

# DAMMON ENGINEERING INC.

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#	DESCRIPTION	DATE

SEAL: \_\_\_\_\_

12-21-17  
DATE: 2/23/17  
CHECKED BY: \_\_\_\_\_  
JOB NO.: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
285 COLSON STREET  
SLIDELL, LA 70468

SHEET TITLE:  
MECHANICAL FLOOR PLAN,  
SCHEDULES AND DETAILS

DRAWING NUMBER:  
**M101**

SHEET NO.: 1 of 4

GENERAL HVAC NOTES

1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6, INSTALLED PER SMACNA STANDARDS.
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. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
4. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 18,000 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.
5. 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.
6. 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.
7. CONDENSATE DRAINS TO BE P-V-C PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
8. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
9. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH. EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
10. PROVIDE AND INSTALL WATER PROOF GULLIE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
11. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
12. LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
13. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
14. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CALKED. (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 E-814).
15. ALL MECHANICAL SYMBOLS AND DRAIN DIAGRAMS MATHEMATICALLY ACCORDING TO THE MECHANICAL SYMBOLS AND DRAIN DIAGRAMS.
16. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 12'-0". REFER TO SELECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
17. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
18. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL A.H.J.S. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
19. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING.
20. PROVIDE BRD SCREENS AT ALL EXTERIOR MECHANICAL PENETRATIONS. COORDINATE WALL MOUNTED THERMOSTAT LOCATIONS WITH ALL OWNER FURNISHED TEAS EITHER WALL MOUNTED OR FLOOR MOUNTED AGAINST PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS.
21. SEE ROOF PLAN FOR ALL ROOF PENETRATIONS.
22. PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCT'S OCCUR.

### A/C UNIT SCHEDULE

TOTAL BTU	ELECTRICAL	COMMENTS
120,000 BTU (10 TON)	VOLTAGE MCA 240V/30	NOTE: ALL A/C TO BE SPLIT-SYSTEM HVAC (TRANE OR EQUAL)
180,000 BTU (15.5 TON)	-	P1,***
AHU 12	-	P1,***

### AHU UNIT SCHEDULE

TOTAL BTU	CFM	O.A.	HEAT (KW)	ELECTRICAL	COMMENTS
120,000 BTU (10 TON)	9,800	450	12	VOLTAGE MCA 240V/30	NOTE: ALL A/C TO BE SPLIT-SYSTEM HVAC (TRANE OR EQUAL) ALL AHU TO BE SINGLE POINT CONNECTION
180,000 BTU (15.5 TON)	4,500	1500	21	240V/30	-
AHU 12	-	-	-	-	P1,***

