

# Reliable®

## Model G6-80 Concealed Quick Response Extended Coverage Light Hazard Horizontal Sidewall Sprinkler (SIN RA4762)

### The Sidewall Concealer®

**Coverage to 18 ft. x 22 ft. (5.5m x 6.7m),  
16 ft. x 24 ft. (4.9m x 7.3m).  
175 psi (12,0 bar) Rated.**

#### Features:

1. Flat cover plate (Solid or Perforated) for optimized finish mounting purposes.
2. 8.0 K Factor.
3. Sprinkler is approved for 175 psi (12,0 bar) applications.
4. Quick response, extended coverage light hazard Horizontal Sidewall.
5. Push-on/pull-off, sturdy convenient flat cover plate.
6. Sprinkler, shipped complete with factory installed protective cap.
7. Sprinkler assembly and cover plate packaged separately.
8. 1/4" (6.3mm) adjustment.
9. Cover plate available in chrome, standard white paint, special bronze, black paint or flat white finishes.

#### Approval Organizations

1. Listed by Underwriters Laboratories Inc. and UL certified for Canada (cULus).

#### Patents:

**U.S. Patent No. 6,374,919, other Patents pending**

#### Product Description

The Reliable Model G6-80 Concealed Quick Response Extended Coverage Horizontal Sidewall Sprinkler is an attractive, concealed sprinkler assembly that utilizes a push-on/pull-off cover plate assembly. The sprinkler assembly is shipped with a protective cap.

The flat cover plate is attached to the skirt using 135°F (57°C) ordinary temperature classification solder. The sprinkler is easily installed into the sprinkler fitting using the Model G6 Sprinkler Wrench.

When the ambient temperature rises, the solder holding the cover plate melts, allowing the release of this part and thus exposing the sprinkler inside to the rising ambient temperature.

The Model G6-80 utilizes a Quick Response soldered link. This quick response enables the sprinkler to apply water to a fire sooner than standard sprinklers of the same temperature rating.

This sprinkler is listed for a maximum service pressure of 175 psi (12,0 bar).



#### Application and Installation

The Model G6-80 sprinkler is intended for installation in light hazard occupancies in accordance with NFPA 13. This sprinkler is especially well-suited for use in student dormitories, hotels, hospitals and care facilities.

Model G6-80 Concealed Horizontal Sidewall sprinklers utilize a sprinkler assembly with spring loaded deployable deflector feature. The assembly is completed by the installation of the attractive, 135°F (57°C) push-on/pull-off cover plate assembly, which provides 1/4" (6.3mm) of adjustment.

Apply a Teflon\* - based thread sealant to the sprinkler threads. After a 2 5/8" (66.7mm) diameter hole is cut in the wall, the sprinkler is easily installed and properly oriented with the Model G6 Wrench, as follows:

Do not remove factory installed plastic protective cap since it is sized to fit inside the G6 wrench. Note that the sprinkler can only mate when the sprinkler's deflector orientation tab (Fig. 1) is aligned with wrench's key-way. G6 wrench is provided with bubble level pad and TOP marking, features that assure proper orientation of the internally retained horizontal sidewall deflector. Final leveling can be done after leak proof joint is obtained with a minimum to maximum torque of 10 to 20 ft-lbs (13,4 to 26,8 N·m). Do not attempt to compensate for improper rough in dimensions of fitting by over tightening the sprinkler assembly, but readjust the sprinkler fitting instead. Leave the protective cap on to assure sprinkler protection while the wall is plastered, wallpapered or painted.

Concealed cover plate/cup assemblies are listed only for use with specific sprinklers. The use of any other concealed cover plate/cup assembly with the Model G6-80 Horizontal Sidewall Sprinkler or the use of this dedicated concealed cover plate assembly on any sprinkler with which it is not specifically listed will void all guarantees, warranties, listings and approvals.

\* DuPont Registered Trademark

**Technical Data:**

Orifice Size	"K" Factor		Thread Size	Maximum Ambient Temperature	Maximum Water Working Pressure	Sprinkler Identification Number (SIN)	Approvals
	US	Metric					
17/32" (20mm)	8.0	115	3/4" NPT (R3/4)	100°F (38°C)	175 PSI (12 bar)	RA4762	1

