FILE NAME: J:\... Offices\St Tammany HS\ Design Revit Models\Revit Drawings\Current Drawings\M101 - Mechanical plan.dwg PLOT DATE & TIME: Thursday, April 28, 2022, 3:07:56 PM

SPLIT SYSTEM AIR CONDITIONING SCHEDULE

AIR HANDLER														HEAT PUMP							
TAG	TRANE MODEL NO.	NOMINAL TONS	TOTAL CFM	OA CFM	COOLING		Motor HP	ESP (" WC)	HEAT	POWER				TAG	TRANE MODEL NO.	POWER				REMARKS
					TMBH	SMBH			KW	VAC	PH	MCA	MAX BRKR			VAC	PH	MCA	MAX BRKR	
AHU-1	TEM6A0D48	4	1400	140	42.2	33.3	3/4	0.4	3.6	208	1	17.3	30	HP-1	4TWA6048A1	208	1	18	30	1, 2, 3, 4

NOTES:
1. Cooling capacities to be rated in accordance with AHRI standard 210/290 for ASHRAE standard design weather conditions in New Orleans, LA.
2. Provide crankcase heat, time delay relay, condensate overflow switch & programmable 7/24 thermostat with lockable cover.
3. Install units in accordance with manufacturer's recommendations.
4. Provide new filters after commissioning and final acceptance.

DIFFUSER SCHEDULE

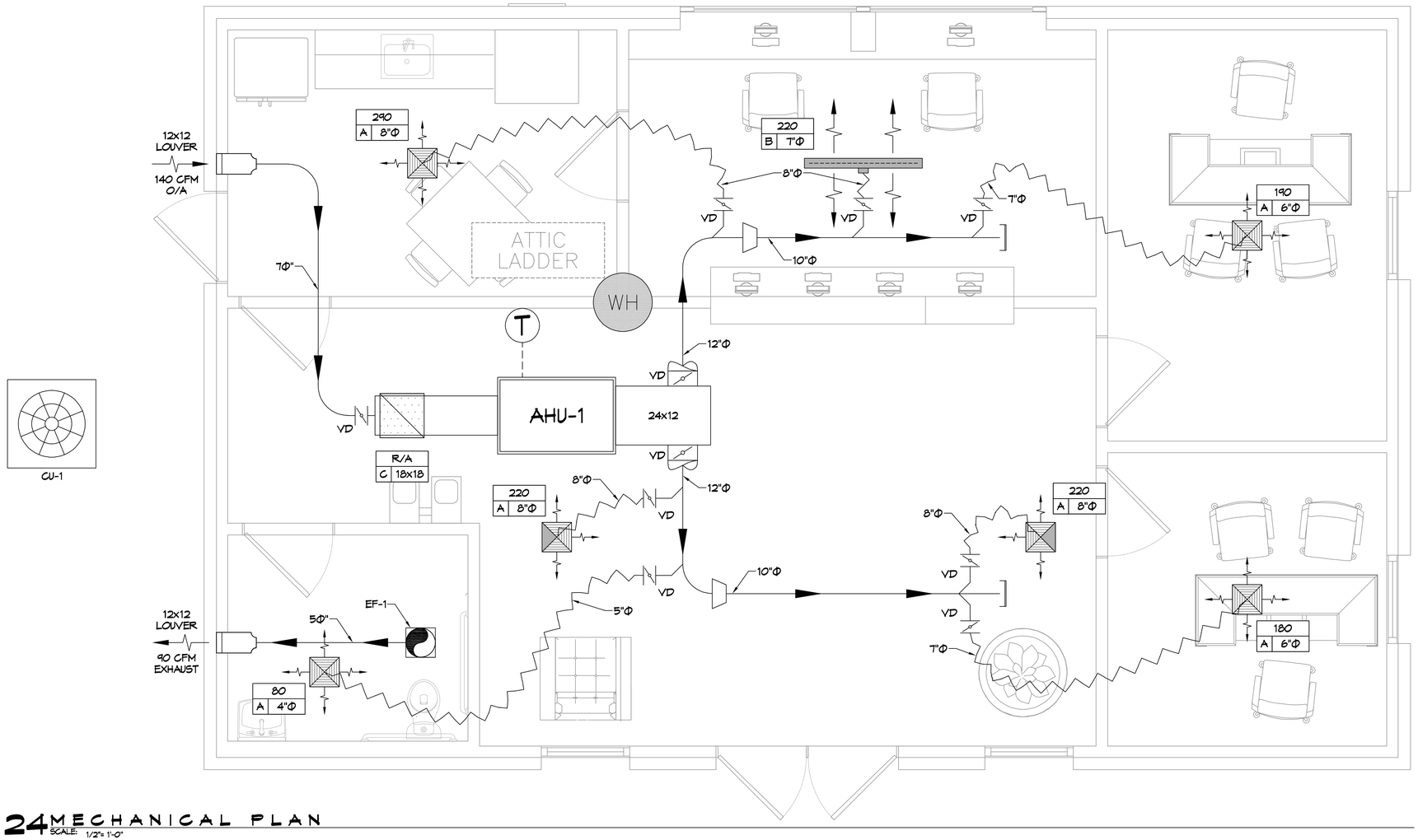
TAG	SERVICE	NECK SIZE	DESCRIPTION
A	Supply Air	Ref. Plan	12"x 12" Adjustable Square Cone Diffuser, Price ASCDA w/ Insulated Back Panel
B	Supply Air	Ref. Plan	48" Linear Slot w/ 2 -1/2" Slots, Price SDS w/ SDA Plenum
C	Return Air	Ref. Plan	24" X 24" Perforated, Ducted Return, Titus PAR

