

### CEILING DIFFUSER SCHEDULE

SYMBOL	AIR QUANTITY	NECK SIZE	R/OUT DUCT SIZE	FACE DIMENSION	
				HARD CEILING	LAY-IN CEILING
☒	0 - 60	6"	8"	12 x 12	24 x 24
☒	65 - 150	8"	8"	16 x 16	24 x 24
☒	155 - 195	8"	10"	16 x 16	24 x 24
☒	200 - 250	10"	10"	20 x 20	24 x 24
☒	255 - 335	10"	12"	20 x 20	24 x 24
☒	400 - 550	12"	12"	24 x 24	24 x 24
☒	555 - 595	12"	14"	24 x 24	24 x 24
☒	600 - 745	14"	14"	24 x 24	24 x 24
☒	750 - 1000	16"	16"	30 x 30	30 x 30

### CEILING RETURN AIR OR EXHAUST REGISTER SCHEDULE

SYMBOL	CFM	SIZE	R/OUT SIZE
☒	0 - 75	8 x 6	10 x 6
☒	80 - 105	10 x 6	12 x 6
☒	110 - 175	10 x 10	12 x 8
☒	180 - 270	12 x 12	14 x 8
☒	275 - 325	16 x 12	20 x 8
☒	330 - 800	24 x 24	26 x 10
☒	805 - 1200	24 x 24	26 x 12
☒	1205 - 1500	24 x 24	26 x 14

\* THESE SIZES ARE TO BE USED UNLESS OTHERWISE NOTED ON DRAWINGS.

1. ALL DIFFUSERS TO BE THIS TYPE OR SMALLER UNLESS TO BE THIS SMALL TYPE.

### HEAT PUMP SPLIT SYSTEM SCHEDULE

INDOOR UNIT DESIGNATION	AHU-1	AHU-2	
OUTDOOR UNIT DESIGNATION	HP-1	HP-2	
AIR QUANTITIES			
TOTAL SUPPLY AIR	CFM	1200	1700
OUTSIDE AIR	CFM	45	45
HEATING AND COOLING CAPACITIES			
TOTAL HEATING CAPACITY	BTUH	32,000	51,300
SENSIBLE COOLING CAPACITY	BTUH	28,000	42,975
TOTAL COOLING CAPACITY	BTUH	36,000	51,300
AIR TEMPERATURES			
COOLING COIL ENTERING	*Fdb - *Fdb	80-61	80-61
COOLING COIL LEAVING	*Fdb - *Fdb	55-54	55-54
HEATING COIL ENTERING AND LEAVING	*Fdb - *Fdb	52-95	52-95
INDOOR UNIT DATA			
EXTERNAL STATIC PRESSURE (INCL. FILTER)	IN. H2O	0.1	0.1
BLOWER MOTOR	HP	3/4	3/4
ELECTRICAL CHARACTERISTICS	V/PH	208-230/1	208-230/1
CONDENSATE DRAIN SIZE	IN.	3/4"	3/4"
FILTER LOCATION	UNIT	UNIT	UNIT
ELECTRIC HEAT DATA			
HEATING TYPE		ELECTRIC	ELECTRIC
LOCATION		SUPPLY	SUPPLY
ACTUAL HEATING CAPACITY (NOMINAL CAP.)	KW	10	10
VOLTAGE	V/PH	208-230/1	208-230/1
OUTDOOR UNIT DATA			
NUMBER OF COMPRESSORS/NUMBER OF STAGES	NO.	1	1
ELECTRICAL CHARACTERISTICS	V/PH	208-230/1	208-230/1
MCA/MOCP	A/MP3 (EACH)	26.1/45	22.9/35
UNIT WEIGHT	LBS.	325	325
REFRIGERANT TYPE		R-410A	R-410A
REFRIGERANT SUCTION AND LIQUID LINE SIZES	IN.-IN.	1/2"	1/2"
SEER/SEER2		14.3/15	14.3/15
COP (HEATING)		-	-
HSPFF (HEATING)		8.5	8.5
MANUFACTURER		BOBCH	BOBCH
MODEL NUMBER (INDOOR UNIT)		BVA036	BVA024
MODEL NUMBER (OUTDOOR UNIT)		BOVA36H	BOVA24

- NOTES:
- ALL AHU'S TO BE VARIABLE SPEED WITH HUMIDITY CONTROL.
  - TSTAT TO BE HONEYWELL VISION PRO 8000 TYPE WITH HUMIDITY CONTROL.
  - PROVIDE SINGLE POINT OF POWER.
  - PROVIDE 2" FILTER 4 RACK.
  - MANUFACTURE TO PROVIDE TRANSFORMER FOR ELECTRIC HEATERS.
  - PROVIDE LONG LINE ACCESSORY FOR REFRIGERANT LINE IF NEEDED.
  - PROVIDE CONDENSATE PUMP FOR ALL AHU'S.
  - REFER TO MANUFACTURE FOR INSTALL AND SERVICE CLEARANCE.

### DH-1 PERFORMANCE

	@ 80°F and 60%RH	@ 73°F and 60%RH
Water Removal	70 Pints / 8.75 Gallons	55 Pints / 6.875 Gallons
Efficiency	5.0 Pints/kWh	4.79 Pints/kWh
Energy Factor	2.4 LkWh	2.27 LkWh
Blower	150 CFM @ 0.0" WG 140 CFM @ 0.2" WG 130 CFM @ 0.4" WG	
Fan	70 Watts	
Operating Temperature	49°F Min. 95°F Max.	
Sizing	Up to 1,800 Sq. Ft. / 18,000 Cu. Ft.	
<b>ELECTRICAL</b>		
Power	580 watts @ 80°F and 60% RH	
Supply Voltage	115 volt - 1 phase - 60 Hz	
Current Draw	5.1 amps	
Power Cord	9' 115 VAC, Ground (USA, MEX, CAN, JPN)	
Circuit Requirement	15 Amps	

