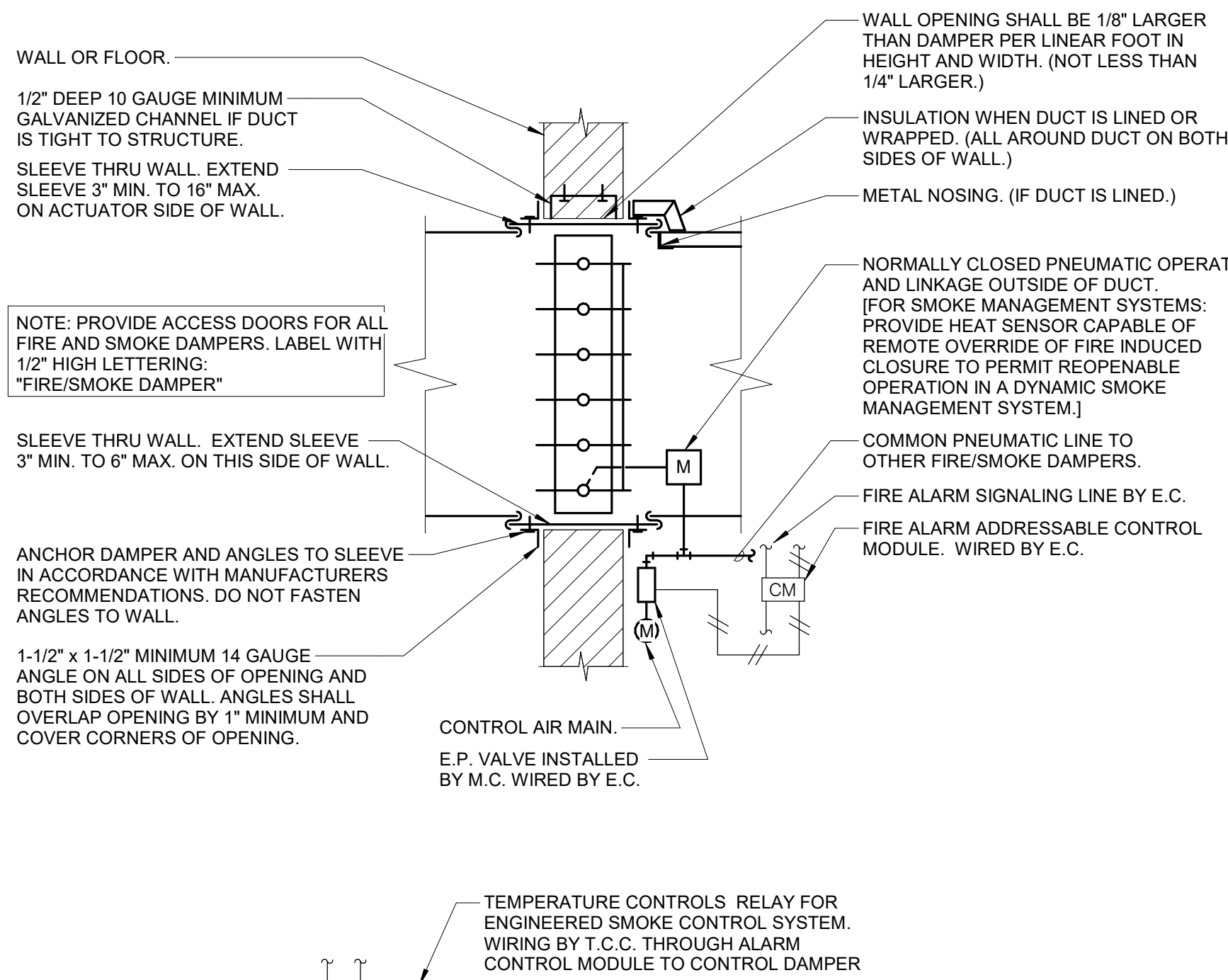
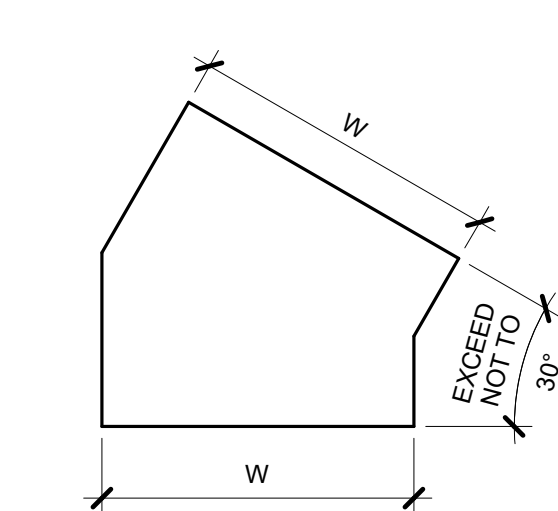




