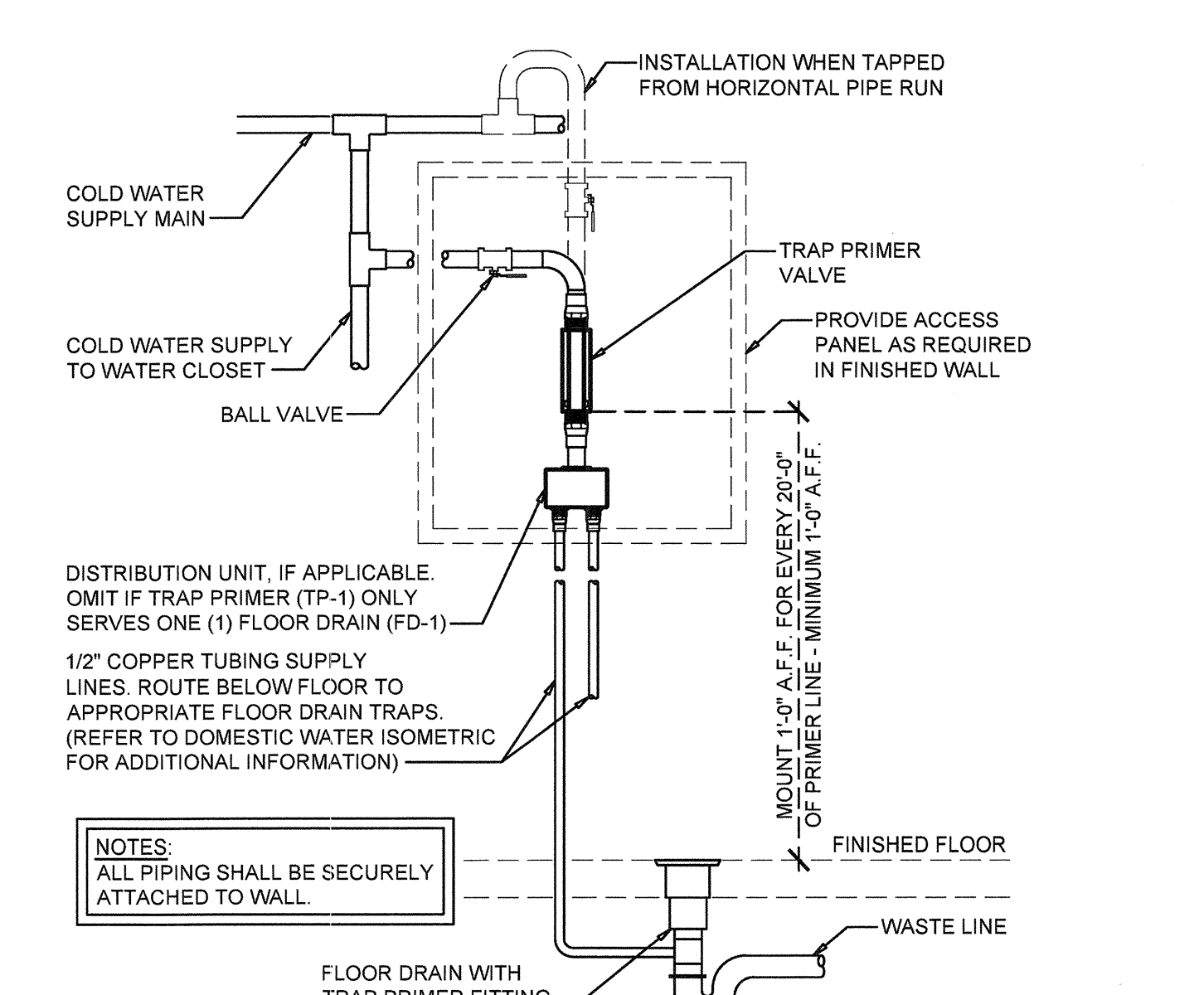
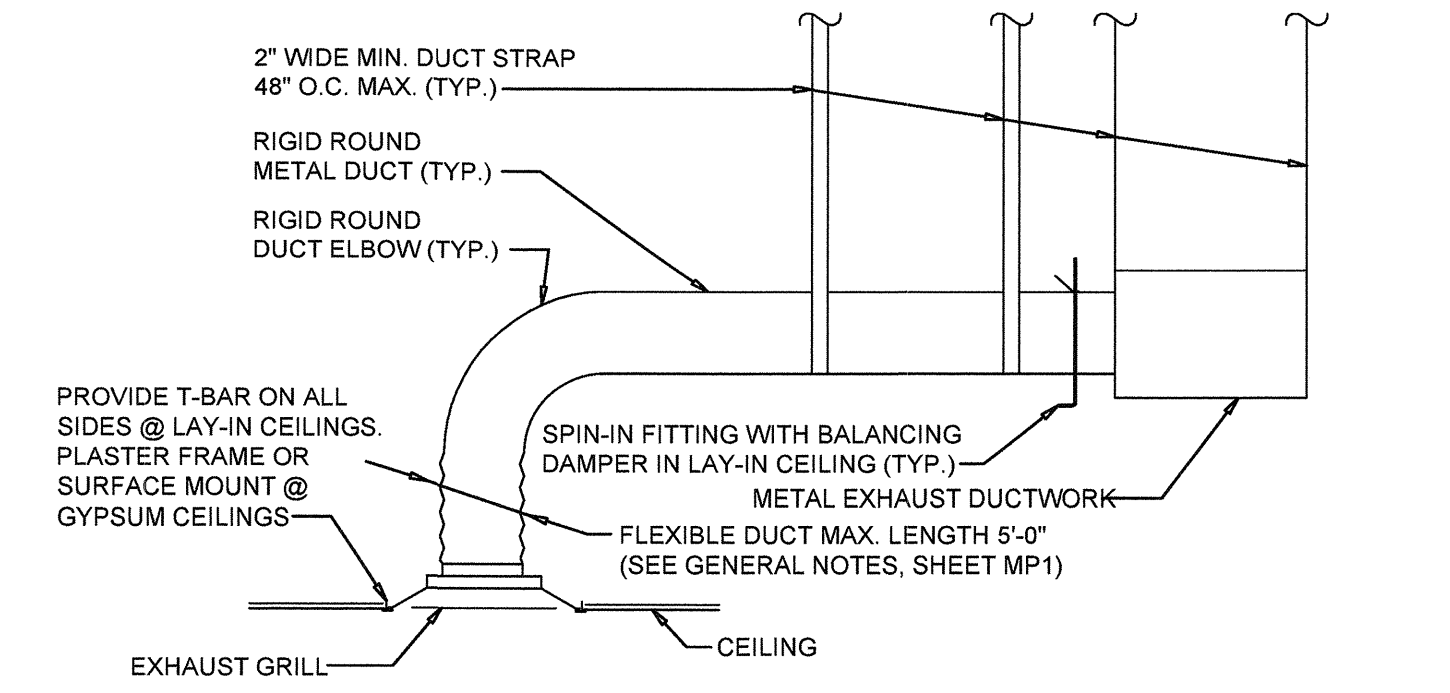


