

SECTION 15140
SUPPORTS, BASES, AND ANCHORS

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. Pipe and equipment hangers and supports.
- B. Equipment bases and supports.
- C. Sleeves and seals.
- D. Flashing and sealing equipment and pipe stacks.

1.2 REFERENCES

- A. ASME B31.1 - Power Piping.
- B. ASME B31.2 - Fuel Gas Piping.
- C. ASME B31.5 - Refrigeration Piping.
- D. ASME B31.9 - Building Services Piping.
- E. ASTM F708 - Design and Installation of Rigid Pipe Hangers.
- F. MSS SP58 - Pipe Hangers and Supports - Materials, Design and Manufacture.
- G. MSS SP69 - Pipe Hangers and Supports - Selection and Application.
- H. MSS SP89 - Pipe Hangers and Supports - Fabrication and Installation Practices.
- I. NFPA 13 - Installation of Sprinkler Systems.
- J. NFPA 14 - Installation of Standpipe and Hose Systems.
- K.

5. Wall Support for Pipe Sizes to 3": Cast iron hook.
 6. Wall Support for Pipe Sizes 4" and over: Welded steel bracket and wrought steel clamp.
 7. Vertical Support: Steel riser clamp.
 8. Floor Support: Cast iron adjustable pipe saddle, lock nut, nipple, floor flange, and concrete pier or steel support.
 9. Copper Pipe Support: Carbon steel ring, adjustable, copper plated.
- B. Plumbing Piping - DWV:
1. Conform to ASME B31.9, ASTM F708, MSS SP58, MSS SP69, and MSS SP89.
 2. Hangers for Pipe Sizes 2 to 1½" inch: Carbon steel, adjustable swivel, split ring.
 3. Hangers for Pipe Sizes 2" and over: Carbon steel, adjustable, clevis.
 4. Multiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
 5. Wall Support for Pipe Sizes to 3": Cast iron hook.
 6. Wall Support for Pipe Sizes 4" and over: Welded steel bracket and wrought steel clamp.
 7. Vertical Support: Steel riser clamp.
 8. Floor Support: Cast iron adjustable pipe saddle, lock nut, nipple, floor flange, and concrete pier or steel support.
 9. Copper Pipe Support: Vinyl coated carbon steel ring, adjustable. Copper plated or copper clad hangers shall not be used.
- C. Plumbing Piping - Water:
1. Conform to ASME B31.9, ASTM F708, MSS SP58, MSS SP69, and MSS SP89.
 2. Hangers for Pipe Sizes 2 to 1½": Carbon steel, adjustable swivel, split ring.
 3. Hangers for Cold Pipe Sizes 2" and over: Carbon steel, adjustable, clevis.
 4. Hangers for Hot Pipe Sizes 2 to 4": Carbon steel, adjustable, clevis.
 5. Hangers for Hot Pipe Sizes 6" and Over: Adjustable steel yoke, cast iron roll, double hanger.
 6. Multiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
 7. Multiple or Trapeze Hangers for Hot Pipe Sizes 6" and Over: Steel channels with welded spacers and hanger rods, cast iron roll.
 8. Wall Support for Pipe Sizes to 3": Cast iron hook.
 9. Wall Support for Pipe Sizes 4" and over: Welded steel bracket and wrought steel clamp.
 10. Wall Support for Pipe Sizes 6" and over: Welded steel bracket and wrought steel clamp

7. Multiple or Trapeze Hangers for Hot Pipe Sizes 6" a

2.6 SLEEVES

- A. For materials refer to Section 15000, Item 3.7.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.2

- A. Provide flexible flashing and metal counter-flashing where piping and ductwork penetrate weather or waterproofed walls, floors and roofs.
- B. Flash vent and soil pipes projecting 3" minimum above finished roof surface with lead worked one-inch minimum into hub, 8" minimum clear on sides with 24" x 24" sheet size. For pipes through outside walls, turn flanges back into wall and caulk, metal counter-flash, and seal.
- C. Flash floor drains in floors with topping over finished areas with lead, 10" clear on sides with minimum 36" x 36" sheet size. Fasten flashing to drain clamp device.
- D. Seal floor, shower and mop sink drains watertight to adjacent materials.
- E. Provide acoustical lead flashing around ducts and pipes penetrating equipment rooms, installed in accordance with manufacturer's instructions for sound control.
- F. Provide curbs for mechanical roof installations 14" minimum high above roof surface. Flash and counter flash with sheet metal, seal watertight. Attach counter flashing mechanical equipment and lap base flashing on roof curbs. Flatten and solder joints.
- G. Adjust storm collars tight to pipe with bolts; caulk around top edge. Use storm collars above roof jacks. Screw vertical flange section to face of curb.

3.6 SLEEVES

- A. For construction and execution refer to Section 15000, item 3.7.

END OF SECTION