### SPECIFICATIONS

Duct Connections	8" Round Inlet, 8" Round Outlet
Drain Connection	3/4" Threaded Female NPT
Refrigerant	R410A, 15 oz.
Unit Dimensions	12"W x 12"H x 28"D
Unit Weight	55 lbs.
<b>SHIPPING</b>	
Shipping Dimensions	15"W x 16"H x 31"D
Shipping Weight	65 lbs.
Pallet Quantity	12 per pallet
UPC Number	859029004632
Shipping Options	UPS and LTL

MODEL 4033730 SANTA FE

## MECHANICAL GENERAL NOTES

- THE WORK DESCRIBED HEREINAFTER SHALL BE INSTALLED SUBJECT TO THE NON TECHNICAL SPECIFICATIONS. THIS SECTION APPLIES TO ALL AIR CONDITIONING, SHEETMETAL, PIPING, AND AUTOMATIC TEMPERATURE CONTROLS WORK.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THAT OF OTHER TRADES. SEE ARCHITECTURAL SECTIONS FOR A DESCRIPTION OF THE WORK AND SEQUENCE OF CONSTRUCTION. THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC IN NATURE. THEY ARE, HOWEVER, AS ACCURATE AS SCALE PERMITS AND THE CONTRACTOR SHALL FOLLOW THEM AS CLOSELY AS POSSIBLE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL CONDITIONS RELATING TO THE WORK IN THE FIELD PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL VERIFY ALL WALLS, PARTITIONS, AND STRUCTURAL SYSTEMS BEFORE INSTALLATION AND FABRICATION OF ANY DUCTWORK OR PIPING SYSTEMS. ALL OFFSETS REQUIRED FOR INSTALLATION OF DUCTWORK, OR PIPING SHALL BE INCLUDED IN THE SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER. THE ENGINEER SHALL BE THE SOLE INTERPRETER OF THE DRAWINGS.
- ALL MATERIALS SHALL BE NEW AND OF BEST QUALITY AND SHALL BE THE PRODUCTS OF REPUTABLE MANUFACTURERS. MATERIALS AND EQUIPMENT SHALL BE PROPERLY STORED AND PROTECTED FROM THE WEATHER AT ALL TIMES DURING CONSTRUCTION TO PREVENT UNNECESSARY CORROSION AND FOULING. ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER BY SKILLED AND COMPETENT MECHANICS. ANY WORKER CONSIDERED INCOMPETENT OR UNFIT FOR WORK ON THIS CONSTRUCTION PROJECT SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR UNDER THE DIRECTION OF THE ENGINEER.
- THE WORK SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, ORDINANCES, ETC., WHETHER FEDERAL, STATE OR LOCAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS AND PAYING ANY FEES REQUIRED IN ORDER TO PROCEED WITH THE WORK.
- THE CONTRACTOR IS REQUIRED TO ATTEND ALL CONSTRUCTION CONFERENCES INCLUDING THE PRE-BID CONFERENCE, THE PRE-CONSTRUCTION CONFERENCE AND THE OWNER'S PROGRESS MEETINGS AS SCHEDULED BY THE ARCHITECT OR THE OWNER. FAILURE TO MAKE REFERENCES IN THE SPECIFICATIONS TO ANY ITEMS OF THE WORK SHOWN BY THE DRAWINGS, AND NECESSARY TO THE COMPLETION OF THE WORK SHALL NOT RELIEVE THE CONTRACTOR OF THE FULL RESPONSIBILITY TO FURNISH THE MATERIALS AND PERFORM THE WORK OF SUCH ITEMS, IN A MANNER COMPARABLE TO OTHER ITEMS OF SIMILAR NATURE FOR WHICH DETAILED SPECIFICATIONS ARE INCLUDED, DRAWINGS AND SPECIFICATIONS ARE INTENDED TO CLEARLY SET FORTH ALL WORK AND THE DETAILED DESCRIPTION IS ADDED TO ASSIST IN ESTABLISHING THE SCOPE AND THE LOCATION OF THE SEVERAL PARTS OF THE WORK. COLLECTIVELY, THEY SHALL GOVERN AND CONTROL THE SCOPE, CHARACTER AND DESIGN OF THE WORK, AND ANY ITEM CALLED FOR IN ANY ONE OF THE DOCUMENTS SHALL BE AS THOUGH REQUIRED IN ALL.
- ALL CUTTING AND PATCHING SHALL BE DONE BY WORKMEN SKILLED IN THE TRADES INVOLVED. ALL CUTTING SHALL BE DONE IN SUCH A MANNER AS NOT TO ENDANGER OR DAMAGE FACILITIES. ALL PATCHING SHALL FINISH FLUSH AND SMOOTH AND SHALL MATCH EXISTING ADJOINING SURFACES.
- SEE GENERAL REQUIREMENTS FOR ELECTRICITY AND WATER. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL FUEL REQUIRED FOR THE OPERATION OF HIS CONSTRUCTION EQUIPMENT.
- ALL FINISHED FIELD INSTALLED PRESSURE PIPING SYSTEMS SHALL BE TESTED.
