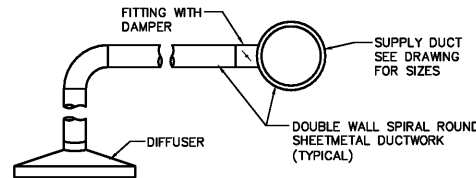
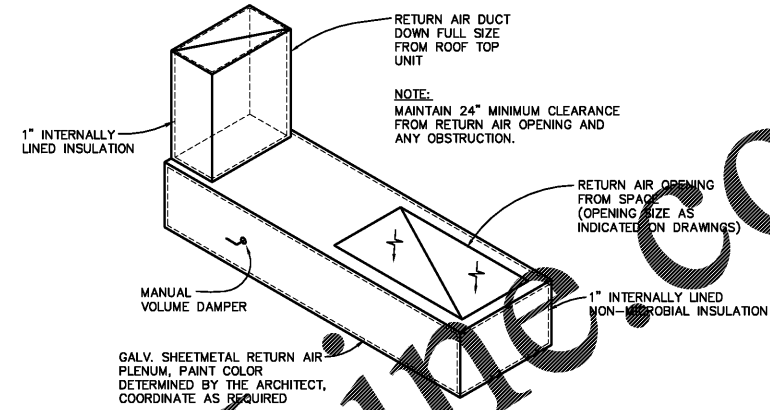


MECHANICAL GENERAL NOTES:

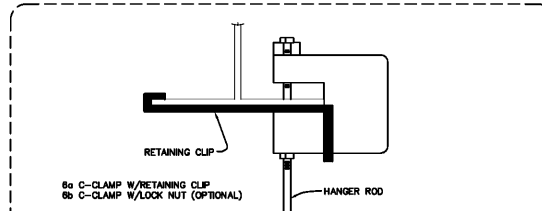
- IN GENERAL, PLANS AND DIAGRAMS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- INTENT OF THESE NOTES AND MECHANICAL NOTES ON DRAWINGS IS TO CLARIFY THE SCOPE OF WORK AND ALERT CONTRACTOR OF EXISTING CONDITIONS. CONTRACTOR TO VISIT SITE AND VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET AND/OR CHANGES IN DUCT SIZES TO MEET FIELD CONDITIONS AND COORDINATE WITH ELECTRICAL, PLUMBING AND FIRE PROTECTION SUBCONTRACTOR BEFORE ANY CONSTRUCTION WORK.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRADES INSTALLATION SCHEDULES. FIXED WORK SUCH AS DUCTWORK AND PLUMBING SHALL BE INSTALLED PRIOR TO ANY TRADE WORK THAT CAN BE EASILY RELOCATED OR OFFSET SUCH AS ELECTRICAL CONDUITS, SMALL WATER LINES ETC.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE. TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ELEVATION WITH WATER PIPING, SANITARY DRAINS AND MAJOR ELECTRICAL CONDUITS.
- CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTARY STEEL REQUIRED TO SUSPEND MECHANICAL EQUIPMENT AND MATERIALS.
- ALL MECHANICAL WORK SHALL MEET ALL THE REQUIREMENTS OF BUT NOT LIMITED TO THE "2011 OHIO MECHANICAL CODE".
- DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. INTERNAL INSULATION (WHERE USED) HAS NOT BEEN ACCOUNTED FOR.
- DUCTWORK, DIFFUSERS, REGISTERS, GRILLES, AND OTHER ITEMS OF THE AIR HANDLING SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- WALL MOUNTED THERMOSTATS SHALL BE INSTALLED AT AN ELEVATION OF 48" ABOVE FINISHED FLOOR TO THE TOP UNLESS OTHERWISE NOTED ON DRAWINGS. LOCATION OF THE WALL MOUNTED THERMOSTAT SHALL BE COORDINATED WITH OTHER TRADES FOR A NEAT APPEARANCE. FINAL LOCATION OF THERMOSTAT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER OR HIS REPRESENTATIVE IN THE FIELD. PROVIDE CLEAR PLEXIGLAS LOCK BOXES OVER ALL THERMOSTATS.
- ALL SUPPLY AIR DIFFUSERS SHALL BE 4-WAY THROW UNLESS OTHERWISE NOTED (SEE MECHANICAL LEGEND).
- COORDINATE AIR DEVICE LOCATIONS WITH LIGHTING FIXTURES, SPEAKERS AND FIRE SPRINKLER HEADS (WHERE APPLICABLE).
- VERIFY VOLTAGE WITH ELECTRICAL BEFORE ORDERING EQUIPMENT.
- CONTRACTOR SHALL PROVIDE A COPY OF THE TEST AND BALANCE REPORT AT THE FINAL INSPECTION. THIS REPORT MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO THE FINAL INSPECTION. THE CONTRACTOR MUST ALSO PROVIDE ALL REPORTS REQUIRED BY THE SPECIFICATION.
- FLEXIBLE AND RIGID ROUND DUCT TAKE-OFFS FOR DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0". INSULATE RIGID ROUND DUCTS WITH 1-1/2" FOIL FACED FIBERGLASS DUCT WRAP, DUCT WRAP TO HAVE AN INSTALLED MINIMUM THERMAL RESISTANCE (R) VALUE OF 6.0.
- SUPPLY AND RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSULATED SHEET METAL CONSTRUCTION IN ACCORDANCE WITH LATEST SMACNA STANDARDS. INSULATION SHALL BE 1-1/2" FOIL FACED FIBERGLASS DUCT WRAP WITH AN INSTALLED MINIMUM THERMAL RESISTANCE (R) VALUE OF 6.0. ALL JOINTS SHALL BE SECURELY TAPED WITH 3" WIDE GLASS FABRIC TAPE WITH FOSTER 30/35 MASTIC OR EQUAL.
- PROVIDE A TRAP IN ALL CONDENSATE PIPING LOCATED AT THE ROOF TOP UNIT. CONDENSATE PIPING TO BE TYPE "L" COPPER.
- TURNING VANES SHALL BE PROVIDED IN ALL SHEETMETAL SUPPLY DUCT RECTANGULAR ELBOWS WITH ANGLES BETWEEN 15 DEGREES AND LESS THAN 90 DEGREES PER FIG. 2-5 OF THE SMACNA MANUAL.
- ALL EXHAUST DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTION IN ACCORDANCE WITH LATEST SMACNA STANDARDS. ALL JOINTS SHALL BE SECURELY TAPED WITH 3" WIDE GLASS FABRIC TAPE WITH FOSTER 30/35 MASTIC OR EQUAL.
- DUCT SHALL BE SECURELY SUPPORTED, HUNG OR SUSPENDED IN ACCORDANCE WITH THE 2011 OHIO MECHANICAL CODE. PROVIDE MINIMUM 1-1/2" WIDE 22 GA. STRAPS, 10 FT. SPACING FOR MAXIMUM HALF DUCT PERIMETER UP TO 30" AND ALL ROUND FLEX DUCT, PROVIDE 1" WIDE 22 GA. STRAPS, 5 FT. SPACING FOR MAXIMUM HALF DUCT PERIMETER FROM 31" TO 72" AND 1" WIDE 20 GA. STRAPS, 5 FT. SPACING FOR MAXIMUM HALF DUCT PERIMETER UP TO 96".
- ROOF TOP UNIT OUTSIDE AIR INTAKE SHALL MAINTAIN A MINIMUM OF 10'-0" FROM ANY EXHAUST ROOF CAPS OR SANITARY VENT THRU ROOF PIPING.
- PROVIDE ALL ROOF TOP UNITS WITH MANUFACTURER'S RECOMMENDED SERVICE AREA CLEARANCES.
- ALL ROOF TOP UNITS SHALL BE REINFORCED TO WITH STAND 140 MPH WIND LOAD DESIGN. (SEE "ROOF CURB DETAIL FOR MECHANICAL EQUIPMENT")
- ALL CONDENSATE DRAIN PIPING ON ROOF SHALL BE PROPERLY SUPPORTED.
- GUARANTEE, FOR ONE YEAR AFTER DATE OF ACCEPTANCE BY THE OWNER, ALL EQUIPMENT, MATERIALS AND WORKMANSHIP TO BE FREE FROM DEFECT.
- ALL MECHANICAL EQUIPMENT CONTROL WIRING TO BE ROUTED IN CONDUIT.
- IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO INSTALL THE HEATING, VENTILATION AND AIR CONDITIONING SYSTEM SO AS TO INSURE QUIET OPERATION. VIBRATION OR SOUND SHALL BE TRANSMITTED TO THE BUILDING STRUCTURE OR OCCUPIED AREAS. THE DECISION OF THE ENGINEER AS TO THE QUIETNESS OF THE SYSTEM AND EQUIPMENT SHALL BE FINAL. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO CORRECT OR REPLACE ANY NOISY SYSTEM OR EQUIPMENT AS REQUIRED.
- ALL MATERIAL SHALL BE OF APPROVED QUALITY. THE WORK SHALL BE DONE THOROUGH AND WORKMANLIKE MANNER. THE WORK MATERIAL AND TESTS SHALL BE IN ACCORDANCE WITH THE "2011 OHIO MECHANICAL CODE".



