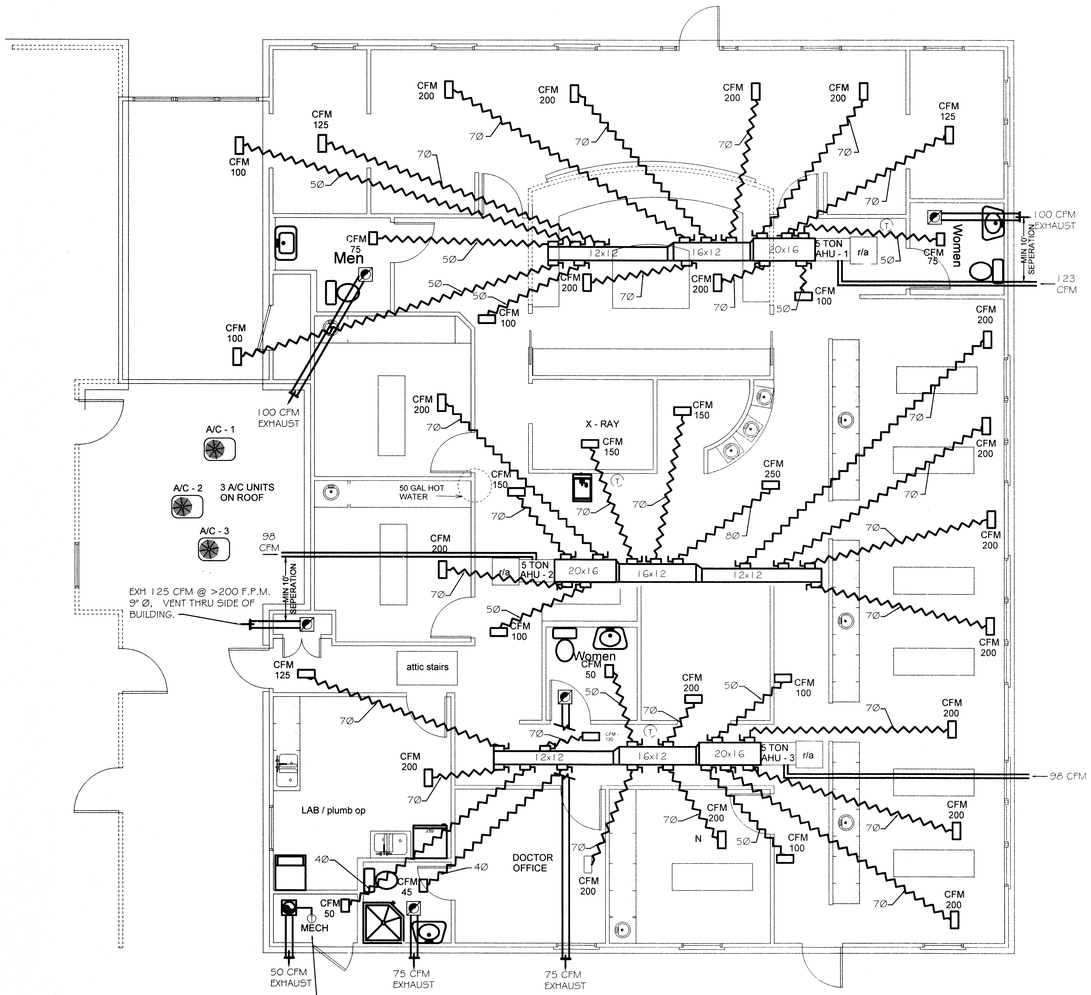


ALL VACUUM AND COMPRESSOR UNITS MUST BE INSTALLED AND OPERATED IN A THERMOSTATICALLY OR OTHERWISE STABLE AMBIENT TEMPERATURE ENVIRONMENT. FORCED AIR AND HVAC INPUT MUST BE USED IN ADDITION TO AN EXHAUST FAN IN ORDER TO REGULATE AMBIENT TEMPERATURES OF THE ROOM WHICH HOUSES THESE PIECES OF EQUIPMENT.

