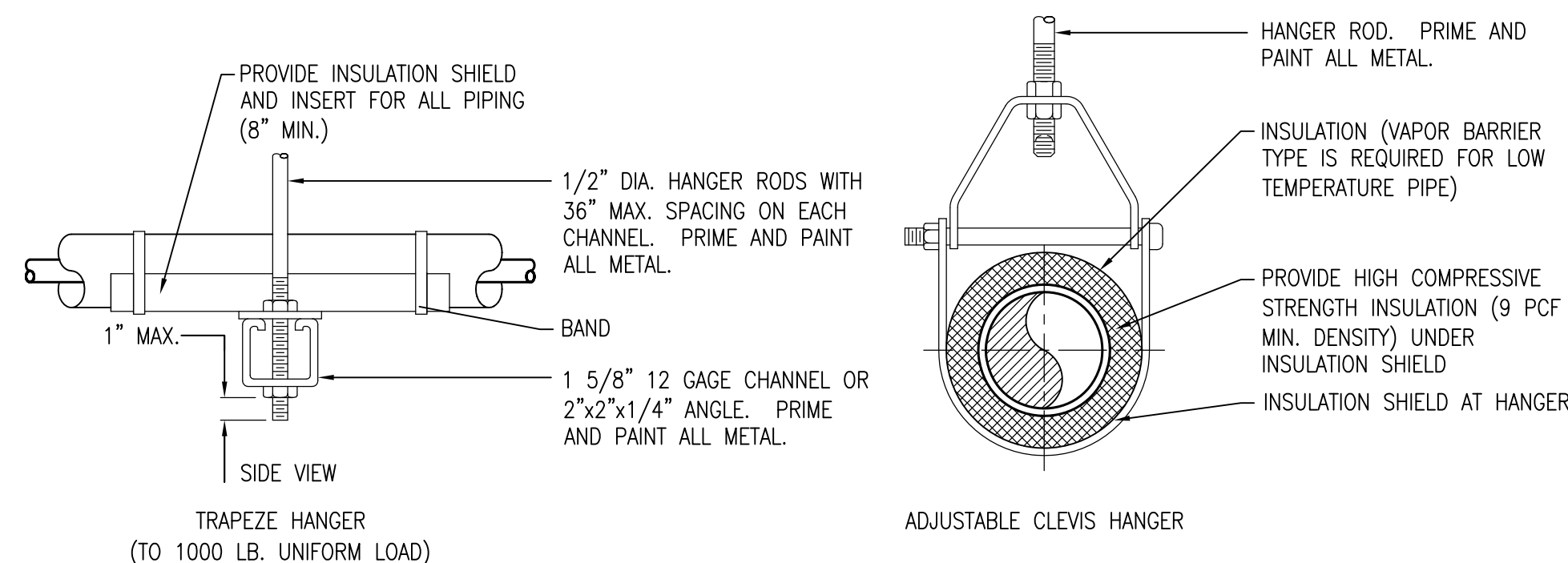


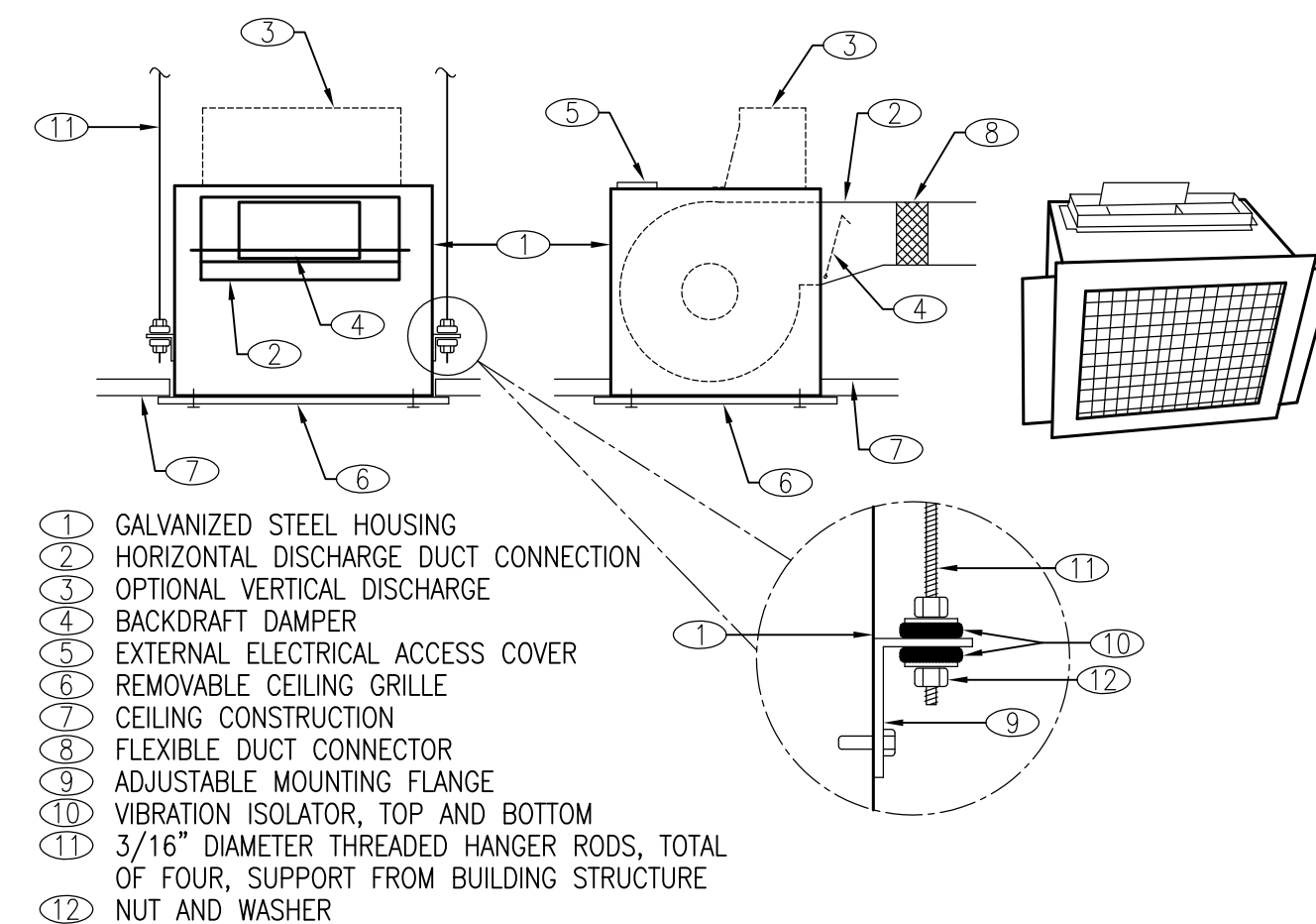
ROUND DUCT TAP-IN MOUNTING DETAIL

