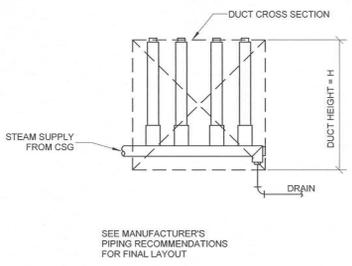
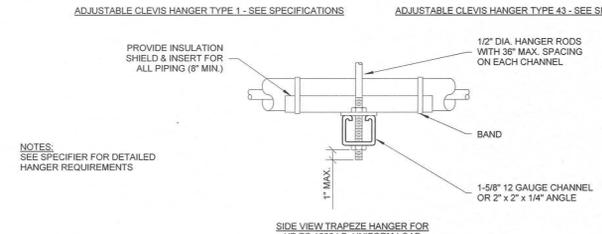
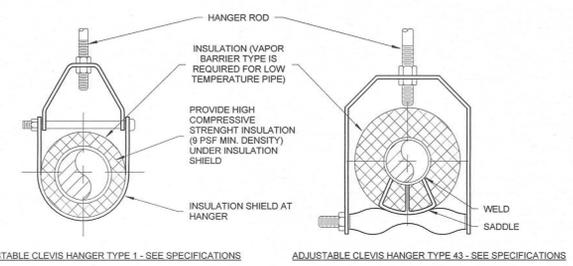


- NOTES:**
- WHEN COIL IS INCLUDED IN CASING MOUNTED ON VIBRATION ISOLATOR UNITS, THE RUNOUT PIPING FOR CONNECTIONS TO COIL SHALL BE INSTALLED WITH SWING JOINTS TO ALLOW FOR THE VIBRATION.
 - PIPING SHALL BE INSTALLED IN SUCH MANNER THAT IT WILL NOT BLOCK THE SWING OR USE OF ACCESS DOORS OR PANELS, NEITHER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



SEE MANUFACTURER'S PIPING RECOMMENDATIONS FOR FINAL LAYOUT



MAXIMUM PIPE/TUBING SUPPORT SPACING

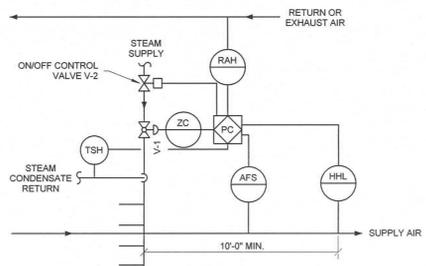
NOM. SIZE (IN.)	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
PIPE (FT.)	7	7	7	9	10	11	12	14	16	17	19	22	23	25	27	28	30	32
TUBING (FT.)	5 FT	6	7	8	8	9	10	12	13	14	16	-	-	-	-	-	-	-

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE

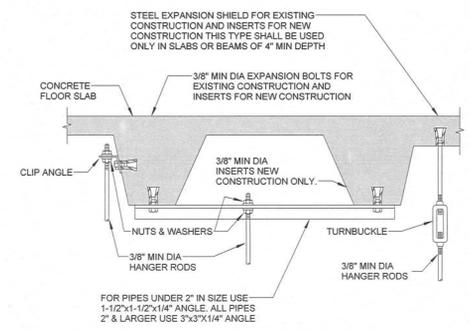
1 STEAM COIL - PIPING CONNECTIONS
M-502 N.T.S.

2 HUMIDIFIER - PIPING CONNECTIONS (MULTIPLE DISPERSION TUBES)
M-502 N.T.S.

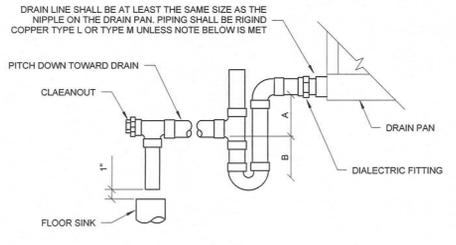
3 PIPE HANGER
M-502 N.T.S.



STEAM HUMIDIFIERS:
RETURN (OR EXHAUST) AIR HUMIDITY SHALL BE MONITORED. ON A CALL FOR HUMIDIFICATION, HUMIDIFIER VALVE V-1 SHALL MODULATE TO MAINTAIN THE RETURN (OR EXHAUST) AIR HUMIDITY SET POINT TO 30% (ADJUSTABLE). PRIOR TO ACTIVATION OF V-1, THE ON/OFF CONTROL VALVE V-2 SHALL BE ENABLED THROUGH ECC AND JACKET TEMPERATURE SENSED BY TSH SHALL BE WARM ENOUGH TO PREVENT CONDENSATION. THE HIGH LIMIT HUMIDITY SENSOR, LOCATED IN THE SUPPLY AIR DUCT 10 FEET AWAY FROM THE HUMIDIFIER SHALL DISABLE THE HUMIDIFIER AND GIVE AN ALARM SIGNAL TO THE ECC. IF THE SUPPLY AIR HUMIDITY EXCEEDS 90% RH (ADJUSTABLE), THE AIRFLOW SWITCH SHALL PROVE AIRFLOW BEFORE HUMIDITY CONTROLS ARE ACTIVATED.



