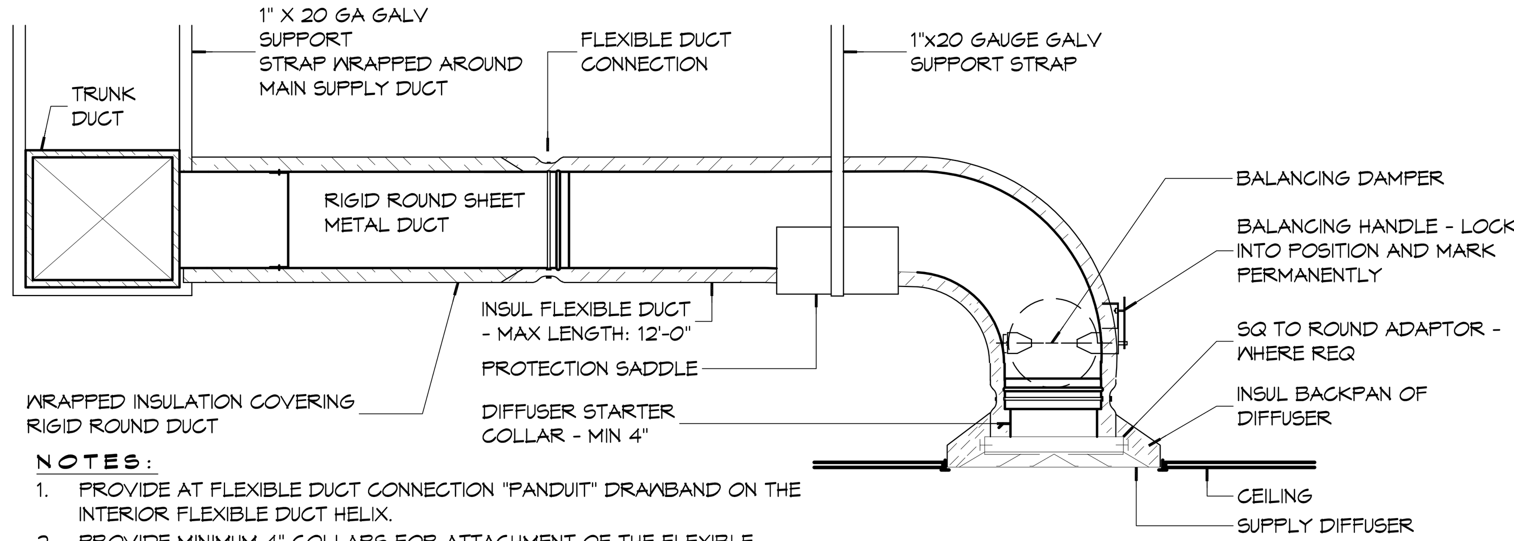


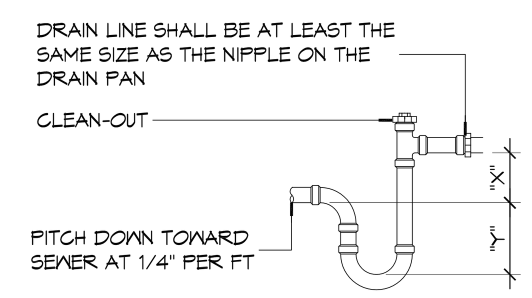
NOTES:

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 ROUND DUCT, DAMPERS AND DIFFUSERS.
3. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

5 DETAIL
SCALE: NTS — TYPICAL NON-RATED SUPPLY AIR REGISTER

NOTES:

1. LENGTHS "X" AND "Y" SHALL BE DETERMINED BY AHU BASED ON TOTAL STATIC PRESSURE.
2. "X" AND "Y" SHALL BE EQUAL TO MINIMUM 1/2 TOTAL UNIT STATIC PRESSURE.
3. ALL CONDENSATE PIPING SHALL BE SLOPED AT 1/4" PER FOOT



4 DETAIL
SCALE: NTS — CONDENSATE TRAP

AHU UNIT SCHEDULE

TOTAL Btu	CFM	OA	HEAT (KW)	ELECTRICAL VOLT	ELECTRICAL MCA	ELECTRICAL MAX O.C.P.	MFR
ZONE-1 10 TON 120,000 Btu	4000	75	15	208/230	7.5	60	DAIKIN OR EQUAL
ZONE-2 10 TON 120,000 Btu	4000	75	15	208/230	7.5	60	DAIKIN OR EQUAL
ZONE-3 5 TON 60,000 Btu	2000	50	15	208/230	6.0	15	GOODMAN OR EQUAL

