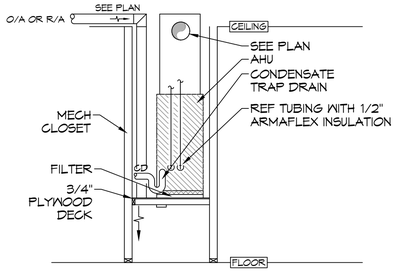
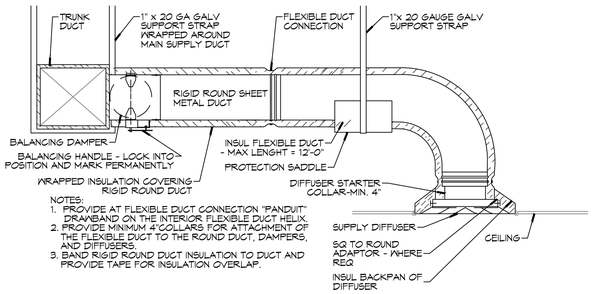
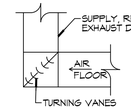


A TYPICAL VERTICAL AHU DETAIL

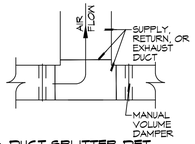


NOTES:
1. PROVIDE AT FLEXIBLE DUCT CONNECTION "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX.
2. PROVIDE MINIMUM 4"COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO THE ROUND DUCT, DAMPERS, AND DIFFUSERS.
3. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

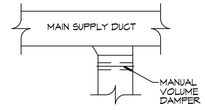
B DIFFUSER CONNECTION DETAIL - FLEX DUCT



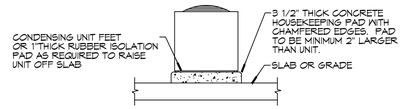
C SQUARE ELBOW DETAIL



D DUCT SPLITTER DET



E SUPPLY DUCT TAKE-OFF DETAIL



F CONDENSING UNIT MOUNT

DETAILS

SCALE: N.T.S.

A/C SCHEDULE

AIR HANDLER													HEAT PUMP							
TAG	MAKE	MODEL	NOMINAL TONS	TOTAL CFM	OA CFM	COOLING		Motor HP	ESP (" WC)	AUX. HEAT KW	POWER			TAG	MAKE	MODEL	POWER			REMARKS
						TMBH	SMBH				VAC	PH	MCA				VAC	PH	MCA	
AHU-1	Goodman	ASPT25B14	2	720	40	16.3	14.2	3/4	0.3	3	240	1	19	HP-1	Goodman	GSZ140241	240	1	10.6	1, 2, 3, 4
AHU-2	Goodman	ASPT61D14	5	1610	230	50.5	37.3	1	0.5	6	240	1	40	HP-2	Goodman	GSZ140601	240	1	34.3	1, 2, 3, 4

NOTES:
1. Provide inlet filter box, single point power connection, 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.