MECHANICAL PLAN

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

A/C UNIT SCHEDULE TOTAL HVAC TONS = 15

NO.	TOTAL BTU	CFM	O.A.	HEAT ELEC.	ELECTRICAL			COMMENTS
					VOLTAGE	MCA	CKT BRKR	
1	60,000 5 TON	2,000	123	15 KW	1Ø	-	PNL	
2	60,000 5 TON	2,000	98	15 KW	1Ø	-	PNL	
3	60,000 5 TON	2,000	98	15 KW	1Ø	-	PNL	

HVAC NOTES

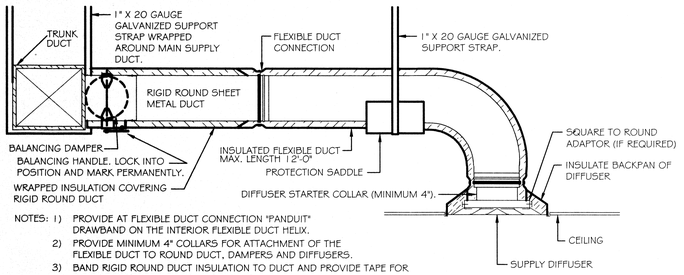
1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, 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 U.L. 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 U.L. RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES.
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 EQUAL TO BROAN MODEL OR EQUAL. 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.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCH. DWGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIEDTO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. INSTALL FIRE DAMPER WHERE S.A. & R.A. DUCTS PENETRATE 1 HOUR RATED CEILINGS.
18. 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 FLAMESAND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E8-14).
19. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMATICALLY. CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
20. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 15'-0".
21. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
22. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
23. 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.
24. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING. ALL THERMOSTATS MUST BE PROGRAMMABLE. SEE SECTIONS 502.4.4 OR 503.2.4.3 OF THE 2006 INTERNATIONAL ENERGY CODE.

LEGEND

- EXHAUST FAN
- THERMOSTAT
- DAMPER
- A/C CONDENSING UNIT
- AHU UNIT
- ROUND FLEX DUCT

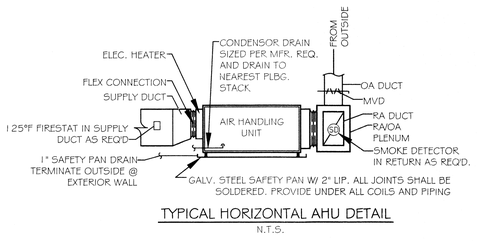
NOTE-1: MECHANICAL PLAN IS DRAWN DIAGRAMATIC. DUCT LOCATIONS ARE FOR REFERENCE ONLY. FIELD LOCATE AS NEEDED BETWEEN JOISTS OR TRUSSES. INSTALL FIRE DAMPER AT ANY LOCATION WHERE DUCT PENETRATES A FIRE WALL OR CEILING. ANY EXHAUST FAN FIXTURE INSTALLED IN A RATED CEILING SHALL BE RATED FOR THAT CEILING.

NOTE-2: COORDINATE LOCATION OF ALL SUPPLY AIR DIFFUSERS, RETURN AIR GRILLES, EXHAUST FANS, ETC... WITH LIGHTING PLAN.

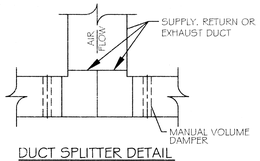


NOTES: 1) PROVIDE AT FLEXIBLE DUCT CONNECTION "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX.
2) PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.
3) BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

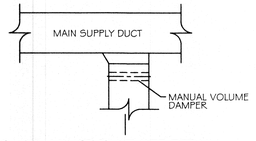
DIFFUSER CONNECTION DETAIL-FLEX DUCT
N.T.S.



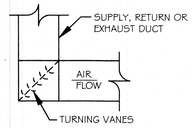
TYPICAL HORIZONTAL AHU DETAIL
N.T.S.



DUCT SPLITTER DETAIL
N.T.S.



SUPPLY DUCT TAKE-OFF DETAIL
N.T.S.



SQUARE ELBOW DETAIL
N.T.S.

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

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3330 KINGMAN STREET
METAIRIE, LA

JOB No:	DATE: 10-25-2013
DRAWN BY: CKD	CHECKED BY: BAM

#	DESCRIPTION	DATE
REVISIONS		

STATE OF LOUISIANA
BRIAN A. MISTICH
LICENSE No. 24187
REGISTERED PROFESSIONAL ENGINEER
IN
MECHANICAL ENGINEERING
10/24/2013

MECHANICAL PLAN

SHEET No:

M101