

## 6” Rod Hanger Exception

### *Rod Swivel Orientation*

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NFPA 13 strictly defines required hanger characteristics to regulate the mechanics of dampening effect relative to lateral sway bracing and restraint. NFPA 13 specifies the hanger rod 6” length ratio as having a conservative reactant effect to horizontal force perpendicular to the system pipe. Accordingly, NFPA 13 is specifying dampening effect mechanics which are defined by the ratio of flexure relative to rigidity of the hanger rod.

The hanger characteristics required to achieve this prescribed dampening effect are defined by the 6” hanger rod exceptions specified in 2016 NFPA 13 sections 9.3.5.5.10.1(1), 9.3.5.5.10.2(1) and 9.3.6.5.

The inclusion of swivel fittings in the rod hanger assembly need not conflict with the NFPA 13 dampening effect. Correct alignment of the swivel fitting pivot axis can conform to the NFPA 13 dampening effect, per the 6” hanger rod exceptions.

Accordingly, the rod swivel in the hanger shall be assembled such that the fitting pivot axis is oriented perpendicular to the system pipe axis. This configuration only allows articulation parallel to the system pipe while correctly maintaining rigidity of the hanger rod perpendicular to the axis of the system pipe in conformance to the mechanics of NFPA 13 dampening effect.



**Kraig Kirschner is a third generation fire sprinkler contractor and a journeyman fitter. He is a Principal Member of NFPA 13 - Hanging and Bracing Technical Committee and serves on Standard Technical Panels of UL 203, UL 203A and FM 1950. Kraig is a Life Member of the National Fire Protection Association and was named Person of the Year in 2009 Fire Protection Contractor Magazine. He holds dozens of patents that enhance the installation and application of hangers and sway braces.**