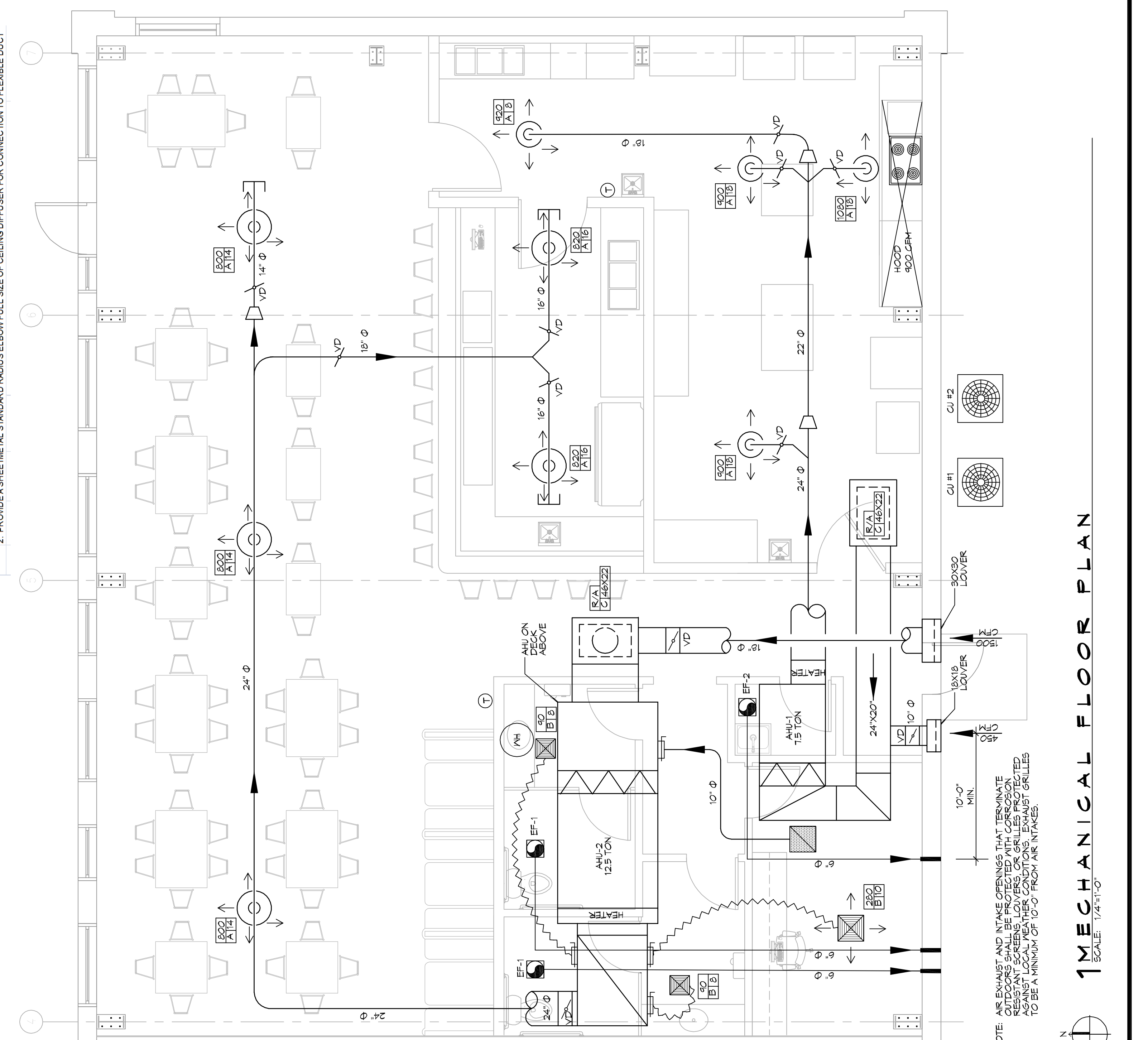
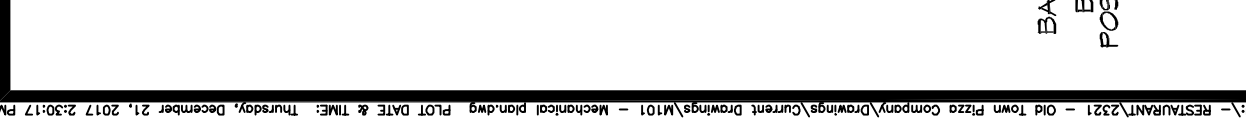
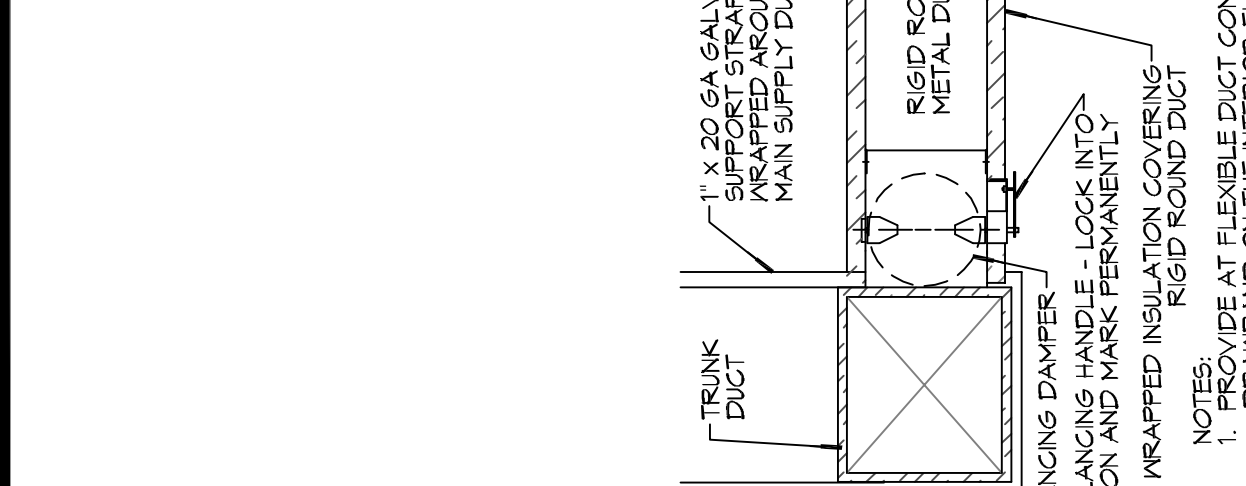
### EXHAUST FAN SCHEDULE