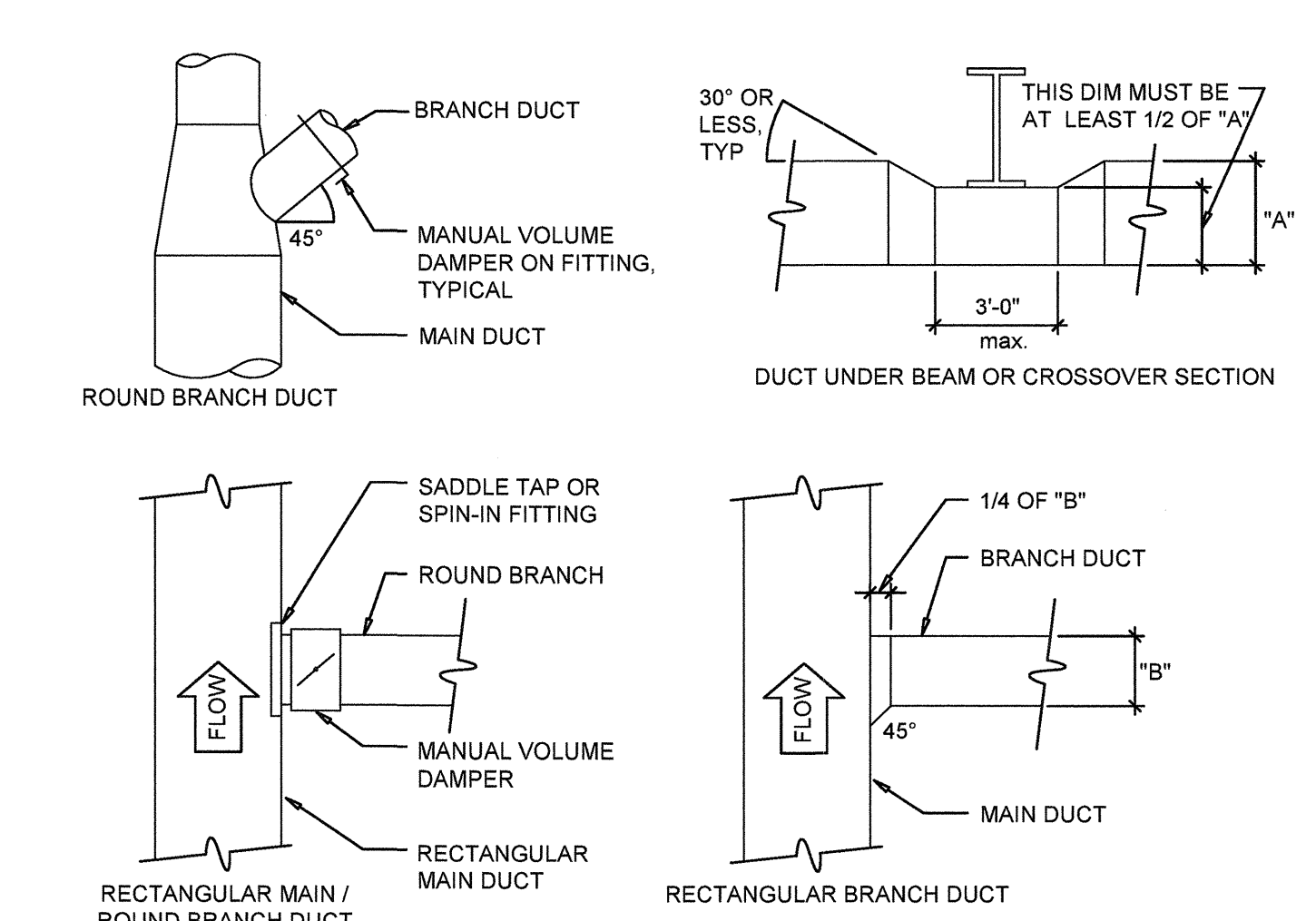
1 DIFFUSER DIRECT CONNECTION TO SUPPLY TRUNK