NOT TO SCALE



TYPICAL PIPE HANGAR INSTALLATION DETAIL

NOT TO SCALE

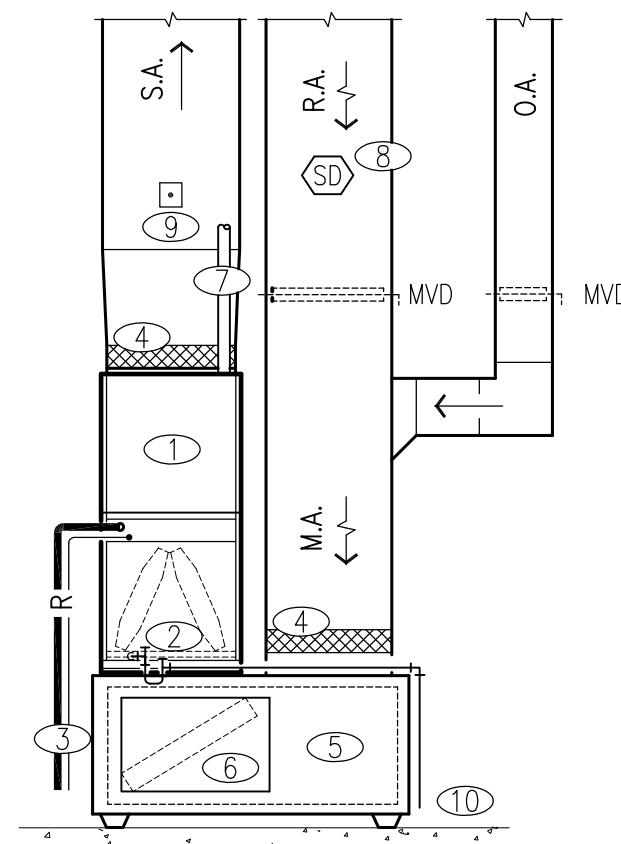