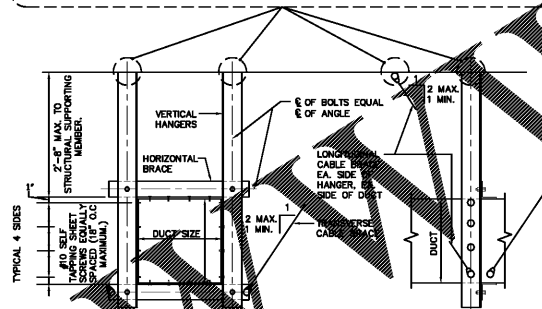
DIFFUSER RUNOUT DETAIL
NO SCALE



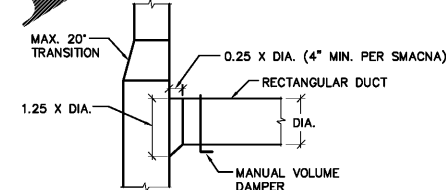
RETURN AIR PLENUM BOX DETAIL
NO SCALE



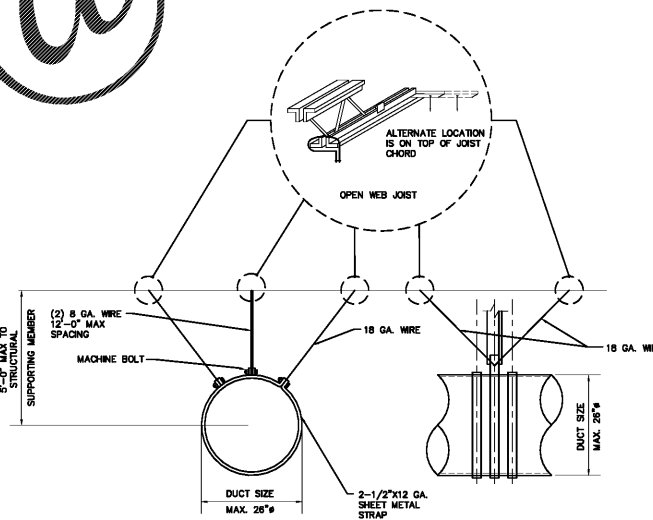
CONNECTIONS TO JOIST
NO SCALE



CABLE STRAP BRACING FOR RECTANGULAR DUCTS
NO SCALE



BRANCH DUCT DETAILS
NO SCALE



ROUND DUCT SUPPORT AND BRACING DETAIL
NO SCALE

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	CLIENT REVIEW	01/10/17

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