NOTES:

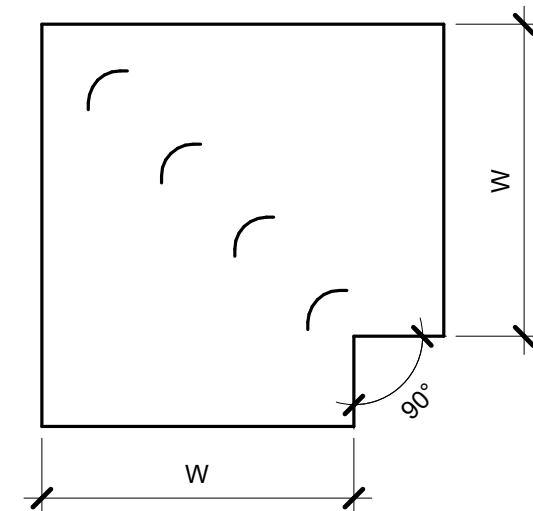
1. CONNECTION OF DAMPER TO SLEEVE SHALL BE AS SHOWN IN FIGURE 1 OF SMACNA "FIRE DAMPER AND HEAT STOP GUIDE FOR AIR HANDLING SYSTEMS", SECOND EDITION.
2. DAMPER CLOSURES BY SPRING ACTION IN EVENT OF HIGH TEMPERATURE OR LOSS OF PRESSURE TO PNEUMATIC OPERATOR.
3. FLOOR MOUNTED DAMPER SIMILAR WITH ACTUATOR ON SIDE WITH ACCESS DOOR.
4. SEE FIRE/SMOKE DAMPER WIRING SCHEMATICS ON ELECTRICAL DRAWINGS FOR WIRING SCHEMATIC. COORDINATE ALL FSD/CM LOCATIONS SHOWN ON ELECTRICAL PLANS.

1 FIRE/SMOKE DAMPER - PNEUMATIC ACTUATION
NO SCALE

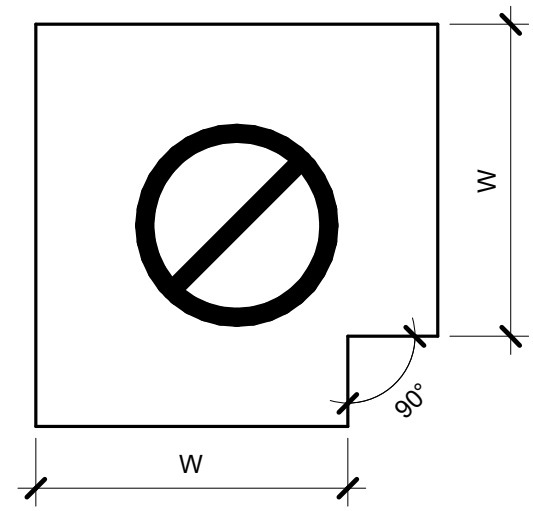


RECTANGULAR
MITERED ELBOW
TYPE RE2

USE ONLY AS PART OF OFFSETS
AND TRANSITIONS PER FIGURE 4-7
TYPE 2 OR AS SHOWN ON
DRAWINGS. OFFSETS ABOVE 30°
SHALL BE TYPE RE1.



RECTANGULAR
MITERED ELBOW
WITH VANES
TYPE RE2



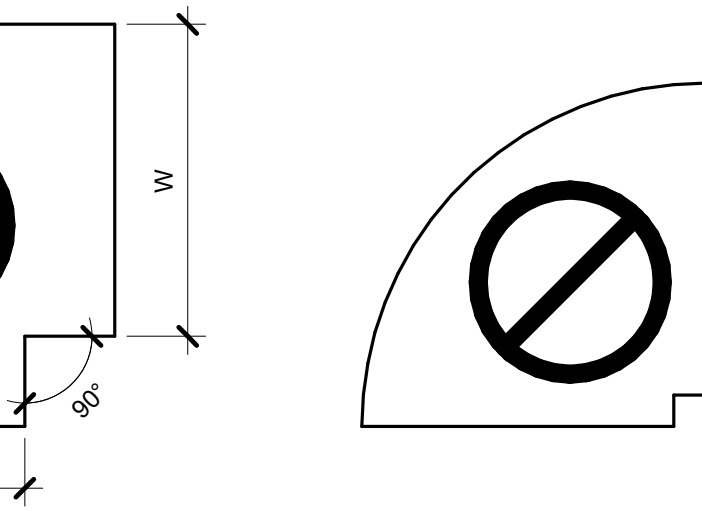
RECTANGULAR / OVAL / ROUND
MITERED ELBOW
WITHOUT VANES
TYPE RE4

