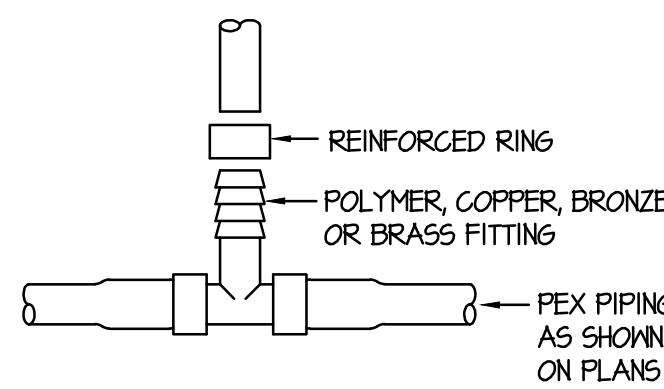


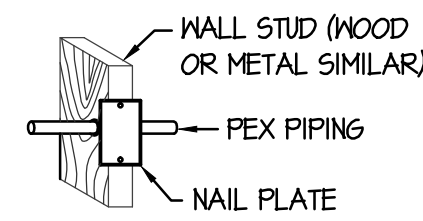
THIS TYPE (COLD EXPANSION) OF FITTING REQUIRES THAT THE PEX PIPING, WITH REINFORCING PEX RING PLACED OVER THE END OF THE PIPE, IS EXPANDED BEFORE THE FITTING IS INSERTED INTO THE PIPE END. THE EXPANDED PIPE END IS ALLOWED TO RETRACT ONTO THE FITTING TO FORM THE SEAL. THE MEMORY OF THE PIPE ALLOWS IT TO TIGHTEN OVER THE FITTING. AN EXPANDER TOOL IS REQUIRED TO EXPAND THE PIPE AND THE PEX RING TOGETHER.

ALL JOINTS (TEES, ELBOWS, COUPLINGS, ETC.) ARE JOINTED SIMILARLY.



NOTE: STAINLESS STEEL CAMP BANDS ARE ALSO PERMITTED FOR REINFORCING RING.

NOTE: DO NOT LOCATE ANY JOINTS BELOW FLOOR.



WALL INSTALLATION

PIPE SUPPORTS: PLASTIC HANGERS AND STRAPS ARE RECOMMENDED, BUT METAL SUPPORTS WHICH ARE DESIGNED FOR USE WITH PLASTIC TUBING CAN BE USED.

DO NOT USE SUPPORTS THAT PINCH OR CUT THE TUBING. SUPPORT SHOULD ALLOW FREE TUBING MOVEMENT.

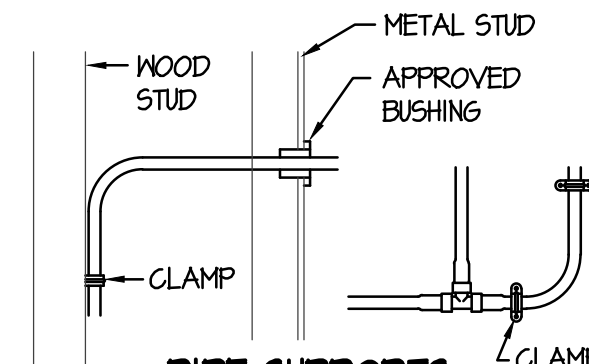
INSPECT ALL SUPPORTS PRIOR TO INSTALLATION TO ENSURE THAT SHARP EDGES DO NOT EXIST THAT CAN DAMAGE THE TUBING.

DO NOT USE IN ANY APPLICATION WHERE TUBING WILL BE EXPOSED TO DIRECT SUNLIGHT.

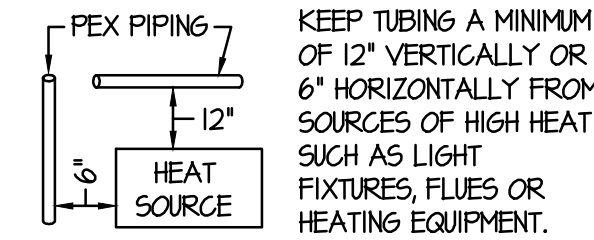
VERTICAL TUBING TO BE SUPPORTED EVERY 8'-0" HORIZONTAL TUBING TO BE SUPPORTED EVERY 4'-0".