A/C UNIT SCHEDULE

TOTAL Btu	ELECTRICAL VOLT	ELECTRICAL MCA	ELECTRICAL MAX O.C.P.	MFR
ZONE-1 10 TON A/C 120,000 Btu	208/230	43.2	70	DAIKIN OR EQUAL
ZONE-2 10 TON A/C 120,000 Btu	208/230	43.2	70	DAIKIN OR EQUAL
ZONE-3 5 TON A/C 60,000 Btu	208/230	32.8	50	GMC OR EQUAL

EXHAUST FAN SCHEDULE

FAN NO.	CFM	VOLTAGE	TYPE	MFR/LOCATION
EXH-1	165	120	VENT	BROAN-L150MG
EXH-2	165	120	VENT	BROAN-L150MG
EXH-3	50	120	VENT	BROAN-576

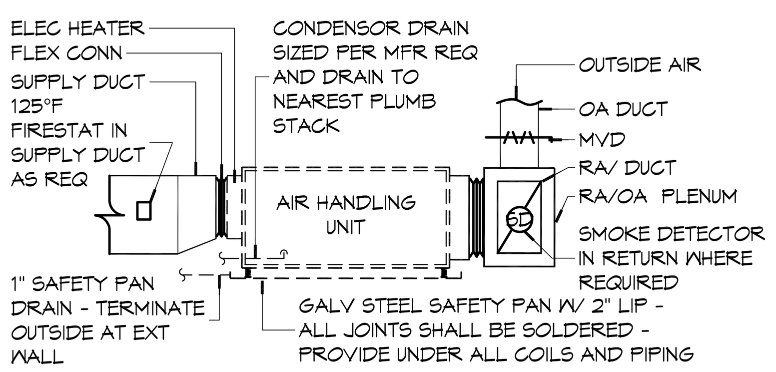
NOTE:
1. ALL FANS INSTALLED IN RATED ASSEMBLIES SHALL BE EQUIPPED W/ APPROPRIATE FIRE DAMPER TO MATCH ASSEMBLY FIRE RATING.
2. PAINT ALL SHUTTERS AND EXTERIOR GRILLES TO COLOR SPECIFICATION BY ARCHITECT.
3. PROVIDE BIRSCREENS ON ALL SHUTTERS AND EXTERIOR GRILLES.
4. PROVIDE BACK FLOW PREVENTER ON ALL EXHAUST SYSTEMS

GENERAL HVAC NOTES

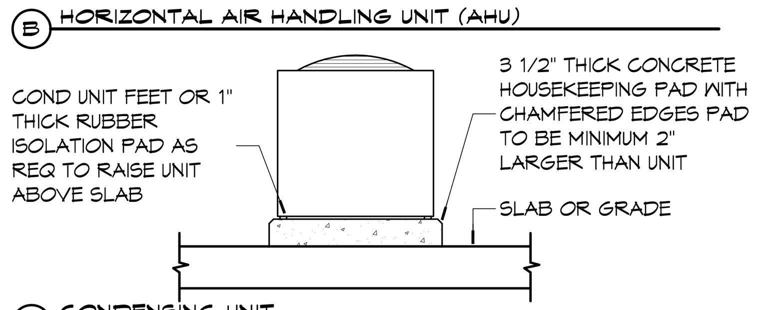
1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, 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 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. 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
- RETURN AIR GRILLE
- EXHAUST FAN ONLY
- SUPPLY AIR DUCT
- RETURN AIR DUCT
- OUTSIDE AIR INTAKE DUCT W/ VOLUME DAMPER AND MOTORIZED OR GRAVITY DAMPER TO SHUT OFF WHEN SYSTEM IS NOT RUNNING
- THERMOSTAT
- DAMPER
- ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN R-6. PROVIDE MANUAL DAMPER AT DIFFUSER CONNECTIONS; DUCT SIZE AS FOLLOWS:
  - 250CFM TO 350CFM = 9"
  - 200CFM TO 250CFM = 8"
  - 150CFM TO 200CFM = 7"
  - 100CFM TO 150CFM = 6"
- -A/C CONDENSING UNIT
- AHU - AHU UNIT; S/A (SUPPLY); R/A (RETURN)