- WORK CONSISTS OF FURNISHING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TRANSPORTATION, SCAFFOLDING, SERVICES, SUPERVISION, PLANT, AND PERFORMING ALL OPERATIONS REQUIRED TO PROPERLY COMPLETE ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS AND AS INDICATED ON THE APPLICABLE DRAWINGS, SUBJECT TO TERMS AND CONDITIONS OF THE CONTRACT. THE CONTRACTOR IS REQUIRED TO HAVE A QUALIFIED AND EXPERIENCED GENERAL SUPERINTENDENT AND EXPERIENCED SUPERINTENDENT FOR EACH TRADE.
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- ALL POWER WIRING, RELAYS, PANELS, TRANSFORMERS, DISCONNECT SWITCHES FOR HVAC EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL CONTROL WIRING, RELAYS, PANELS, SENSORS (OR THERMOSTATS) SHALL BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR. ALL MOTOR STARTERS SHALL BE FURNISHED BY THE HVAC CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- ALL DUCTS TO HAVE AIR EXTRACTORS (ADJUSTABLE TYPE) ON SQUARE OR RECTANGULAR TAKEOFFS WITH SPIN-IN VOLUME DAMPERS ON ROUND OR OVAL TAKE-OFFS. SPIRAL DUCT TAKE-OFFS HAVE NO EXTRACTORS INSTALL FLEXIBLE DUCT CONNECTORS AT ALL FANS AND AIR HANDLING UNITS.
- INSULATE ALL REFRIGERANT LINES WITH 3/4" ARMAFLEX OR EQUIVALENT INSULATION. PROVIDE WITH WEATHERPROOF ALUMINUM JACKET ON LINES OUTSIDE.
- ALL MATERIALS SHALL BE LISTED BY THE UNDERWRITERS LABORATORIES (UL) OR NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA).
- REFRIGERANT PIPING SHALL BE SIZED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR LIQUID, VAPOR HORIZONTAL AND VAPOR RISERS.
- TUBING SHALL BE INSTALLED WITH MOISTURE INDICATOR SIGHT GLASS LOCATED IN THE LIQUID LINE ADJACENT TO THE OUTDOOR UNIT.
- THOROUGHLY CLEAN REFRIGERANT PIPE FITTINGS BEFORE ASSEMBLY. ALL JOINTS ARE TO BE MADE WITH SILVER ALLOY BRAZE MELTING ABOVE 1100 DEGREES F. NO ACID FLUX IS TO BE USED ON ANY JOINT.
- ALL CONDENSATE DRAINS SHALL TERMINATE INTO ROOF GUTTER. SECURE TO ROOF SEAMS WITH APPROVED CLIP.
- ALL WORK AND MATERIALS SHALL BE WARRANTED (PARTS AND LABOR) FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER. AN ADDITIONAL WARRANTY (PARTS ONLY) SHALL INCLUDE 4 YEARS ON ALL COMPRESSORS, WITH NINE YEARS ON ALL HEAT EXCHANGERS.
- CONTRACTOR SHALL SUPPLY, TO THE ENGINEER, 6 SETS OF SUBMITTALS ON THE FOLLOWING ITEMS:
  - AIR DISTRIBUTION (DIFFUSER, GRILLE AND REGISTERS)
  - HEATING/AIR CONDITIONING EQUIPMENT
  - DAMPERS
  - FANS
  - INSULATION MATERIALS
  - CONTROLS
  - PIPING
- THESE ITEMS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONTRACTOR ORDERING.
- ALL FEES, PERMITS, TAPS, LICENSE, INSURANCE, AND BONDS SHALL BE PAID BY THIS CONTRACTOR FOR ALL RELATED WORK.
- ROUTE REFRIGERANT PIPING AS SHOWN ON DRAWINGS. MANUFACTURE TO SIZE REFRIGERANT PIPING.
- PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED UNLESS EMBOSSED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ELECTRONIC COPIES.
- DEVIATION FROM MATERIALS, METHODS, AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING BY THE ENGINEER. APPROVAL WILL NOT BE GIVEN UNLESS THE ENGINEER IS SATISFIED THAT THE PROPOSED SYSTEMS ARE SUPERIOR IN PERFORMANCE, DURABILITY, LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.
- APPROVALS OF EQUIPMENT OR SYSTEMS OTHER THAN THAT SHOWN MUST BE WITHIN TEN (10) WORKING DAYS PRIOR TO BID DATE.
- ALL DUCT AND PIPE SIZES SHOWN ARE CLEAR NET INSIDE DIMENSIONS.
- ALL AIR DISTRIBUTION DUCTWORK SHALL BE AIR TIGHT AND FREE OF LEAKS, AND SHALL BE INSPECTED FOR LEAKS PRIOR TO INSTALLATION OF FAN UNITS OR FINISHED FLOOR/CEILING SYSTEM. DUCTWORK SHALL BE SEALED WITH AIR DUCT SEALER PER SMACNA STANDARDS AND UL RATING.
- EQUIPMENT, DUCTWORK, DAMPERS, LOUVERS, GRILLES, REGISTERS, DIFFUSERS, OTHER AIR DISTRIBUTIONS EQUIPMENT AND MATERIALS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING:
  - ASHRAE
  - SBCCI
  - SMACNA
  - NFPA
  - AMCA STANDARD HANDBOOK 99
  - AIR DIFFUSION COUNCIL TEST CODE 106/2R3
  - SBCCI STANDARD MECHANICAL CODE
  - ANSI
  - ASME
  - AGA
  - UL FIRE RESISTANCE DIRECTORY

