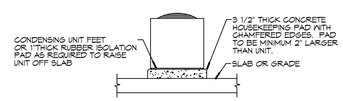
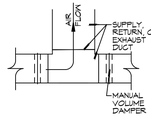
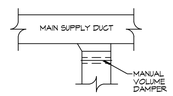


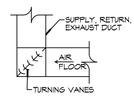
Q CONDENSING UNIT MOUNT



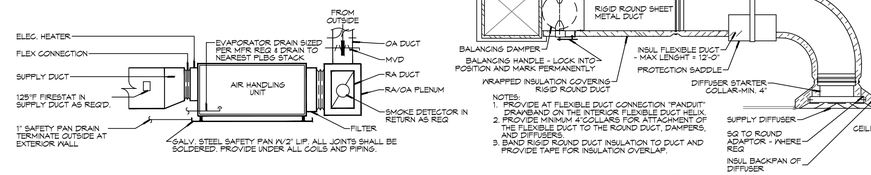
P DUCT SPLITTER DET



O SUPPLY DUCT TAKE-OFF DETAIL



N SQUARE ELBOW DETAIL

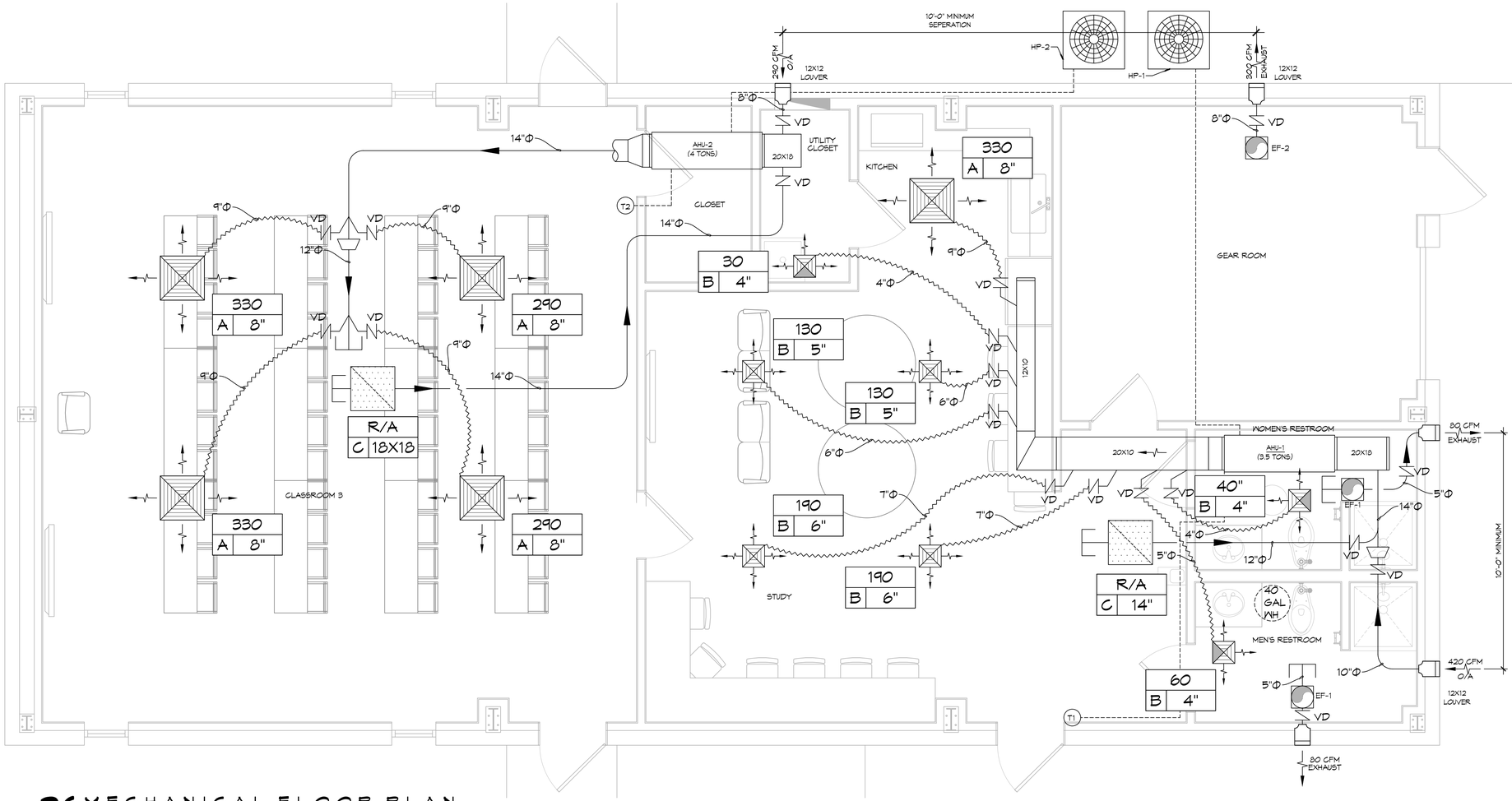


M TYPICAL HORIZONTAL AHU DETAIL

L DIFFUSER CONNECTION DETAIL - FLEX DUCT

25 DETAILS

SCALE: N.T.S.



26 MECHANICAL FLOOR PLAN

SCALE: 3/8" = 1'-0"

SPLIT SYSTEM SCHEDULE

AIR HANDLER													HEAT PUMP								
TAG	MAKE	MODEL	NOMINAL TONS	TOTAL CFM	OA CFM	Motor HP	ESP (" WC)	AUX. HEAT KW	POWER VAC	PH	MCA	MAX FUSE (AMPS)	TAG	MAKE	MODEL	POWER VAC	PH	MCA	MAX FUSE (AMPS)	REMARKS
AHU-1	Trane	GAM5B0C42	3-1/2	1100	420	1/2	0.5	2.9	208	1	22	25	HP-1	Trane	4TWR6042	208	1	26	45	1, 2, 3
AHU-2	Trane	GAM5B0C48	4	1240	290	3/4	0.4	2.9	208	1	25	25	HP-2	Trane	4TWR6048	208	1	28	50	1, 2, 3

NOTES:

1. Provide condensate overflow switch & programmable 7/24 thermostat with lockable cover.
2. Install units in accordance with manufacturer's recommendations.
3. Provide new filters after commissioning and final acceptance.

DIFFUSER SCHEDULE

TAG	SERVICE	NECK SIZE	DESCRIPTION	REMARKS
A	Supply Air	Ref. Plan	24"x 24" Adjustable Square Cone Diffuser, Price ASCDA w/ Insulated Back Panel	1, 2, 3
B	Supply Air	Ref. Plan	12"x 12" Adjustable Square Cone Diffuser, Price ASCDA w/ Insulated Back Panel	1, 2, 3
C	Return Air	Ref. Plan	24" X 24" Perforated, Ducted Return, Titus PAR	1, 2, 3

Notes:

1. Seal perimeter of diffusers/grilles to prevent moisture migration from attic space, as applicable