CEILING EXHAUST FAN INSTALLATION DETAIL

NOT TO SCALE

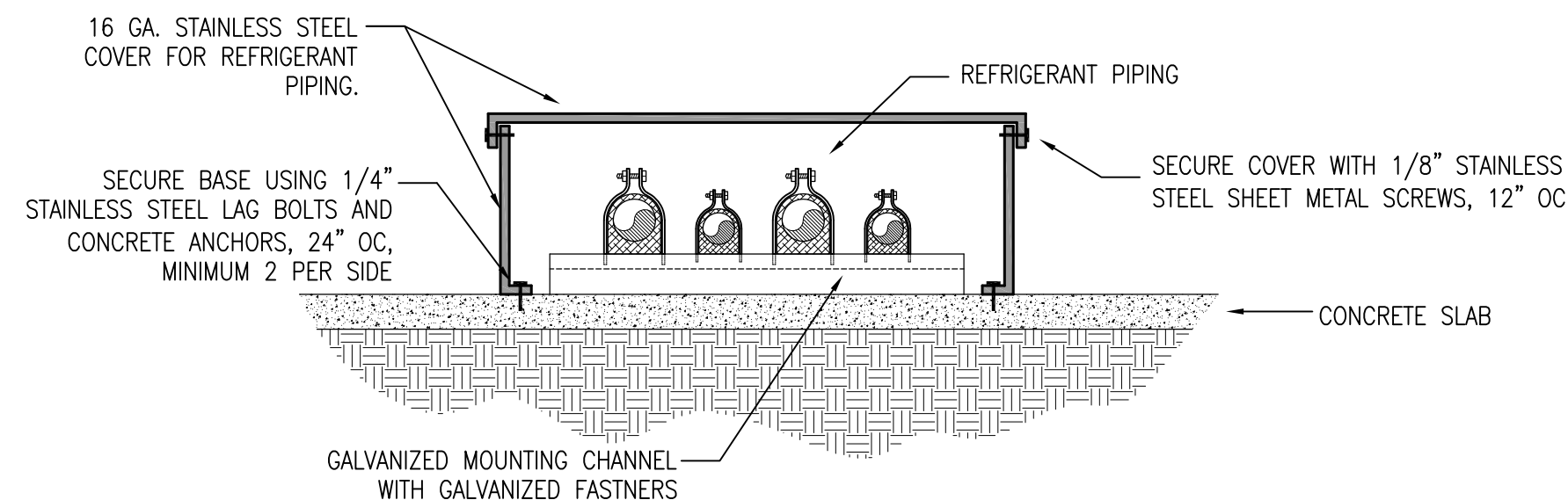
INSTALLATION DETAIL KEY NOTES:

- 1 AIR HANDLING UNIT AND MATCHING HEAT PUMP COIL. UNIT TO BE PROVIDED WITH ELECTRIC AUXILIARY HEATING COIL AND SINGLE POINT POWER CONNECTION. INSTALL UNIT IN ACCORDANCE TO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. MAINTAIN CLEARANCE IN FRONT OF UNIT SUITABLE FOR REMOVAL OF AIR FILTERS.
- 2 CONDENSATE PIPING, TRAP AT UNIT AS SHOWN ON 'CONDENSATE DRAIN DETAIL' AND ROUTE TO FLOOR DRAIN IN MECHANICAL CLOSET. COORDINATE LOCATION OF DRAIN WITH PLUMBING CONTRACTOR.
- 3 REFRIGERANT PIPING SET AND CONTROL WIRING, ROUTE TO CORRESPONDING OUTDOOR UNIT AS SHOWN ON HVAC PLANS. SEE 'GENERAL HVAC NOTES', ALSO SEE 'REFRIGERANT PIPE MOUNTING DETAIL'.
- 4 PLENUM SHALL HAVE TOP CONNECTION FOR RETURN AIR. PROVIDE FLEXIBLE DUCT CONNECTOR, TYPICAL OF SUPPLY AND RETURN DUCTS.
- 5 FOR VERTICAL AIR HANDLERS WITH A BOTTOM INTAKE AND TOP DISCHARGE AND A NOMINAL TONAGE OF 4-TONS OR LESS A FACTORY FABRICATED PLENUM BY MCDANIELS METALS IS REQUIRED. CONNECTION OF UNIT TO PLENUM SHALL BE AT FULL SIZE OF UNIT CONNECTION. PLENUM IS CONSTRUCTED WITH 1" THICK INSULATION AND HAS A MINIMUM FILTER SIZE OF 20X25.
- 6 FILTER ACCESS DOOR - DO NOT BLOCK WITH CONDENSATE PIPING. DOOR SHALL BE REMOVABLE WITHOUT THE USE OF TOOLS.
- 7 APPROXIMATE LOCATION OF INCOMING ELECTRICAL SINGLE POINT POWER CONNECTION FOR FAN AND AUXILIARY ELECTRIC HEAT POWER.
- 8 INSTALL DUCT-MOUNTED SMOKE DETECTOR IN RETURN DUCT UPSTREAM OF OUTSIDE AIR DUCT CONNECTION. DETECTORS ARE FURNISHED BY DIVISION 16 CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR. INSTALL ON 2" RIGID BOARD INSULATION.
- 9 GLOBAL PLASMA SOLUTIONS BI-POLAR IONIZATION EQUIPMENT IN SUPPLY DUCTWORK. REFER TO AIR HANDLER SCHEDULE FOR SIZE. PROVIDE SECTION OF DUCTWORK AT DISCHARGE OF UNIT ADEQUATELY SIZED FOR INSTALLATION OF BI-POLAR IONIZATION TUBES. LOCATE AHU AND BI-POLAR IONIZATION TO ALLOW REMOVAL AND REPLACEMENT OF BIPOLAR IONIZATION TUBES.
- 10 PROVIDE 1" NEOPRENE ISOLATION PADS UNDERNEATH PLENUM.