DIFFUSER SCHEDULE

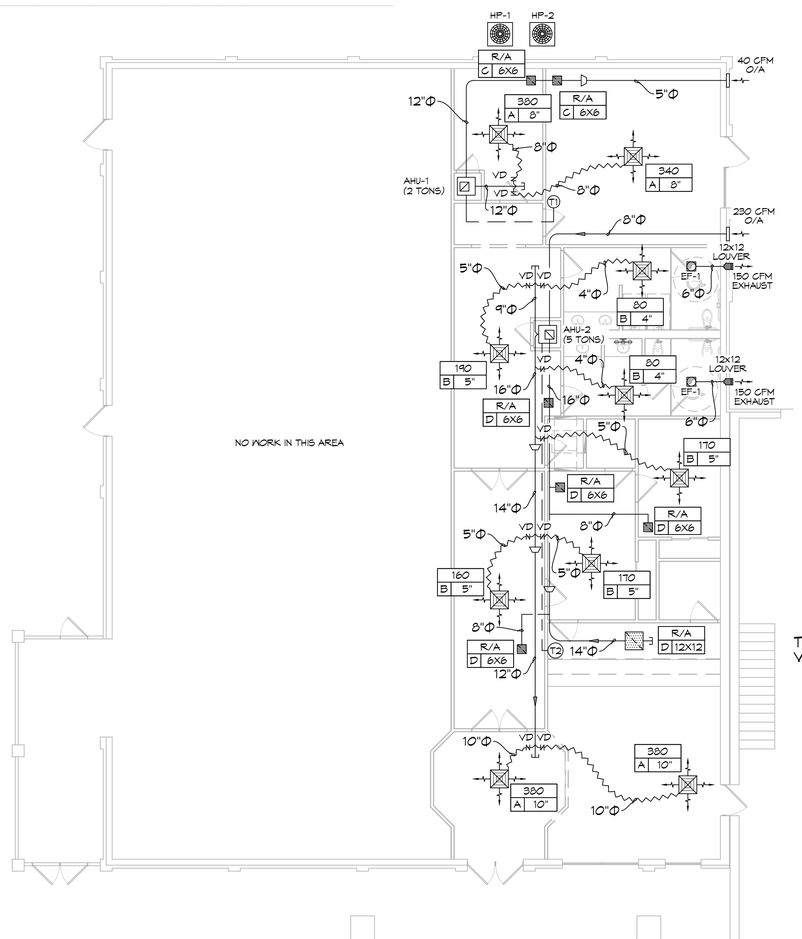
TAG	SERVICE	NECK SIZE	DESCRIPTION	REMARKS
A	Supply Air	Ref. Plan	24"x 24" Perforated Ceiling Diffuser, Price ASCDA w/ adjustable pattern	1, 2, 3
B	Supply Air	Ref. Plan	12"x 12" Perforated Ceiling Diffuser, Price ASCDA w/ adjustable pattern	1, 2, 3
C	Return Air	Ref. Plan	12" X 12" Perforated Return, Titus PAR	1, 2, 3
D	Return Air	Ref. Plan	24" X 24" Perforated Return, Mitius PAR	1, 2, 3

Notes:
1. Seal perimeter of diffusers/grilles to prevent moisture migration from attic space
2. Insulate backpanel to prevent condensation (R-6, minimum).
3. Coordinate with owner / architect for color and finish

EXHAUST FAN SCHEDULE

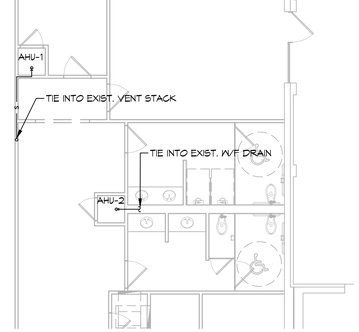
Tag	Service	Fan		Power			Make / Model	Remarks
		Airflow (CFM)	TSP (" wc)	VAC	Ph	Amps		
EF-1	Restroom Exhaust	150	0.1	120	1	0.31	Panasonic FV-1115VQ1	1, 2, 3

1. Fan to be interlocked with light wall switch
2. Furnish w/ ceiling grille and wall cap
3. Install in accordance with manufacturer's recommendations



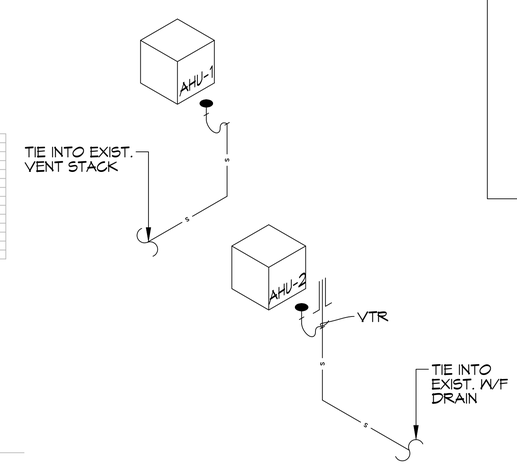
33 MECHANICAL PLAN

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



34 PLUMBING PLAN

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



35 PLUMBING RISER

SCALE: 3/16"= 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".
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.

LEGEND

CFM
NECK SIZE | MARK

- SUPPLY AIR GRILLE 4-WAY
- 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-8. 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"

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Slidell, LA 70458

#	DESCRIPTION	REVISIONS	DATE

SEAL:

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

NEW PARTIAL RENOVATION

RED ROOF INN

1662 GAUSE BLVD.
SLIDELL, LA 70458

JOB No:	2481
DATE:	11-07-2023
DRAWN BY:	SGA
CHECKED BY:	CCD

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SHEET TITLE:
MECHANICAL PLAN

DRAWING NUMBER:

M101

SHEET No: 9 of 10