



DAMMON
ENGINEERING, INC.

CHIEF ENGINEER
EMMETT
DAMMON, P.E.
CHIEF ARCHITECT
ROBERT
WILTSE

1095 FLORIDA AVENUE
SLIDELL, LA. 70458
OFFICE: 985-649-5832
FAX: 985-641-5950

WEBSITE:
WWW.DAMMONENGINEERING.COM
EMAIL:
DAMMONENG@BELLSOUTH.NET

ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

SOUTHEAST
LOUISIANA
VETERANS
HEALTH CARE
SYSTEM

SUITE B
MECHANICAL
PLAN

REV:

SCALE: AS NOTED
JOB#: 2009
DATE: 02-03-09
SHEET 10

- CONTRACTOR NOTES**
1. PROVIDE ELEC. DISCONNECT, MAINTENANCE OUTLET, AND LIGHT AT EACH AIR HANDLER LOCATION.
 2. INSTALL ALL MECHANICAL EQUIPMENT PER MANUFACTURER REQUIREMENTS.
 3. INSTALL ALL DUCT WORK ABOVE CEILING AS SHOWN. MAKE ADJUSTMENTS PER FIELD REQUIREMENTS.
 4. PROVIDE ONE OUTDOOR SERVICE OUTLET WITHIN 10' OF EACH CONDENSER UNIT.
 5. COORDINATE MECHANICAL PLANS WITH ARCHITECTURAL, ELECTRICAL, AND PLUMBING PLANS.

MECHANICAL NOTES

1. CONCEALED DUCTWORK TO BE UL-181, CLASS 1, FIBERGLASS DUCTBOARD. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 CFM & SECONDARY DUCTS TO 800 CFM. TO BE INSTALLED PER SMACNA STANDARDS.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACNA STANDARDS. LINE WITH NEOPRENE COATED 1.0" x 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
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. WHERE MULTIPLE AIR-HANDLING SYSTEMS SHARE COMMON SUPPLY OR RETURN AIR DUCTS OR FLENUMS WITH A COMBINED CAPACITY GREATER THAN 2000 CFM, THE RETURN AIR SYSTEM SHALL BE PROVIDED WITH SMOKE DETECTORS IN ACCORDANCE WITH I.M.C. 06.SFC. 606.2.1.
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.
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 NO. 100 CF 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 FUTURE 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 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 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-E814).
18. MECHANICAL PLANS ARE DRAWN SCHEMATICALLY. CONTRACTOR TO ROUTE DUCT SYSTEMS PER FIELD CONDITIONS.
19. AREA OF REFUGE SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 92A. TO INCLUDE STAIRWELL PRESSURIZATION SYSTEMS, PROVIDE PROPER ACTIVATION AND CONTROL SYSTEMS.
20. PROVIDE POWER SUPPLY AND MAX. OVERCURRENT DEVICE PER MANUFACTURERS SPECIFICATION FOR ALL UNITS.

AIR BALANCE SCHEDULE

	ACH1	AHU2	AHU3	EF1	EF2
SUPPLY AIR FLOW (CFM)	7200	7200	600		
OUTSIDE AIR FLOW (CFM)	1520	2105	100		
RETURN AIR FLOW (CFM)	5680	5095	500		
EXHAUST AIR FLOW (CFM)				90	200
BUILDING PRESSURE (CFM)	+ 1520	+2105	+100	-80	-200
QUANTITIES	1	1	1	7	1
TOTAL PRESSURIZATIONS	+ 1520	+2105	+100	-560	-200
REMARKS					
RESULTING BUILDING PRESSURIZATION (CFM) =	+ 2965				