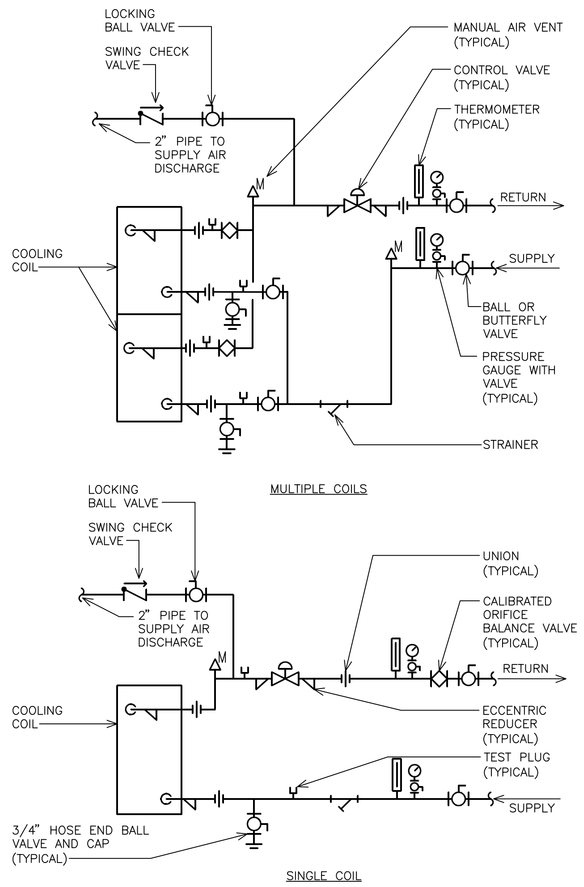
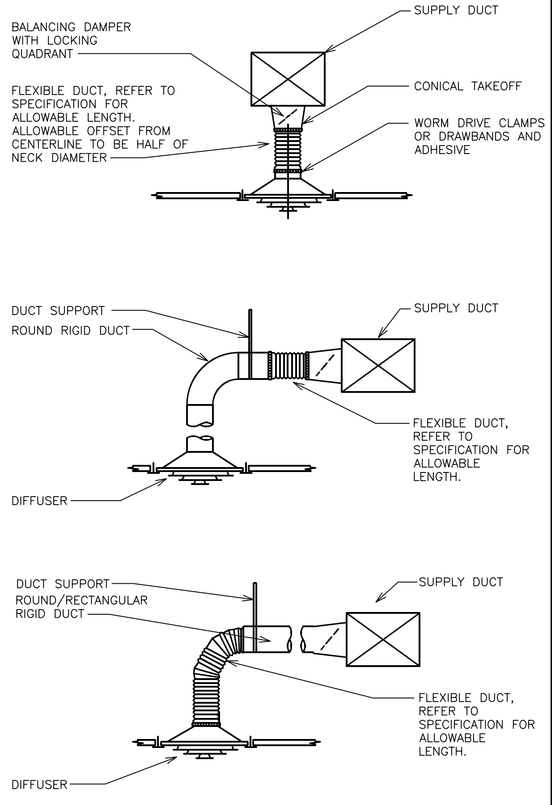


NOTES:

1. PIPE COILS COUNTER-FLOW TO AIR FLOW. I.E. CHILLED WATER SUPPLY CONNECTION IS ON THE DISCHARGE SIDE OF THE COIL.
2. LOCATE UNIONS TO ALLOW FOR COIL REMOVAL.
3. MOUNT THERMOMETERS AND GAUGES NO MORE THAN 8'-0" A.F.F.
4. REDUCE TO CALIBRATED ORIFICE BALANCING VALVE AS REQUIRED.

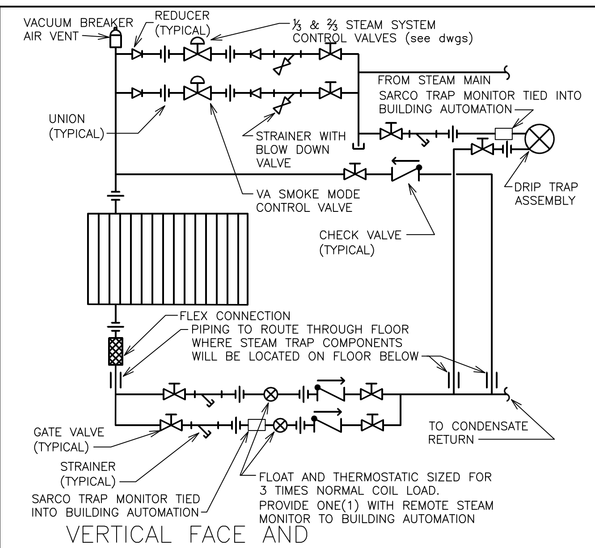
1 AIR HANDLING UNIT COOLING COIL PIPING DETAIL (2-WAY VALVE)
NO SCALE



NOTES:

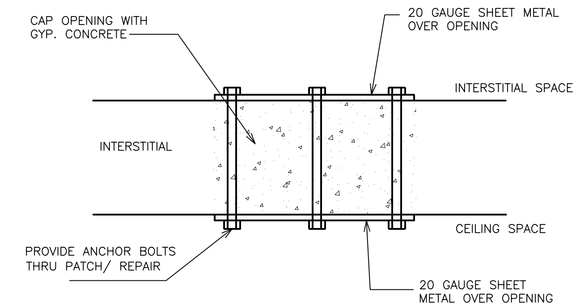
1. TOP DETAIL IS TO BE FOLLOWED WHEN CENTERLINE OF DIFFUSER IS UNDER THE DUCT ENOUGH TO PERMIT A BOTTOM TAKEOFF WITH A FLEXIBLE DUCT OFFSET OF LESS THAN HALF THE NECK DIAMETER. BOTTOM DETAIL TO BE USED IN ALL OTHER CASES.

2 CEILING DIFFUSER RUNOUT DETAIL
NO SCALE

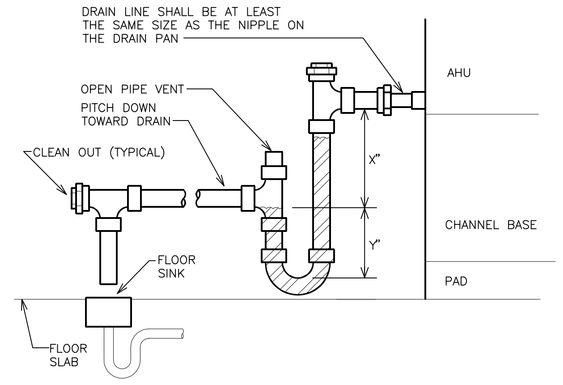


3 VERTICAL FACE AND BYPASS STEAM COIL DETAIL
NO SCALE

COORDINATE ALL PATCH/ REPAIRING WITH GENERAL CONTRACTOR. SEE DEMOLITION SHEETS FOR EQUIPMENT BEING REMOVED.



4 INTERSTITIAL DECK REPAIR DETIAL
NO SCALE



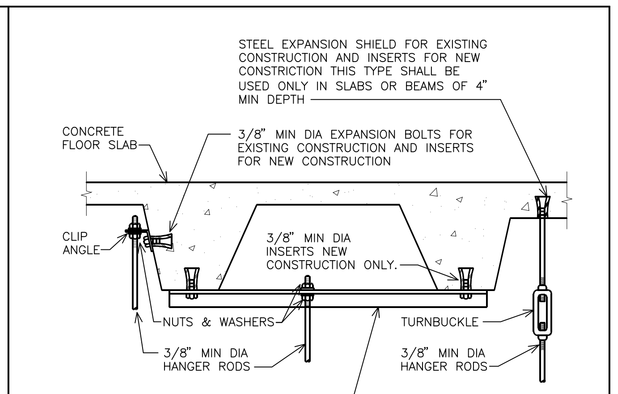
CONDENSATE TRAP SIZING FOR DRAW THROUGH AIR HANDLING UNIT.
X = NEGATIVE STATIC PRESSURE AT THE DRAIN PAN + 2".
Y = X, IF SPACE ALLOWS BUT NOT LESS THAN 1/2 X.

NEGATIVE STATIC PRESSURE AT THE DRAIN PAN IS EQUAL TO MANUFACTURERS LISTED PRESSURE DROP OF ALL DEVICES (FILTERS, COILS, ETC.) BETWEEN THE FAN UP TO AN INCLUDING THE COOLING COIL. UTILIZE DIRTY PRESSURE DROP FOR FILTERS.

