Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 05/21/2025

Completed By: National TAB

PROJECT

Ford's Garage (Avon, IN)

10416 E US HWY 36

Avon, IN 46123

Client

Lamb Mechanical Services

7061 Corporate Circle

Indianapolis, IN 46278

National TAB

Project: Ford's Garage (Avon, IN)

Table Of Contents

CERTIFICATION

PROJECT: Ford's Garage (Avon, IN)

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
REGISTRATION NO:	3629
CERTIFIED BY:	Joe Hertenstein
DATE:	5/21/2025

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
REGISTRATION NO:	3629
CERTIFIED BY:	Joe Hertenstein
DATE:	

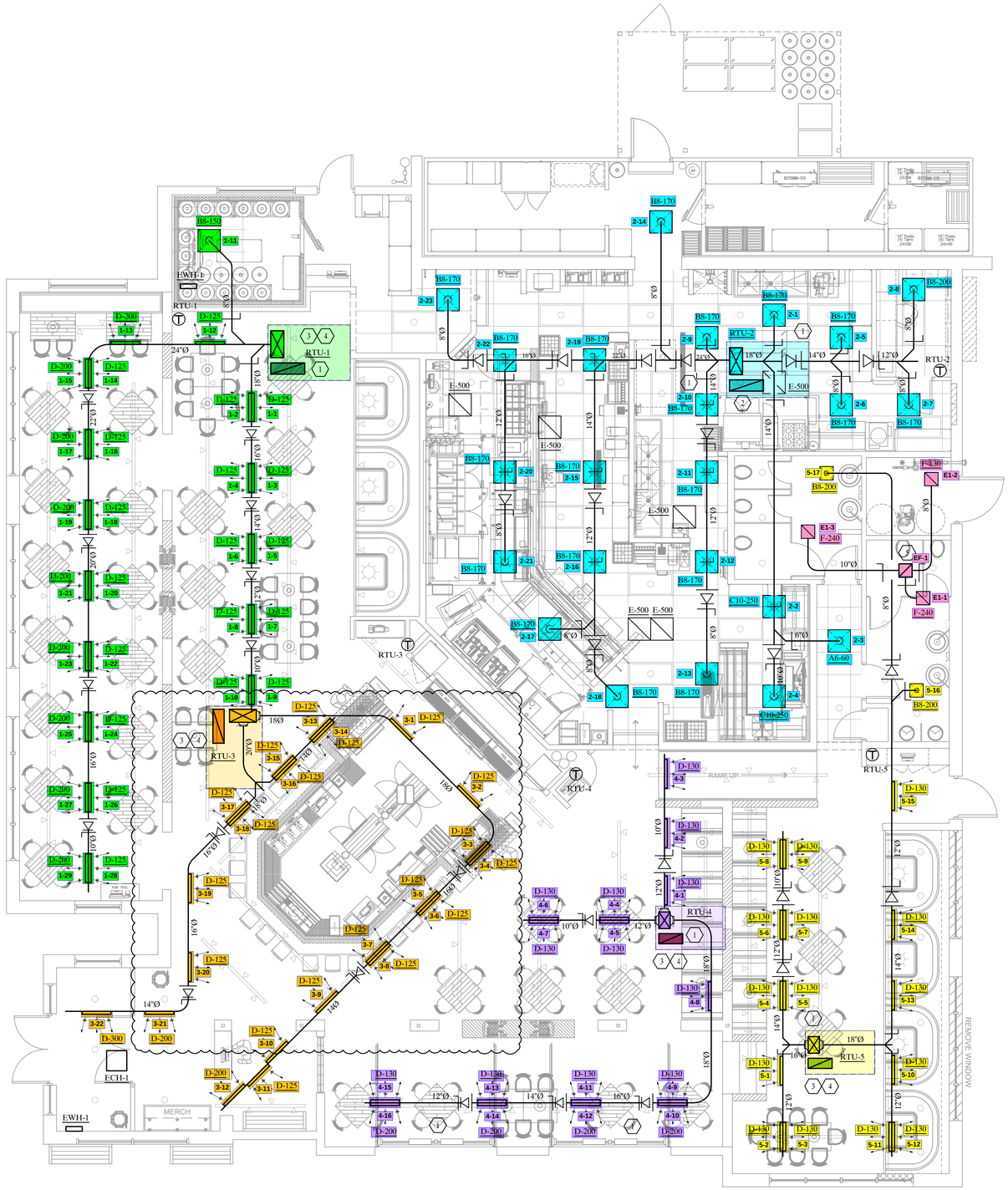
Submitted and Certified by:

NEBB TAB FIRM:	National TAB
TAB PROFESSIONAL:	Joe Hertenstein
SIGNATURE:	Joe Hertenstein
REGISTRATION NO:	3629
CERTIFICATION EXP:	12/31/2025

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 2200484C	3/24/2025	3/24/2027
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	Evergreen S-PVF-1 S/N 2200484C	3/24/2025	3/24/2027
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 5 % +/- 7 cfm	Evergreen S-PVF-1 S/N 2200484C	3/24/2025	3/24/2027
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 071118034	7/12/2024	7/12/2025
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 5028	7/12/2024	7/12/2025
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 071118034	7/12/2024	7/12/2025
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 1075	7/12/2024	7/12/2025
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 071118034	7/12/2024	7/12/2025
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - PD1388 7-6 S/N 4011	7/12/2024	7/12/2025
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper ATKINS - SRH77A S/N 071118034	7/12/2024	7/12/2025
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Fluke 373 True RMS, S/N: 33290686	7/12/2024	7/12/2025
	AMPERAGE MEASUREMENT	0 Amperers to 100 Amperes	2 % reading +/- 5 digits	Fluke 373 True RMS, S/N: 33290686	7/12/2024	7/12/2025
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	SHIMPO DT-207LR S/N: D1530081R	7/12/2024	7/12/2025
HYDRONIC	PRESSURE MEASUREMENT	-30 in Hg to 200 psi	±2% of reading +/- 1 psi	Alnor HM680 S/N: 70807241	5/11/2024	5/31/2025
	DIFFERENTIAL PRESSURE MEASUREMENT	0 psi - 80 psi	±2% of reading +/- 1 psi	Alnor HM680 S/N: 70807241	5/11/2024	5/31/2025

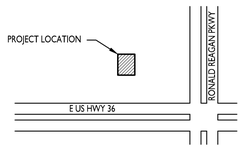
Abbreviation List

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



FLOOR PLAN - HVAC

SCALE: 3/16" = 1'-0"



KEY PLAN

GENERAL NOTES:

A. ALL WORK SHALL BE IN ACCORDANCE WITH THE BEST QUALITY STANDARDS OF THE TRADE, AND SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS.
B. THE CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS REQUIRED TO COMPLETELY AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT, AND SHALL EXAMINE THE SCOPE OF WORK OF OTHER TRADES PRIOR TO SUBMITTING A BID PROPOSAL.
C. CONSTRUCTION DOCUMENTS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE, HOWEVER, SYSTEMS HAVE BEEN SHOWN DIAGRAMMATICALLY AND IN SOME CASES, ENLARGED FOR CLARITY. ANY OFFSETS, ADDITIONAL FITTINGS, AND/OR APPURTENANCES REQUIRED TO PROVIDE A COMPLETE AND COORDINATED SYSTEM SHALL BE BORNE BY THE CONTRACTOR.
D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF CEILING MOUNTED MATERIALS INCLUDING ALL DIFFUSERS, GRILLES, AND REGISTERS.
E. THE M.C. SHALL COORDINATE DUCTWORK INSTALLATIONS WITH OTHER TRADES. LIGHTING AND DUCTWORK DESIGNS INDICATED ON CONTRACT DRAWINGS WERE COORDINATED, HOWEVER CONFLICTS WITH DUCTWORK AND LIGHTS MAY ARISE DUE TO GRID INSTALLATION. H.C. SHALL BE RESPONSIBLE FOR ALL DUCTWORK MODIFICATIONS AND OFFSETS REQUIRED TO AVOID FIELD CONDITIONS.
F. PROVIDE TURNING VANES IN ALL SQUARE ELBOWS. SEE DETAILS.
G. FIRE STOP AROUND ALL WALL AND FLOOR PENETRATIONS.
H. ALL EQUIPMENT INCLUDING BUT NOT LIMITED TO DUCTWORK, PIPING, UNIT HEATERS, ETC. SHALL BE HUNG FROM THE STRUCTURE.
I. ALL EXTERIOR PENETRATIONS SHALL BE WEATHER AND WATER TIGHT.
J. REFRIGERANT PIPE SIZING AND CONFIGURATION BY UNIT MANUFACTURER.
K. FIELD VERIFY EXACT DUCT ROUTING AND SIZES. REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO PERFORMING ANY WORK.
L. COORDINATE SHEET METAL PENETRATIONS THRU LOAD BEARING WALLS AND PROVIDE STRUCTURAL LINTELS AS REQUIRED. REFERENCE STRUCTURAL AND ARCHITECTURAL DRAWINGS.
M. ALL VENT AND RELIEF MUST BE MINIMUM 25'-0" FROM FRESH AIR INTAKE.
N. HVAC CONTRACTOR TO PROVIDE ANY AND ALL OPENINGS, FLASHING, SLEEVE'S, SEAL'S, CURB, AND COUNTER FLASHING AS REQUIRED.
O. BALANCE AIR AND WATER TO FLOW SHOWN ON PLANS.
P. INSTALL FIRE DAMPERS IN ALL FIRE RATED WALLS PER NFPA101,90A.
Q. FLEXIBLE DUCTWORK IS LIMITED TO A MAXIMUM LENGTH OF 3 FEET, WITH NO DIPS, SAGS, OR TIGHT ELBOWS; AND ON SUPPLY DUCTWORK ONLY. FLEXIBLE DUCTWORK SHALL BE AN INSULATED, SEMI-RIGID AND LIGHT WEIGHT AIR DUCT, MANUFACTURED BY USING DEAD SOFT ALUMINUM STRIP WHICH IS SPIRALLY WOUND AND MECHANICALLY JOINED TOGETHER FORMING AN AIR TIGHT-LEAKPROOF TRIPLE LOCK SEAM. DUCT TO BE SELF-SUPPORTING AND CORROSIVE RESISTANT UL-181 CLASS 1 PRODUCT, WITH A POLYETHYLENE VAPOR BARRIER. FLEXIBLE DUCTWORK TO BE LIKE MASTERFIT UPC-018 (ACOUSTICAL) OR AN APPROVED EQUAL.

(#) PLAN NOTES:

1. ROUTE SUPPLY DUCT OVER THE TOP OF GARAGE DOORS.
2. CONNECT TO EXISTING SUPPLY AND RETURN AIR PLENUMS.
3. INSTALL 1x1x1/8" ANGLE IRON FRAME TO 1x1x 16 GA. BLACK WIRE MESH OVER RETURN PLENUM.
4. PAINT THE INSIDE OF THE RETURN PLENUM DULL BLACK UP TO BOTTOM OF RTU CURB.
5. 19"x 19" EXHAUST AIR PLENUM UP TO EXISTING EXHAUST FAN CURB, INSTALL EF-1 ON EXISTING CURB.