SCALE: NOT TO SCALE



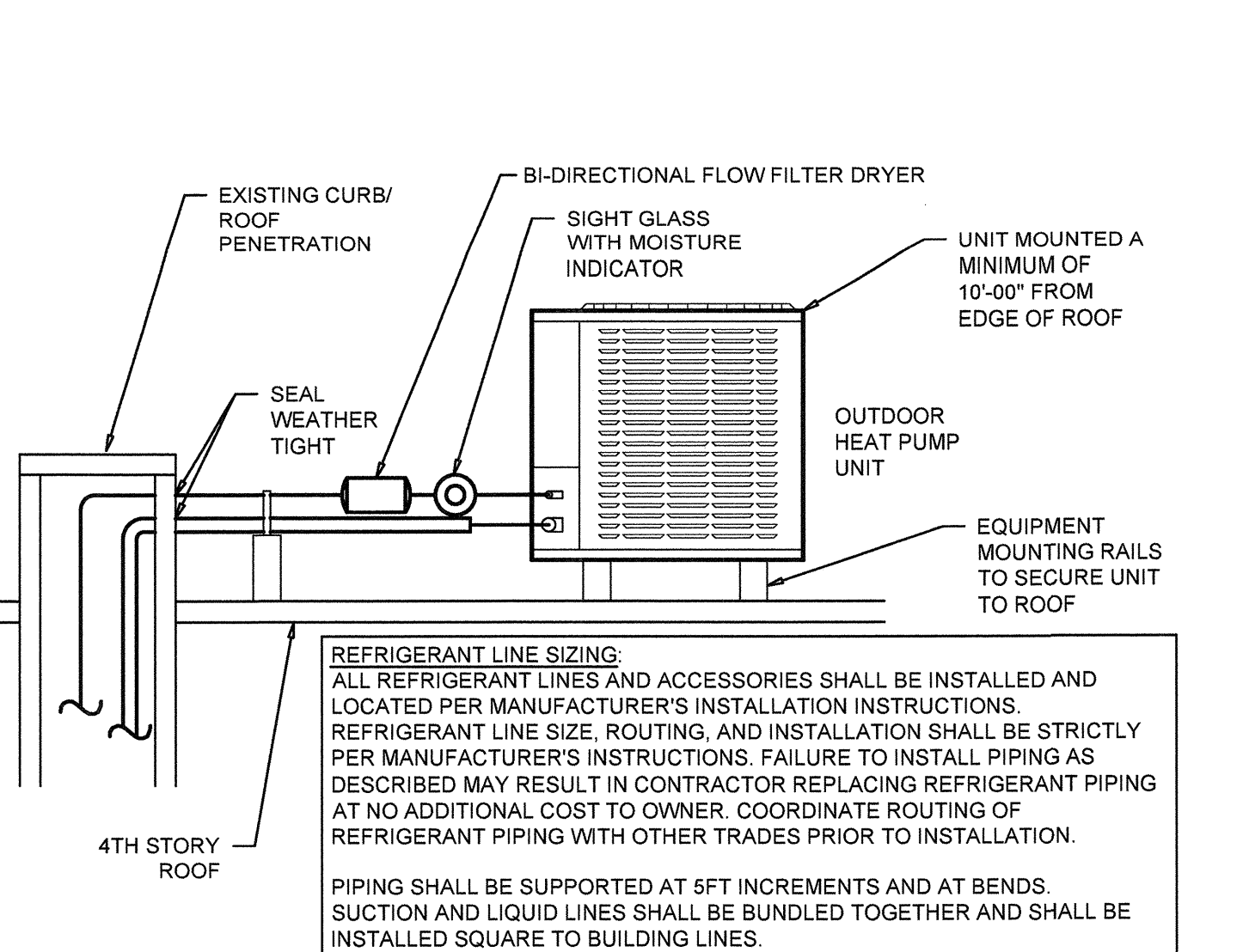
2 TRAP PRIMER DETAIL
SCALE: NOT TO SCALE