5 SECURING HANGER RODS IN CONCRETE
M-502 N.T.S.

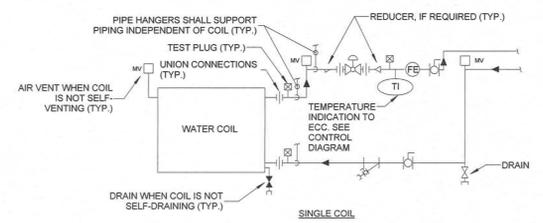


- NOTE:**
- CPVC PIPE MAY BE USED ONLY IF APPROVED BY LOCAL VA AND IS INDOORS AND DOES NOT PASS THROUGH RATED BARRIERS.
 - DIALECTRIC FITTING TO BE USED WHEN TWO DISSIMILAR METALS ARE TO BE CONNECTED.

UNIT TYPE	A	B
DRAW THRU	2\"/>	

WHERE X = STATIC PRESSURE IN PAN

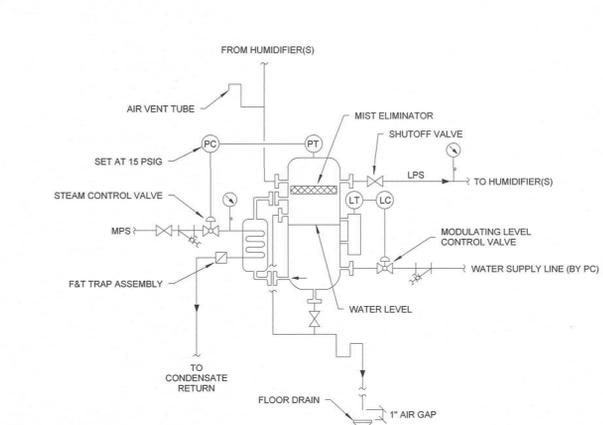
6 AIR HANDLING UNIT DRAIN TRAP DETAIL
M-502 N.T.S.



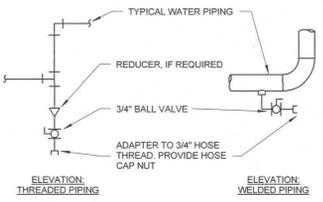
- NOTES:**
- WHEN COIL IS INCLUDED IN CASING MOUNTED ON VIBRATION ISOLATORS THE FIRST 2 HANGERS FOR EACH PIPE SHALL BE SPRING & NEOPRENE TYPE. TYPE \"H\" FOR 4\"/>

7 WATER COILS - PIPING CONNECTIONS
M-502 N.T.S.

4 STEAM HUMIDIFIER CONTROLS
M-502 N.T.S.

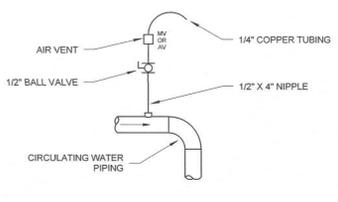


8 CLEAN STEAM GENERATOR
M-502 N.T.S.



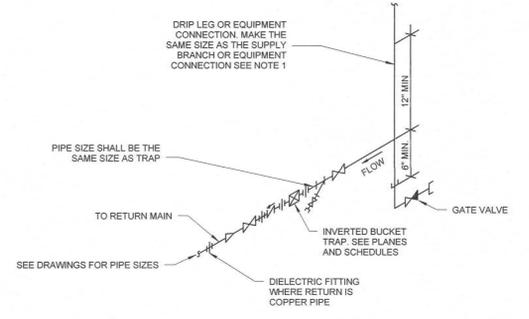
- NOTES:**
- DRAIN ALL LOW POINTS AS INDICATED ABOVE.
 - WHERE SCALE POCKETS ARE SHOWN ON PIPE RISER DIAGRAMS AND/OR PLANS, LOCATE DRAIN AT BOTTOM OF SCALE POCKET.

9 DRAIN VALVE AND AIR VENT CONNECTIONS (HYDRONIC SYSTEMS)
M-502 N.T.S.



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

10 INVERTED BUCKET STEAM TRAP ASSEMBLY
M-502 N.T.S.



- NOTES:**
- ALL DRIP POINTS ON SHALL BE PROVIDED WITH A 12\"/>

100% CONSTRUCTION DOCUMENTS

CONSULTANTS: Amended Per Owner's Comments No Rev Clouds 10/17/2014 Revisions Date		PROJECT MANAGER: Raleigh, NC Indianapolis, IN Philadelphia, PA Fort Collins, CO Virginia Beach, VA www.acg-pa.com (919) 858-7420 NC License # C-1848	Project Number 2013121	Scale N.T.S.	Drawing Title MECHANICAL DETAILS - PIPING	Project Title REPLACE AIR HANDLING UNITS 3, 14, & 34	VA Project Number 246-13-C-0106	Building Number 1 AND 3	Office of Facilities Management
		Approved: Project Director	Location 2300 RAMSEY STREET, FAYETTEVILLE, NC 28301	Date 08/28/2014	Checked DJR	Drawn SPG	Drawing Number M-502	Dwg. 11 of 18	Department of Veterans Affairs