2. R value of insulated back panels/plenums to exceer R-6
3. Coordinate with owner / architect for color and finish

EXHAUST FAN SCHEDULE

TAG	FAN AIRFLOW (CFM)	FAN TSP (" wc)	POWER VAC	PH	HZ	Amps	MAKE / MODEL	REMARKS
EF-1	80	0.20	120	1	60	0.37	Broan A80	1, 2
EF-2	300	0.15	120	1	60	2.6	Broan L300	1, 2

1. Install per manufacturer's recommendations.
2. Furnish with matching grille.

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 AHU 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".
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 AHJ'S. 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. PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS OCCUR.

LEGEND

CFM | NECK SIZE | MARK

- SUPPLY AIR GRILLE 4-WAY
- SUPPLY AIR 3 WAY BLOW
- SUPPLY AIR 2 WAY BLOW
- RETURN AIR GRILLE
- EXHAUST FAN
- THERMOSTAT
- SUPPLY AIR DUCT
- RETURN AIR DUCT
- DAMPER CONTROL (V.D.)
- 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"

NOTE:

ALL MECHANICAL IS DRAWN DIAGRAMMATICALLY FOR CLARITY, FIELD VERIFY PRIOR TO FABRICATION.

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#	DESCRIPTION	DATE
	REVISIONS	

SEAL: STATE OF LOUISIANA — BRIAN A. MISTICH License No. 30187 — PROFESSIONAL ENGINEER

NEW TRAINING FACILITY
ST. TAMMANY FIRE PROTECTION DISTRICT No. 1

34120 S RANGE ROAD
SLIDELL, LA 70460

JOB No:	2501	DATE:	02-10-2025
DRAWN BY:	CKD	CHECKED BY:	BAM

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SHEET TITLE:
MECHANICAL FLOOR PLAN, SCHEDULES AND DETAILS

DRAWING NUMBER:

M101

SHEET No: 13 of 15