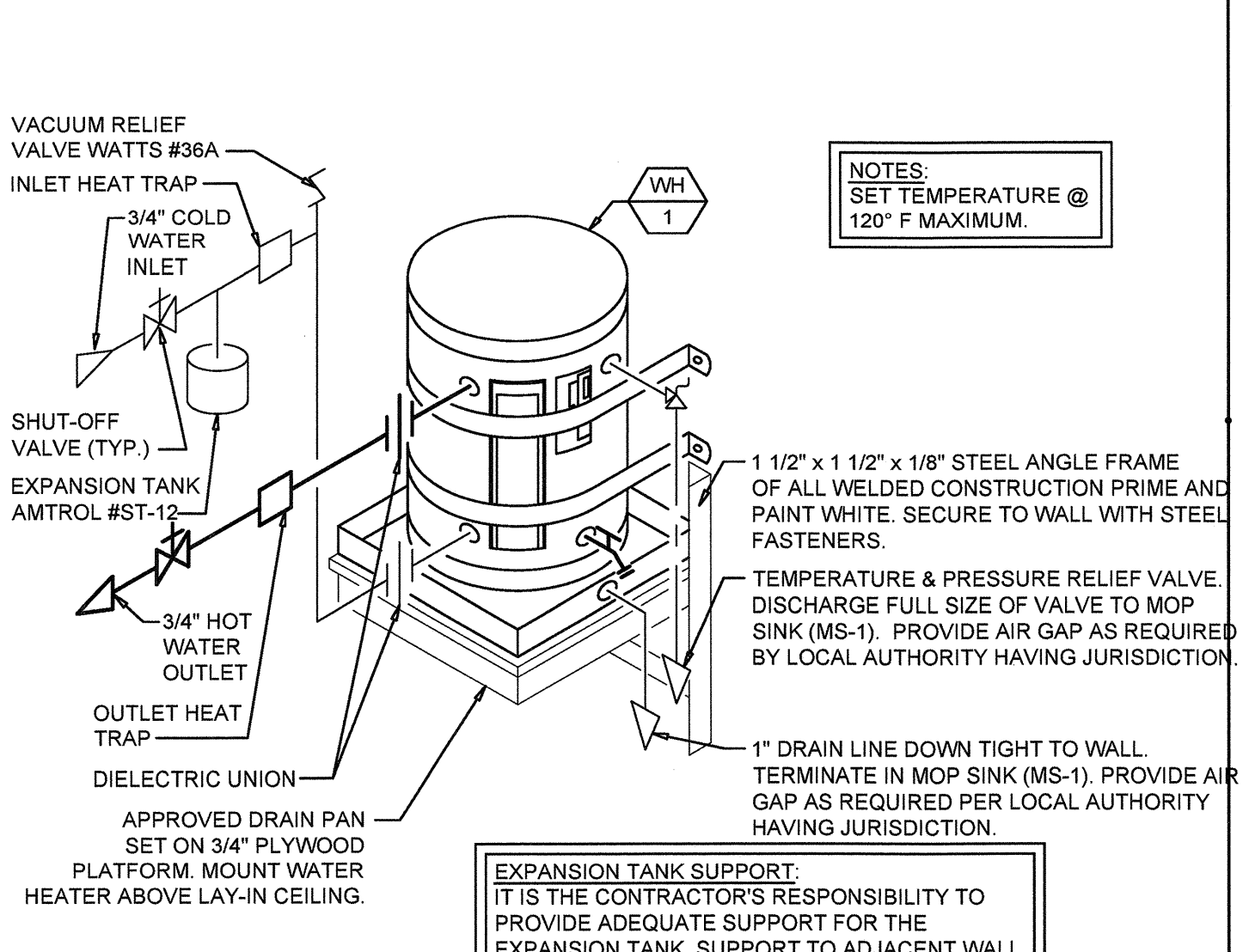
4 TYPICAL EXHAUST GRILLE/DUCTWORK DETAIL
SCALE: NOT TO SCALE



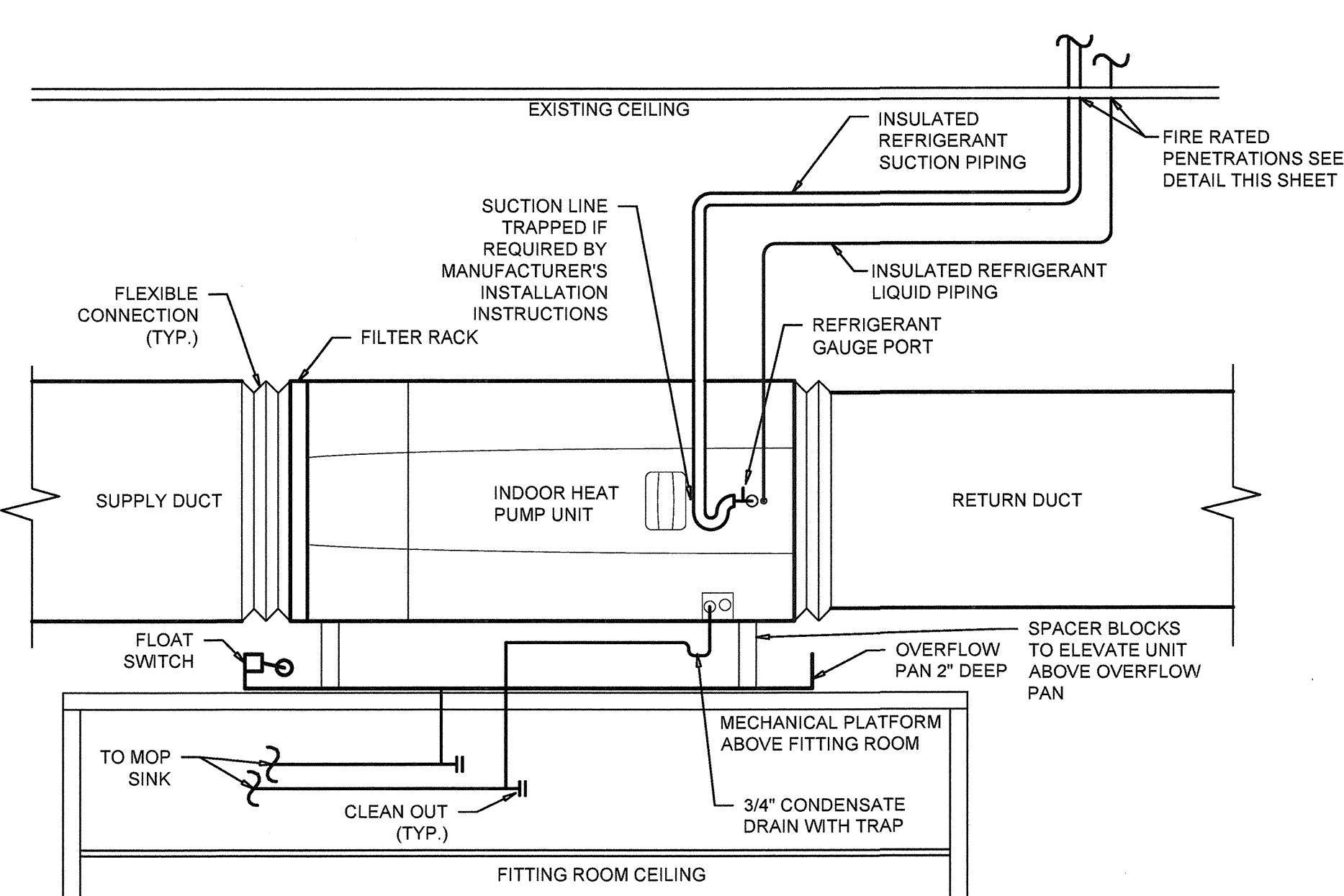
5 DUCT CONNECTION DETAILS
SCALE: NOT TO SCALE



