

Reliable®

Model F4FR Quick Response Concealed Automatic Sprinkler

The Concealer® A Concealed Sprinkler With ½" (13mm) or 1½" (38mm) Adjustment

Features

1. ½" (13mm) Total adjustment provided by economical standard inlet version.
2. 1½" (38mm) Total adjustment provided by adjustable inlet versions.
3. Adjustable inlet version available with either 1" NPT male or female threads eliminating costly reducing coupling.
4. Simple, sturdy, threaded cover plate attachment; does not require clips or springs.
5. Smooth aesthetic ceiling profile.
6. Available in brass, chrome, white, black-plated or other color painted finishes.
7. Ordinary temperature rating.
8. Multiple orifices for design flexibility.

U.S. Patent Number 4,880,063

Listings and Approvals

1. Listed by Underwriters Laboratories Inc. and UL certified for Canada (cULus)
2. NYC BS&A No. 587-75-SA / MEA 258-93-E
3. Loss Prevention Certification Board (LPCB)

Note: Approvals are ordinary hazard except for small orifice sprinklers which are limited to light hazard occupancies.

UL Listing Categories

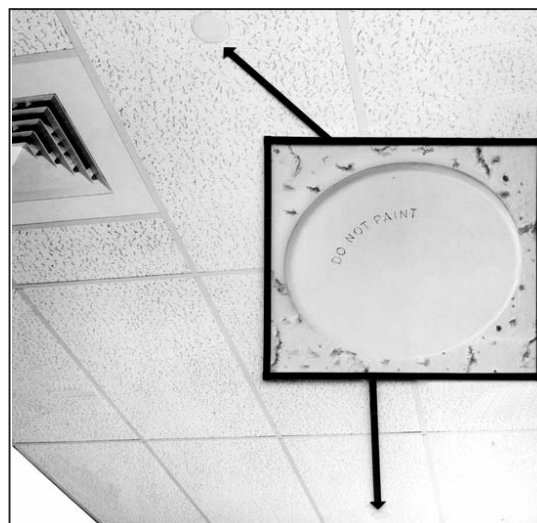
Sprinklers, Automatic & Open
Quick Response Sprinkler

UL Guide Number

VNIV

Application

The Reliable Model F4FR Concealer is the most versatile quick response sprinkler available. The Model F4FR Quick Response Concealed Sprinkler provides the best form of fire protection by offering an attractive appearance and ½" (13mm) cover adjustment for ease of installation. The adjustable 1" NPT inlet versions have one and one half inches of total adjustment, and they also eliminate the need for a reducing coupling. The small diameter



cover plate is easily and positively attached and blends into the ceiling, concealing the most dependable fire protection available, an automatic sprinkler system.

The Concealer® is designed for use where aesthetic appearance is important. Offices, hospitals, motels and restaurants are but a few of the applications where it can be used. It is available in different orifice sizes allowing the designer to optimize system performance, thereby achieving a very efficient installation.

The Model F4FR Concealer is a quick response concealed sprinkler intended for use in accordance with NFPA 13.

The Concealer® can eliminate the need for precise cutting of drop nipples. The threaded cover plate assembly can be adjusted without tools to fit accurately against the ceiling. The fire protection system need not be shut down to adjust or remove the cover plate assembly.

Product Description

The Concealer® for quick response applications uses a 135°F (57°C) 3mm diameter glass bulb in a standard style sprinkler frame with a drop-down deflector. This assembly is recessed into the ceiling and concealed by a flat cover plate. The cover plate and sprinkler cup assemblies are attached using a strong threaded engagement. This threaded engagement provides ½" (13mm) of cover adjustment. The cover plate is attached to the skirt using 135°F (57°C) ordinary temperature classification solder. When the ceiling temperature rises, the solder holding the cover plate fuses, thus releasing the plate and exposing the sprinkler inside to ambient temperature. The subsequent shattering of the sprinkler bulb opens the waterway and causes the deflector to drop into position to distribute the discharging water. Any secure engagement between the cover plate and cup will assure that the drop-down deflector is properly located below the ceiling.

Note: The cup and skirt are fabricated from corrosion resistant plated steel and are intended for interior non-corrosive applications.

Temperatures Ratings

Classification	Sprinkler	Cover Plate	Max. Ceiling Temp.
Ordinary	135°F/57°C	135°F/57°C	100°F/38°C
	155°F/68°C*	135°F/57°C	

* LPCB approved only.

Finishes ⁽¹⁾:

Standard Finishes:
Bronze
Bright Brass Plated
Chrome Plated
Black Plated
White

Note: Paint or any other coatings applied over the factory finish will void all approvals and warranties.

⁽¹⁾ Other colors and finishes are available. Consult factory for details.

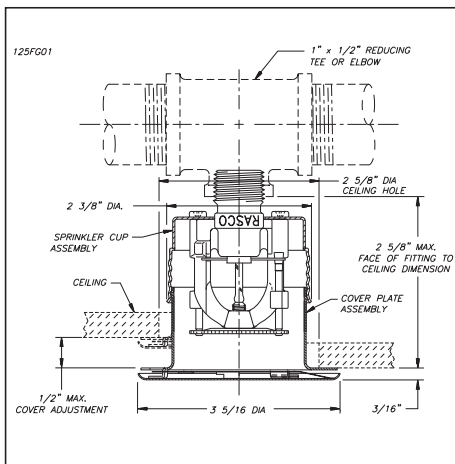
Installation

Do not install The Concealer[®] in ceilings which have positive pressure in the space above. In addition, inspect all sprinklers after installation to ensure that both the gap between the cover plate and ceiling and the 4 slots in the cup are open and free from any air flow impediment.