WHEN PENETRATING METAL STUDS, UTILIZE A BUSHING DESIGNED FOR PLASTIC TUBING.

SUPPORTS SHALL BE INSTALLED AT CHANGES IN DIRECTION TO RELIEVE STRESS AS SHOWN.



PIPE SUPPORTS

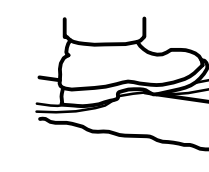


KEEP TUBING A MINIMUM OF 12" VERTICALLY OR 6" HORIZONTALLY FROM SOURCES OF HIGH HEAT SUCH AS LIGHT FIXTURES, FLUES OR HEATING EQUIPMENT.

NOTE: USE ONLY CONTINUOUS LENGTH TUBING (NO FITTINGS) WHEN INSTALLING PEX UNDER OR WITHIN A SLAB. PROTECT PEX TUBING WITH NON-METALLIC SLEEVES WHERE IT PENETRATES A SLAB OR FOUNDATION WALL.

MIN. CLEARANCES

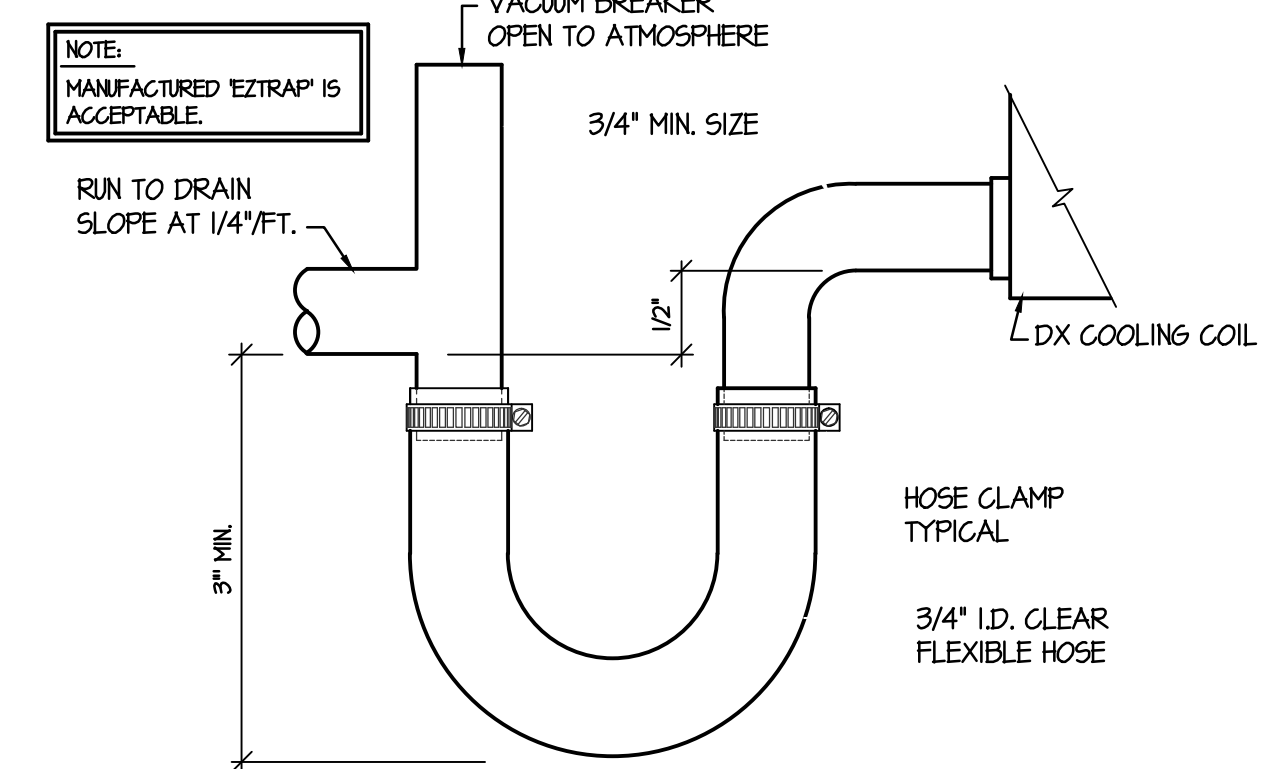
TUBING SIZE	MIN. RADIUS BENDING
3/8"	4"
1/2"	5"
3/4"	7"
1"	9"



DO NOT CRUSH OR KINK TUBING

DO NOT DRAG TUBING OVER ROUGH TERRAIN, ROCKS, OR ANY SURFACE THAT CAN CUT, PUNCTURE OR DAMAGE TUBING WALL.