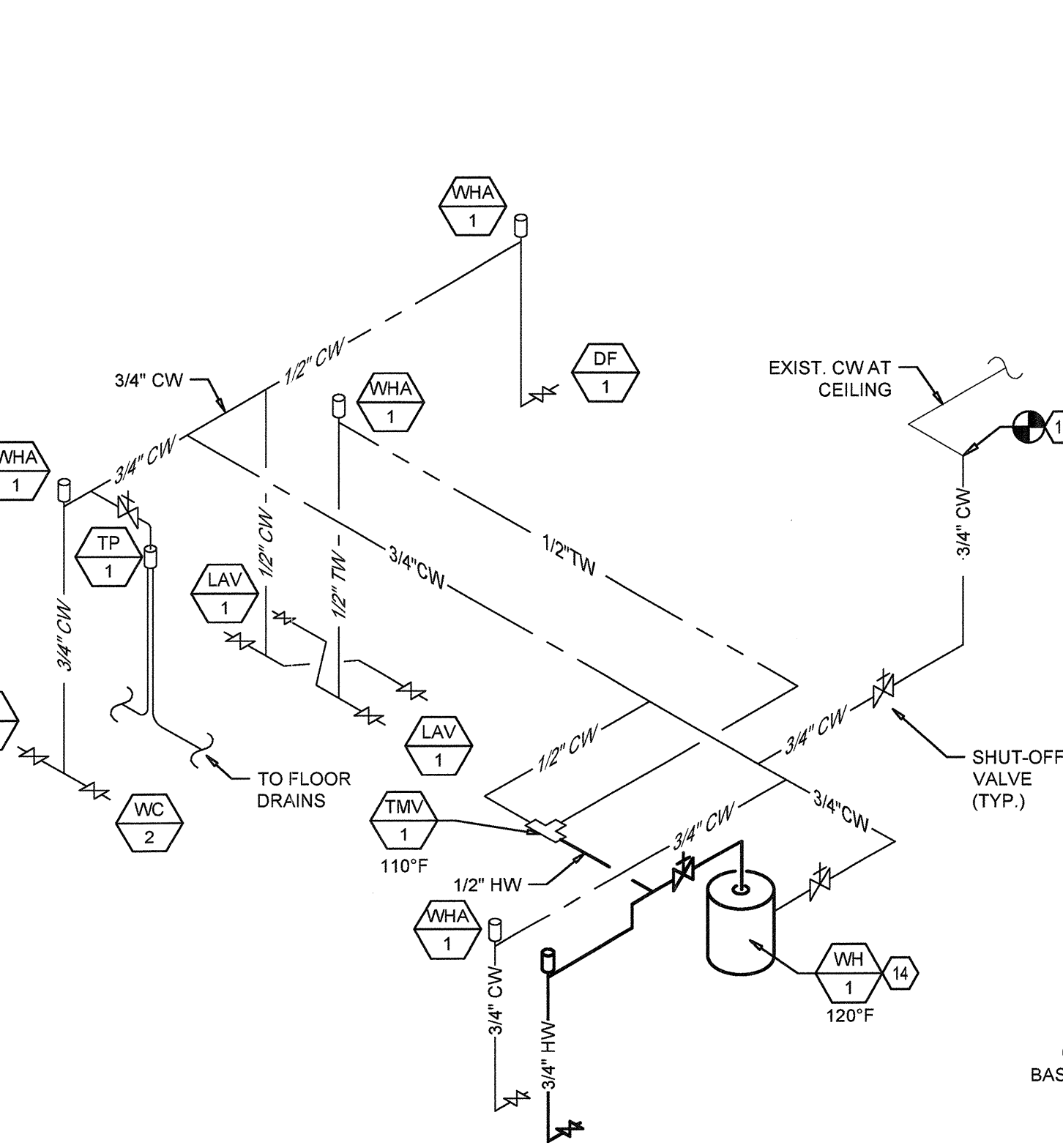
7 OUTDOOR HEAT PUMP MOUNTING DETAIL
SCALE: NOT TO SCALE



