

# Reliable®

## Model G4 Concealed Automatic Sprinkler

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

#### Features

1. Cover plate assembly attachment (Plain or Perforated) with ½" (13mm) adjustment. Does not require clips or springs.
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. Smooth aesthetic ceiling profile.
5. Available in white or other color painted or brass, chrome, or black plated finishes.
6. Ordinary and intermediate temperature ratings.
7. Multiple orifices for design flexibility.

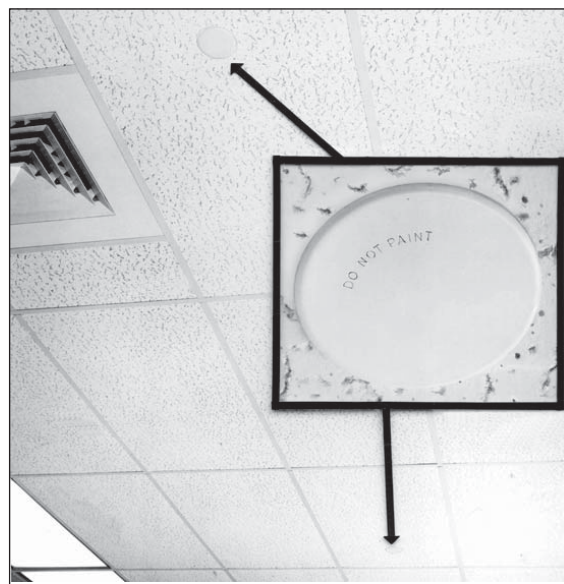
#### Approvals & Listings

1. Underwriters Laboratories Inc. (UL)
2. Underwriters Laboratories of Canada. (ULC)
3. N.Y.C. BS&A No. 587-75-SA.

**Note:** Approvals are for light and ordinary hazard, except for small orifice sprinklers which are limited to light hazard occupancies. The cup and skirt are fabricated from plated steel and are intended for interior non corrosive applications.

#### Application

The Reliable Model G4 Concealer™ is the most versatile concealed sprinkler available. It provides the best form of fire protection while offering an attractive appearance and ½" (13mm) of cover adjustment for ease of installation. The adjustable 1" NPT inlet versions have 1½" (38mm) of total adjustment and also eliminates the need for a reducing coupling. The small diameter cover plate assembly is easily 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 most efficient installation.

The Concealer™ can eliminate the need for precise cutting of drop nipples. The cover plate assembly can be adjusted without tools so it mates accurately with the ceiling. The fire protection system need not be shut down to adjust or remove the cover plate assembly.

#### Product Description

The Reliable Model G4 Concealer™ standard response uses the proven Model G fusible element 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. This threaded engagement provides ½" (13mm) of cover adjustment. The flat cover plate is attached to the skirt using an ordinary temperature classification solder. This results in a strong cover plate assembly with an ordinary temperature rating, and an intermediate temperature sprinkler which can be installed in 150°F (66°C) environments. When the ceiling temperature rises, the solder holding the cover plate to the skirt melts, the flat cover plate released thus exposing the sprinkler inside to the rising ambient temperature.

The subsequent fusing of the sprinkler element opens the waterway and causes the deflector to drop into position to distribute the discharging water. Any secure engagement of the threads between the cover plate and cup will assure that the drop-down deflector is properly located below the ceiling when a sprinkler operates.

## Installation

Do not install The Concealer™ in ceilings which have positive pressure in the space in the space above.

After a 2<sup>5</sup>/<sub>8</sub> inch diameter hole is cut in the ceiling, the sprinkler is to be installed with the Model G4 Wrench. The wrench has drive tangs which insert into cup slots. When installing a sprinkler the wrench is first positioned into the sprinkler/cup assembly until the wrench tangs engage drive slots in the top of the cup (there are two sets of mating 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.**

The adjustable inlet versions are similar to the standard Model G4 except that an addition 1" (25mm) of adjustment is provided by means of a telescoping inlet section that threads in or out of a stationary coupling reducer (either 1 male or 1 female) as shown in Fig. 2 or Fig. 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 with holes for the sprinkler, each telescoping inlet section is to be adjusted with

### Temperature Ratings

| Classification | Sprinkler   | Cover Plate | Max. Ambient Temp. |
|----------------|-------------|-------------|--------------------|
| Ordinary       | 135°F/57°C  | 135°F/57°C  | 100°F/38°C         |
| Ordinary       | 165°F/74°C  | 135°F/57°C  | 100°F/38°C         |
| Ordinary       | 165°F/74°C  | 165°F/74°C  | 150°F/66°C         |
| Intermediate   | 212°F/100°C | 165°F/74°C  | 150°F/66°C         |

