CPVC Hangers
Head Set
Model SHB1

General Description
The TYCO CPVC Hanger Head Set Model SHB1 offers a time saving installation method for proper placement of an automatic sprinkler before the ceiling is installed.

The CPVC Hanger Head Set Model SHB1 is a re-designation for the Central Model SHB1 Head Set Hanger.

The CPVC Hanger Head Set in a side-mount position (Ref. Figure 2) provides accurate vertical positioning of the sprinkler thereby assuring a desirable uniform sprinkler deflector-to-ceiling positioning of the sprinklers. Due to the unique design of the Head Set Hanger, “blocking” is not required to offset the centerline of piping to accommodate the sprinkler escutcheon from the side of the joist. With the fasteners provided, the Head Set Hanger is intended to be attached directly to the side of a solid wood framing member or the side of a structural composite wood joist of minimum 3/8 inch thickness OSB (Oriented Strand Board) web member or equivalent.

Note: The Head Set Hanger is designed for use with Johnson Controls “West Coast” style Sprinkler Head Adapters:
- P/N 80175W (3/4 in. x 1/2 in. NPT)
- P/N 80176W (1 in. x 1/2 in. NPT)

Notice
The Head Set Hanger described herein must be installed and maintained in compliance with this document and the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. The installing contractor or sprinkler manufacturer should be contacted with any questions.

Technical Data
Approvals
UL Listed for use with CPVC pipe as follows:
Side-mount Head Set Hanger (Ref. Figure 2) to provide accurate vertical positioning of a sprinkler.

Material
Galvanized aluminum, 20 gauge

Weight
0.26 lb (0.12 kg)
Installation

The following instructions for the TYCO CPVC Hanger Head Set Model SHB1 are broken down as follows: “Head Set Hanger — Solid Wood Joist” and “Head Set Hanger — Composite Wood Joist”.

**NOTICE**
The Head Set Hanger does not meet the UL requirement for providing vertical restraint that may result from a sprinkler activation. A number of hanger techniques (not inclusive of the use of a Head Set Hanger) as described in Installation Handbook IH-1900 can be used to provide vertical restraint. Failure to provide vertical restraint may result in vertical lift upon sprinkler activation and the inability of a sprinkler to operate effectively in the event of a fire.

Installing sprinklers into the sprinkler adapter fittings prior to solvent cementing the adapters to the drop is unacceptable. Failure to allow sprinkler fitting joint to cure before installing sprinklers may result in cement in sprinkler waterway and inability of the sprinkler to properly operate in the event of a fire.

The Head Set Hanger should not be installed other than side-mount or attached to anything other than the side of a solid wood framing member or structural composite wood joist, with the fasteners provided, without prior review and approval of the authority having jurisdiction. Any other method of installation may not comply with NFPA or local requirements. If the installer attaches the Head Set Hanger to another type of structural member or orients the Head Set Hanger in a position other than side-mount, fasteners and fastener methods shall comply with applicable NFPA and local code requirements.

**SOLID WOOD JOIST**

**Step 1.** Position the Head Set Hanger against vertical solid wood joist surface (side-mount).

**Step 2.** Set depth using graduated markings on Offset Gauge (Ref. Figure 2).

**Step 3.** Secure Head Set Hanger to wood surface using two #10 x 1 in. hex head lag screws provided. (Ref. Figure 1).

**Step 4.** Cut and install CPVC sprinkler drop making sure the face of the sprinkler head adapter is flush with the inside of the Head Set Cup.

**Step 5.** Insert sprinkler inlet pipe threads through the Head Set Cup and thread into CPVC adapters using the instructions provided in the technical data sheet for the sprinkler, as well as Technical Data Sheet TFP700 for the “INSTALLER WARNING”.

**COMPOSITE WOOD JOIST**

**Step 1.** Use pliers to break off tab (Ref. Figure 4).

**Step 2.** Using pliers to bend lower tabs in 90 degree angle (Ref. Figure 4).

**Step 3.** Position the Head Set Hanger against composite wood joist web member (side-mount).

**Step 4.** Set depth using graduated markings on Offset Gauge (Ref. Figure 3).

**Step 5.** Secure Head Set Hanger to wood surface using two #10 x 1 in. hex head lag screws provided (Ref. Figure 1).

**Step 6.** Cut and install CPVC sprinkler drop making sure the face of the sprinkler head adapter is flush with the inside of the Head Set Cup.

**Step 7.** Insert sprinkler inlet pipe threads through the Head Set Cup and thread into CPVC adapters using the instructions provided in the technical data sheet for the sprinkler, as well as Technical Data Sheet TFP700 for the “INSTALLER WARNING”.

**NOTICE**

**Sprinkler Head Adapter Flush with Inside of Head Set Cup**

**Screw Holes**

**Locating Tabs**

**Built-in Offset Gauge in 1/4" (6.3 mm) Increments**

**Breaking Away Tabs**

**Lower Flange Bend Area**

**Step 1.** Use pliers to break off tab (Ref. Figure 4).

**Step 2.** Using pliers to bend lower tabs in 90 degree angle (Ref. Figure 4).

**Step 3.** Position the Head Set Hanger against composite wood joist web member (side-mount).

**Step 4.** Set depth using graduated markings on Offset Gauge (Ref. Figure 3).

**Step 5.** Secure Head Set Hanger to wood surface using two #10 x 1 in. hex head lag screws provided (Ref. Figure 1).

**Step 6.** Cut and install CPVC sprinkler drop making sure the face of the sprinkler head adapter is flush with the inside of the Head Set Cup.

**Step 7.** Insert sprinkler inlet pipe threads through the Head Set Cup and thread into CPVC adapters using the instructions provided in the technical data sheet for the sprinkler, as well as Technical Data Sheet TFP700 for the “INSTALLER WARNING”.

**NO NOTICE**
The Head Set Hanger does not meet the UL requirement for providing vertical restraint that may result from a sprinkler activation. A number of hanger techniques (not inclusive of the use of a Head Set Hanger) as described in Installation Handbook IH-1900 can be used to provide vertical restraint. Failure to provide vertical restraint may result in vertical lift upon sprinkler activation and the inability of a sprinkler to operate effectively in the event of a fire.

Installing sprinklers into the sprinkler adapter fittings prior to solvent cementing the adapters to the drop is unacceptable. Failure to allow sprinkler fitting joint to cure before installing sprinklers may result in cement in sprinkler waterway and inability of the sprinkler to properly operate in the event of a fire.

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**FIGURE 2**
SIDE-MOUNT INSTALLATION OF HEAD SET HANGER
PROVIDING ACCURATE VERTICAL POSITIONING OF THE SPRINKLER

**FIGURE 3**
USE OF OFFSET GAUGE FOR HEAD SET HANGER

\[
X + 1" - Y = Z
\]

**STEP 1**
Determine "X"
Refer to Sprinkler Data Sheet

**STEP 2**
Determine "Y"
Face of Sprinkler Fitting

**STEP 3**
Calculate "Z"
Bottom of Joist

**STEP 4**
Convert "Z" to Gauge
Bottom Edge of Head Set Flange
Bottom of Joist
Offset Gauge in 1/4" (6.3 mm) Increments

Example: If "Z" equals 1-1/2", align "A" with bottom of Joist
**Care and Maintenance**

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions.

Automatic sprinkler systems should be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

**Limited Warranty**

For warranty terms and conditions, visit www.tyco-fire.com.

**Ordering Procedure**

Head Set Hangers are provided in box quantities of 100. Orders placed should be for full box quantities.

**Head Set Hanger:**
Specify: Model SHB1 Head Set Hanger, P/N HS2