### EXHAUST FAN SCHEDULE

UNIT DESIGNATION		EF-1	EF-2
AIR FLOW	CFM	10	10
STATIC PRESSURE	IN. WC	0.5	0.5
FAN MOTOR POWER	HP	1/20U	1/20U
FAN SPEED	RPM	132	132
DRIVE		DIRECT	DIRECT
SONES	SONES	1.5	1.5
WEIGHT	LBS	10	10
ELECTRICAL CHARACTERISTICS	V/PH	115/1	115/1
MANUFACTURER		BROAN	GREENHECK
MODEL NUMBER		5121	9P-B110

- NOTES:
- MOUNT ALL EXHAUST FANS IN ACCORDANCE WITH MFG INSTRUCTIONS.
  - PROVIDE FAN SPEED CONTROLLERS FOR ALL EXHAUST FANS.
  - WIRE EXHAUST FANS IN ROOM THEY SERVE TO LIGHT SWITCH.
  - PROVIDE BACK-DRAFT DAMPER FOR ALL EXHAUST

Winton Engineering, P.A.  
Robin Winton, P.E.

2207 WOODBINE DR.  
TALLAHASSEE, FL 32309 850-894-5316  
FL 156206

ROBIN WINTON, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 56206. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROBIN WINTON ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MARTHA'S  
RETREAT  
BARN

2023-101 Drawn By: RPW  
Project # Checked By: RPW  
28 FEBRUARY 2024  
Date

### DESIGN DEVELOPMENT

- Revisions
- △
  - △
  - △
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### MECHANICAL NOTES

Tallahassee Florida

# M1.0



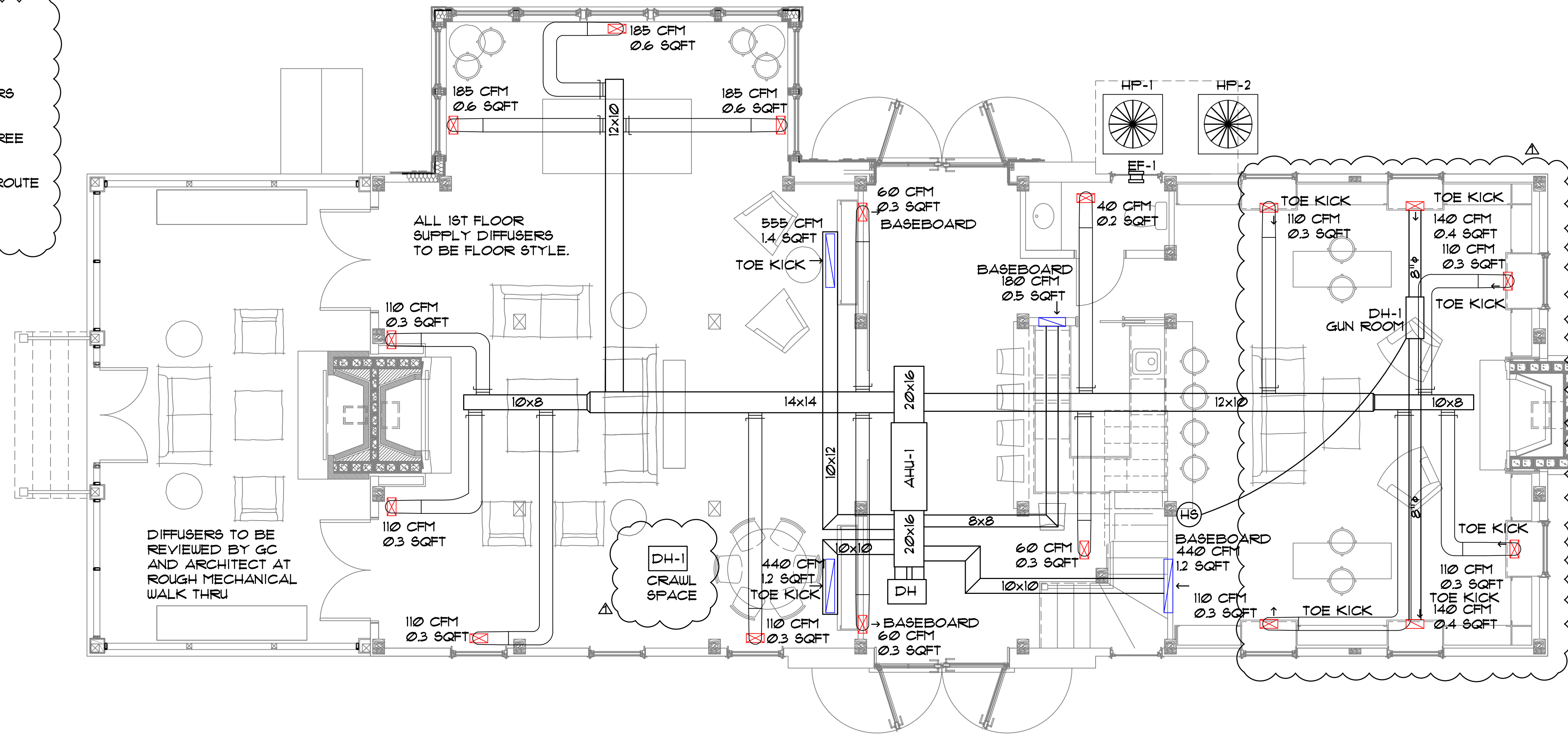
**GENERAL NOTES:**

WOOD FLOOR DIFFUSERS SHALL HAVE A NECK VELOCITY OF 400 FPM. DIFFUSERS SHOULD HAVE OPEN AREA TO ALLOW FOR MAXIMUM OF 400 FPM DISCHARGE.

