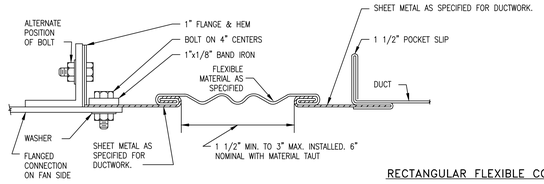
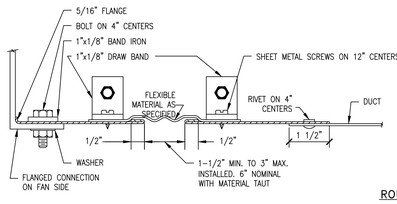
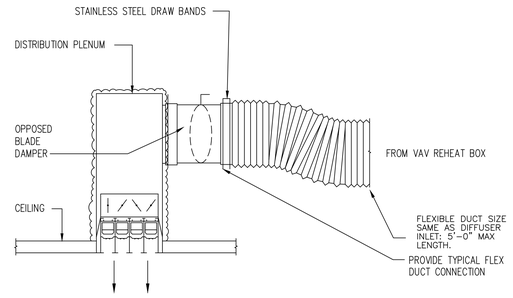


RECTANGULAR FLEXIBLE CONNECTION

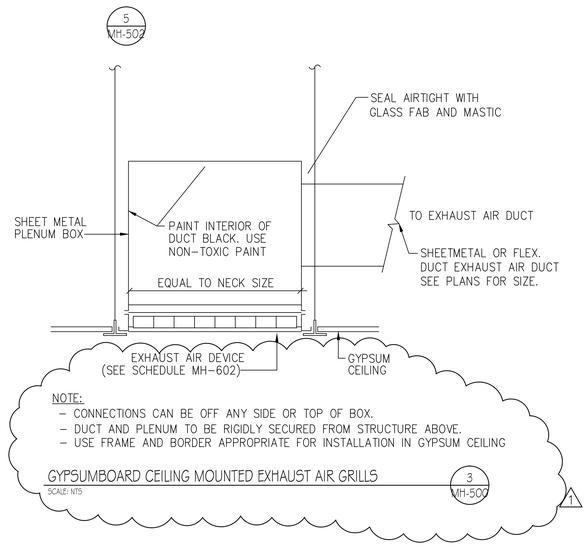


ROUND FLEXIBLE CONNECTION

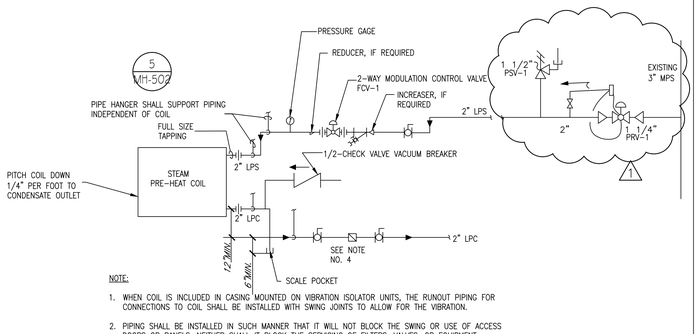
RECTANGULAR AND ROUND FLEXIBLE CONNECTION DETAILS (8 / MH-500)
SCALE: NTS
REFERENCE MH-400 AND MH-401



LINEAR SLOT DIFFUSER SUPPLY AND EXHAUST DETAIL (5 / MH-500)
SCALE: NTS
REFERENCE MH-100,MH-101, MH-402 AND MH-403



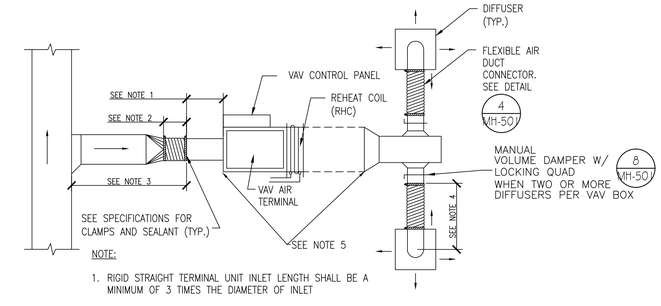
GYPSUMBOARD CEILING MOUNTED EXHAUST AIR GRILLS (3 / MH-500)
SCALE: NTS