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CERTIFICATION

EARL WADE BOULWARE
NO. 16277
STATE OF
PROFESSIONAL ENGINEER

PROJECT INFORMATION

FORD'S GARAGE

10416 E US HWY 36
AVON, IN 46123

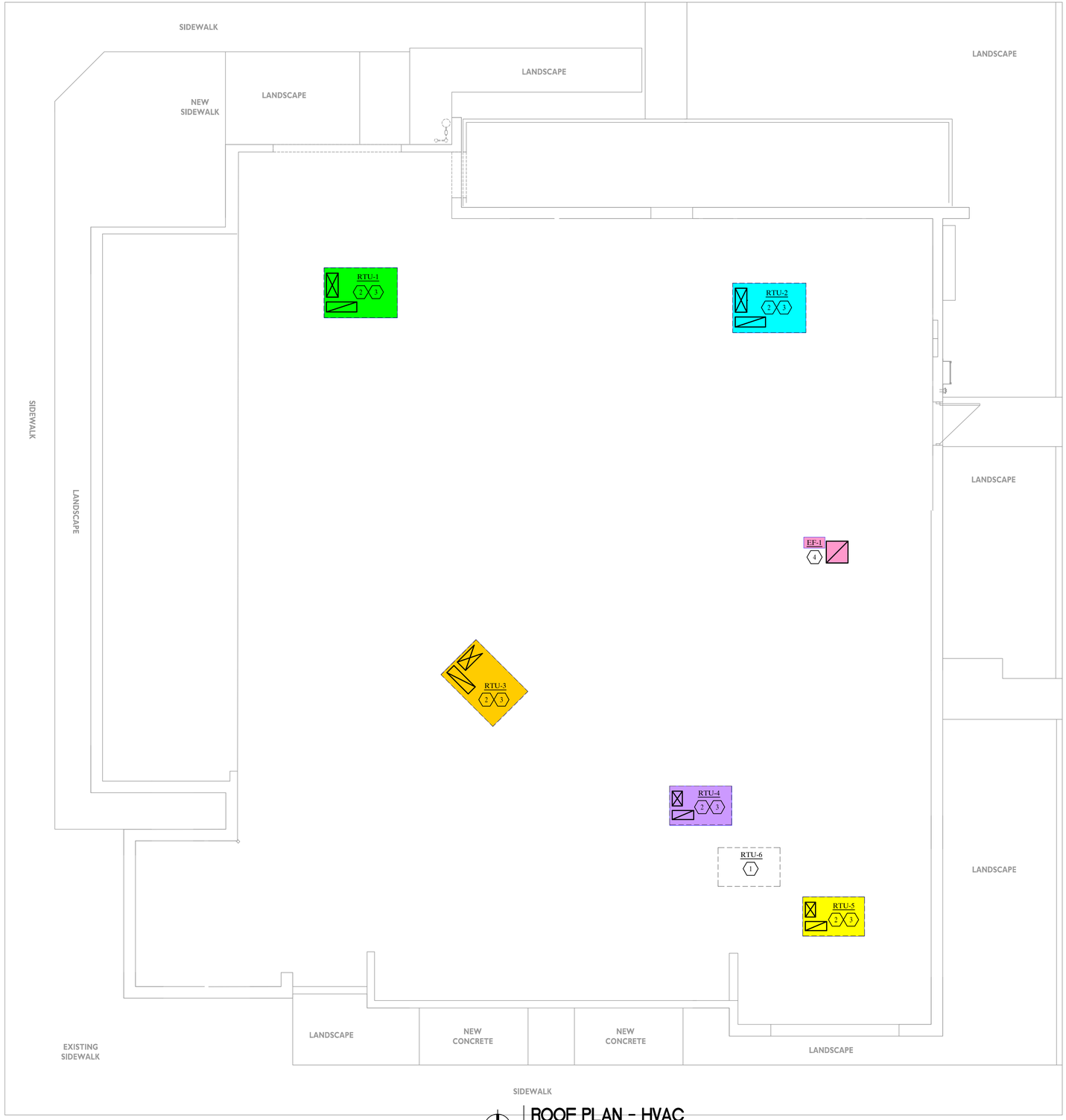
ISSUE DATES

ISSUE	DATE
LTG CHANGES	10-14-24
MEP CHANGES	01-16-25

PROJECT NUMBER: 24-503

FLOOR PLAN - HVAC

M101



ROOF PLAN - HVAC

SCALE: 3/16" = 1'-0"

GENERAL NOTES:

A. ALL WORK SHALL BE IN ACCORDANCE WITH THE BEST QUALITY STANDARDS OF THE TRADE, AND SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS.
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D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF CEILING MOUNTED MATERIALS INCLUDING ALL DIFFUSERS, GRILLES, AND REGISTERS.
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F. PROVIDE TURNING VANES IN ALL SQUARE ELBOWS. SEE DETAILS.
G. FIRE STOP AROUND ALL WALL AND FLOOR PENETRATIONS.
H. ALL EQUIPMENT INCLUDING BUT NOT LIMITED TO DUCTWORK, PIPING, UNIT HEATERS, ETC. SHALL BE HUNG FROM THE STRUCTURE.
I. ALL EXTERIOR PENETRATIONS SHALL BE WEATHER AND WATER TIGHT.
J. REFRIGERANT PIPE SIZING AND CONFIGURATION BY UNIT MANUFACTURER.
K. FIELD VERIFY EXACT DUCT ROUTING AND SIZES. REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO PERFORMING ANY WORK.
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M. ALL VENT AND RELIEF MUST BE MINIMUM 25'-0" FROM FRESH AIR INTAKE.
N. HVAC CONTRACTOR TO PROVIDE ANY AND ALL OPENINGS, FLASHING, SLEEVE'S, SEALS, CURB, AND COUNTER FLASHING AS REQUIRED.
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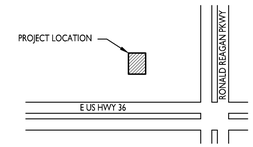
(#) PLAN NOTES:

1. REMOVE RTU-6 AND DO NOT REPLACE, PROVIDE A PERMANENT 14 GA 1-PIECE CURB CAP, INTERNALLY LINED FOR SOUND AND SWEATING.
2. REMOVE EXISTING RTU-1,2,3,4,5 AND REPLACE WITH NEW RTU'S PER SCHEDULE, M.C. TO INCLUDE CURB ADAPTOR TO FIT NEW RTU IF REQUIRED.
3. DISCONNECT EXISTING GAS PIPING FROM ALL EXISTING RTU'S AND RECONNECT TO NEW RTUS.
4. REMOVE EXISTING EXHAUST FAN AND INSTALL NEW EF-1 PER SCHEDULE.



KEY PLAN

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PROJECT INFORMATION

FORD'S GARAGE

10416 E US HWY 36
AVON, IN 46123

ISSUE DATES

ISSUE	DATE
LTG CHANGES	10-14-24
MEP CHANGES	01-16-25

PROJECT NUMBER: 24-503

ROOF PLAN - HVAC

M102

National TAB

Project: Ford's Garage (Avon, IN)

System/Unit: AHU/RTU

Asset: RTU-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	1025P73158
Model Num	NA	48FEFM12B3M5A8
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	38”x21”
Num PreFilter 1	-	4
PreFilter Size 1	-	20”x20”x2”

Motor Data		
	Design	**Actual**
Horsepower	3.0	5.0
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

Test Data		
	Design	**Actual**
SF CFM	4325	4164
RA CFM	-	3278
OA CFM	847	886
RL Voltage	208	214 / 214 / 214
RL Amperage	-	7.25 / 7.02 / 7.26
OA Damper Position	-	5VDC

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.71"
Fan Suction SP	-	-1.11"
Fan Discharge SP	-	0.95"
Total ESP	0.70	1.66"
Fan Total SP	-	2.06"

Completed By: Chase Wright on 05/01/2025

National TAB

Project:Ford's Garage (Avon, IN)

AHU/RTU

Diffuser Supply (GRD)