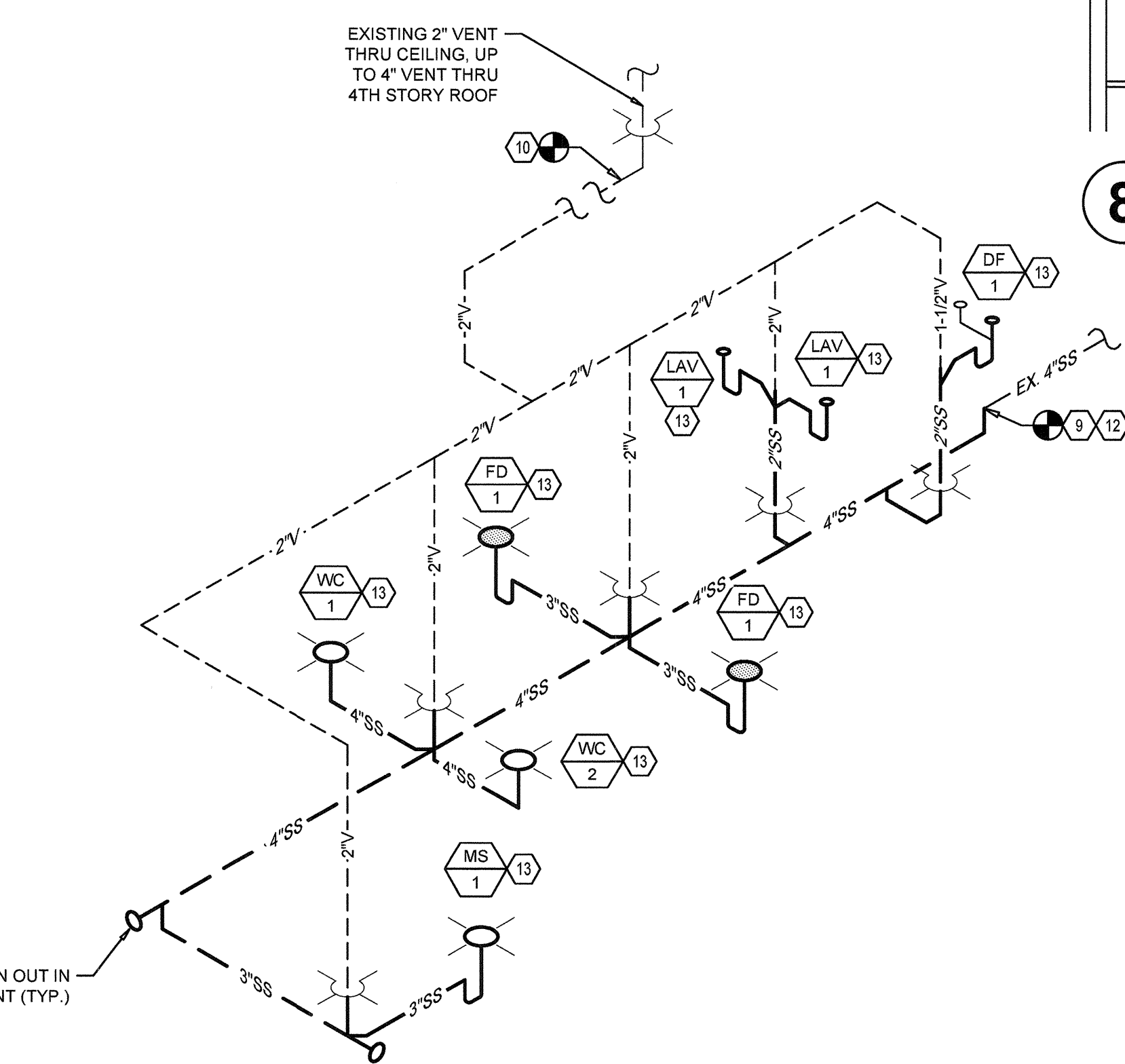
10 WATER HEATER DETAIL
SCALE: NOT TO SCALE



