

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Sprinkler Escutcheons

Learning Objective: The student shall be able to explain where escutcheons are required for automatic sprinklers.

Escutcheons are protective or ornamental plates or flanges placed around sprinklers, often to hide holes cut in the ceiling tile. They may be made of metal, plastic or other material approved by the code official.

It is important for the inspector to know whether the escutcheons are installed to perform a fire protection function or simply to improve aesthetics. In those circumstances where the escutcheon is installed solely for cosmetic purposes, the code official may have no authority to require its installation, repair, or replacement. Today's picture illustrates a common challenge to fire inspectors: when are sprinkler escutcheons required?

Guidance may be found in two documents: NFPA 13, *Standard for the Installation of Sprinkler Systems*, and the locally adopted building code. According to the sprinkler standard, escutcheons used with *flush-type, concealed, or recessed* (illustrated) sprinklers must be part of a listed sprinkler assembly.

Using the wrong type of escutcheon with recessed or flush-type sprinklers can result in severe disruption of the spray pattern, which can minimize its effectiveness. Note that this standard does not require escutcheons, only that if they are installed with these sprinkler types they must be listed as part of the sprinkler assembly.

Where fire sprinkler systems penetrate fire-resistance rated ceiling assemblies, building codes require the gap around the pipe (called the "annular space") to be sealed with firestopping material or covered with an approved metallic escutcheon.



The escutcheon for this recessed sprinkler must be part of a listed sprinkler assembly so if it loosens it won't interfere with water spray.

Underwriters Laboratories (UL) provides listings for escutcheons that are installed with *pendent* or *sidewall* type sprinklers. These escutcheons might be used for decorative purposes or reducing the protrusion of the sprinkler body beyond the surface of the ceiling or wall without adversely affecting water distribution and sprinkler operation. Nonmetallic escutcheons must be listed.

For additional information, go to www.ul.com, and select "Online Certifications Directory." Type "VNUV" in the UL Category Code field, and select informational guide "VNUV.GuideInfo" explaining decorative escutcheons. See also the *International Building Code*[®] Chapter 7 and *NFPA 5000*[®], *Building Construction and Safety Code*[®], Chapter 8.