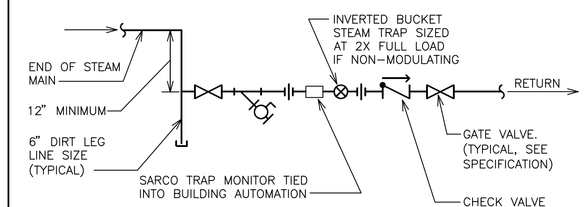
NOTES:

1. PITCH DRAIN PAN AT 1/4" PER FOOT MINIMUM SLOPE TO DRAIN.
2. PROVIDE SHOP DRAWING FOR DRAIN PAN AND CONDENSATE PIPING FOR REVIEW WITH AIR HANDLING UNIT SUBMITTAL.
3. DRAIN LINE SHALL BE AT LEAST THE SAME SIZE AS THE NIPPLE ON THE DRAIN PAN.

5 DRAW THROUGH AHU CONDENSATE TRAP DETAIL
NO SCALE

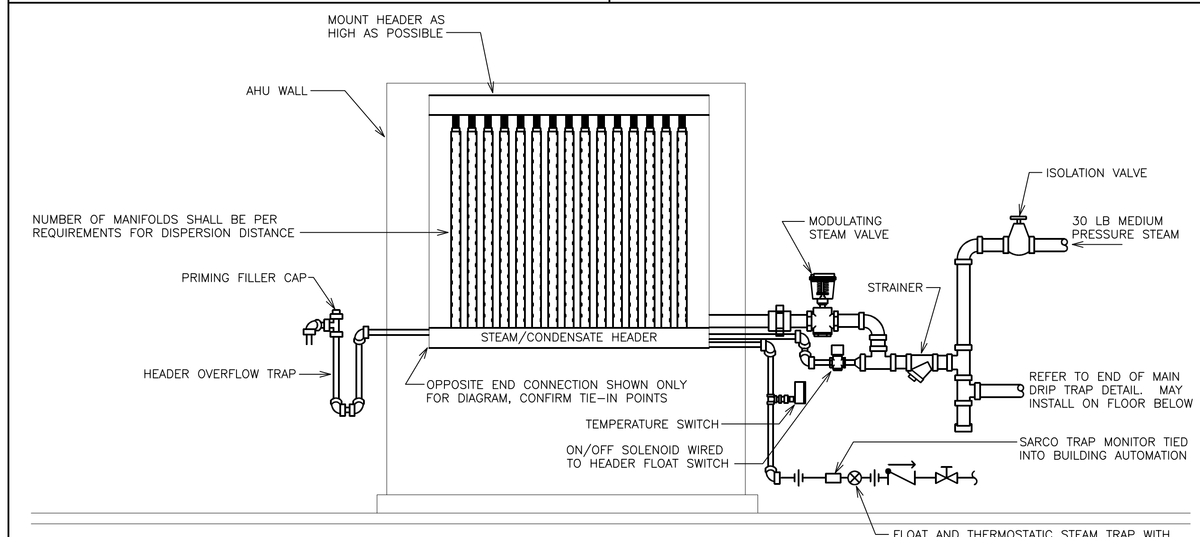


6 SECURING HANGER RODS IN CONCRETE
NO SCALE

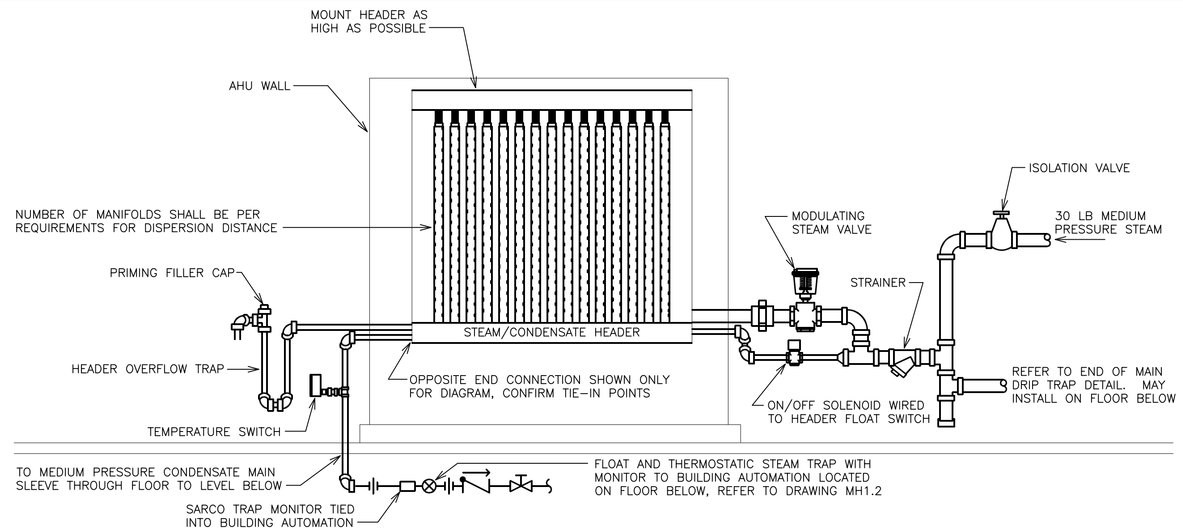


MEDIUM OR HIGH PRESSURE

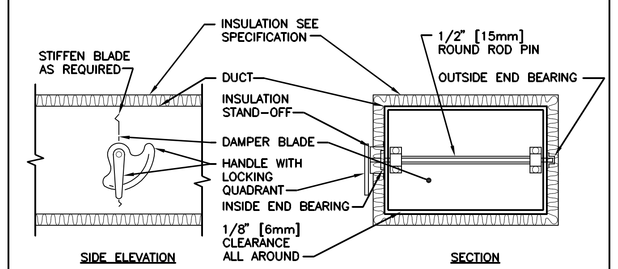
7 STEAM DRIP TRAP DETAIL
NO SCALE



8 STEAM HUMIDIFIER DETAIL (for AH1NW-11 & AH3NW-27)
NO SCALE



9 STEAM HUMIDIFIER DETAIL (for AH2NW-19 & AH2NW-20)
NO SCALE



NOTE:

1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

10 VOLUME DAMPER DETAIL
NO SCALE

CD ISSUE
FULLY SPRINKLERED

GENERAL NOTES:

GENERAL CONTRACTOR AND/OR ALL SUBCONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS SHOWN ON THESE PLANS AND SHALL BE RESPONSIBLE FOR VARIATIONS BETWEEN PLAN DIMENSIONS AND ACTUAL FIELD DIMENSIONS. WHERE VARIATIONS ARE FOUND TO OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO PROCEEDING WITH CONSTRUCTION; NO ADJUSTMENT TO THE WORK WILL BE MADE WITHOUT THE PRIOR APPROVAL OF THE PROJECT ENGINEER.