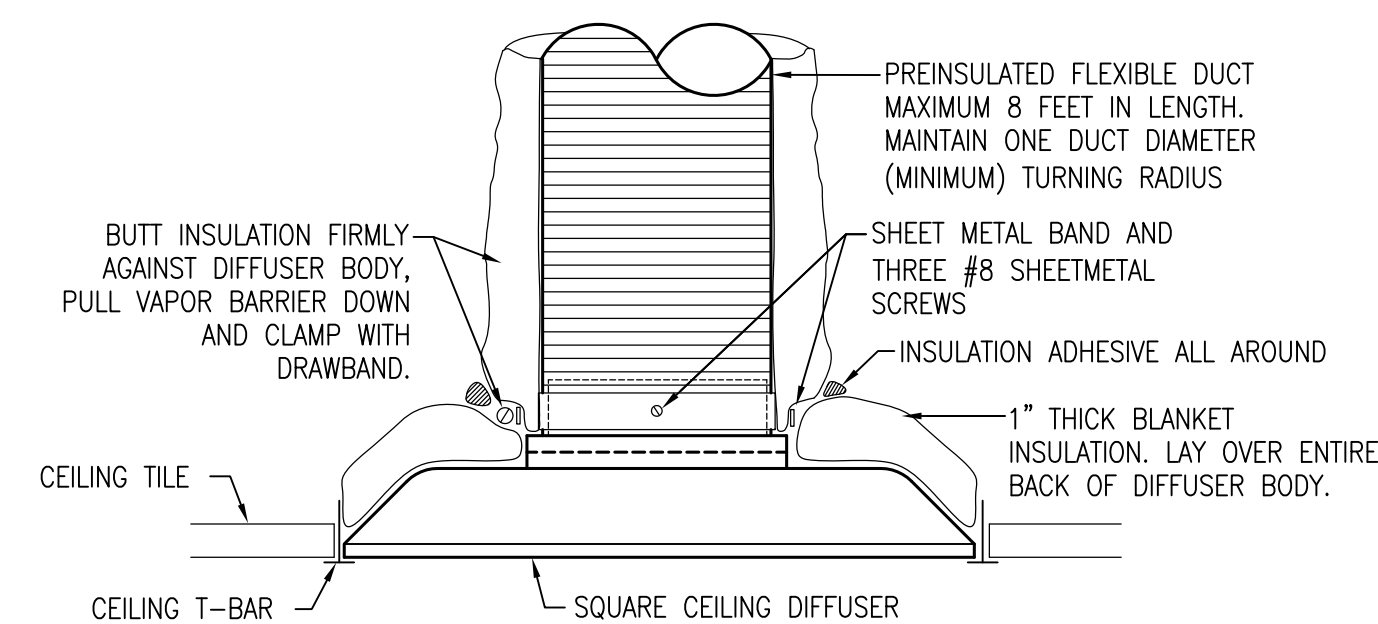
TYPICAL HEAT PUMP AIR HANDLER INSTALLATION DETAIL