Coverage Area									
Flow Rate		Pressure		Max. Coverage Area Width x Length		Deflector to Ceiling Dimension		Temperature Rating	
gpm	L/min	psi	bar	ft. x ft.	m x m	inches	mm	Sprinkler	Cover
31	117.3	15.0	1,03	14 x 22	4.3 x 6.7	4 - 6	102 - 152	165°F (74°C)	135°F (57°C)
35	132.5	19.1	1,3	14 x 22	4.3 x 6.7	6 - 12	152 - 305		
35	132.5	19.1	1,3	14 x 24	4.3 x 7.3	4 - 6	102 - 152		
39	147.6	23.8	1,6	14 x 24	4.3 x 7.3	6 - 12	152 - 305		
26	98.4	10.6	0,7	16 x 16	4.9 x 4.9	4 - 12	102 - 305		
29	109.8	13.1	0,9	16 x 18	4.9 x 5.5	4 - 12	102 - 305		
32	121.1	16.0	1,1	16 x 20	4.9 x 6.1	4 - 12	102 - 305		
36	136.2	20.2	1,4	16 x 22	4.9 x 6.7	4 - 12	102 - 305		
39	147.6	23.8	1,6	16 x 24	4.9 x 7.3	4 - 12	102 - 305		
33	124.9	17.0	1,2	18 x 18	5.5 x 5.5	4 - 12	102 - 305		
36	136.2	20.2	1,4	18 x 20	5.5 x 6.1	4 - 12	102 - 305		
40	151.4	25.0	1,7	18 x 22	5.5 x 6.7	4 - 12	102 - 305		

**Approval Type**

Quick Response Extended Coverage - Light Hazard Horizontal Sidewall.

Minimum spacing between sprinklers - 8 feet (2.4m).

Install below smooth, flat, horizontal ceilings only AS DEFINED BY THE NFPA 13 STANDARD.