Notes:
1. Seal around perimeter of diffusers/grilles to prevent moisture migration from attic space
2. Coordinate with owner / architect for color and finish
3. R value of insulated back panels to exceed R-6

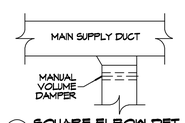
Exhaust Fan Schedule

Tag	Fan				Power			Make / Model	Remarks
	Airflow (CFM)	TSP (" wc)	Watts	RPM	Volts	Phase	Hz		
EF-1	90	0.2	72	2250	120	1	60	Air King BFQ110	1, 2

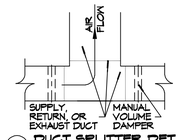
1. Install per Manufacturer's recommendations.
2. Furnish with speed control and backdraft damper.



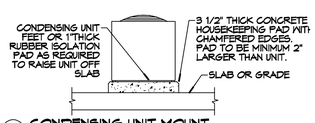
24 MECHANICAL PLAN
SCALE: 1/2"= 1'-0"



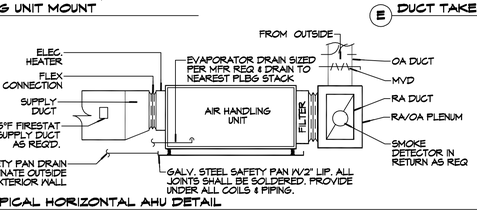
A SQUARE ELBOW DET



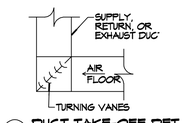
B DUCT SPLITTER DET



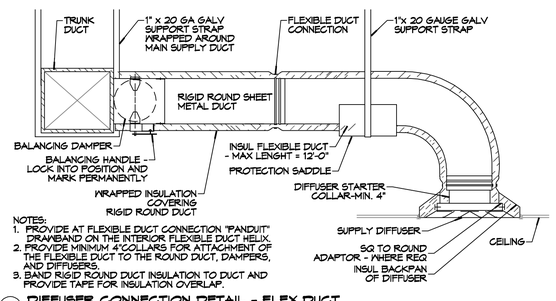
C CONDENSING UNIT MOUNT



D TYPICAL HORIZONTAL AHU DETAIL



E DUCT TAKE-OFF DET



NOTES:
1. PROVIDE AT FLEXIBLE DUCT CONNECTION "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX.
2. PROVIDE MINIMUM 4"COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO THE ROUND DUCT, DAMPERS, AND DIFFUSERS.
3. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

F DIFFUSER CONNECTION DETAIL - FLEX DUCT

TYPICAL DETAILS
SCALE:

GENERAL HVAC NOTES

1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL WRAPED WITH FIBROUS GLASS DUCT WRAP WITH FSK VAPOR BARRIER, MIN R-6. INSTALLED PER SMACNA STANDARDS. DUCT WORK IMMEDIATELY DOWNSTREAM FROM RTU SHALL BE LINED FOR SOUND ATTENUATION.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
4. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
6. PROVIDE UL LISTED 125 °F FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
7. PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES AND EXHAUST FANS.
8. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
9. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
10. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
11. EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
12. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
13. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E8-14).
18. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
19. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 16'-0".
20. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
21. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
22. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJS. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
23. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING.
24. PROVIDE BIRD SCREENS AT ALL EXTERIOR MECHANICAL PENETRATIONS.
25. COORDINATE WALL MOUNTED THERMOSTAT LOCATIONS WITH ALL OWNER FURNISHED ITEMS EITHER WALL MOUNTED OR FLOOR MOUNTED AGAINST PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS.
26. SEE ROOF PLAN FOR ALL ROOF PENETRATIONS.
27. PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS OCCUR.

HVAC LEGEND

- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- SLOT DIFFUSER
- VD — DAMPER CONTROL
- T — THERMOSTAT

ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6.
DUCT SIZE AS FOLLOWS:
350 CFM TO 350 CFM = 9"
200 CFM TO 250 CFM = 8"
150 CFM TO 200 CFM = 7"
100 CFM TO 150 CFM = 6

CFM	
MK	SIZE

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REVISIONS

#	DESCRIPTION	DATE

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JOB No:	DATE:	DRAWN BY:	CHECKED BY:
2022	04-28-2022	JASMM	BAM

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SHEET TITLE:
MECHANICAL FLOOR PLAN, SCHEDULES AND DETAILS

DRAWING NUMBER:
M101

SHEET No: 15 of 17