FILE NAME: J:\~ Projects ~ Medical - Dental\2401 - Action Fitness - Gym Design Project Manag. data\Drawings\Current Drawings\M101 - Mech Plan.dwg PLOT DATE & TIME: Tuesday, November 23, 2021 8:19:57 AM

SPLIT SYSTEM HEAT PUMP SCHEDULE

AIR HANDLER											CONDENSING UNIT					
TAG	MODEL NO.	NOMINAL TONS	TOTAL CFM	OA CFM	Motor HP	ESP (" WC)	HEAT KW	POWER VAC	POWER PH	POWER MCA	TAG	MODEL NO.	POWER VAC	POWER PH	POWER MCA	REMARKS
AHU-1	Heil	5	2000	200	3/4	0.6	10	208	3	32	C-1	Heil	208	3	21.5	1, 2, 3, 4
AHU-2	Heil	5	2000	200	3/4	0.6	10	208	3	32	C-2	Heil	208	3	21.5	1, 2, 3, 4

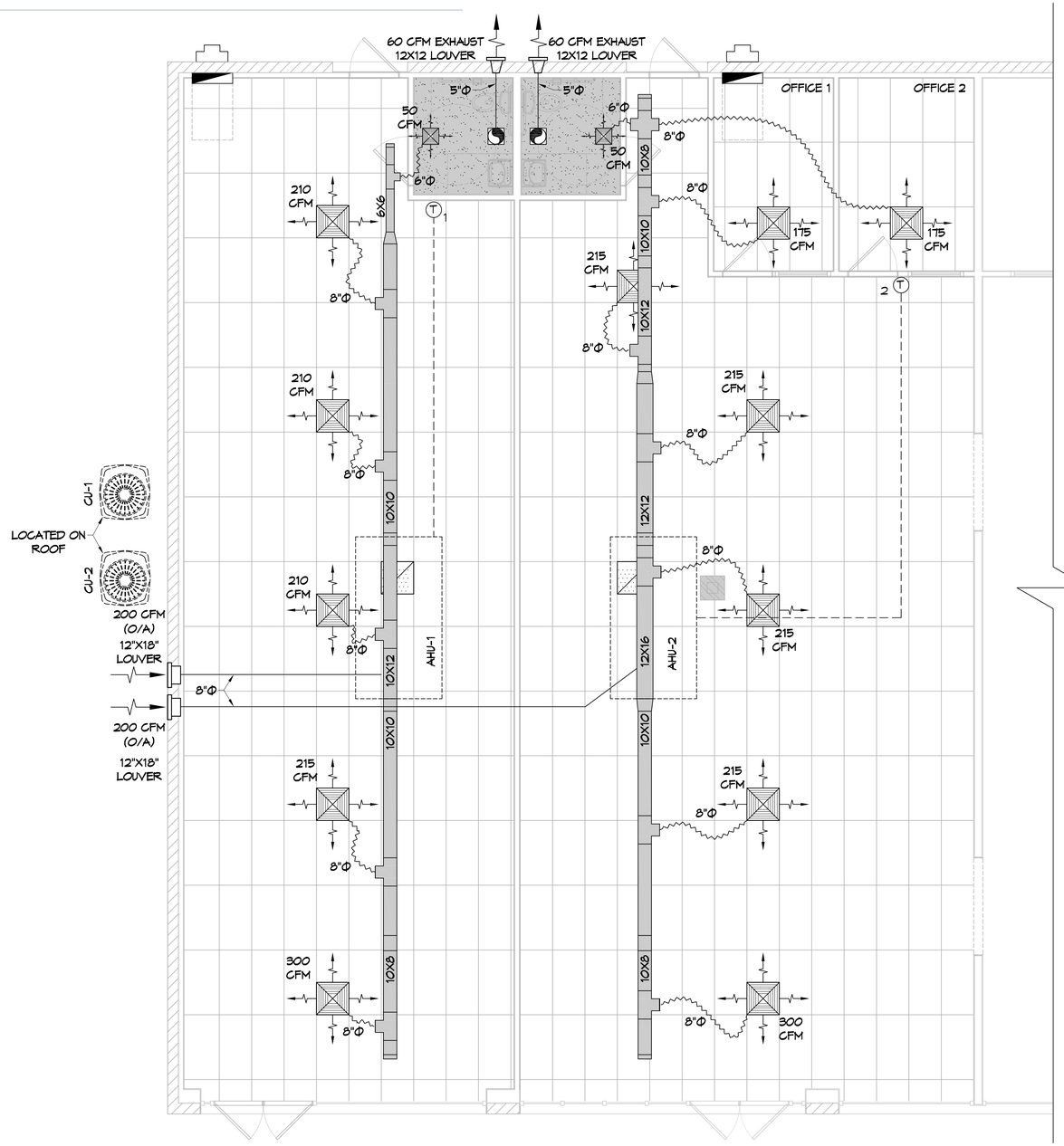
NOTES:

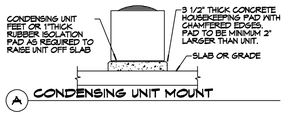
1. Provide inlet filter box, single point power connection, expansion valve, crankcase heat, time delay relay, condensate overflow switch & programmable 7/24 thermostat with lockable cover.
2. Cooling capacities to be rated in accordance with AHRI standard 210/290 for ASHRAE standard design weather conditions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

Exhaust Fan Schedule

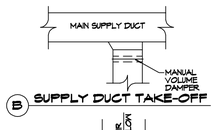
Tag	Fan Airflow (CFM)	Fan ESP (" wc)	Power Watts	Power Volts	Power Phase	Power Hz	Make / Model	Remarks
EF-1	60	0.3	43	120	1	60	Broan A80	1, 2, 3

1. Install per Manufacturer's recommendations.
2. Manual balancing damper
3. Interlock with light switch

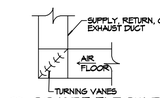




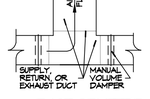
A CONDENSING UNIT MOUNT



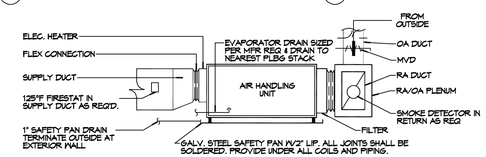
B SUPPLY DUCT TAKE-OFF



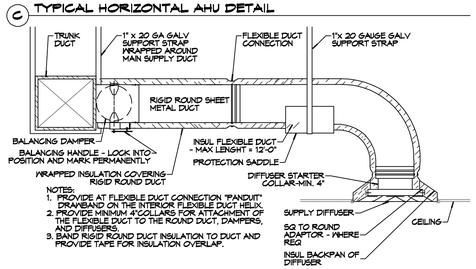
D SQUARE ELBOW DETAIL



F DUCT SPLITTER



C TYPICAL HORIZONTAL AHU DETAIL



E DIFFUSER CONNECTION DETAIL - FLEX DUCT

DETAILS
SCALE: N.T.S.

11 MECHANICAL PLAN
SCALE: 1/4"=1'-0"

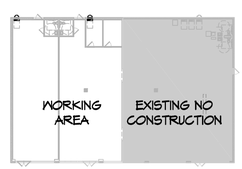
GENERAL HVAC NOTES

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 12'-0". SUPPORT FLEX DUCT TO PREVENT SAGGING
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.

NOTE: REFER TO MECHANICAL PLAN PROVIDED BY CORDES ELECTRIC

MECHANICAL LEGEND

- 24X24 SUPPLY AIR GRILLE
- 24X24 RETURN AIR GRILLE
- 12X12 SUPPLY AIR GRILLE
- THERMOSTAT
- 2X4 DROP CEILING
- ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6. DUCT SIZE AS FOLLOWS: 250 CFM TO 350 CFM = 9" 200 CFM TO 250 CFM = 8" 150 CFM TO 200 CFM = 7" 100 CFM TO 150 CFM = 6
- EXHAUST FAN
- SHEETROCK CEILING



KEY PLAN
SCALE: 1/32"=1'-0"

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	REVISIONS	

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DRAWN BY: TNT

SHEET TITLE:
MECHANICAL PLAN

DRAWING NUMBER:
M101

SHEET No: 6 of 8

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