NOT ALLOWED

NOTES:

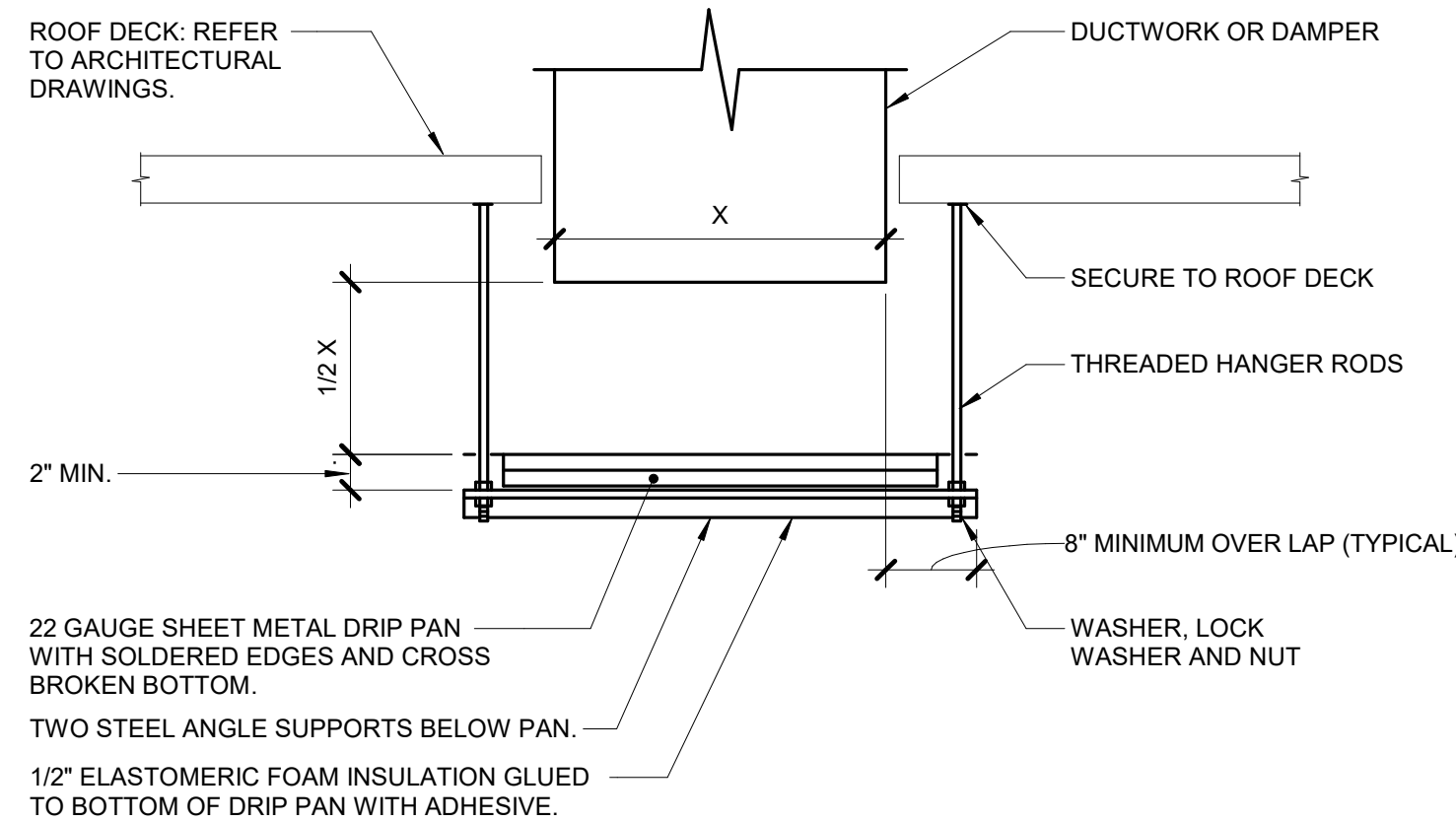
1. BEAD, CROSSBREAK, AND REINFORCE FLAT SURFACES AS IN STRAIGHT DUCT.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. DEFAULT ELBOW SHALL BE TYPE RE1.
4. ELBOW TYPES SHALL BE INSTALLED AS SHOWN AND NOT BE SUBSTITUTED WITHOUT PERMISSION. EXCEPTION: RE1 OR RE3 MAY BE SUBSTITUTED FOR RE2.