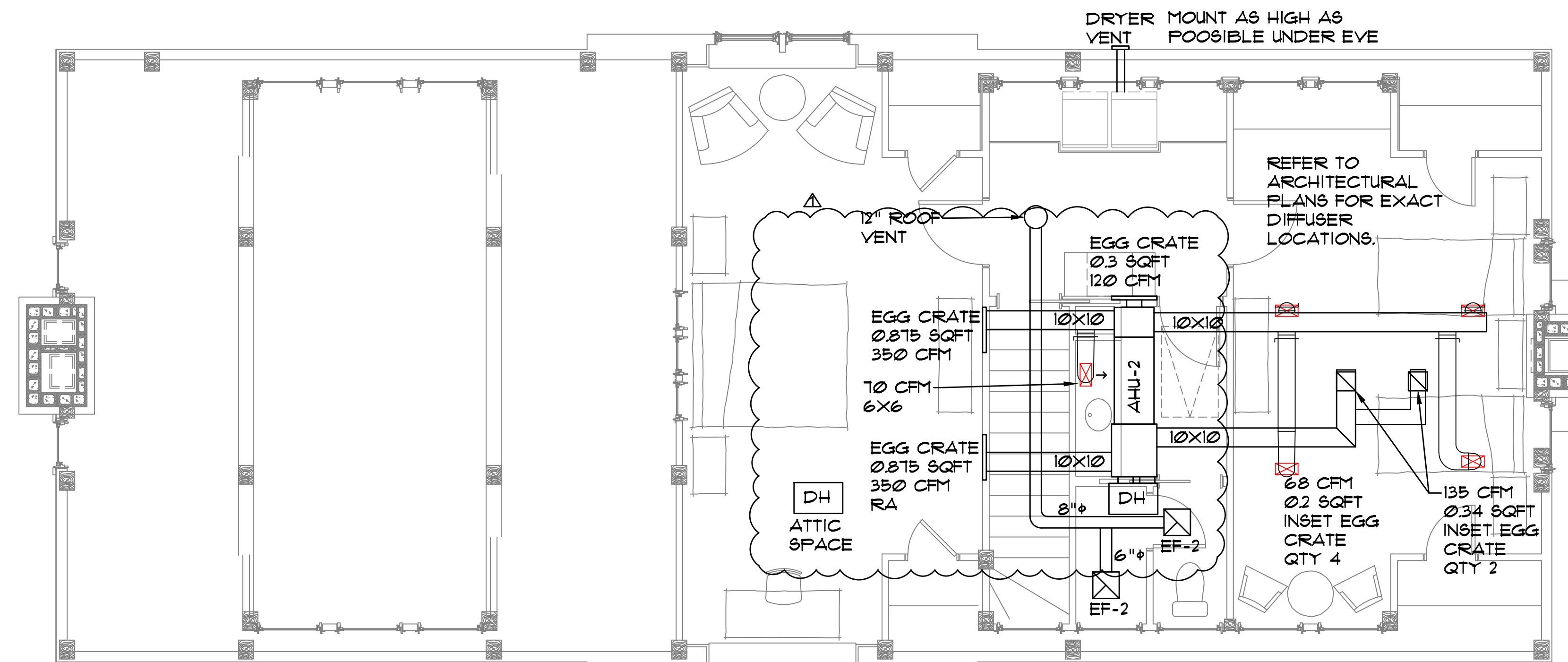
RETURN GRILLES SHALL HAVE A MAXIMUM FACE VELOCITY OF 400 FPM. SIZE FREE ARE TO ALLOW FOR 400 FPM.

ADD DE-HUMIDIFIER TO CRAWLSPACE AND ATTIC AREA, AS SHOWN ON PLANS. ROUTE CONDENSATE FROM DE-HUMIDIFIERS TO EXTERIOR.

2



**MECHANICAL 1ST FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**MECHANICAL 2ND FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

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MARTHA'S  
RETREAT  
BARN

2023-101 Drawn By: RPW  
Project # Checked By: RPW  
28 FEBURARY 2024  
Date

DESIGN  
DEVELOPMENT

- Revisions
- △ 11/14/24 DESIGN CHANGES
  - △ 2/11/25 CHANGES
  - △
  - △
  - △
  - △

MECHANICAL  
PLAN

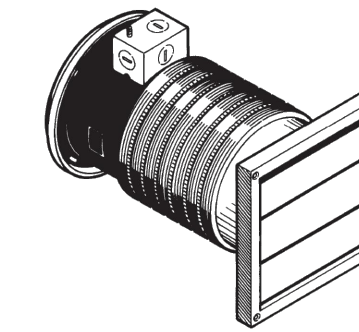
Tallahassee Florida

**M2.0**

2207 WOODBINE DR, TALLAHASSEE, FL 32309  
Phone 850.567.2019



**MODEL 512M  
THRU-THE-WALL  
VENTILATOR**



**Economy, versatility & performance in a thru-the-wall ventilator.**

- FEATURES**
- INTERIOR GRILLE:**
- White polymeric - complements any decor
  - Spin-on installation
- MOTOR:**
- Plug-in, thermally protected, permanently lubricated
  - Quiet, durable polymeric blade
  - Motor easy, features fast, easy "twist-lock" installation
- HOUSING:**
- Galvanized steel housing
  - Can be installed in outside walls from 5 1/4" to 10" thick (walls less than 6" thick will not use the 6" dia. flexible duct)
  - Use with Model SC100W Electronic Variable Speed Control - 3 amp

**TYPICAL SPECIFICATION**

Ventilator shall be Broan Model 512M.

Unit shall be installed in an exterior wall - NOT through a fire-rated wall. Unit shall be controlled with a wall switch (speed control).

Ventilator shall be galvanized steel housing finished.

Motor assembly shall be removable and permanently lubricated. RPM not to exceed 2600.

Air delivery shall be no less than 70 CFM and sound level no greater than 6.0 Sones. All air and sound ratings shall be certified by HVI. Unit shall be U.L. listed.

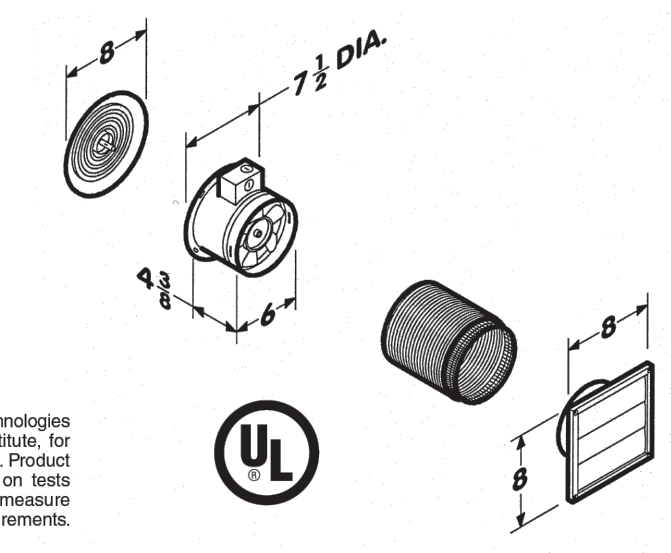
- EXTERIOR WALL CAP:**
- Louvered white polymeric material
  - Integral birdscreen
  - 6" dia. flexible ducting included
- Can be used to ventilate excess heat and humidity from single family, residential garages.