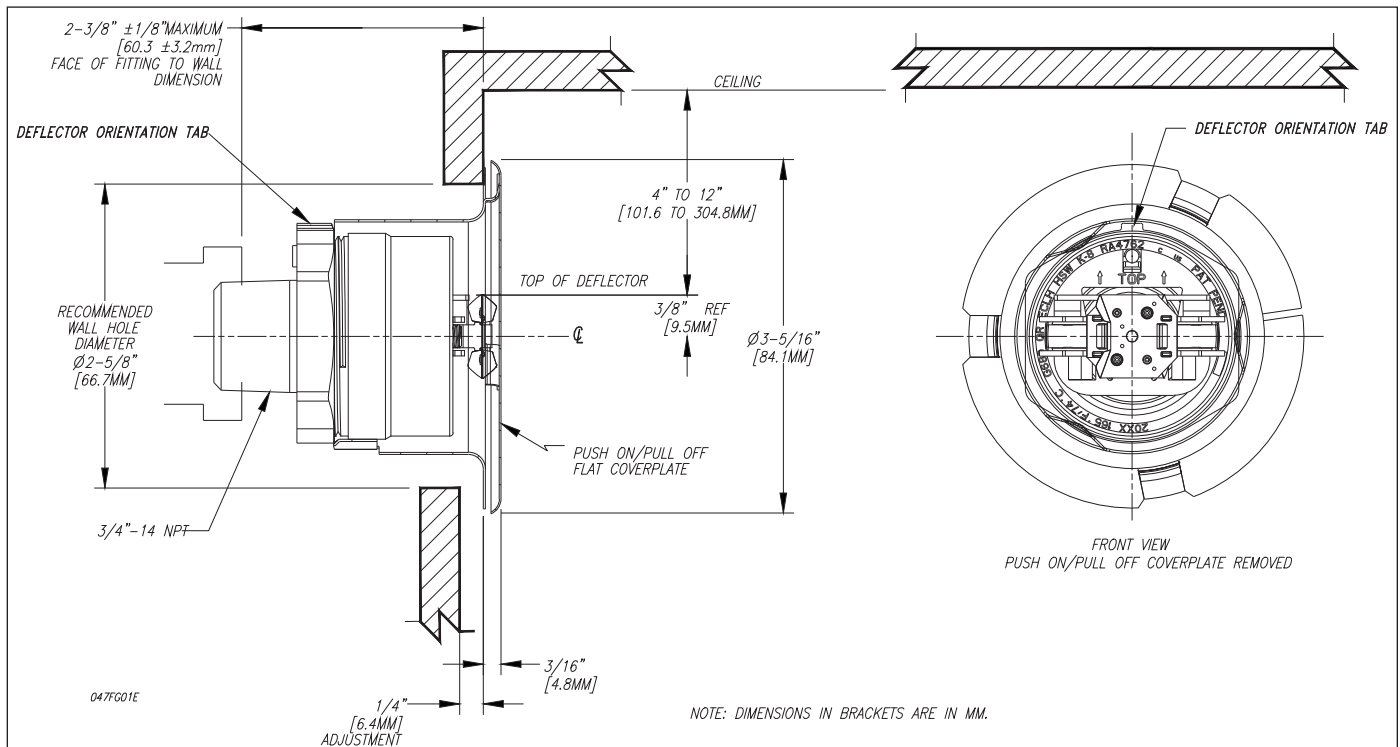


Figure 1

## Maintenance

Model G6-80 Concealed Sprinklers should be inspected and maintained in accordance with NFPA 25. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluids. Remove dust by using a soft brush or gentle vacuuming. Remove any sprinkler cover plate assembly, which 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 their original cartons and packaging until used to minimize the potential for damage to sprinklers that would cause improper operation or non-operation.

## Model G6-80 Concealed Quick Response Extended Coverage Light Hazard Horizontal Sidewall Sprinkler Specification

Sprinklers shall be a [quick response – cULus Listed] extended coverage concealed horizontal sprinkler with G6-80 deflector and adjustable cover plate for light hazard, interior, non-corrosive applications. Sprinklers to be of bronze frame construction with brass cover plate and copper alloy retainer flange assembly. Water seal assembly shall consist of a Teflon\* coated Belleville spring washer and machined brass cup containing no plastic parts. Method of attaching the cover plate to the sprinkler cup shall be a push-on and Pull-off design allowing a 1/4" cover plate adjustment. Sprinklers shall have a nominal K-factor of 8.0 (115.3), and 3/4" NPT thread. Sprinkler temperature rating shall be 165°F (74°C) with a cover plate temperature rating of 135°F (57°C). Sprinklers shall be capable of a maximum coverage area of 16 ft. x 24 ft. (4.9 m x 7.4 m) or 18 ft. x 22 ft (5.5 m x 6.7 m), with a minimum lateral spacing of 8 ft. (2.4 m). Rated working pressure shall be 175 psi (12,0 bar). A plastic protective cap shall be provided and factory installed inside the sprinkler cup to protect the sprinkler from damage, which could occur during construction before the cover plate is installed. Standard cover plate finish: [Chrome] [White] [Custom Color– specify]. Extended Coverage Concealed horizontal sidewall sprinklers shall be Reliable Model G6-80. SIN RA4762 (Bulletin 047).

## UL Listing Category

Sprinklers, Automatic and Open  
Quick Response Extended coverage Sprinklers

## Ordering Information

Specify:

1. Model G6-80 Sidewall Concealer®
2. Cover Plate Type: Solid or Perforated
3. Cover Plate Finish

## Installation Wrench

Model G6 Sprinkler Wrench

## Installation Aid

A protective plastic cap is included for use during installation.

## Cover Plate Finishes<sup>(1)</sup>

Standard Finishes
Chrome
White Paint
Special Application Finishes
Bronze
Black Paint
Flat White Paint

<sup>(1)</sup> Other colors and finishes are available. Consult factory for details.

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

\*DuPont Registered Trademark

# Reliable...For Complete Protection

Reliable offers a wide selection of sprinkler components. Following are some of the many precision-made Reliable products that guard life and property from fire around the clock.

- Automatic sprinklers
- Flush automatic sprinklers
- Recessed automatic sprinklers
- Concealed automatic sprinklers
- Adjustable automatic sprinklers
- Dry automatic sprinklers
- Intermediate level sprinklers
- Open sprinklers
- Spray nozzles
- Alarm valves
- Retarding chambers
- Dry pipe valves
- Accelerators for dry pipe valves
- Mechanical sprinkler alarms
- Electrical sprinkler alarm switches
- Water flow detectors
- Deluge valves
- Detector check valves
- Check valves
- Electrical system
- Sprinkler emergency cabinets
- Sprinkler wrenches
- Sprinkler escutcheons and guards
- Inspectors test connections
- Sight drains
- Ball drips and drum drips
- Control valve seals
- Air maintenance devices
- Air compressors
- Pressure gauges
- Identification signs
- Fire department connection

---

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 over 90 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

**Reliable**<sup>®</sup>

**The Reliable Automatic Sprinkler Co., Inc.**

(800) 431-1588

(800) 848-6051

(914) 829-2042

[www.reliablesprinkler.com](http://www.reliablesprinkler.com)

Sales Offices

Sales Fax

Corporate Offices

Internet Address



Recycled  
Paper

Revision lines indicate updated or new data.

EG. Printed in U.S.A. 04/14 P/N 9999970456