NOTE:

1. WHEN COIL IS INCLUIDED IN CASING MOUNTED ON VIBRATION ISOLATOR UNITS, THE RUNOUT PIPING FOR CONNECTIONS TO COIL SHALL BE INSTALLED WITH SWING JOINTS TO ALLOW FOR THE VIBRATION.
2. PIPING SHALL BE INSTALLED IN SUCH MANNER THAT IT WILL NOT BLOCK THE SWING OR USE OF ACCESS DOORS OR PANELS; NEITHER SHALL IT BLOCK THE SERVICING OF FILTERS, VALVES, OR EQUIPMENT.
3. TRAP EACH COIL SEPARATELY WHEN INSTALLED IN A BANK OF TWO OR MORE HIGH. ALSO PROVIDE SEPARATE VACUUM BREAKER FOR EACH COIL.
4. ONE TRAP ASSEMBLY IS SHOWN. TWO TRAPS IN PARALLEL ARE REQUIRED WHEN CONDENSATE LOAD IS 5,000 LBS/HR OR GREATER.
5. SUPPLY & RETURN PIPES ARE SHOWN FROM SAME END. REHEAT COIL MAY HAVE SUPPLY & RETURN PIPES FROM OPPOSITE ENDS.

STEAM HEATING COIL PIPING CONNECTIONS (7 / MH-500)
SCALE: NTS
REFERENCE MP-100, MI-601

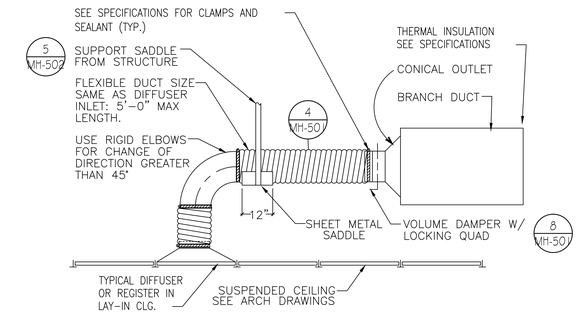


NOTE:

1. RIGID STRAIGHT TERMINAL UNIT INLET LENGTH SHALL BE A MINIMUM OF 3 TIMES THE DIAMETER OF INLET
2. A FLEXIBLE AIR DUCT CONNECTOR IS NOT MANDATORY FOR INLET TO THIS BOX, BUT ALLOWED TO ACCOMMODATE MINOR OFFSETS. MAXIMUM LENGTH 3'-0".
3. A BRANCH DUCT SERVING AN INDIVIDUAL BOX MAY BE THE SAME SIZE AS THE BOX INLET, PROVIDED THE EQUIVALENT LENGTH OF THE BRANCH DUCT, AS SHOWN, DOES NOT EXCEED 10 FEET. FOR LONGER LENGTHS, INCREASE THE DUCT SIZE AND PROVIDE A DUCT TRANSITION TO MAINTAIN THE DUCT STATIC PRESSURE DROP AT OR BELOW 0.2"/100'.
4. FLEXIBLE AIR DUCT CONNECTORS, WHEN USED FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER, SHALL NOT EXCEED 5'-0". USE RIGID ELBOWS FOR CHANGE OF DIRECTION GREATER THAN 45°.
5. COMPONENT ARRANGEMENT MAY VARY BY MANUFACTURER. PROVIDE INSULATION W/VAPOR BARRIER FOR CONNECTING DUCT SECTIONS.

