

## OFFSET CPVC HANGERS

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### *Beware Of Listing Limitations*

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AFCON

This article is written to identify a hanger misapplication prevalent on CPVC piping. The 2002 edition of NFPA 13 has emphasized in section 6.1.1.1 that listed components shall be used in accordance with the conditions, requirements and limitations of their listing. It also states that all special requirements shall be included and identified in the product submittal literature and installation instructions. In other words, a product must be tested for its intended use and not used in other configurations. For instance, a hanger tested only for holding pipe in a horizontal orientation and attached to the side of a wood joist, is limited to that configuration. Although this seems self-evident, apparently it is not always followed.

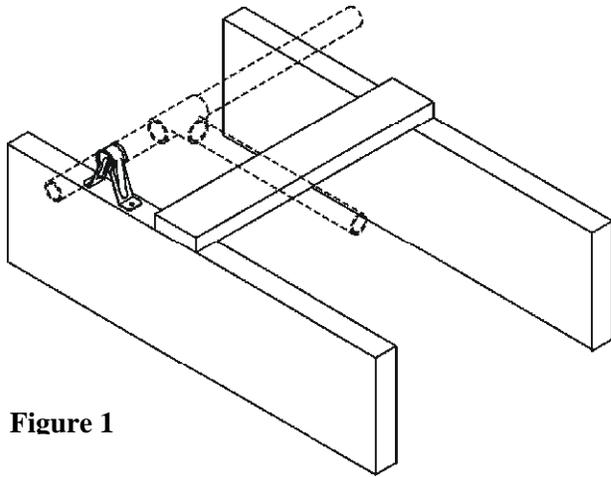
A case in point is the offset hanger for CPVC piping. The majority of these hangers are tested as described above. Care must be taken when an installation runs above the top of the joists as shown in Figure 1. In order to be cost effective, many contractors use offset hangers because they:

- Provide 1-1/2 inch offset from the face of the joist
- Save labor and material by eliminating need to install wood blocking
- Elevate piping to cross ceiling stringers and clear electric wiring, mechanical, etc.
- Provide extra take out for recessed sprinklers.

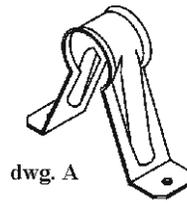
There are several offset hangers on the market that look similar as shown in Figure 2. Few, though, have been tested and listed specifically for attachment to the top of the joist holding hold pipe in an upright orientation. Although the hangers may look similar, the models that are listed for use in an upright orientation can be identified by their sturdier construction (See drawing A in Figure 2). This reinforcement is required for these hangers to properly function when used in the upright manner.

If the manufacturer's cut-sheet for a particular hanger does not explicitly identify such an installation, as required by NFPA 13, use of the hanger in a vertical orientation would be outside the scope of its listing, thus violating the UL listing. Due to the similarity between different product models, this important difference is easily missed by the installer or the AHJ. The problem can be readily avoided by well-informed contractors and properly worded engineering product sheets submitted as part of the review package.

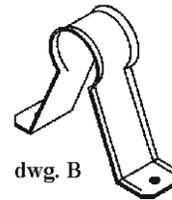
Remember hangers are important. They guard the reliability of a fire sprinkler system by durably maintaining installed piping, distances and dimensions.



**Figure 1**



dwg. A



dwg. B

**Figure 2**