**SPECIFICATIONS**

VOLTS	AMPS	RPM	SONES	CFM
120/127	.40	2660	6.0	70

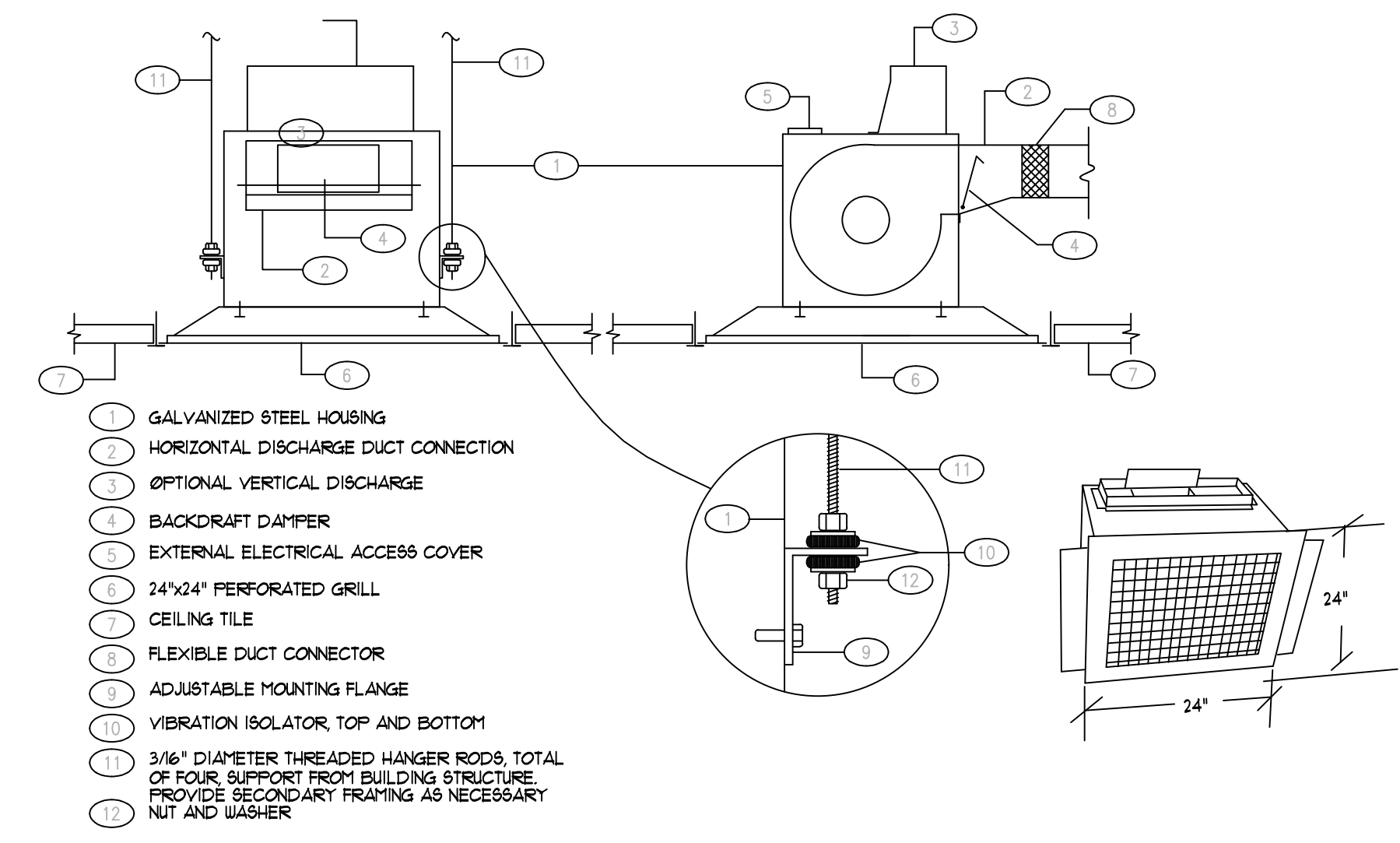
**HVI 2100 CERTIFIED**

HVI 2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.2 in. static pressure, based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly perceived loudness, based on laboratory measurements.



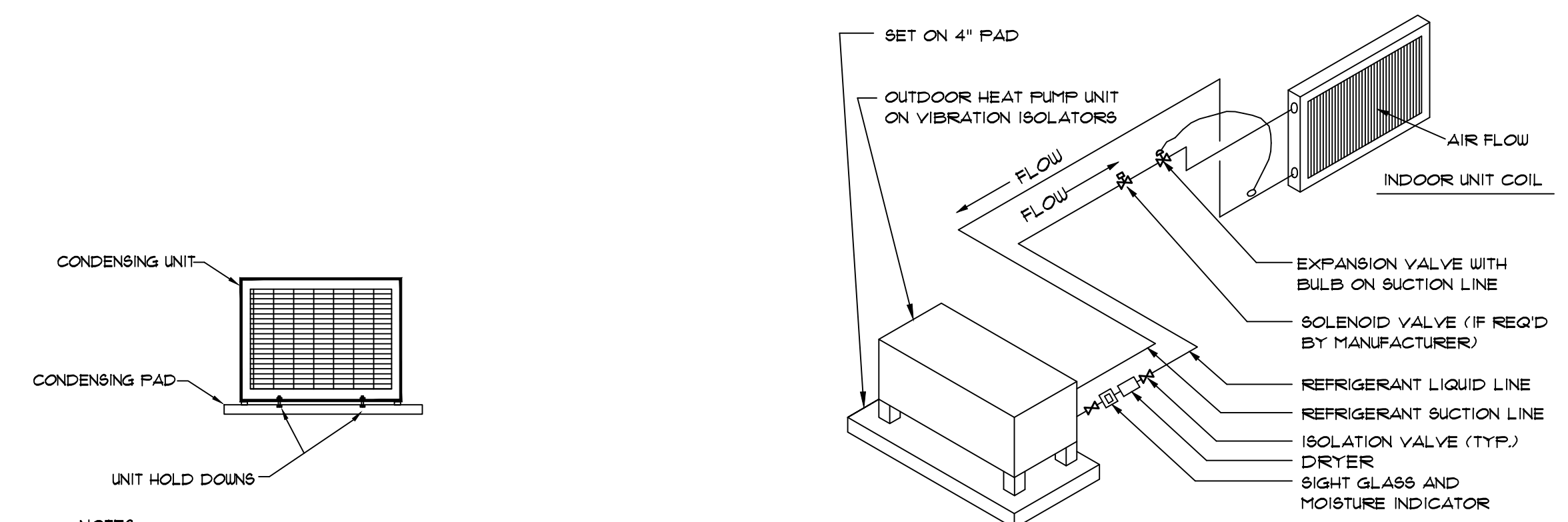
Broan Hartford, Wisconsin 53027 www.broan-nutone.com 1-800-558-1711