RTU-1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	DINING	D		125	46	131	104.8
SGRD2	DINING	D		125	112	125	100.0
SGRD3	DINING	D		125	113	124	99.2
SGRD4	DINING	D		125	118	132	105.6
SGRD5	DINING	D		125	105	128	102.4
SGRD6	DINING	D		125	103	132	105.6
SGRD7	DINING	D		125	91	120	96.0
SGRD8	DINING	D		125	89	122	97.6
SGRD9	DINING	D		125	125	135	108.0
SGRD10	DINING	D		125	112	123	98.4
SGRD11		B	8	150	321	146	97.3
SGRD12	DINING	D		125			-
SGRD13	DINING	D		200			-
SGRD14	DINING	D		125	210	136	108.8
SGRD15	DINING	D		200	175	209	104.5
SGRD16	DINING	D		125	173	137	109.6
SGRD17	DINING	D		200	260	210	105.0
SGRD18	DINING	D		125	196	137	109.6
SGRD19	DINING	D		200	213	211	105.5
SGRD20	DINING	D		125	283	131	104.8
SGRD21	DINING	D		200	183	219	109.5
SGRD22	DINING	D		125	201	132	105.6
SGRD23	DINING	D		200	235	199	99.5
SGRD24	DINING	D		125	201	125	100.0
SGRD25	DINING	D		200	173	216	108.0
SGRD26	DINING	D		125	190	122	97.6
SGRD27	DINING	D		200	199	209	104.5
SGRD28	DINING	D		125	160	135	108.0
SGRD29	DINING	D		200	201	218	109.0
Total				4325	4588	4164	96.28%

Completed By: Chase Wright on 05/01/2025

Asset	Notes	Date	Written By
SGRD12	DIFFUSER 1-12 REMOVED FROM PLANS	05/01/2025	Gabe Merk
SGRD13	DIFFUSER 1-13 REMOVED FROM PLANS	05/01/2025	Gabe Merk

National TAB

Project: Ford's Garage (Avon, IN)

System/Unit: AHU/RTU

Asset: RTU-2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	1922P82177
Model Num	NA	48TCED12A2A5
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	21”x34”
Num PreFilter 1	-	4
PreFilter Size 1	-	20”x20”x2”

Test Data		
	Design	**Actual**
SF CFM	3990	3887
SF RPM	1890	847
RA CFM	-	3079
OA CFM	798	808
RL Voltage	208	211
RL Amperage	-	5.34 / 5.33 / 5.11
VFD Max SetPt	-	60HZ
OA Damper Position	-	4.5 VDC

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	3.0	NL
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	9.2
Service Factor	-	1.15

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.55”
Fan Suction SP	-	-0.81”
Fan Discharge SP	-	0.12”
Total ESP	0.70	0.67”
Fan Total SP	-	0.93”

Completed By: Chase Wright on 05/01/2025

National TAB

Project:Ford's Garage (Avon, IN)

AHU/RTU

Diffuser Supply (GRD)

RTU-2/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	B	8	170	230	177	104.1
SGRD2	KITCHEN	C	10	250	268	268	107.2
SGRD3	KITCHEN	A	6	60	81	61	101.7
SGRD4	KITCHEN	C	10	250	123	257	102.8
SGRD5	KITCHEN	B	8	170	269	172	101.2
SGRD6	KITCHEN	B	8	170	241	170	100.0
SGRD7	KITCHEN	B	8	170	189	166	97.6
SGRD8	KITCHEN	B	8	200	199	209	104.5
SGRD9	KITCHEN	B	8	170	231	180	105.9
SGRD10	KITCHEN	B	8	170	122	167	98.2
SGRD11	KITCHEN	B	8	170	110	157	92.4
SGRD12	KITCHEN	B	8	170	131	180	105.9
SGRD13	KITCHEN	B	8	170	207	159	93.5
SGRD14	KITCHEN	B	8	170	xxx		-
SGRD15	KITCHEN	B	8	170	224	175	102.9
SGRD16	KITCHEN	B	8	170	183	180	105.9
SGRD17	KITCHEN	B	8	170	xxx		-
SGRD18	KITCHEN	B	8	170	201	178	104.7
SGRD19	KITCHEN	B	8	170	302	328	192.9
SGRD20	KITCHEN	B	8	170	141	167	98.2
SGRD21	KITCHEN	B	8	170	159	175	102.9
SGRD22	KITCHEN	B	8	170	239	176	103.5
SGRD23	KITCHEN	B	8	170	196	185	108.8
Total				3990	4046	3887	97.42%