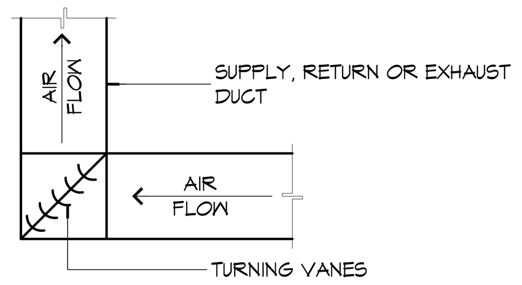
(B) HORIZONTAL AIR HANDLING UNIT (AHU)



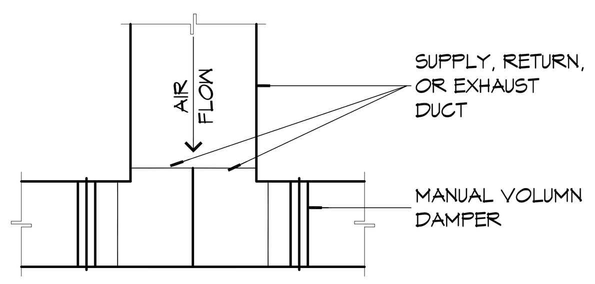
(A) CONDENSING UNIT

3 DETAILS
SCALE: NTS — A/C EQUIPMENT

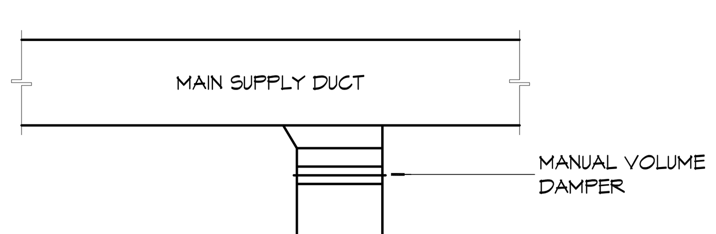
NOTE:
INSTALL FIRE DAMPER AT ANY LOCATION WHERE DUCT PENETRATES A FIRE WALL.