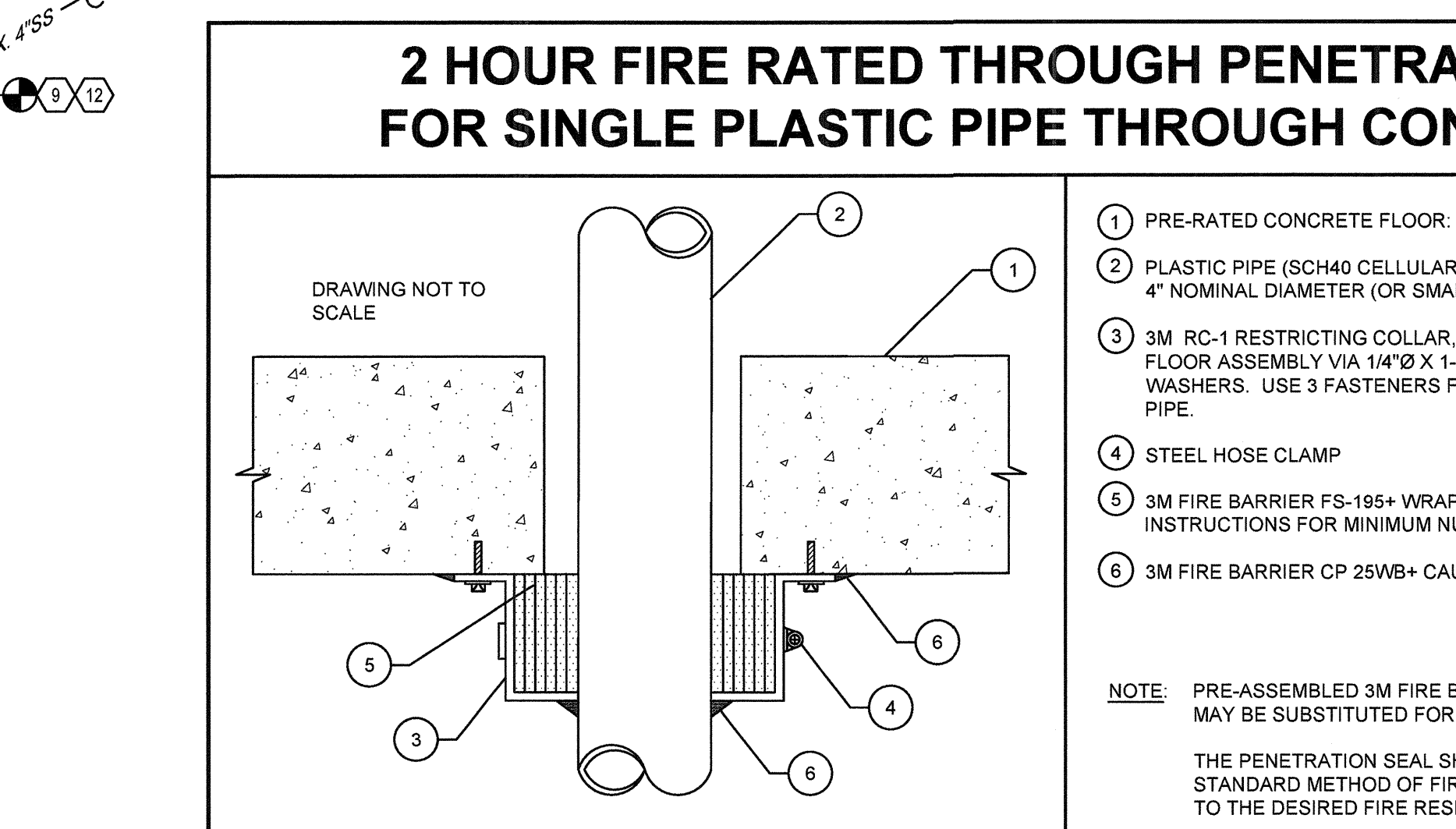
8 INDOOR HEAT PUMP DETAIL
SCALE: NOT TO SCALE