EXHAUST	LOCATION	CFM	VOLTAGE	TYPE	MANUFACTURER
EF-1	TOILET	100	120	VENT	BROAN OR EQUAL
EF-2	JANITOR	50	120	VENT	BROAN OR EQUAL

### DIFFUSER SCHEDULE

TAG	SERVICE	SIZE	DESCRIPTION	REMARKS
A	SUPPLY	REF. PLAN	ALUMINUM ROUND CONE DIFFUSER WITH VOLUME CONTROL AND PATTERN ADJUSTMENT	1, 2
B	SUPPLY	REF. PLAN	ALUMINUM 12" X 12" PERFORATED FACE DIFFUSER WITH ROUND NECK, VOLUME CONTROL AND PATTERN ADJUSTMENT	1, 2
C	RETURN	REF. PLAN	ALUMINUM PERFORATED RETURN WITH VOLUME CONTROL	1, 2
D	SUPPLY	REF. PLAN	ALUMINUM 24" X 24" PERFORATED FACE DIFFUSER WITH ROUND NECK, VOLUME CONTROL AND PATTERN ADJUSTMENT	1, 2

1. PROVIDE DEVICES WITH COLOR AS SELECTED BY ARCHITECT/OWNER  
2. PROVIDE A SHEET METAL STANDARD RADIUS ELBOW FULL SIZE OF CEILING DIFFUSER FOR CONNECTION TO FLEXIBLE DUCT.



NOTE: AIR EXHAUST AND INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED WITH CEILING MOUNTED EXHAUST GRILLES AGAINST LOCAL WEATHER CONDITIONS. EXHAUST GRILLES TO BE A MINIMUM OF 10'-0" FROM AIR INTAKES.

22 GAUGE STAINLESS STEEL FROM FLOOR TO CEILING COVERING 1" MINERAL WOOL BATS WITH WIRE MESH FRESH BRACKET, REINFORCED WITH MINERAL WOOL BATS.

1" X 20 GA GALV SUPPORT STRAP AND MAIN SUPPLY DUCT

1" X 20 GA GALV SUPPORT STRAP

NEUL FLEXIBLE DUCT - MAX LENGTH = 12'-0"

PROTECTION SADDLE

DIFFUSER STARTERS COLLAR MIN 4"

5/8" TO ROUND ADAPTOR - WHERE INSUL BACKSPAN OF DIFFUSER

CONDENSOR DRAIN SIZED TO RETURN REG. DRAIN TO NEAREST FRESH STRAP

SAFETY PAN DRAIN TO EXTERIOR WALL

4" GALV. STEEL SAFETY PAN W/ 2" LIP. ALL JOINTS SHALL BE SOLDERED. PROVIDE UNDER ALL COLLS AND PIPING.

3/4" THICK CONCRETE HOUSING PAD WITH 1" THICK RUBBER ISOLATION ON TOP. PAD TO BE MINIMUM 2" LARGER THAN UNIT.

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MANUAL VOLUME DAMPER