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL DEMOLITION INCLUDING REMOVAL OF WALLS, PARTITIONS, DOORS & CEILING & FLOORS. ANY AND ALL CUTTING OF CONCRETE FLOORS, WALLS OR STRUCTURE SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY. CORE DRILLING THROUGH CONCRETE WALLS, FLOORS OR STRUCTURE FOR PIPING OR CONDUIT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR BY TRADE; FIRESTOPPING OF THESE OPENINGS SHALL BE DONE BY THE RESPECTIVE SUBCONTRACTOR. REMOVAL OF DEBRIS RESULTING FROM DEMOLITION, CUTTING, AND/OR DRILLING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. PATCHING AND REPAIR OF CONCRETE WALLS, FLOOR, OR STRUCTURE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR; THIS WILL BE ACCOMPLISHED UPON COMPLETION OF THE INSTALLATION OF ANY AND ALL UTILITIES INSTALLED BY THE VARIOUS SUBCONTRACTORS.

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TRUE NORTH
PLAN NORTH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
JASON GOTTWALT, PE
Date 08/08/2014 Reg. No. 41360

Drawing Title	MECHANICAL DETAILS
Project Title	UPGRADE AHU'S PHASE 2
Project No.	618-13-130
Building Number	70
Drawing Scale	AS NOTED
Approved: Catherine Joyce, Chief, Projects Section	
Location	V.A. MEDICAL CENTER ONE VETERANS DRIVE MINNEAPOLIS, MN 55417
DRAWING NO.	1272-70-M4.1
Plot Scale	12" = 1'-0"
Approved: Steven Challeen, Director, Engineering	
Date	08/08/2014
Checked	JRG
Drawn	JG/RF
Dwg.	24 of 30

Office of Facilities Management
Department of Veterans Affairs