3 DOMESTIC WATER ISOMETRIC
SCALE: NOT TO SCALE



6 WASTE AND VENT ISOMETRIC
SCALE: NOT TO SCALE



9 INDOOR HEAT PUMP DETAIL
SCALE: NOT TO SCALE

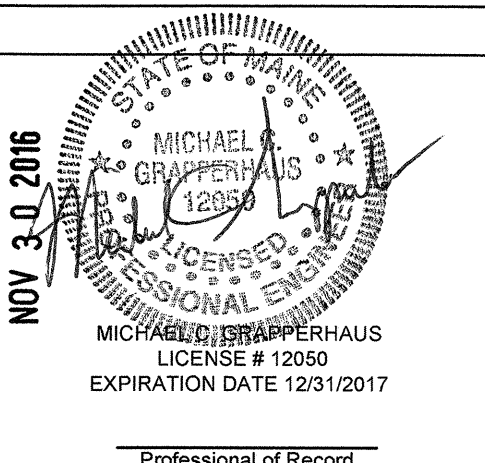
2 HOUR FIRE RATED THROUGH PENETRATION FIRESTOP FOR SINGLE PLASTIC PIPE THROUGH CONCRETE FLOORS

- PRE-RATED CONCRETE FLOOR: MIN. 4-1/2" THICKNESS
- PLASTIC PIPE (SCH40 CELLULAR OR SOLID CORE PVC, OPEN OR CLOSED PIPING SYSTEM) - 4" NOMINAL DIAMETER (OR SMALLER). THE ANNULAR SPACE SHALL BE 1/4".
- 3M RC-1 RESTRICTING COLLAR. MECHANICALLY FASTENED FLUSH TO THE UNDERSIDE OF FLOOR ASSEMBLY VIA 1/4" X 1-1/2" LG MASONRY FASTENERS. USE 1-1/4" FENDER WASHERS. USE 3 FASTENERS FOR 3" PIPE AND SMALLER. USE 4 FASTENERS FOR 4" PIPE.
- STEEL HOSE CLAMP
- 3M FIRE BARRIER FS-195+ WRAP/STRIPS (REFER TO MANUFACTURE'S INSTALLATION INSTRUCTIONS FOR MINIMUM NUMBER OF WRAPS)
- 3M FIRE BARRIER CP 25WB+ CAULK (1/4" BEAD) OR MOLDABLE PUTTY+

NOTE: PRE-ASSEMBLED 3M FIRE BARRIER PLASTIC PIPE DEVICE (PPD), UL FILE NO. R9269 MAY BE SUBSTITUTED FOR RC-1 COLLAR AND FS-195+ WRAP.

THE PENETRATION SEAL SHALL BE CAPABLE OF PASSING ASTM E814 (ANSI/UL 1479) STANDARD METHOD OF FIRE TESTS FOR THROUGH PENETRATION FIRE STOPS UP TO THE DESIRED FIRE RESISTANCE.

ISSUED DATES	
OWNER	11-23-16
BID/PERMIT	11-28-16
REVISIONS	



DRAWN BY	JCD
CHECKED BY	MCG
PROJECT NUMBER	316157
SHEET NAME	MECH/PLUMB ISOMETRICS & DETAILS
SHEET NUMBER	