



CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE

April 26, 2024

PROJECT

HIGHTOWER PARK IMPROVEMENTS FOR CITY OF WEST MEMPHIS

ARCHITECT

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NEBB TAB FIRM

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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, 2024

Expiration Date

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

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



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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	01L6RK	1/31/2024
	Hydronic Differential Pressure	0.4 to 75 PSI	± 2% of reading	Dwyer	490W-6	01L6RK	1/31/2024

(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: HIGHTOWER PARK IMPROVEMENTS

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".





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PROJECT: Hightower Park Improvements - City of West Memphis
LOCATION: West Memphis, AR
PROJECT #: 71901

DATE: 4/26/2024
CONTACT: Elizabeth Amador

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REPORT SUMMARY

Test and Balance consisted of 3 exhaust fans and 2 electric unit heaters.

Exhaust fans were tested to verify proper operation. Fan totals were determined at fan inlets using a direct reading flow hood and fan speeds were adjusted to design. All fan and motor operating data were measured and recorded.

Unit heaters were tested to verify proper operation. All operating data was measured and recorded.

Fan Unit

PROJECT: Hightower Park Improvements - City of West Memphis
LOCATION: West Memphis, AR
PROJECT #: 71901

DATE: 4/26/2024
CONTACT: Elizabeth Amador

SYSTEM/UNIT: EF-01

Tested By: Greg Rinehart
 Date: 4/17/2024

Unit Data	
Fan Manufacturer	Greenheck
Fan Model Number	CSP-A390
Fan Serial Number	22682345

Test Data	
Design Airflow	300 CFM
Actual Airflow	305 CFM
Motor Volts T1-T2	121 Volts
Motor Amps T1	0.7 Amps

Motor Data	
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	1.42 Amps
Corrected FL Amps	1.35 Amps
Motor Type	Direct Drive
Direct Drive Speed	Medium

SYSTEM/UNIT: EF-02

Tested By: Greg Rinehart
 Date: 4/17/2024

Unit Data	
Fan Manufacturer	Greenheck
Fan Model Number	CSP-A700
Fan Serial Number	22682346

Test Data	
Design Airflow	375 CFM
Actual Airflow	408 CFM
Motor Volts T1-T2	121 Volts
Motor Amps T1	2.4 Amps

Motor Data	
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	3.3 Amps
Corrected FL Amps	3.14 Amps
Motor Type	Direct Drive
Direct Drive Speed	Low

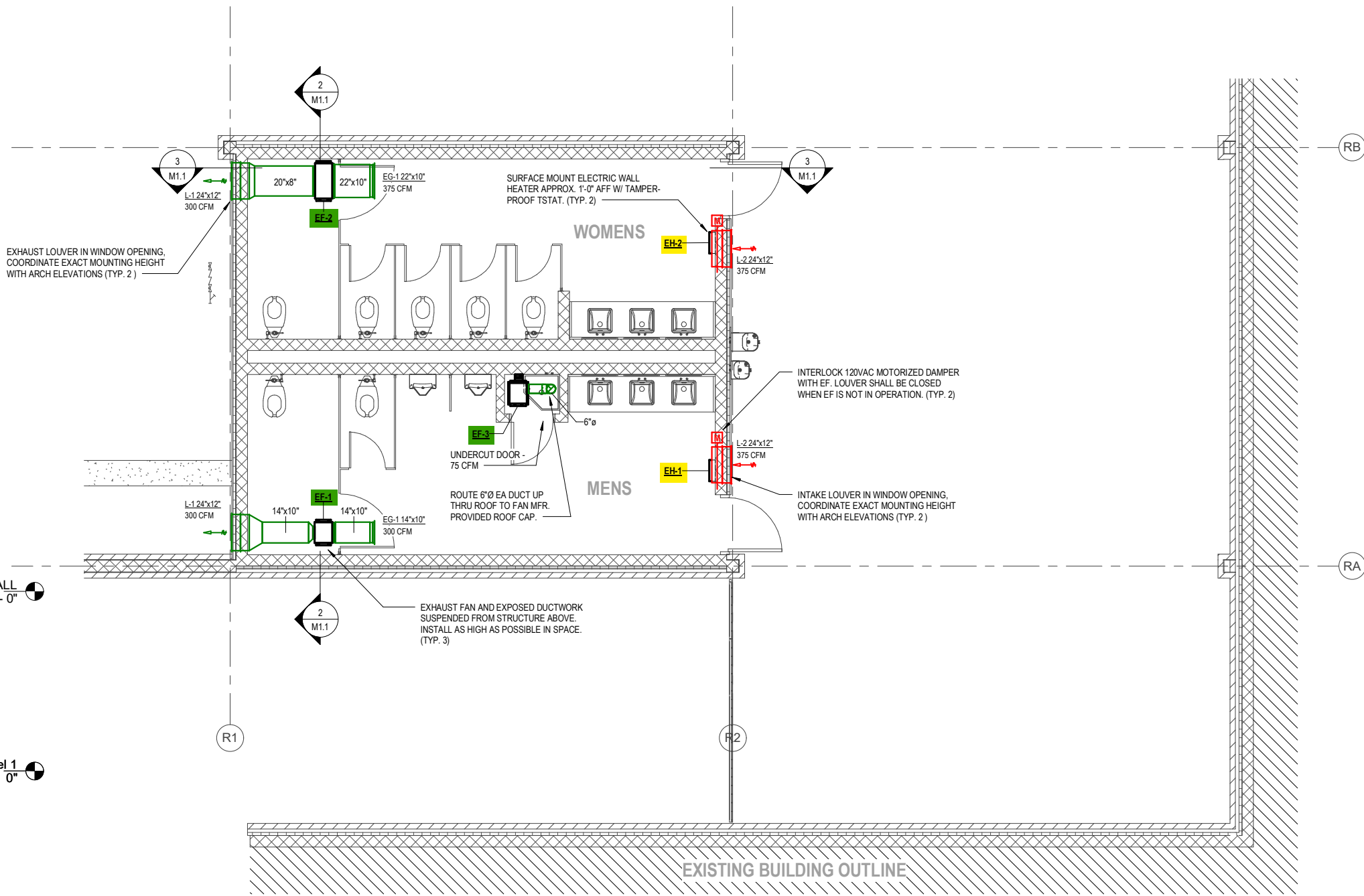
SYSTEM/UNIT: EF-03

Tested By: Greg Rinehart
 Date: 4/17/2024

Unit Data	
Fan Manufacturer	Greenback
Fan Model Number	SP-B110
Fan Serial Number	22682347

Test Data	
Design Airflow	75 CFM
Actual Airflow	81 CFM
Motor Volts T1-T2	120 Volts
Motor Amps T1	0.8 Amps

Motor Data	
Motor Manufacturer	Greenback
Motor RPM	950 RPM
Motor Rated Volts	115 Volts
Motor Phase	1
Motor Hertz	60 Hz
Motor FL Amps	1.15 Amps
Corrected FL Amps	1.10 Amps
Motor Type	Direct Drive
Direct Drive Speed	Low



1
1/4" = 1'-0"

RESTROOM PLAN - HVAC