Completed By: Chase Wright on 05/01/2025

Asset	Notes	Date	Written By
SGRD14	2-14 REMOVED FROM PLANS	05/01/2025	Gabe Merk
SGRD17	DIFFUSER 2-17 REMOVED FROM PLANS	05/01/2025	Gabe Merk

National TAB

Project: Ford's Garage (Avon, IN)

System/Unit: AHU/RTU

Asset: RTU-3 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	0925P72718
Model Num	NA	48FEEM09B2M5A8
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	21”x36”
Num PreFilter 1	-	4
PreFilter Size 1	-	20”x20”x2”

Motor Data		
	Design	**Actual**
Horsepower	2.0	2.4
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	6.4

Test Data		
	Design	**Actual**
SF CFM	3075	3022
RA CFM	-	2392
OA CFM	615	630
RL Voltage	208	214 / 215 / 214
RL Amperage	-	3.53 / 3.03 / 3.10
OA Damper Position	-	4VDC

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.78"
Fan Suction SP	-	-0.58"
Fan Discharge SP	-	0.25"
Total ESP	0.70	1.03"
Fan Total SP	-	0.83"

Completed By: Chase Wright on 05/01/2025

Notes:
FAN SPEED SET POINT 7.0 DCV

Written By: Gabe Merk on 04/30/2025

National TAB

Project:Ford's Garage (Avon, IN)

AHU/RTU

Diffuser Supply (GRD)

RTU-3/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	BAR	D		125	2068	121	96.8
SGRD2	BAR	D		125		129	103.2
SGRD3	BAR	D		125		125	100.0
SGRD4	BAR	D		125		122	97.6
SGRD5	BAR	D		125		133	106.4
SGRD6	BAR	D		125		131	104.8
SGRD7	BAR	D		125		113	90.4
SGRD8	BAR	D		125		119	95.2
SGRD9	BAR	D		125		131	104.8
SGRD10	CASHIER	D		125		122	97.6
SGRD11	CASHIER	D		125		127	101.6
SGRD12	CASHIER	D		200		187	93.5
SGRD13	BAR	D		125		126	100.8
SGRD14	BAR	D		125		125	100.0
SGRD15	BAR	D		125	138	117	93.6
SGRD16	BAR	D		125	150	131	104.8
SGRD17	BAR	D		125	1326	124	99.2
SGRD18	BAR	D		125		121	96.8
SGRD19	BAR	D		125		119	95.2
SGRD20	ENTRY	D		125		126	100.8
SGRD21	ENTRY	D		200	218	195	97.5
SGRD22	ENTRY	D		300	322	278	92.7
Total				3075	4222	3022	98.28%

Completed By: Chase Wright on 05/01/2025

Asset	Notes	Date	Written By
SGRD1	CFM(1) COLUMN INDICATES TRAVERSE/KFACTOR AND HOOD READINGS	04/30/2025	Gabe Merk

National TAB

Project: Ford's Garage (Avon, IN)

System/Unit: AHU/RTU

Asset: RTU-4 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	0925C09098
Model Num	NA	48FEEM07B2M5A8
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	32”x16”
Num PreFilter 1	-	4
PreFilter Size 1	-	16”x16”x2”

Motor Data		
	Design	**Actual**
Horsepower	1.5	1.8
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	5.5

Test Data		
	Design	**Actual**
SF CFM	2360	2242
RA CFM	-	1741
OA CFM	472	501
RL Voltage	208	214 / 215 / 214
RL Amperage	-	1.83 / 1.5 / 1.9
OA Damper Position	-	5 VDC

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.47"
Fan Discharge SP	-	0.32"
Total ESP	0.70	0.59"
Fan Total SP	-	0.79"

Completed By: Chase Wright on 05/01/2025

Notes:
FAN SPEED SET POINT 6.5 DCV

Written By: Gabe Merk on 04/30/2025

National TAB

Project:Ford's Garage (Avon, IN)

AHU/RTU

Diffuser Supply (GRD)

