

three inches = one foot
one and one half inches = one foot
one inch = one foot
one quarter inch = one foot
three quarters inch = one foot
one half inch = one foot
one eighth inch = one foot
one quarter inch = one foot
one eighth inch = one foot

GENERAL NOTES

- 1. ALL WORK SHALL CONFORM TO ALL PROJECT SPECIFICATIONS, LOCAL, STATE, AND NATIONAL CODES. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
2. THE MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS REQUIRED FOR HIS WORK.
3. ALL MATERIALS, EQUIPMENT AND PRODUCTS INCORPORATED IN THE WORK UNDER THE CONTRACT SHALL BE NEW, OF A SUITABLE GRADE FOR THE PURPOSES INTENDED, AND TO THE EXTENT POSSIBLE, STANDARD PRODUCTS OF THE VARIOUS MANUFACTURERS EXCEPT WHERE SPECIAL CONSTRUCTION OR PERFORMANCE FEATURES ARE CALLED FOR.
4. ANY EQUIPMENT OR MATERIAL DEVIATIONS FROM THAT SPECIFIED OR DETAILED ON THIS DRAWING SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER. ALL PROPOSED EQUIPMENT DEVIATIONS SUBMITTED SHALL BE SIMILAR BOTH IN QUALITY AND CAPACITY TO THAT EQUIPMENT SPECIFIED.
5. ALL MECHANICAL EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES (U.L.).
6. THE MECHANICAL CONTRACTOR SHALL INSTALL EQUIPMENT AS SHOWN ON THE DRAWINGS ALLOWING FOR SUFFICIENT ACCESS AND CLEARANCE SPACE FOR EQUIPMENT MAINTENANCE, REPAIRS AND REPLACEMENT. PROVIDE PROPER CLEARANCES FOR REQUIRED PIPING AND ELECTRICAL SERVICES AND CONNECTIONS. INSTALL ALL EQUIPMENT WITH REQUIRED ACCESS AND CLEARANCES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS AND/OR WITH ALL APPLICABLE CODES AND STANDARDS.
7. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION AND ROUTING OF ALL PROPOSED DUCTWORK, PIPING AND EQUIPMENT WITH THE EXISTING BUILDING STRUCTURE.
8. THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL HIS OWN SUPPORT EQUIPMENT. LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION.
9. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER CONNECTIONS TO THE EQUIPMENT PROVIDED UNDER THIS CONTRACT.
10. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL WIRING FOR HIS EQUIPMENT.
11. DUCTWORK AND PIPING LAYOUTS AND LOCATIONS ARE SCHEMATIC. DO NOT SCALE THESE DRAWINGS. EXACT ROUTING OF DUCTWORK AND PIPING MUST BE DETERMINED IN THE FIELD. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR BY ACTUAL MEASUREMENT AND OBSERVATION BEFORE ORDERING OR FABRICATING ANY DUCTWORK, PIPING OR EQUIPMENT. ANY DISCREPANCIES BETWEEN THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS OR DIMENSIONS SHALL BE REPORTED TO THE ENGINEER BEFORE THE PERFORMANCE OF ANY WORK. FAILURE TO VERIFY AND REPORT SHALL CONSTITUTE THE CONTRACTOR'S ACCEPTANCE OF THE EXISTING CONDITIONS AS FIT FOR THE PROPER EXECUTION OF HIS WORK.
12. DUCTWORK AND PIPING SHALL BE KEPT AS CLOSE AND HIGH AS POSSIBLE TO THE BUILDING WALLS, CEILING AND FLOOR AND ROOF STRUCTURE IN ORDER THAT THE MAXIMUM AMOUNT OF SPACE IS AVAILABLE. ADDITIONAL OFFSETS, FITTINGS, ETC. NOT SHOWN BUT REQUIRED TO MAINTAIN MAXIMUM CLEARANCE SHALL BE PROVIDED AT NO ADDITIONAL COST.
13. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PATCHING, PAINTING AND CLEANING ASSOCIATED WITH THIS PROJECT UNLESS NOTED OTHERWISE.
14. PRIOR TO BIDDING, MECHANICAL CONTRACTOR IS TO VISIT SITE TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS.
15. PROVIDE A COMPLETE 1-YEAR WARRANTY ON ALL LABOR AND MATERIALS.