NOT TO SCALE



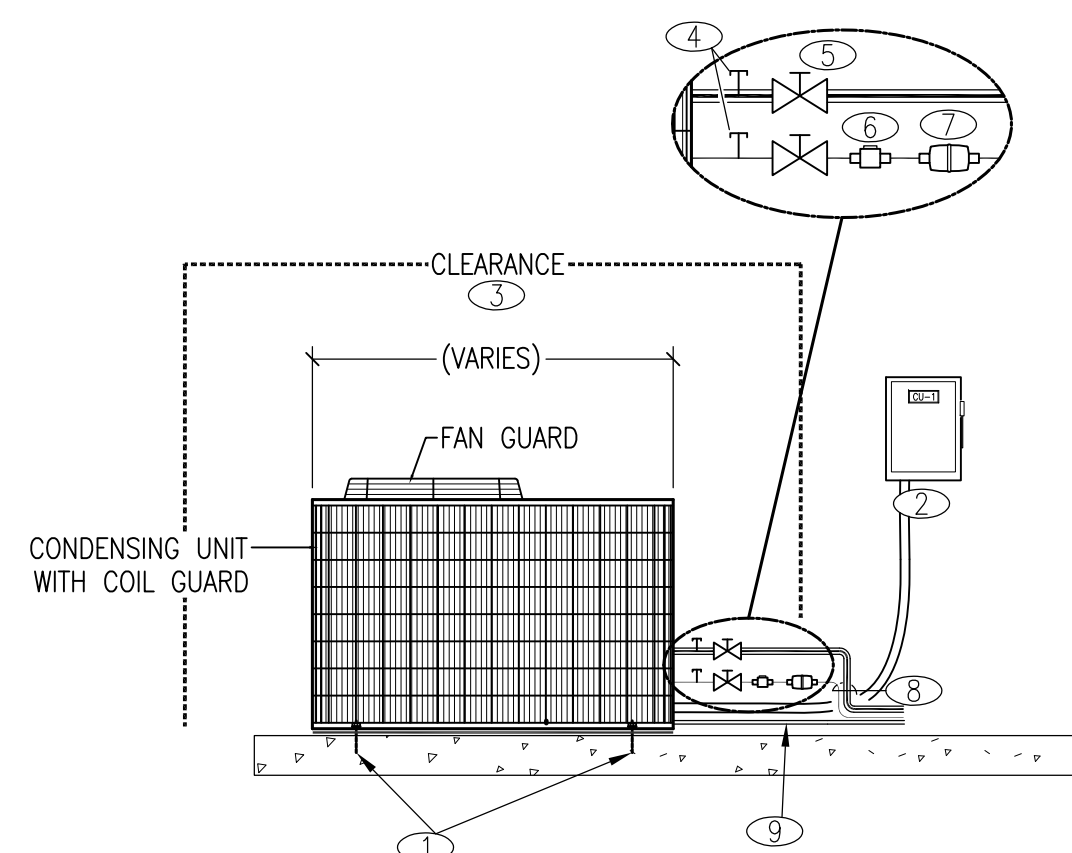
REFRIGERANT PIPE COVER DETAIL

NOT TO SCALE



CEILING DIFFUSER INSTALLATION DETAIL

NOT TO SCALE

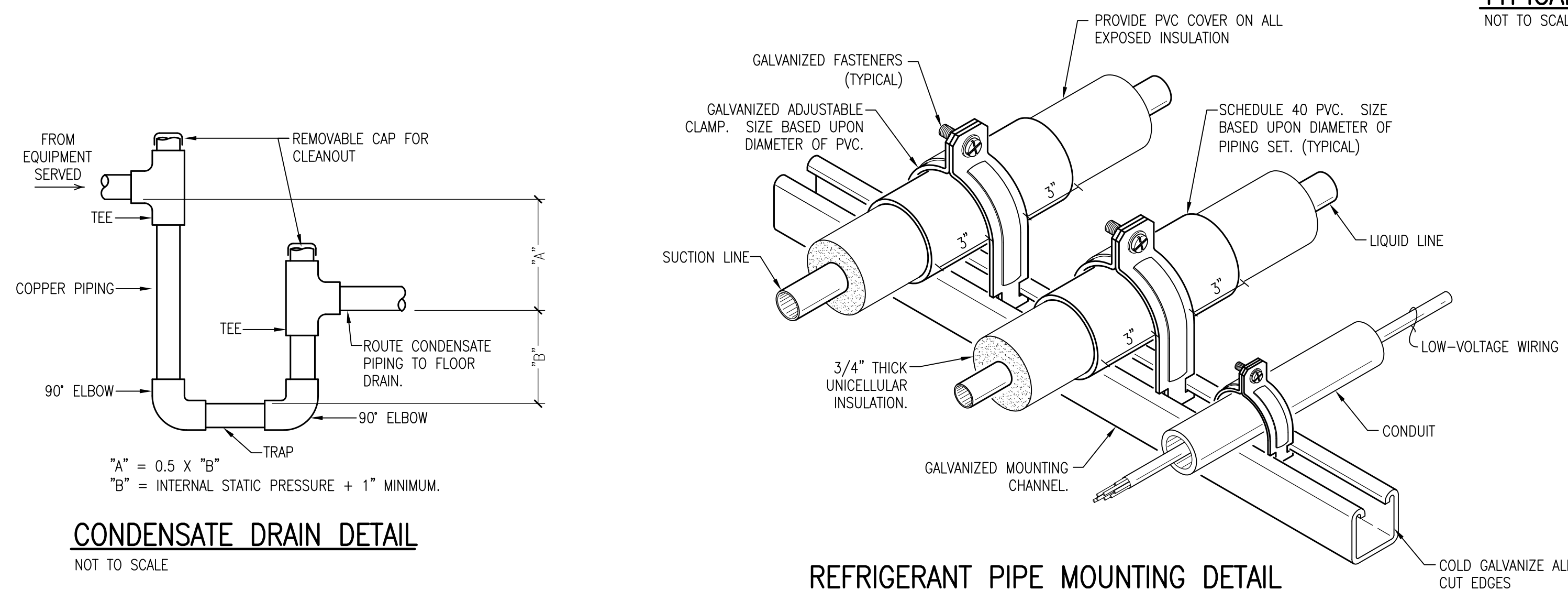


TYPICAL AIR-COOLED UNIT INSTALLATION DETAIL

NOT TO SCALE

INSTALLATION DETAIL KEY NOTES:

- 1 CONDENSING UNITS AND HEAT PUMPS SHALL BE SECURELY ANCHORED TO THE CONCRETE WITH 1/4" TAPCON SCREWS (MINIMUM 4) THRU THE BASE OF THE UNIT PER 2004 FLORIDA MECHANICAL CODE REQUIREMENTS.
- 2 WEATHERPROOF DISCONNECT WITH LIQUID-TIGHT CONDUIT TO CONDENSING UNIT, SEE ELECTRICAL.
- 3 VERTICAL AND HORIZONTAL CLEARANCES SHALL COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.
- 4 REFRIGERANT GAUGE CONNECTION, TYPICAL FOR LIQUID LINE AND SUCTION LINE.
- 5 BACK-SEATED REFRIGERANT SERVICE VALVE, TYPICAL FOR LIQUID LINE AND SUCTION LINE.
- 6 SIGHT-GLASS WITH VISIBLE MOISTURE INDICATOR, EQUAL TO SPORLAN MODEL 'SA'. SIGHT GLASS SHALL BE VISIBLE, DO NOT COVER WITH INSULATION OR PROTECTIVE PIPE COVER.
- 7 SEALED FILTER-DRYER, EQUAL TO SPORLAN MODEL '020'.
- 8 REFRIGERANT LIQUID LINE AND REFRIGERANT SUCTION LINE. SUCTION LINE SHALL BE INSULATED AND JACKETED - SEE 'GENERAL HVAC NOTES'.
- 9 CONDENSING UNIT CONTROL CONDUIT FOR INTERLOCK WITH THERMOSTAT OR BUILDING CONTROLS.

