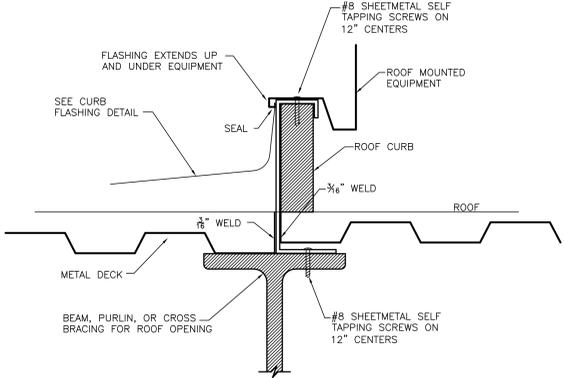
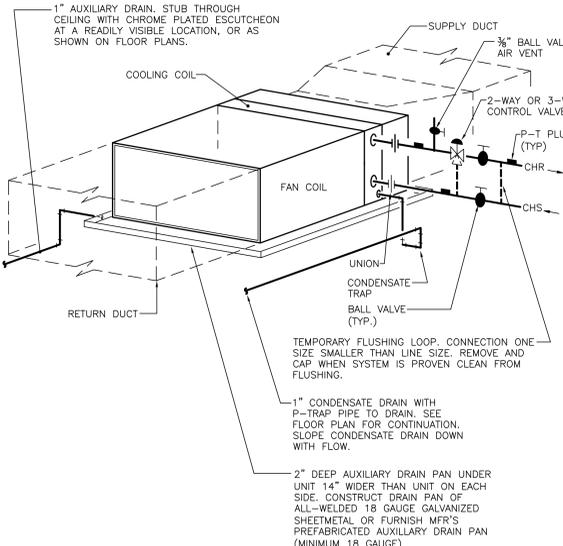


- NOTES:
1. PROVIDE U.L. LISTED DAMPER AND SLEEVE ASSEMBLY IN ACCORDANCE WITH U.L. 555.
 2. INSTALL DAMPER AND SLEEVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 3. PROVIDE MIN. 14 GAUGE SLEEVE. EXTEND BEYOND WALL MAX. 6 INCHES.
 4. PROVIDE EXPANSION SPACE PER MANUFACTURER'S INSTRUCTION. BUT NOT LESS THAN 1/8" PER LINEAR FOOT BOTH DIMENSIONS.
 5. PROVIDE MINIMUM 1 1/2" x 1 1/2" x 1/8" RETAINING ANGLE ON TOP, BOTTOM, AND SIDES. ATTACH ANGLES TO SLEEVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DAMPER SHALL BE SELF SUPPORTING, INDEPENDENT OF DUCTWORK. ANGLES SHALL OVERLAP WALL A MINIMUM OF ONE INCH. PROVIDE ANGLES ON EACH SIDE OF WALL.

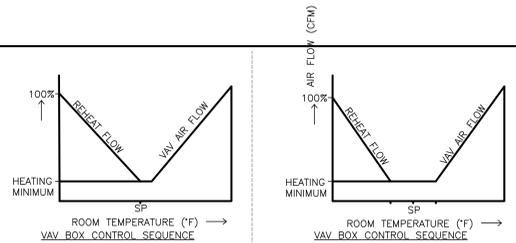
FIRE DAMPER AT RATED WALL
SCALE: _____ NONE