(C) SQUARE ELBOW

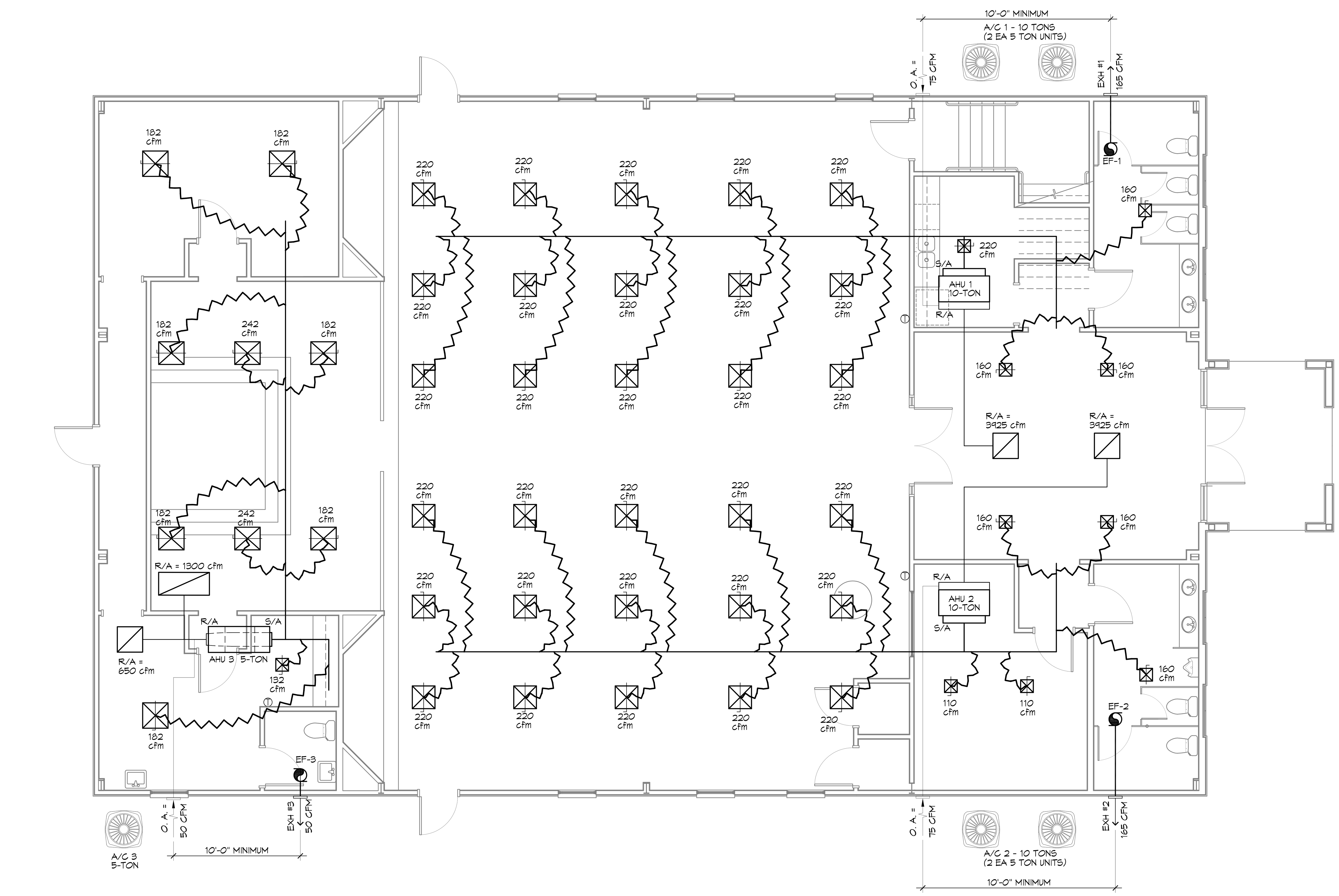


(D) DUCT SPLITTER



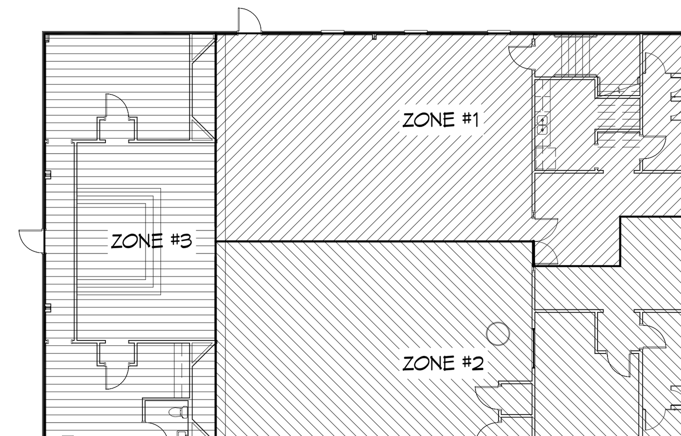
(E) SUPPLY DUCT TAKE-OFF

2 DETAILS
SCALE: NTS — TYPICAL DUCT CONNECTIONS



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

KEY PLAN HVAC ZONES



DAMMON ENGINEERING, INC.
Architects & Engineers
Chief Architect: Kevin J. Kinchen, NCARB
Chief Engineer: Brian Mistich, PE
554 Old Spanish Trail
Slidell, LA 70458
www.dammonengineering.com
info@dammonengineering.com
PH: 985.649.5832
F: 985.641.5950

#	DESCRIPTION	DATE

REVISIONS

SEAL:

PRO MULTIS LACOMBE CHAPEL

PW VORTISCH ROAD AND LA HWY 434
LACOMBE, LOUISIANA 70445

JOB No:	2250	DATE:	SEPTEMBER 3, 2015
DRAWN BY:	JTL	CHECKED BY:	KJK

The above drawings and specifications, designs and arrangements represented thereby are and shall remain the property of Dammon Engineering, and no part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which the have been prepared and developed without written consent of Dammon Engineering. Visual contact with these drawings or specifications shall constitute conclusive evidence of acceptance of these restrictions.

SHEET TITLE:
MECHANICAL FLOOR PLAN, DETAILS, AND SCHEDULES

DRAWING NUMBER:
M101