2 DUCT - ELBOW CONSTRUCTION
NO SCALE

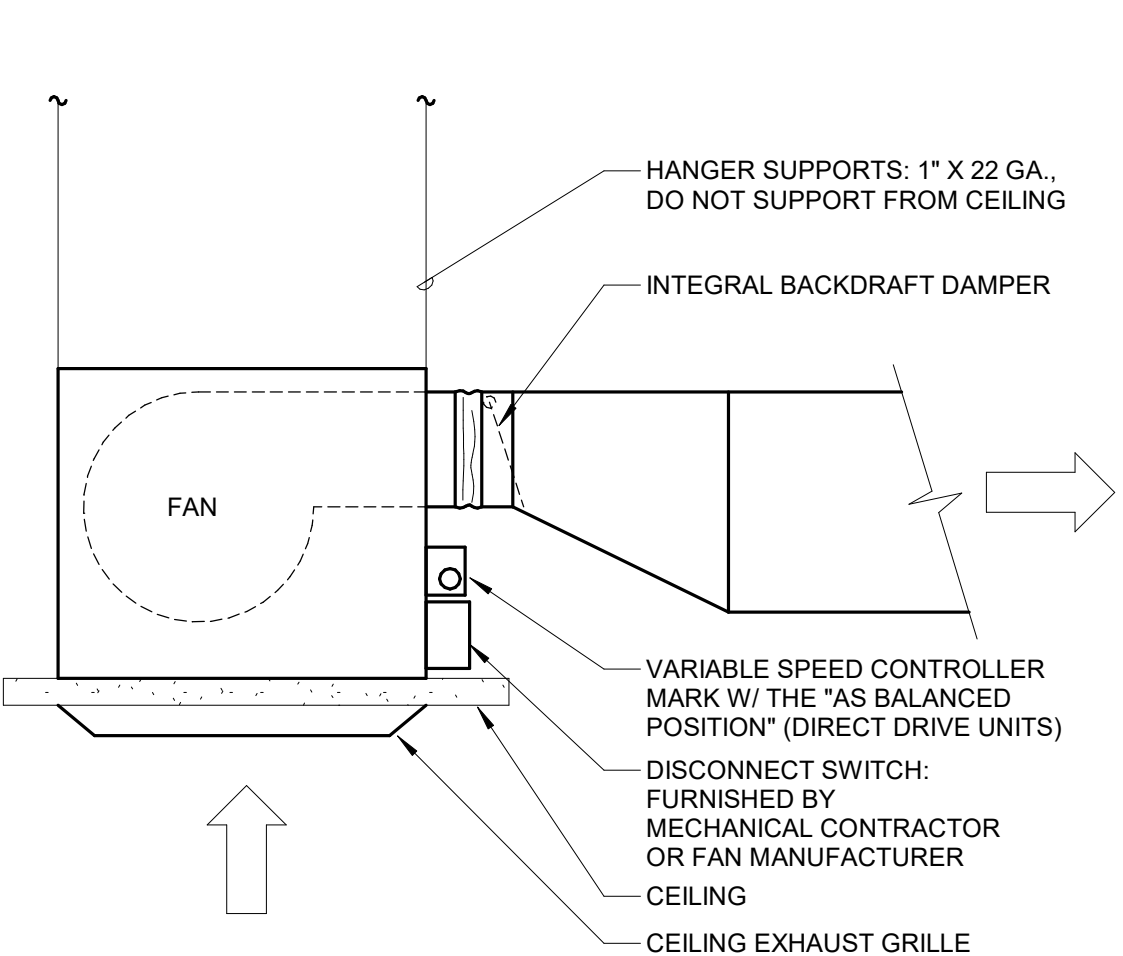


RECTANGULAR
RADIUS ELBOW WITH VANES
TYPE RE3

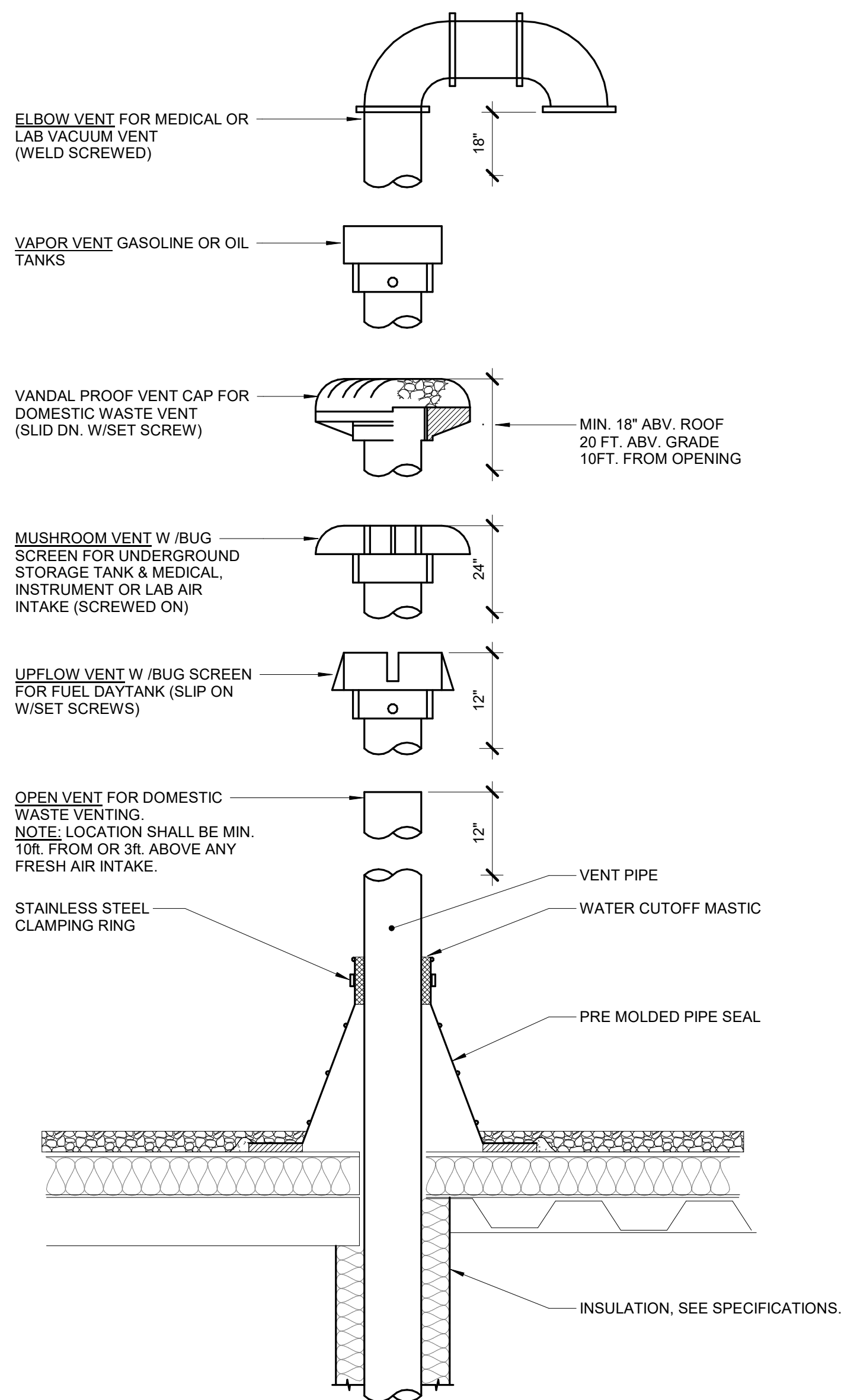
REFER TO SMACNA HVAC SYSTEMS DUCT DESIGN MANUAL,
FOURTH EDITION, SECTION 5.14 "SPLITTER VANES" AND SMACNA
HVAC DUCT CONSTRUCTION STANDARDS, THIRD EDITION,
FIGURES 4-2 AND 4-9 AND CHARTS 4-1 AND 4-1M. ELBOW SHALL
HAVE THREE SPLITTER VANES AND r/W = 0.10 (R/W = 0.60) UNLESS
NOTED OTHERWISE.



3 DRIP PAN
NO SCALE



4 FAN - CEILING MOUNTED
NO SCALE



NOTES:

1. VENT PIPE SHALL BE A MINIMUM OF 4" DIAMETER UNLESS NOTED LARGER ON FLOOR PLANS. INCREASERS, IF REQUIRED TO TRANSITION TO THE LARGER VTR SIZE, MUST BE INSTALLED AT LEAST 12 INCHES BELOW THE THERMAL ENVELOPE OF THE BUILDING.
2. EXTEND VENT PIPE AT LEAST 7 FEET ABOVE ROOF LEVEL WHEN ROOF AREA IS INTENDED TO BE USED BY THE GENERAL PUBLIC. THIS INCLUDES PROMENADES, OBSERVATION DECKS, ETC. THIS IS NOT REQUIRED FOR ROOFS THAT ARE ACCESSIBLE BY MAINTENANCE PERSONNEL ONLY.

5 VENT PIPE FLASHING
12" = 1'-0"