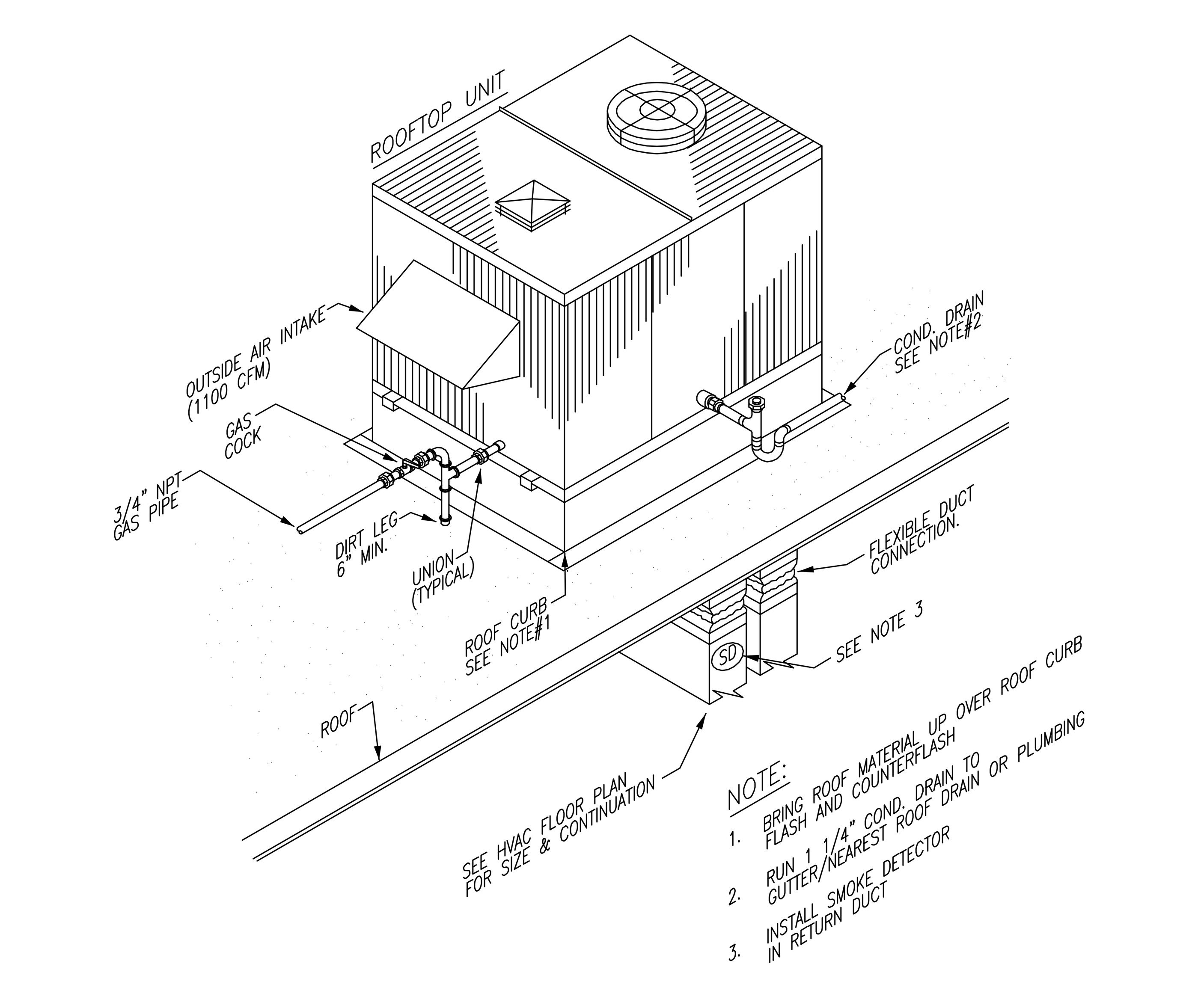
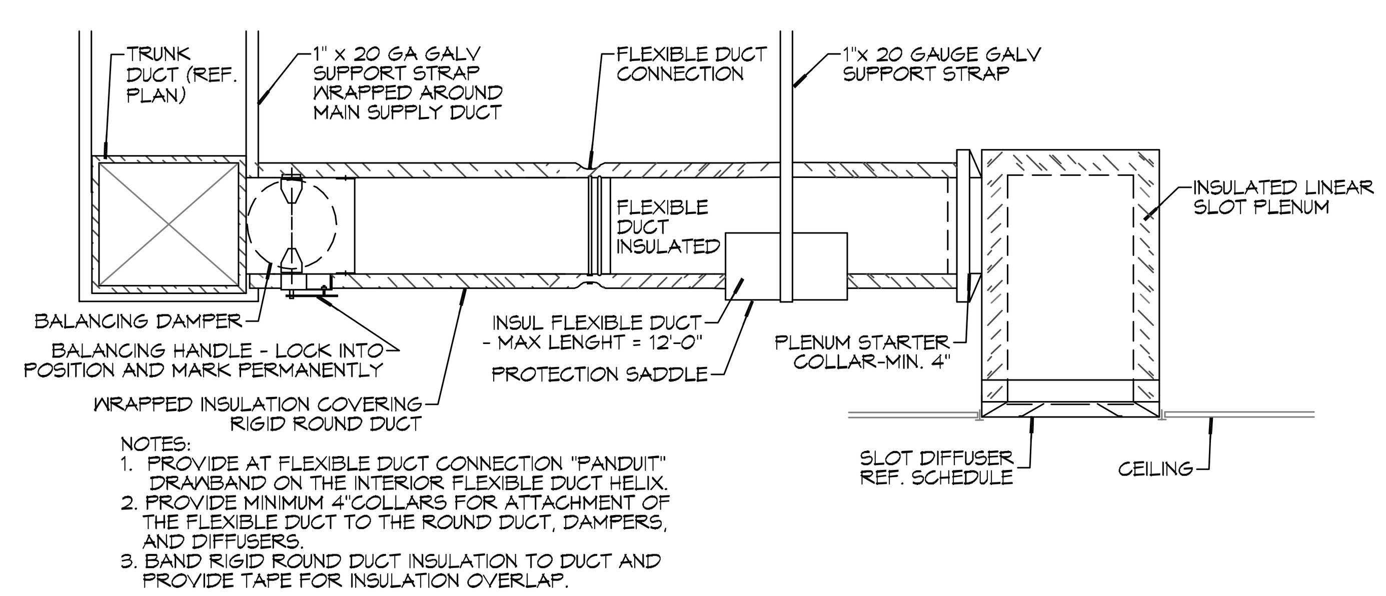
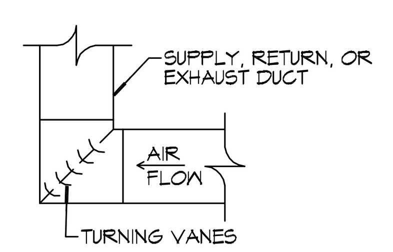