TUBING AND FITTINGS SHALL BE STORED UNDERCOVER FOR CLEANLINESS AND TO AVOID EXPOSURE TO SUNLIGHT. CONSULT MANUFACTURER FOR RECOMMENDED LIMITS TO OUTSIDE STORAGE.



NOTE: MANUFACTURED EZTRAP IS ACCEPTABLE.

A PEX PIPE FITTING DETAILS

NO SCALE

B PEX PIPE INSTALLATION DETAILS

NO SCALE

C PEX PIPE HANDLING DETAILS

NO SCALE

D DX COIL CONDENSATE DRAIN DETAIL

NO SCALE

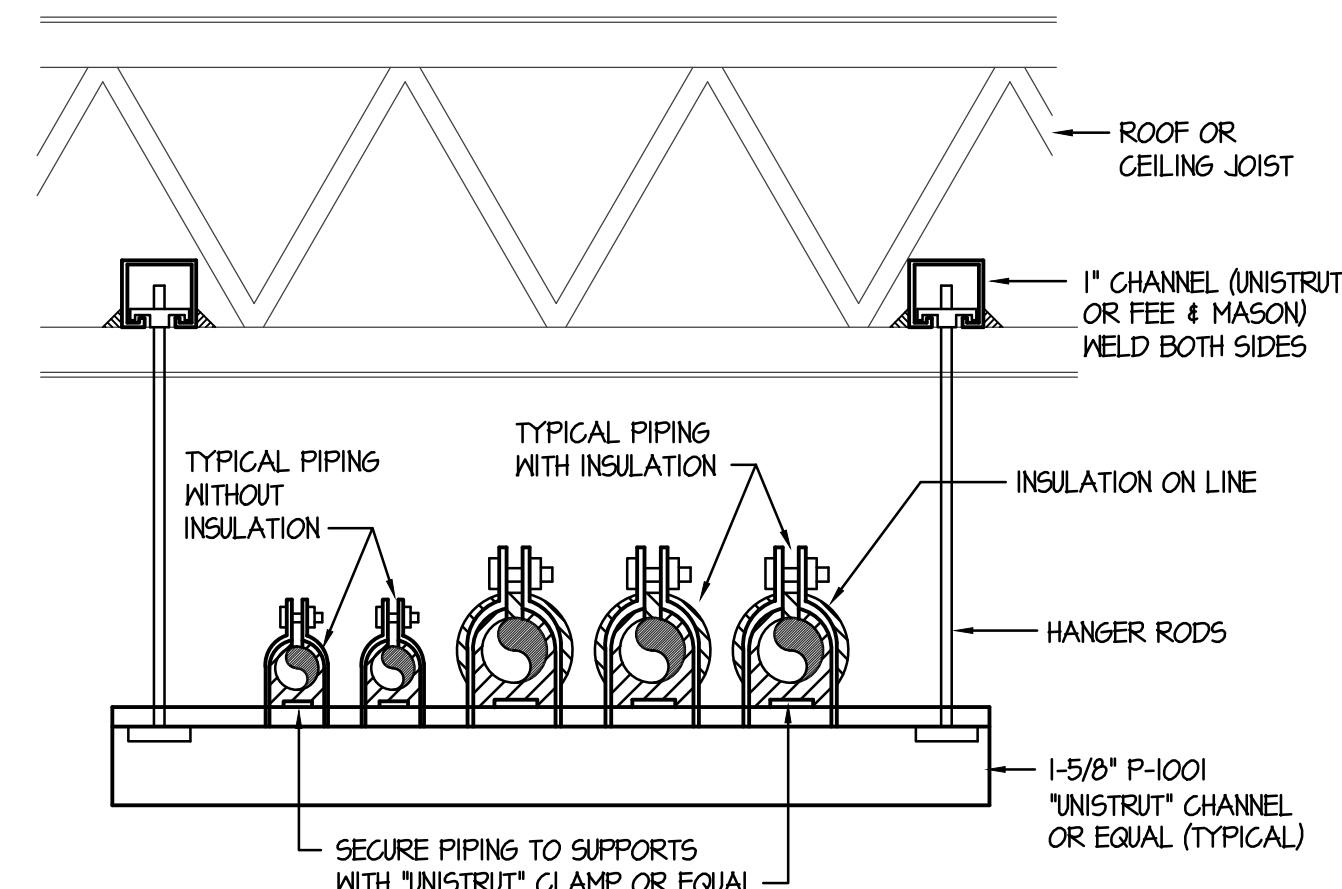
NOTE:

ALL PIPING SUPPORTS ARE TO BE INSTALLED PRIOR TO FIRE-PROOFING OF JOISTS. NO PIPING SUPPORTS ARE TO BE ATTACHED AFTER FIRE-PROOFING HAS BEEN DONE.

SUPPORT SPACING

PIPE Ø	MAX. SPAN*
1"	7'-0"
1-1/2"	9'-0"
2"	10'-0"
2-1/2"	11'-0"
3"	12'-0"
4"	14'-0"
5"	16'-0"
6"	17'-0"
8"	19'-0"

* MOUNT PIPE SUPPORTS AT MAXIMUM SPACING FOR THE SMALLEST PIPING INCLUDED IN SUPPORT RACK.



E PIPE SUPPORT DETAIL

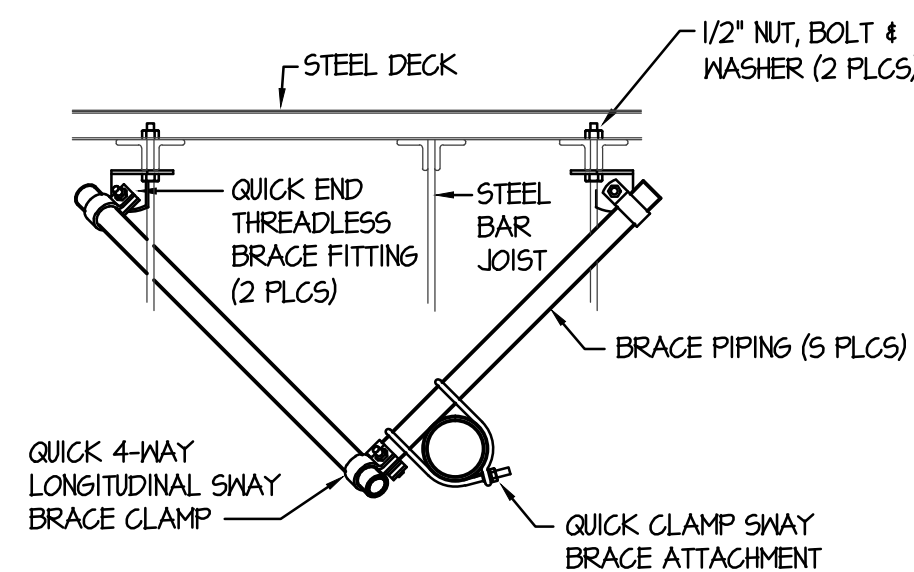
NO SCALE

F SPRINKLER HEAD COORDINATION DETAILS

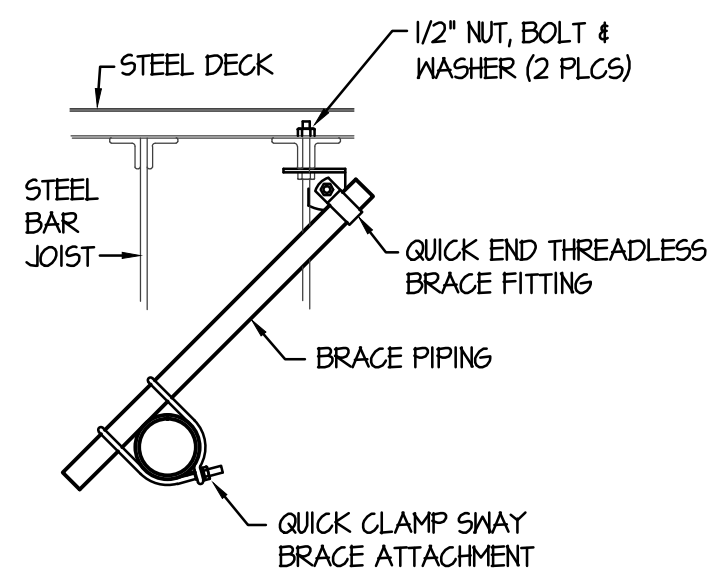
NO SCALE

NOTE:

PROVIDE SEISMIC BRACING ONLY IN SEISMICALLY ACTIVE AREAS. BRACING SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13 AND ALL STATE AND LOCAL CODES.



4-WAY BRACE



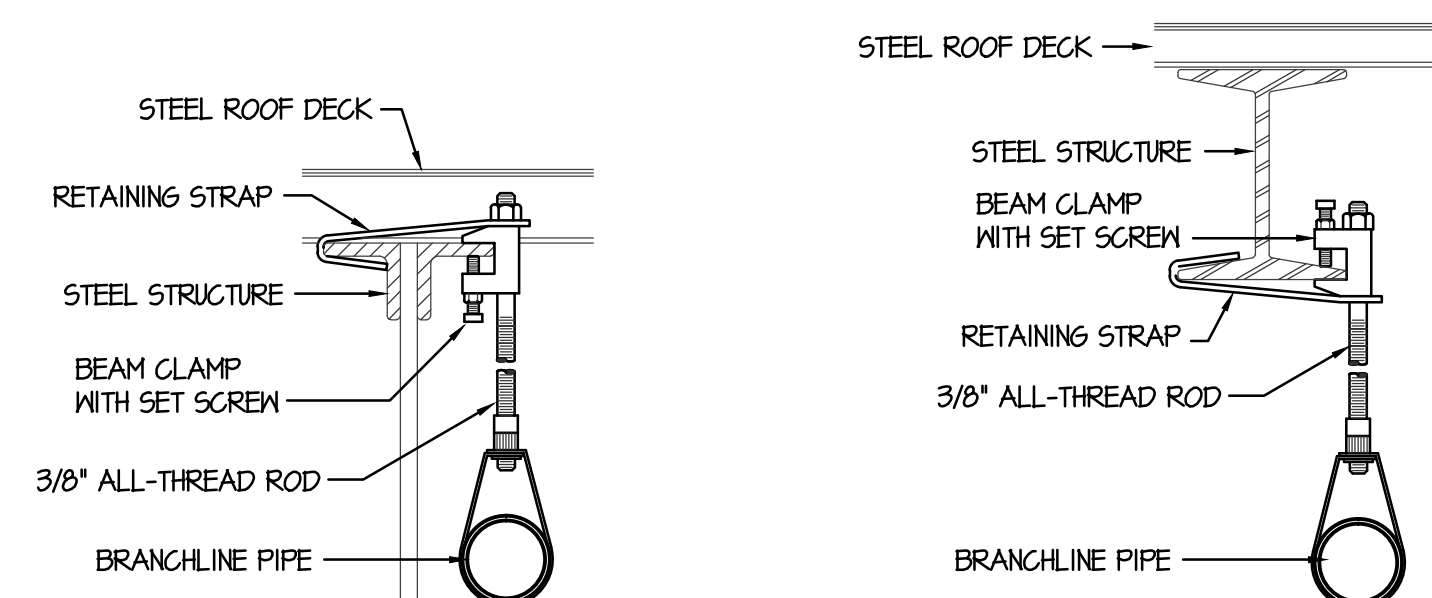
2-WAY BRACE

G SEISMIC BRACING DETAILS

NO SCALE

H DRY PENDANT HEAD DETAILS

NO SCALE

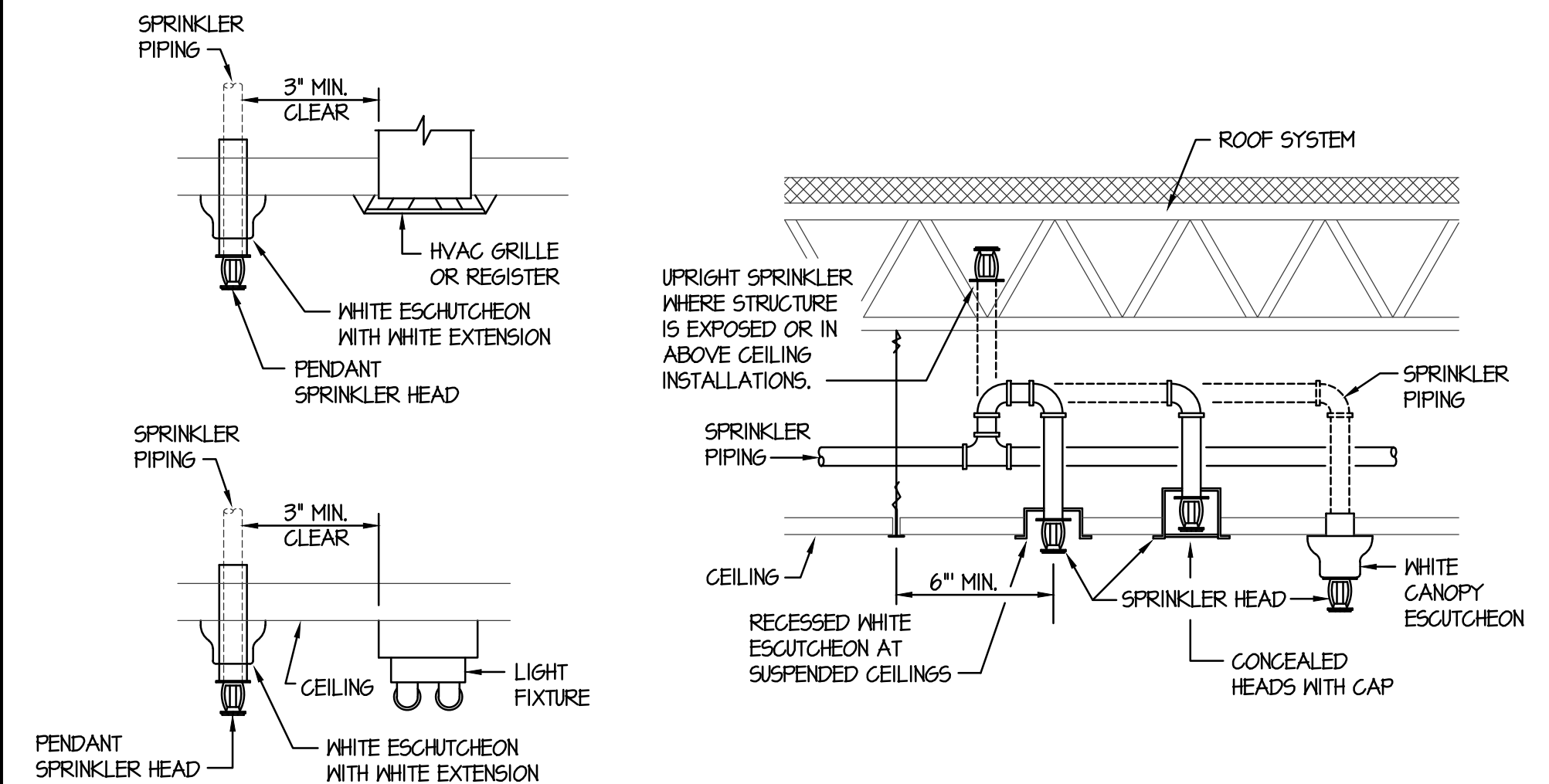


L PIPE HANGER DETAILS

NO SCALE