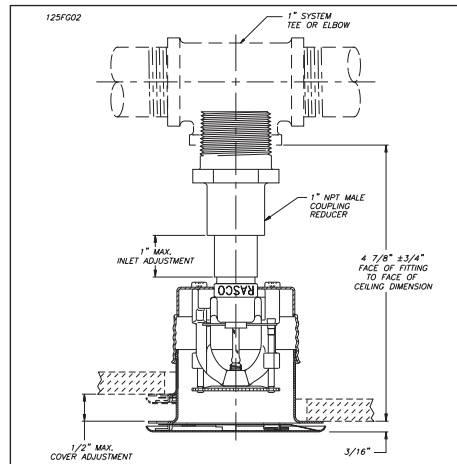
After a 2⁵/₈" diameter hole is cut in the ceiling, the sprinkler is to be installed with the Model G4 Wrench. When installing a sprinkler, the wrench is first positioned into the sprinkler/cup assembly until two wrench tangs fully engage drive slots in the top of the cup (there are two pairs of drive slots in the cup). The sprinkler is then tightened into the pipe fitting. When inserting or removing the wrench from the sprinkler/cup assembly care should be taken to prevent damage to the sprinkler. **DO NOT WRENCH ON ANY OTHER PART OF THE SPRINKLER/CUP ASSEMBLY.**

Installation Data

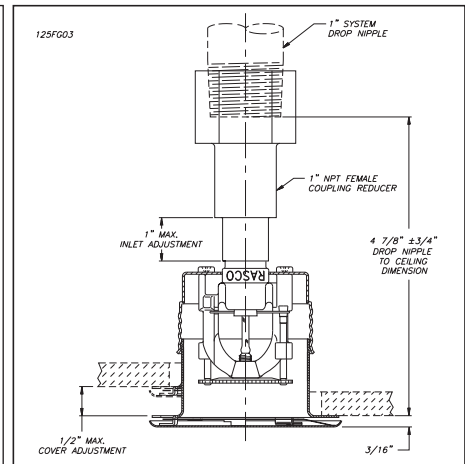
Sprinkler Inlet	Total Adjustment	Nominal Orifice	Nominal K Factor		Thread	Approvals	Sprinkler Identification Number (SIN)
			US	Metric			
Non-Adjustable	½" (13mm)	½" (15mm)	5.6	80	½" NPT (R½)	UL, ULC, NYC, LPCB	R2512
Non-Adjustable	½" (13mm)	⅜" (11mm)	4.2	60	½" NPT (R½)	UL, ULC, NYC	R2513
Non-Adjustable	½" (13mm)	⅜" (10mm)	2.8	40	½" NPT (R½)	UL, ULC, NYC	R2511
Adjustable	1½" (38mm)	½" (15mm)	5.6	80	1" NPT Male or Female	UL, ULC, NYC	R2518



½" NPT (R½) Non Adjustable inlet
Figure 1



1" NPT Male-Adjustable inlet
Figure 2



1" NPT Female-Adjustable inlet
Figure 3

The equipment presented in this bulletin is to be installed in accordance with the latest pertinent Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.

Products manufactured and distributed by Reliable have been protecting life and property for over 80 years, and are installed and serviced by the most highly qualified and reputable sprinkler contractors located throughout the United States, Canada and foreign countries.

Manufactured by



The Reliable Automatic Sprinkler Co., Inc.
(800) 431-1588
(800) 848-6051
(914) 829-2042
www.reliablesprinkler.com

Sales Offices
Sales Fax
Corporate Offices
Internet Address



Revision lines indicate updated or new data.
E.G. Printed in U.S.A. 3/05 P/N 9999970018

The adjustable inlet versions are similar to the standard Model F4FR except that an additional 1" of adjustment is provided by means of a telescoping inlet section that threads in or out of a stationary coupling reducer (either 1" NPT male or 1" NPT female) as shown in Figures 2 or 3. These sprinklers must be installed, before the ceiling is in place by wrenching on only the coupling reducer hex flats. After the ceiling has been installed, each telescoping inlet section is to be adjusted with the G4 Wrench. Final adjustment of each cover is made by hand turning the cover in the clockwise direction until it is tight against the ceiling. **THE MODEL F4FR CONCEALER MUST BE INSTALLED ONLY WITH A 135°F RATED COVER.**

Maintenance

The Model F4FR should be inspected quarterly and the sprinkler system maintained in accordance with NFPA 25. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluids. Remove any sprinkler that has been painted (other than factory applied) or damaged in any way. A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Prior to installation, sprinklers should be maintained in the original cartons and packaging to minimize the potential for damage to sprinklers that would cause improper operation or non-operation.

Ordering Information Specify:

1. Sprinkler Model
2. Nominal Orifice
3. Cover Plate Finish
4. Inlet Type

Installation Wrench

Model G4 Sprinkler Wrench