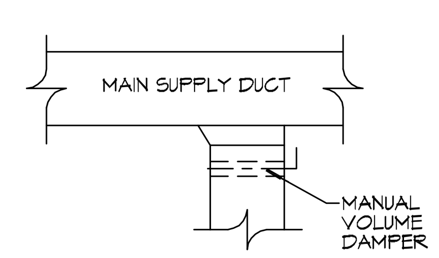
(D) TYPICAL ROOF TOP INSTALLATION AHU DETAIL



(C) DIFFUSER CONNECTION DETAIL - FLEX DUCT



(B) SQUARE ELBOW DETAIL



(A) SUPPLY DUCT TAKE-OFF DETAIL

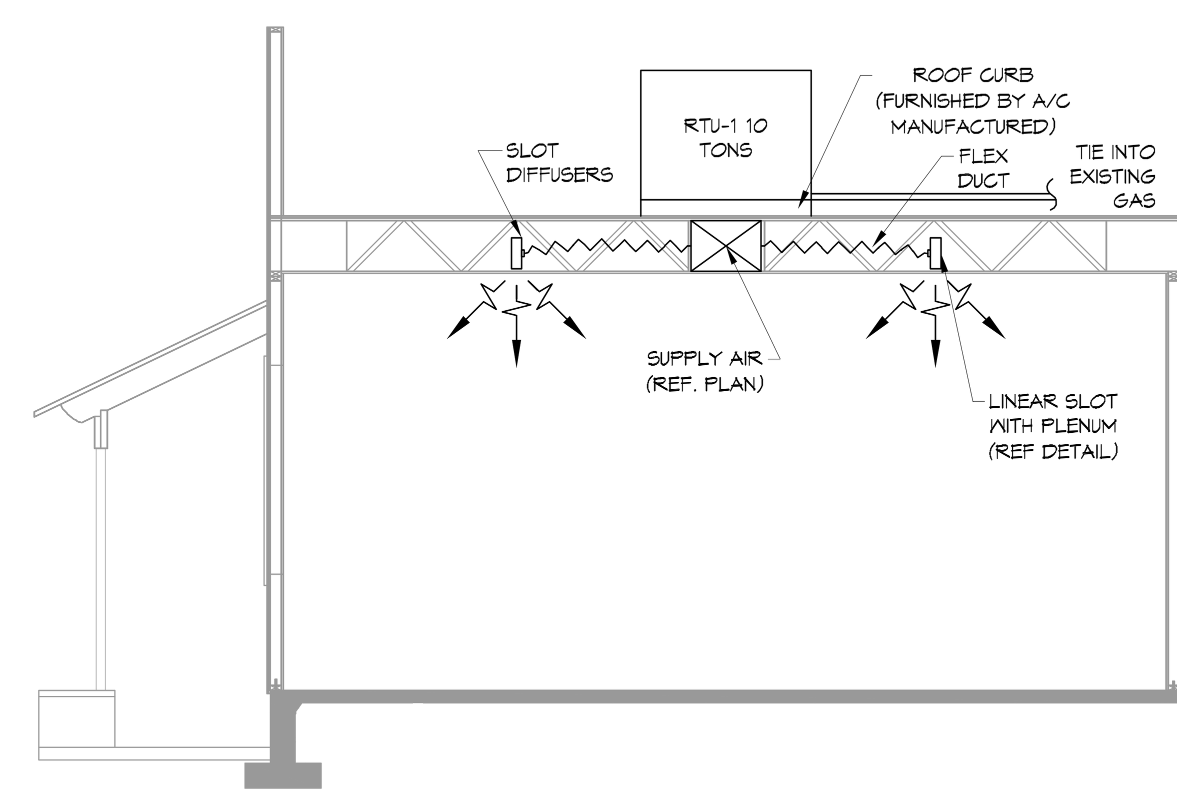
18 DETAILS
SCALE: NTS

SPLIT SYSTEM HEAT PUMP SCHEDULE															
AIR HANDLER															
TAG	TRANE AIR HANDLER MODEL NO.	NOMINAL TONS	TOTAL CFM	OA CFM	COOLING		Motor HP	ESP (" WC)	POWER			GAS HEAT		REMARKS
					MBH	SHC			VAC	Ph	MCA	MBH OUTPUT	MAX. AIR TEMP RISE (F)	
RTU-1	YSC120H3	10	3400	1100	121.1	77.1	2.75	0.4	208	3	49	120 / 84	50	1, 2, 3, 4, 5