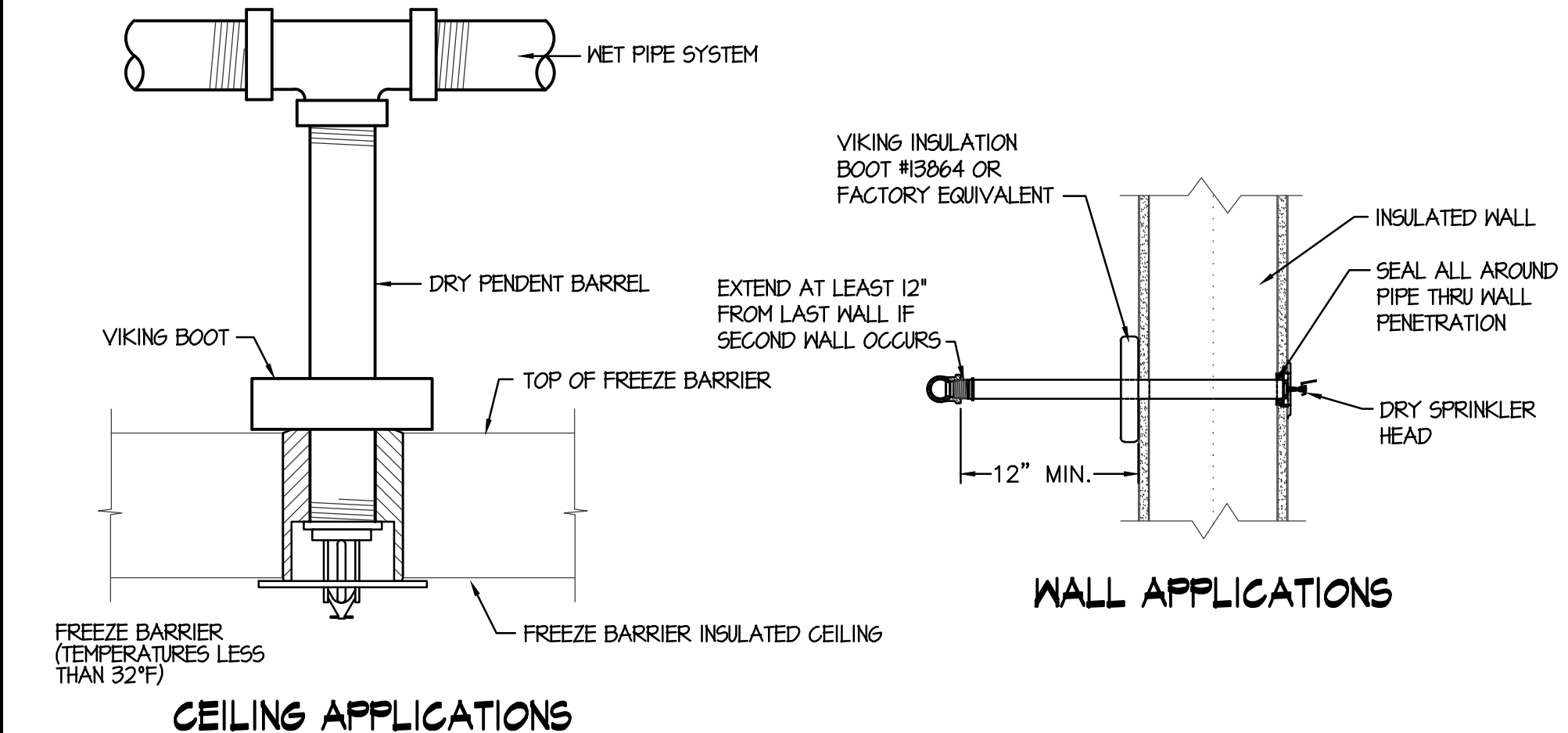
L EXTERIOR HOSE BIBB DETAIL

NO SCALE



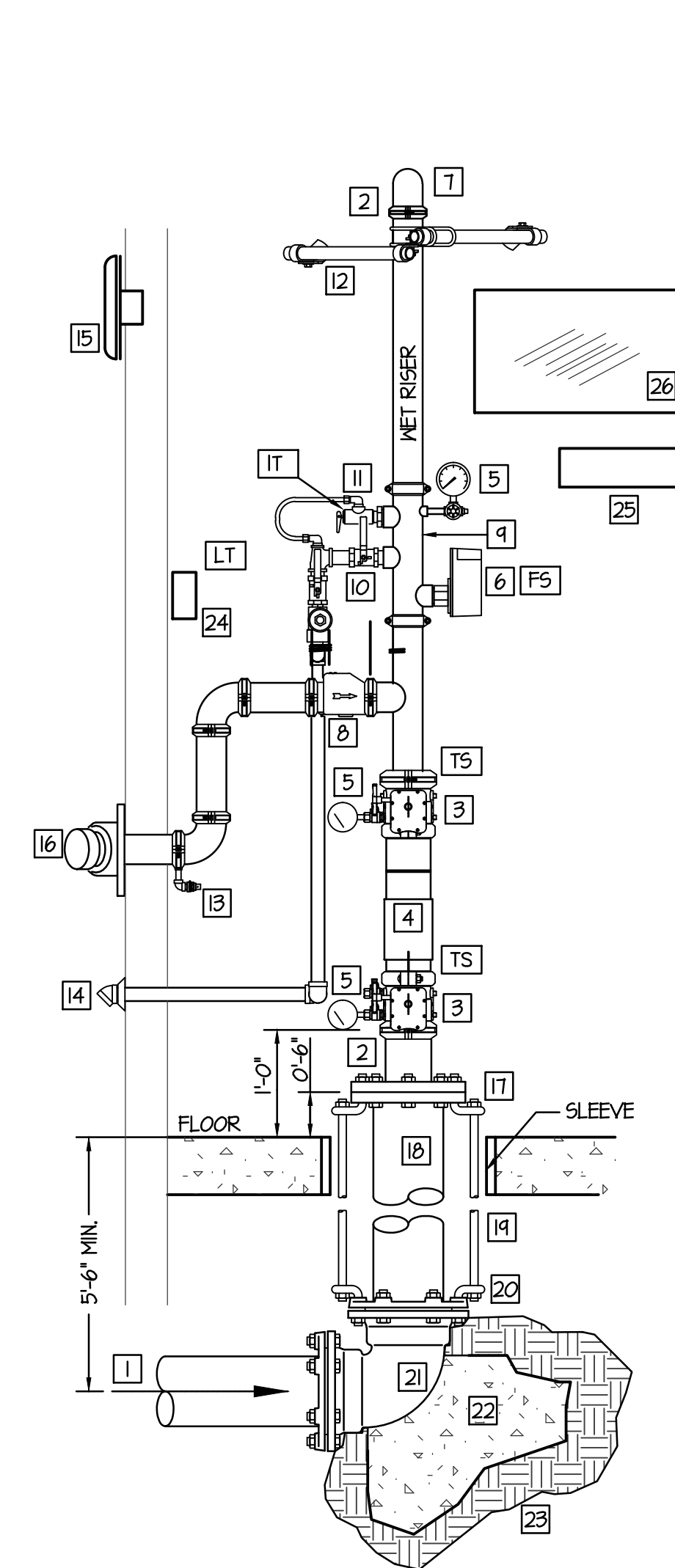
F SPRINKLER HEAD COORDINATION DETAILS

NO SCALE



CEILING APPLICATIONS

WALL APPLICATIONS



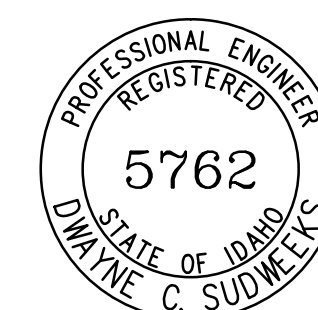
NOTE: PROVIDE SLEEVES WHERE PIPING PENETRATES BUILDING AT FLOOR AND WALLS. SEAL AROUND PENETRATION WITH FLEXIBLE MASTIC AT FLOOR. PROVIDE 2" ANNUAL SPACE AROUND AND RESTRAIN FLANGE SPIGOT.

J FIRE RISER AND ALARM VALVE DETAIL

NO SCALE

ORIGINAL DRAWING SIGNED BY: DWAYNE C. SUDWEEKS
DATE ORIGINAL SIGNED: March 20, 2019
ORIGINAL ON FILE AT ENGINEERED SYSTEMS ASSOCIATES
1955 EAST CENTER, POCAHELLO, IDAHO 83201

Engineered Systems Associates
1355 EAST CENTER
POCAHELLO, IDAHO 83201
PHONE: (208) 233-0501
FAX: (208) 233-0529
EMAIL: esa@engsystems.com
ESA JOB NUMBER: 17078



project for:
Grace School District # 148
New Elementary School
Fourth West Street
Grace, Idaho

340 East Clark Street, Suite A
Pocatello, Idaho 83201
Phone (208) 233-4548
Fax (208) 233-0263
email ted@bootharchitecture.com

BOOTH
Architecture PLLC

plumbing details and diagrams
Date 3/22/19
Sheet No. P3.2