REFERENCE	QTY.	REMARKS	Project
			Location
			Architect
			Engineer
			Contractor
			Submitted by
			Date



- GALVANIZED STEEL HOUSING
- HORIZONTAL DISCHARGE DUCT CONNECTION
- OPTIONAL VERTICAL DISCHARGE
- BACKDRAFT DAMPER
- EXTERNAL ELECTRICAL ACCESS COVER
- 24"x24" PERFORATED GRILL
- CEILING TILE
- FLEXIBLE DUCT CONNECTOR
- ADJUSTABLE MOUNTING FLANGE
- VIBRATION ISOLATOR, TOP AND BOTTOM
- 3/16" DIAMETER THREADED HANGER RODS, TOTAL OF FOUR, SUPPORT FROM BUILDING STRUCTURE. PROVIDE SECONDARY FRAMING AS NECESSARY. NUT AND WASHER.

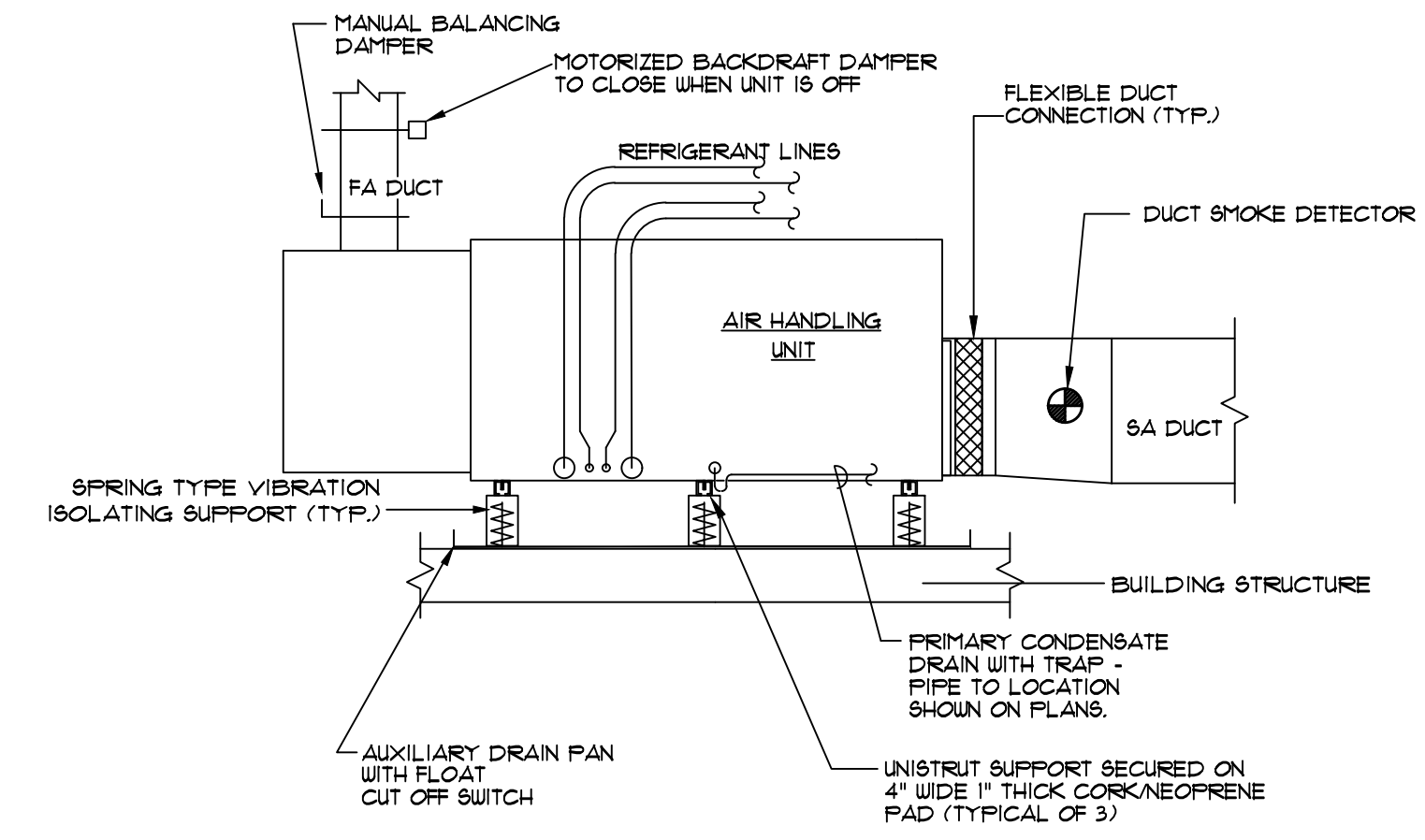
**CEILING EXHAUST FAN DETAIL**  
N.T.S.



