



QUICK RESPONSE

Saving life and property through effective licensing, plan review, and inspection of fire protection systems.

September 2010

CONCEALED PENDENT SPRINKLER

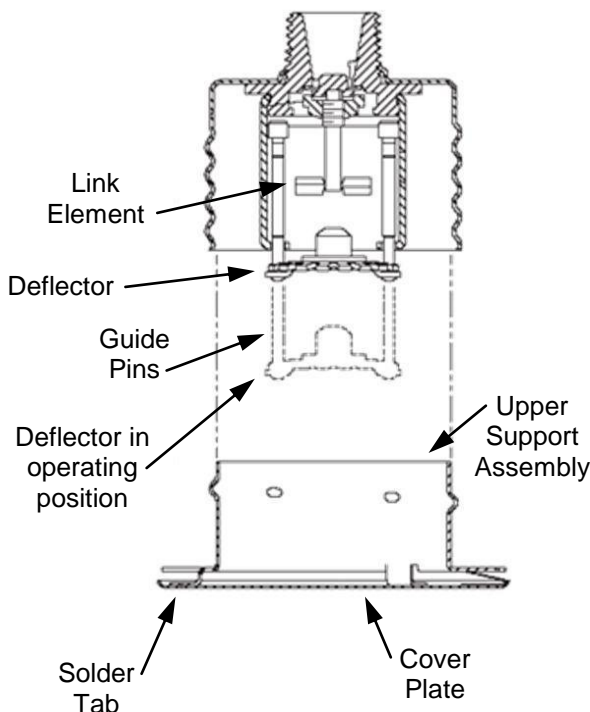


Concealed pendent sprinklers are decorative type sprinklers featuring a flat cover plate designed to conceal the sprinkler operating components above a ceiling. The cover plate is soldered to the sprinkler's special upper support assembly.

Operation of the sprinkler occurs when heat build up causes the solder holding the cover plate to melt allowing the cover plate to fall clear exposing the sprinkler operating components. At this point the deflector, supported by the guide pins, drops down to its operational position. Continued heating of the exposed sprinkler operating components causes the heat-sensitive link element to separate/shatter allowing the sprinkler to activate and flow water.

Cover plates are integral to proper sprinkler performance. It is imperative to ensure that the cover plates do not delay the response or impede the operation of the sprinkler. Painting of the cover plate can retard the thermal response of the heat-responsive elements of the cover plate and sprinkler. Painting of the cover plate may also impede the plate from falling away as designed. As such, NFPA 13 requires that the cover plate shall only be painted by the sprinkler manufacturer.

Since the cover plates are part of the listed sprinkler assembly, missing cover plates shall be replaced.



Quick Response is presented monthly by the
Minnesota State Fire Marshal – Fire Protection Section

www.fire.state.mn.us