



Automatic Sprinklers: Riser Clamps

No. FP-2009-38 September 22, 2009

Learning Objective: The student should be able to identify one of the requirements for sprinkler and standpipe riser support.

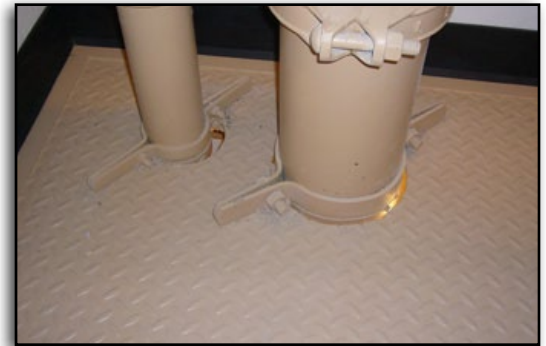
The “brackets” around these sprinkler and standpipe risers are clamps used to transfer some of the pipes’ vertical load (weight) to the building’s structural support. Pipe clamps are required in multistory buildings.

The clamps are intended to prevent pipe movement and should be secured and located so that the system piping remains in its original location and position.

According to NFPA® 13, *Standard for the Installation of Sprinkler Systems* or NFPA® 14, *Standard for the Installation of Standpipes and Hose Systems*:

- In multistory buildings, riser supports should be provided at the lowest level, at each alternate level above, above and below offsets, and at the top of the riser.
- Supports above the lowest level should also restrain the pipe to prevent movement by an upward thrust where flexible fittings are used.
- Distance between supports for risers should not exceed 25 ft (7.6 m).
- Risers should be supported by riser clamps or by hangers located on the horizontal connections within 24 in. (610 mm) of the centerline of the riser.
- Riser clamps supporting risers by means of set screws should not be used.
- Riser clamps anchored to walls using hanger rods in the horizontal position should not be permitted to support risers vertically.
- Where risers are supported from the ground, the ground support should constitute the first level of riser support.
- Where risers are offset or do not rise from the ground, the first ceiling level above the offset should constitute the first level of riser support.

For additional information, see NFPA® 13, *Standard for the Installation of Sprinkler Systems* or NFPA® 14, *Standard for the Installation of Standpipes and Hose Systems*.



These clamps are required to support sprinkler and standpipe risers.