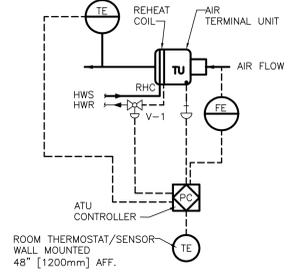
ROOF CURB ATTACHMENT TO STEEL ROOF CONSTRUCTION
SCALE: _____ NONE



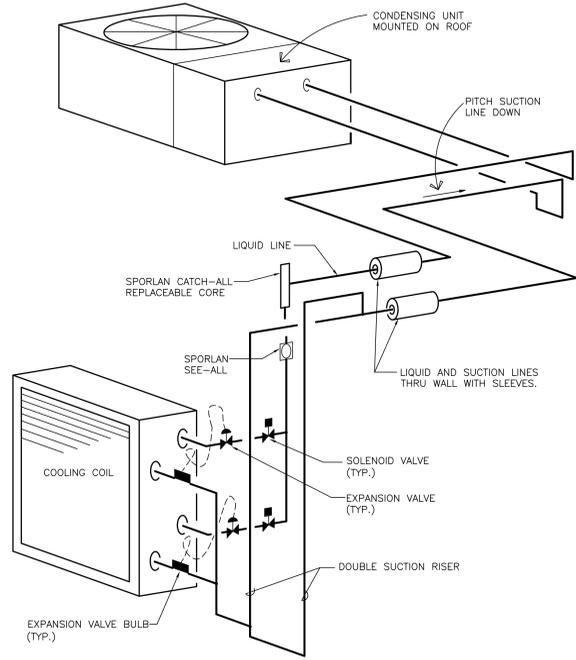
CHILLED WATER PIPING AT ABOVE CEILING TWO PIPE FAN COIL UNIT
SCALE: _____ NONE



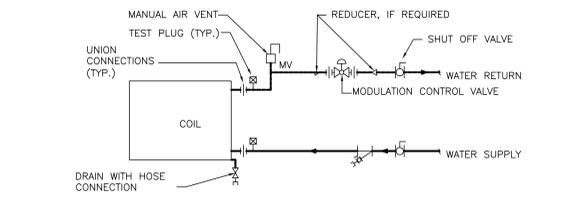
- NO DEADBAND
- A. UPON FALL IN SPACE TEMPERATURE THE VAV DAMPER WILL MODULATE TO MINIMUM POSITION.
 - B. UPON FURTHER DROP IN SPACE TEMPERATURE VALVE V-1 WILL MODULATE TO MAINTAIN SET POINT $\pm .5^\circ F$. THE ADJUSTABLE TOLERANCE OF $\pm .5^\circ F$ HAS BEEN SELECTED TO PREVENT VALVE HUNTING.
 - C. THE REVERSE SHALL OCCUR ON THE RISE IN SPACE TEMPERATURE.
- W/DEADBAND
- A. SET POINTS SHALL BE SET AS FOLLOWS: COOLING $75^\circ F$ (ADJ.) HEATING $70^\circ F$ (ADJ.) DEADBAND OF $5^\circ F$ BETWEEN HEATING AND COOLING SET POINTS WILL BE MAINTAINED.
 - B. UPON FALL IN SPACE TEMPERATURE THE VAV DAMPER WILL MODULATE TO MINIMUM POSITION.
 - C. UPON FURTHER DROP IN SPACE TEMPERATURE VALVE V-1 WILL MODULATE TO MAINTAIN SET POINT $\pm .5^\circ F$. THE ADJUSTABLE TOLERANCE OF $\pm .5^\circ F$ HAS BEEN SELECTED TO PREVENT VALVE HUNTING.
 - D. THE REVERSE SHALL OCCUR ON THE RISE IN SPACE TEMPERATURE.



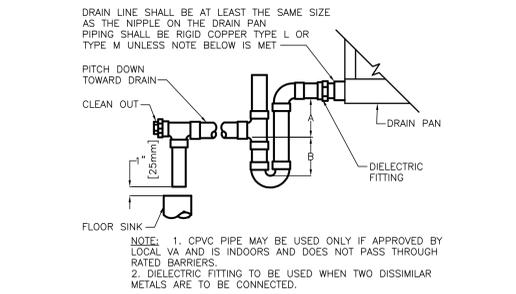
NO SUPPLEMENTAL HEATING VARIABLE VOLUME AIR TERMINAL UNIT CONTROL DIAGRAM
SCALE: _____ NONE



REFRIGERANT PIPING DIAGRAM
SCALE: _____ NONE



TERMINAL UNIT WATER COILS PIPING CONNECTIONS
SCALE: _____ NONE



NOTE: 1. CPVC PIPE MAY BE USED ONLY IF APPROVED BY LOCAL VA AND IS INDOORS AND DOES NOT PASS THROUGH RATED BARRIERS.
2. DIELECTRIC FITTING TO BE USED WHEN TWO DISSIMILAR METALS ARE TO BE CONNECTED.

UNIT TYPE	A	B
DRAW THRU	2" [50mm] PLUS X	X
BLOW THRU	1" [25mm] MINIMUM	2X

WHERE X = STATIC PRESSURE IN PAN

AIR HANDLING UNIT DRAIN TRAP DETAIL
SCALE: _____ NONE

Revisions	Date



Tennessee Valley Healthcare System



Project Title: **UPGRADE ELECTRICAL DISTRIBUTION PHASE 3**
 Drawing Title: **HVAC DETAILS**
 Approved By: _____
 Building Number: 4

Date: **OCTOBER 31, 2012**
 Project No.: **626A4-11-202**
 Drawing No.: **MH.402**
 Dwg. 52 of 97

Department of Veterans Affairs