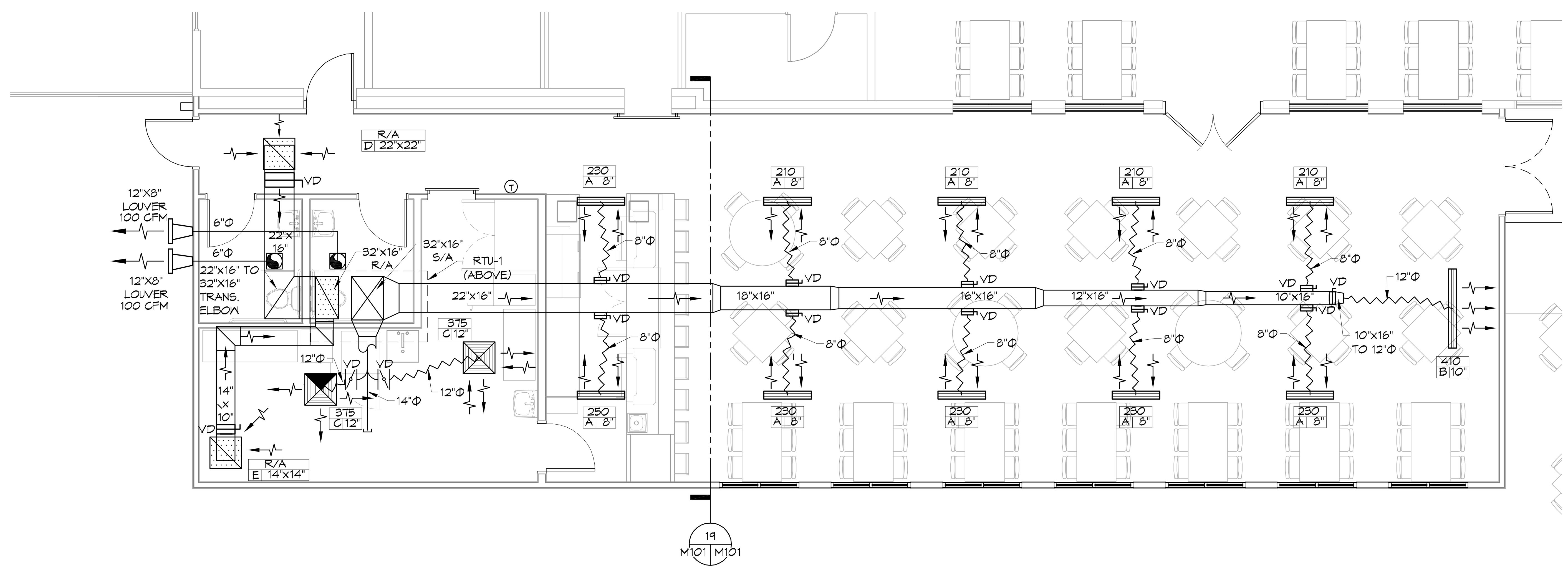
NOTES:
1 Cooling capacities to be rated in accordance with AHRI standard 210/290 for ASHRAE standard design weather conditions in New Orleans, LA.
3 Provide single point power connection, motorized outside air damper (0 - 50%) & condensate oiverflow switch.
2 Install units in accordance with manufacturer's recommendations.
4 Provide programmable 7/24 thermostat with lockab
5 Provide new filters after commisioning and final acceptance.

DIFFUSER SCHEDULE			
Mark No.	Service	Neck Size	Description
A	Supply Air	Ref. Plan	36"x 3/4" three slot linear w/ plenum
B	Supply Air	Ref. Plan	60"x 3/4" four slot linear w/ plenum
C	Supply Air	Ref. Plan	24" x 24" fixed pattern plaque, aluminized steel
D	Return Air	Ref. Plan	Perforated face return, aluminum
E	Return Air	Ref. Plan	Perforated face return, aluminum

1. Coordinate with Owner for colors and finish.



19 AHU SECTION
SCALE: 1/4" = 1'-0"



17 MECHANICAL FLOOR PLAN
SCALE: 3/16"=1'-0"

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.
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 MANUFACTURERS' 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. 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

- SUPPLY AIR GRILLE 4-WAY
- SUPPLY AIR 3 WAY
- LINEAR DIFFUSER
- RETURN AIR GRILLE
- EXHAUST FAN
- THERMOSTAT
- SUPPLY AIR DUCT
- RETURN AIR DUCT
- DAMPER CONTROL
- ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6. PROVIDE MAN. DAMPER AT DIFFUSER CONNECTIONS. 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"

DAMMON ENGINEERING, INC.
LOUISIANA & MISSISSIPPI
Chief Engineer: Brian Mistich, PE
554 Old Spanish Trail
Slidell, LA 70458
www.dammonengineering.com
info@dammonengineering.com
PH: 985.649.5832

REVISIONS		
#	DESCRIPTION	DATE

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

NEW DINING ADDITION
SOUTHSIDE CAFE
3154 PONTCHARTRAIN DR
SLIDELL, LA 70458

JOB No:	2359	DATE:	01-08-2019
DRAWN BY:	JAGMW	CHECKED BY:	CKD

SHEET TITLE:
MECHANICAL FLOOR PLAN, SCHEDULES AND DETAILS

DRAWING NUMBER:
M101