### Installation Data

| Sprinkler Inlet | Total Adjustment | Nominal Orifice | Nominal K Factor |        | Thread                | Approvals | Sprinkler Identification Number (SIN) |
|-----------------|------------------|-----------------|------------------|--------|-----------------------|-----------|---------------------------------------|
|                 |                  |                 | US               | Metric |                       |           |                                       |
| Non-Adjustable  | 1/2" (13mm)      | 1/2" (15mm)     | 5.6              | 80     | 1/2" NPT (R1/2)       | 1,2,3     | R2115                                 |
| Non-Adjustable  | 1/2" (13mm)      | 7/16" (11mm)    | 4.2              | 60     | 1/2" NPT (R1/2)       | 1,2,3     | R2113                                 |
| Non-Adjustable  | 1/2" (13mm)      | 3/8" (10mm)     | 2.8              | 40     | 1/2" NPT (R1/2)       | 1,2,3     | R2111                                 |
| Adjustable      | 1 1/2" (38mm)    | 1/2" (15mm)     | 5.6              | 80     | 1" NPT Male or Female | 1,2,3     | R2118                                 |
| Adjustable      | 1 1/2" (38mm)    | 7/16" (11mm)    | 4.2              | 60     | 1" NPT Male or Female | 1,2,3     | R2113                                 |
| Adjustable      | 1 1/2" (38mm)    | 3/8" (10mm)     | 2.8              | 40     | 1" NPT Male or Female | 1,2,3     | R2112                                 |

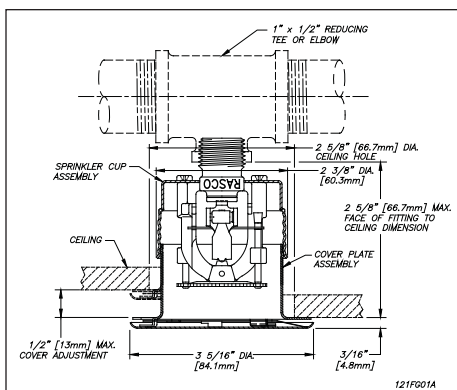


Fig. 1 - 1/2" NPT (R1/2) Non-Adjustable Inlet

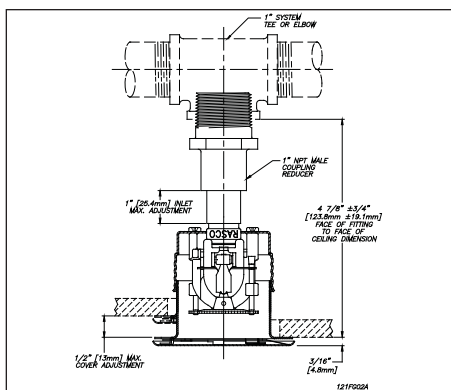


Fig. 2 - 1" NPT Male-Adjustable Inlet

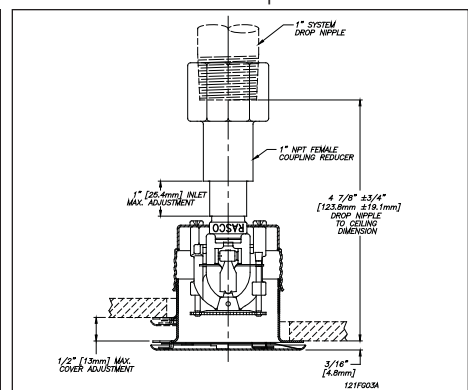


Fig. 3 - 1" NPT Female-Adjustable Inlet

the G4 Wrench. Install the cover plate assembly by hand turning it clockwise until it is tight against the ceiling.

## Maintenance

The Model G4 Concealer™ should be inspected and the sprinkler system maintained in accordance with NFPA 25. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluids. Replace any sprinkler or cover plate 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

1. Sprinkler Model
2. Temperature Rating
3. Nominal Orifice
4. Flat Cover Plate Finish
5. Inlet Type

**Note:** Unless otherwise specified, the 165°F (74°C) sprinkler will be provided with the 165°F (74°C) cover.

### Cover Plate Finishes

| Standard Finishes                           |
|---|
| White Paint                                 |
| Chrome                                      |
| Special Application Finishes                |
| Off White Paint                             |
| Black Paint                                 |
| Custom Color Paint – Specify <sup>(1)</sup> |
| Raw Brass (Lacquered)                       |
| Bright Brass                                |
| Finished Bronze                             |
| Black Plated                                |
| Satin Chrome                                |
| Stainless Steel Clad <sup>(2)</sup>         |

<sup>(1)</sup> Custom color paint is semi-gloss, unless specified otherwise.

<sup>(2)</sup> Stainless steel clad cover plates are Type 316 Stainless Steel on the finished side and C102 Copper Alloy on the back side. Cover plates are not listed or approved as corrosion resistant. Stainless steel clad cover plates are not available perforated.

### Installation Wrench

Model G4 Sprinkler Wrench

The equipment presented in this bulletin is to be installed in accordance with the latest published 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 almost 100 years.

Manufactured by

# Reliable®

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