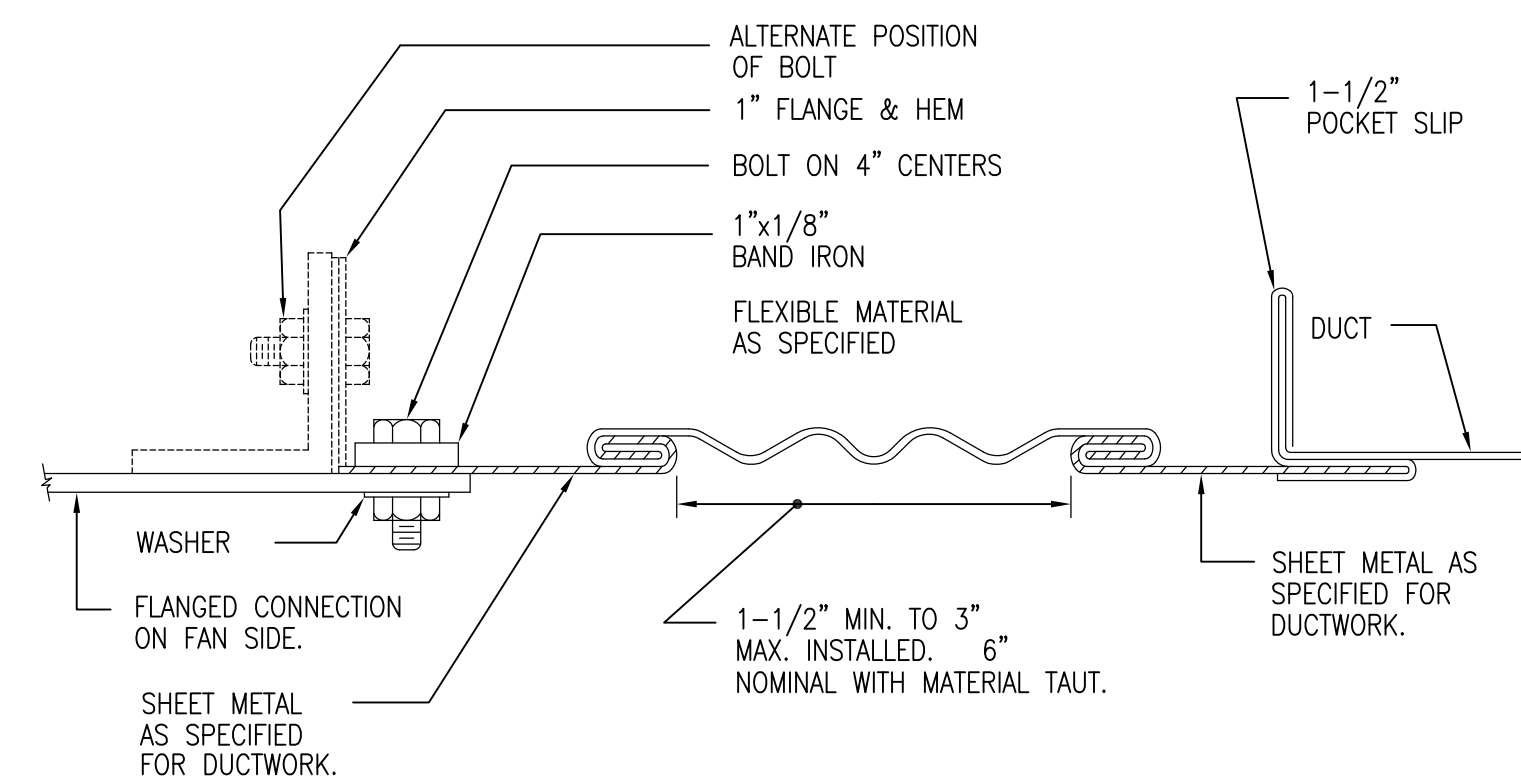


CONDENSATE DRAIN DETAIL

NOT TO SCALE

REFRIGERANT PIPE MOUNTING DETAIL

NOT TO SCALE



RECTANGULAR FLEXIBLE CONNECTION

NOT TO SCALE



PINDER-MARTIN ASSOCIATES, INC.
1001 N. 12th AVENUE
PENSACOLA, FL 32501
850-439-9110

AA26000896

PROJECT:
5 CLASSROOM ADDITION

LOCATION:
WEST NAVARRE INTERMEDIATE SCHOOL
1970 COTTON BAY LANE
NAVARRE, FL 32566

CONSULTANTS:

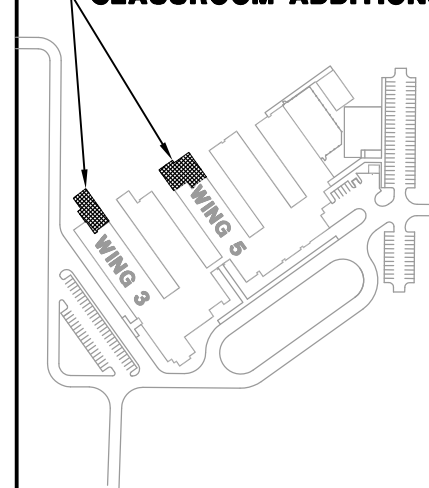
JEHLE-HALSTEAD, INC.
49 EAST CHASE STREET
PENSACOLA, FL 32502

CRAFT & WEBSTER
STRUCTURAL ENGINEERING, INC.
129 HIGHPOINT DRIVE
GULF BREEZE, FL 32561

GULF BREEZE CONSULTING, INC.
139 EAST GOVERNMENT STREET
PENSACOLA, FL 32502

ADAMS CONSULTING
ENGINEERING, INC.
3 WEST GARDEN STREET - SUITE 382
PENSACOLA, FL 32502

NEW CLASSROOM ADDITIONS



WEST NAVARRE
INTERMEDIATE

No.	Revision/Issue	Date

KENNETH L. GONZALEZ
ENGINEER OF RECORD
PE 61015

DRAWN BY: KMJS
CHECKED BY: KLG
PINDER-MARTIN ASSOCIATES, INC.
PROJECT #: 21118.03
REVIEW: 09-08-11
PERMITTING: 09-09-11
RELEASE FOR BIDDING: 09-19-11

**HVAC
DETAILS**

M2.0