1
Filter Size - S1	16x25x2

Test Data	
Cool Ent Air DB Temp Actual	70.0 Deg F
Cool Ent Air WB Temp Actual	62.0 Deg F
Cool Leav Air DB Temp Actual	54.0 Deg F
Cool Leav Air WB Temp Actual	52.0 Deg F
Heat Ent Air Temp Actual	70.0 Deg F
Heat Leav Air Temp Actual	98.0 Deg F
Heating Air Delta T	28.0 Deg F

Electrical Test Data	
Motor Volts T1-T2	120 Volts
Motor Amps T1	4.60 Amps

Motor Data	
Motor Manufacturer	General Electric
Motor HP	1/3 HP
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	6.8 Amps
Motor Type	Direct Drive
Direct Drive Speed	Medium

Air Test Data	
Design Airflow	200 CFM
Actual Airflow	207 CFM

Log:	Unit	Date	Tester	Notes
	EXISTING FCU-02	8/8/2023	Greg Rinehart	Can not test heat, ambient temperature too high.
	EXISTING FCU-02	8/8/2023	Greg Rinehart	Unit tag missing, can not get information.

EXISTING FCU-02 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	108	A4	6	100	140	140.0	101	101.0	Evergreen
Outlet-02	107	A4	6	100	147	147.0	106	106.0	Evergreen
Totals:		-	-	200	287	143.5	207	103.5	-