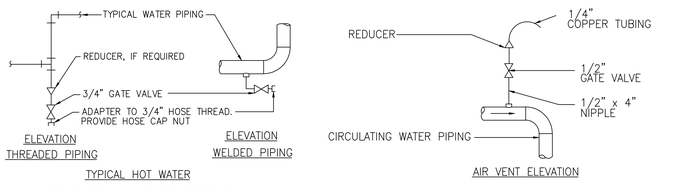
NOTE:
VERIFY RIGHT OR LEFT HAND CLEARANCE REQUIREMENTS WITH PLANS.

VAV BOX AIR TERMINAL UNIT INSTALLATION DETAIL (4 / MH-500)
SCALE: NTS
REFERENCE MH-100,MH-101, MH-402 AND MH-403



- DUCT AND PLENUM TO BE RIGIDLY SECURED FROM STRUCTURE ABOVE.
- USE FRAME AND BORDER APPROPRIATE FOR INSTALLATION IN SUSPENDED CEILINGS

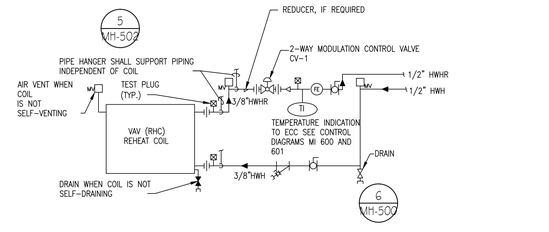
TYPICAL SUSPENDED CEILING MOUNTED EXHAUST AIR DIFFUSER (2 / MH-500)
SCALE: NTS
REFERENCE MH-100,MH-101, MH-402 AND MH-403



NOTES:
1. DRAIN ALL LOW POINTS AS INDICATED ABOVE.

NOTES:
1. VENT ALL HIGH POINTS INDICATED ABOVE.
2. IF AUTOMATIC AIR VENTS ARE USED, PIPE DISCHARGE TO DRAIN

PIPING HIGH AND LOW POINT DETAILS (6 / MH-500)
SCALE: NTS
REFERENCE MP-100



NOTE:

1. WHEN COIL IS INCLUIDED IN CASING MOUNTED ON VIBRATION ISOLATORS THE FIRST 2 HANGERS FOR EACH PIPE SHALL BE SPRING & NEOPRENE TYPE. TYPE "H" FOR 4" [100mm]ø PIPE & SMALLER. TYPE "H-P" FOR 5" [125mm]ø PIPE & LARGER.
2. PIPING SHALL BE INSTALLED IN SUCH MANNER THAT IT WILL NOT BLOCK THE SWING OR USE OF ACCESS DOORS OR PANELS; NEITHER SHALL IT BLOCK THE SERVICING OF FILTERS, VALVES, OR EQUIPMENT.
3. THE FLOW ELEMENT MAY BE INSTALLED IN THE SUPPLY PIPING IF THE REQUIRED MINIMUM UPSTREAM AND DOWNSTREAM DIMENSIONS CANNOT BE OBTAINED IN THE RETURN PIPING.

HOT WATER HEATING COIL (VAV-#) PIPING CONNECTIONS (1 / MH-500)
SCALE: NTS
REFERENCE MP-100, MI-601

BIDDING DOCUMENTS
FULLY SPRINKLERED

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35% SD REVISION 1	11/26/2012
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Drawing Title MECHANICAL DETAILS SHEET 1		**Project Title** RENOVATE SPS		**Project Number** 583-12-107	Engineering and Facilities Management Services
PROJECT ENGINEER: John Piwowarski	**Approved Engineering Chief**	**Location** BASEMENT A-WING		**Building Number** 1	
SCALE	**Approved Service Chief**	**Date** 6/10/2013	**Checked** DR / **Drawn** DS	**Drawing Number** MH-500 / 3FY12 / 35 of 55	Department of Veterans Affairs

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