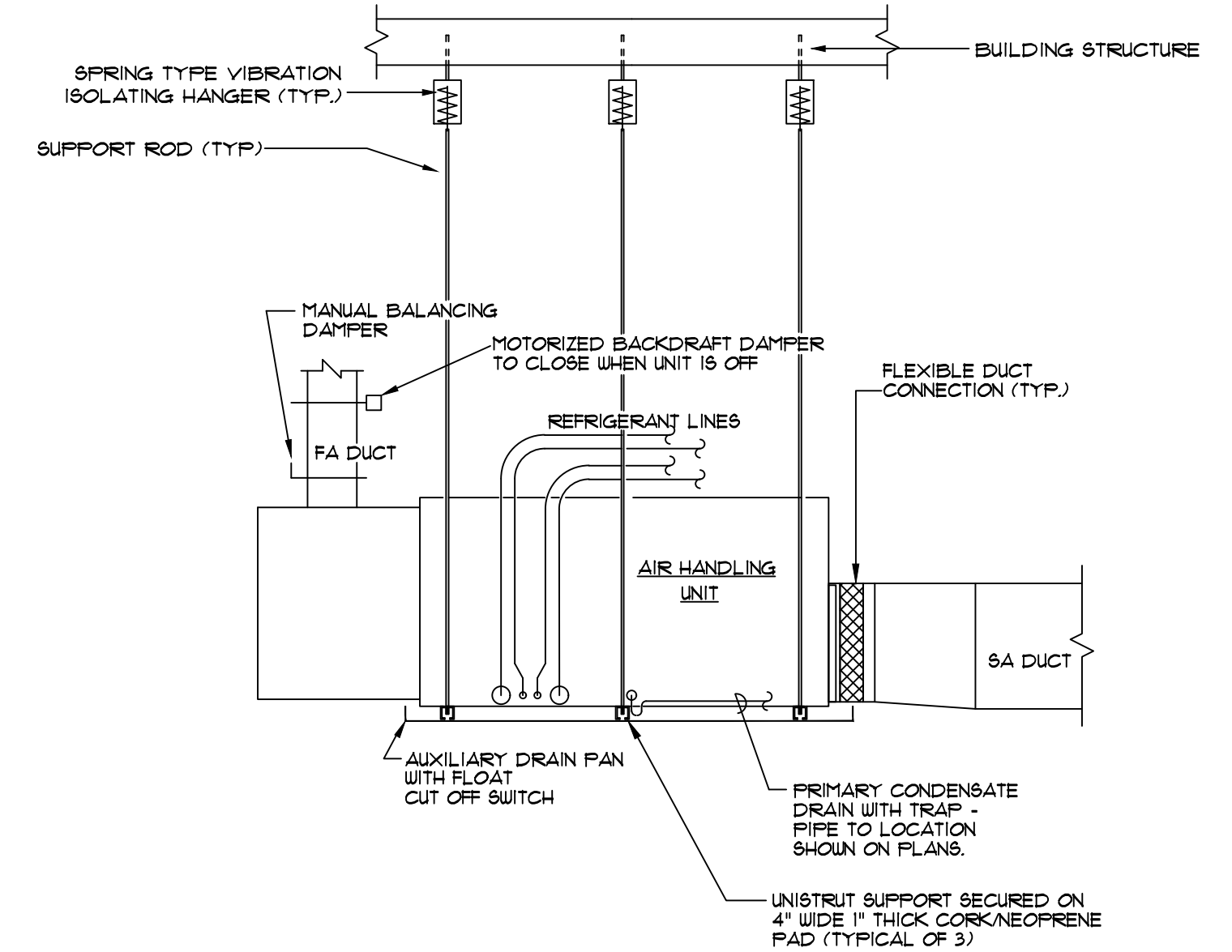
**CONDENSING UNIT DETAIL WITH HOLD DOWNS**  
N.T.S.

- NOTES:**
- INSULATE SUCTION LINE.
  - PITCH ALL HORIZONTAL SUCTION PIPING A MINIMUM OF 1/2" IN 10 FEET IN DIRECTION OF FLOW.
  - EQUIPMENT MANUFACTURER SHALL DETERMINE THE REFRIGERANT PIPE SIZES. PROVIDE SOLENOID VALVE, ACCUMULATOR AND OTHER REFRIGERANT SPECIALTIES AS RECOMMENDED BY THE MANUFACTURER.
  - WHERE REFRIGERANT PIPING IS NOT SHOWN, ROUTE AS DIRECTLY AS POSSIBLE FROM OUTDOOR UNIT ABOVE GRADE THRU WALL OF MECHANICAL ROOM TO AHU.

**REFRIGERANT PIPING SCHEMATIC - SPLIT SYSTEM HEAT PUMP**  
N.T.S.



**HORIZONTAL AIR HANDLING UNIT**  
N.T.S.



- PROVIDE A FLOAT SWITCH IN THE AUXILIARY DRAIN PAN INTERLOCKED WITH AHU FAN.
- PROVIDE CLEANOUTS ON CONDENSATE DRAIN.
- PROVIDE FOR 2" FILTER RACKS WITH FILTERS.
- DRAIN FLOAT SENSOR IN SECONDARY PAN, OR PROVIDE A SECONDARY DRAIN LINE TO BE RUN TO EXTERIOR OF THE BUILDING.
- INTERLOCK OUTSIDE AIR DAMPER WITH COMPRESSORS SUCH THAT THE DAMPER WILL NOT OPEN UNLESS COMPRESSORS ARE RUNNING.
- SMOKE DETECTOR TO HAVE A VISUAL AND AUDIBLE SUPERVISORY SIGNAL.

**HORIZONTAL AIR HANDLING UNIT**  
N.T.S.

Winton Engineering, P.A.  
Robin Winton, P.E.  
2207 WOODBINE DR.  
TALLAHASSEE, FL 32309 850-894-5316  
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**MARTHA'S RETREAT BARN**

2023-101 Drawn By: RPW  
Project # Checked By: RPW  
4 APRIL 2024  
Date

**DESIGN DEVELOPMENT**

- Revisions
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**MECHANICAL DETAILS**

Tallahassee Florida

**M3.0**