RTU-4/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	DINING	D		130	478	137	105.4
SGRD2	DINING	D		130	411	135	103.8
SGRD3	DINING	D		130			-
SGRD4	DINING	D		130	202	120	92.3
SGRD5	DINING	D		130	165	126	96.9
SGRD6	DINING	D		130	212	121	93.1
SGRD7	DINING	D		130	167	123	94.6
SGRD8	DINING	D		130	539	125	96.2
SGRD9	DINING	D		130	580	127	97.7
SGRD10	DINING	D		200	519	193	96.5
SGRD11	DINING	D		130	378	131	100.8
SGRD12	DINING	D		200	566	210	105.0
SGRD13	DINING	D		130	503	140	107.7
SGRD14	DINING	D		200	661	209	104.5
SGRD15	DINING	D		130	533	135	103.8
SGRD16	DINING	D		200	580	210	105.0
Total				2360	6494	2242	95%

Completed By: Chase Wright on 05/01/2025

Asset	Notes	Date	Written By
SGRD3	4-3 REMOVED FROM PLANS	05/01/2025	Gabe Merk

National TAB

Project: Ford's Garage (Avon, IN)

System/Unit: AHU/RTU

Asset: RTU-5 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	0925C09099
Model Num	NA	48FEEM07B2M5A8
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	28”x16”
Num PreFilter 1	-	4
PreFilter Size 1	-	16”x16”x2”

Motor Data		
	Design	**Actual**
Horsepower	1.5	1.8
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	5.5

Test Data		
	Design	**Actual**
SF CFM	2350	2234
RA CFM	-	1747
OA CFM	470	487
RL Voltage	208	209/209/209
RL Amperage	-	3.4/3.2/3.3
OA Damper Position	-	4.8 VDC

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.52”
Fan Suction SP	-	-0.83”
Fan Discharge SP	-	0.65”
Total ESP	0.70	1.17”
Fan Total SP	-	1.48”

Completed By: Gabe Merk on 05/01/2025

Notes:
FAN SPEED SETPOINT 8.6DCV

Written By: Gabe Merk on 05/01/2025

National TAB

Project:Ford's Garage (Avon, IN)

AHU/RTU

Diffuser Supply (GRD)

RTU-5/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	DINING	D		130	188	142	109.2
SGRD2	DINING	D		130	161	138	106.2
SGRD3	DINING	D		130	190	123	94.6
SGRD4	DINING	D		130	148	139	106.9
SGRD5	DINING	D		130	185	132	101.5
SGRD6	DINING	D		130	147	131	100.8
SGRD7	DINING	D		130	182	126	96.9
SGRD8	DINING	D		130	181	137	105.4
SGRD9	DINING	D		130	162	142	109.2
SGRD10	DINING	D		130	125	129	99.2
SGRD11	DINING	D		130	201	119	91.5
SGRD12	DINING	D		130	145	130	100.0
SGRD13	DINING	D		130	153	134	103.1
SGRD14	DINING	D		130	141	142	109.2
SGRD15	DINING	D		130			-
SGRD16	RESTROOM	B	8	200	162	184	92.0
SGRD17	RESTROOM	B	8	200	51	186	93.0
Total				2350	2522	2234	95.06%

National TAB

Project: Ford's Garage (Avon, IN)

System/Unit: FAN - Exhaust

Asset: EF-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	COOK
Model Num	NA	100C15DH 100 ACEH
Serial Num	-	179PL50062-00/0000701
Type	CRE DNBLAST	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	48Y
Horsepower	-	1/8
Motor Rpm	1490	1600
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.7

Test Data		
	Design	**Actual**
CFM	480	477
RL Voltage	120	123
RL Amperage	-	1.7
Discharge ESP	-	ATM
Total ESP	0.35	0.13”

Completed By: Gabe Merk on 05/01/2025

National TAB

Project:Ford's Garage (Avon, IN)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-1/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RESTROOM	F	10	240	1	298	256	260	108.3
EGRD2		F	8	130					-
EGRD3	RESTROOM	F	10	240	1	245	214	217	90.4
Total				610		543	470	477	78.2%

Asset	Notes	Date	Written By
EGRD2	EF1-2 REMOVED FROM PLANS	05/01/2025	Gabe Merk