- 16. INSTALL ESCUTCHEONS IN ALL PLACES WHERE PIPING PENETRATES A WALL IN AN EXPOSED LOCATION.
17. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, INCLUDING THE SCHEDULES AND DETAILS PRIOR TO INSTALLATION OF ANY MECHANICAL SYSTEMS AND SHALL RESOLVE ANY CONFLICTS WITH THE ENGINEER.
18. ALL DUCT SIZES SHOWN ARE FREE AREA SIZES.
19. THE HIGHEST OPERATING COMPONENT OF THE THERMOSTAT SHALL BE MOUNTED AT 48" MAX. A.F.F.
20. INSTALL FLEXIBLE DUCT CONNECTIONS AT THE SUPPLY AND RETURN DUCTWORK CONNECTIONS OF ALL AIR HANDLING UNITS.
21. PROVIDE FIRE DAMPERS AT ALL DUCT PENETRATIONS THROUGH THE FIRE-RATED WALLS AS SHOWN ON PLANS OR AS REQUIRED. PROVIDE RADIATION DAMPERS AT ALL DIFFUSERS/GRILLES MOUNTED IN FIRE-RATED CEILINGS AND CEILING ASSEMBLIES AS SHOWN ON PLANS OR AS REQUIRED.
22. PROVIDE ACCESS PANELS IN THE DUCTWORK FOR ALL FIRE DAMPERS OR OTHER DUCT MOUNTED EQUIPMENT. LOCATE ACCESS PANEL SO THAT ACCESS TO EQUIPMENT IS EASILY ATTAINED.
23. OUTSIDE AIR INTAKES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM ALL EXHAUST DISCHARGE AND PLUMBING VENTS.
24. REPLACE ALL FILTERS JUST PRIOR TO ACCEPTANCE BY THE OWNER.
25. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE COATESVILLE VA MEDICAL CENTER'S INFECTION CONTROL PROGRAM.
26. CONSTRUCTION DEBRIS SHALL BE HANDLED AS NOTED IN THE APPLICABLE SPECIFICATION SECTIONS. IN ADDITION CONTRACTOR SHALL INSURE THAT DURING REMOVAL DEBRIS IS PROPERLY SECURED, COMPLETELY ENCASED IN A CART, AND WRAPPED IN PLASTIC TO PREVENT SPILLAGE.

VA STANDARD ISOLATION ROOM OUTSIDE AIR CALCULATION. Table with columns: SPACE CLASSIFICATION, VOLUME (FT³), REQ'D AIR CHANGES/HR, CFM/FT³, OUTDOOR AIR (CFM) REQ'D. Rows include Patient Room 218C, Patient Room 218H, Ante Room 218F, and totals for required and provided air.

CALCULATION NOTES: 1. OUTDOOR AIR VALUES WERE DETERMINED PER VA STANDARD ISOLATION ROOM DETAIL.

OUTDOOR AIR CALCULATION ISOLATION ROOM. Table with columns: SPACE CLASSIFICATION, FT³ OR NUMBER PEOPLE, CFM/PERSON, CFM/FT³, OUTDOOR AIR (CFM). Rows include Patient Room 218C, Patient Room 218H, Ante Room 218F, and totals for required and provided air.

OUTDOOR AIR CALCULATION NOTES: 1. OUTDOOR AIR VALUES WERE DETERMINED PER THE 2009 INTERNATIONAL MECHANICAL CODE - SECTION 403. 2. AIR REQUIRED BY VA STANDARD EXCEEDS IMC STANDARD.

MECHANICAL SYSTEMS AND EQUIPMENT. METHOD OF COMPLIANCE: Prescriptive [X], Energy Cost Budget []. Thermal Zone: 4A. EXTERIOR DESIGN CONDITIONS: Winter Dry Bulb: 14°F, Summer Dry Bulb: 95°F. BUILDING HEATING LOAD: 77,300 Btu/hr. BUILDING COOLING LOAD: 67,000 Btu/hr. MECHANICAL SPACE CONDITIONING SYSTEM: Unitary - The space is being served by one new constant volume packaged roof top air handler with direct expansion cooling and an electric re-heat coil. Designer Statement: To the best of my knowledge and belief, the design of this building complies with the mechanical system and equipment requirements of ASHRAE 90.1.

ABBREVIATIONS table listing symbols for AHU, CFM, COND, CO2R, CU, EA, EF, EOH, EOR, FD, FPM, GUH, HP, L, LP, NG, RA, RTU, OA, PKG, LPS, LPSOR, MPS, MPSOR, LSD, LSRD, SW, RD.

MECHANICAL LEGEND table listing symbols for Thermostat, CO2 Sensor, Lay-in Ceiling Supply Diffuser, Lay-in Ceiling Return Diffuser, GWB Ceiling Exhaust Register, Linear Slot Diffuser, Linear Slot Return Diffuser, Sidewall Supply Register, Rectangular Duct, Round Duct, Duct to be Demolished, Balancing (Volume) Damper, Round Flex Duct, Rectangular Duct - Riser, Fire Damper, Duct Smoke Detector, Diffuser Mark, Neck Size, Diffuser CFM, Humidity Sensor, Static Pressure Sensor.

FINAL CONSTRUCTION DOCUMENTS

Project information block including Architect/Engineers (APOGEE), Professional Stamp/Seal (John W. Mathews), Drawing Title (MECHANICAL DATA AND NOTES), Project Title (Department of Veterans Affairs), Project Number (542-11-106), Building Number (Building 1), Location (Coatesville, PA), Date (June 14th, 2011), Checked (JMM), Drawing Number (M-001), and Office of Construction and Facilities Management.