

# Reliable®

## Model G6-80 Concealed Quick Response Extended Coverage Sidewall Sprinkler

cULus Listed

### Features

- Flat cover plate.
- K-factor of 8.0 (115 metric).
- Listed as quick-response, extended coverage for Light Hazard occupancies.
- ¼" (6.3mm) cover plate adjustment.
- Model G6 Cover plate available in a wide variety of colors and finishes.

### Product Description

The Reliable Model G6-80 is a concealed quick response extended coverage sidewall sprinkler that utilizes a push-on/pull-off flat cover plate assembly. The sprinkler can be used in any light hazard occupancy where sidewall sprinklers are permitted, and is especially well-suited for use in dormitories, hotels, health care facilities, and offices where aesthetically pleasing sidewall sprinkler protection is needed.

The flat cover plate is attached to the skirt using 135°F (57°C) ordinary temperature classification solder. When the temperature rises, the solder holding the cover plate melts, allowing the release of the plate and exposing the concealed fire sprinkler to the rising temperature.

The Model G5-80 quick-response sprinkler utilizes a fast response solder link that enables the sprinkler to activate five to six times quicker than a standard response sprinkler of the same temperature rating. The sprinkler is listed for a maximum service pressure of 175 psi (12,0 bar), and is shipped with a factory installed protective cap.

### 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 non-corrosive environments in student dormitories, hotels, hospitals and care facilities.

Care must be exercised that temperature rating and sprinkler spacing are in accordance with this bulletin and the latest published standards of the National Fire Protection Association, and approved by the Authority Having Jurisdiction.



Model G6-80 Concealed Sidewall Sprinkler

Model G6-80 Concealed Horizontal Sidewall sprinklers utilize a spring loaded deployable deflector. It is not necessary to remove the factory installed plastic protective cap as it is sized to fit inside the Model G6 wrench. The wrench must be properly oriented on the sprinkler using the key way in the wrench for proper fit. The G6 wrench is provided with a flat surface for use with a bubble level and TOP marking to allow proper orientation of the horizontal sidewall deflector. Final leveling can be performed after a leak proof joint is obtained with a torque between 8 and 18 ft-lbs (11 to 24 N.m) using a proper thread sealant. Leave the protective cap in place to protect the sprinkler while the wall is finished.

The protective cap must be removed and the Model G6 listed cover plate installed prior to the sprinkler system being placed in service. Concealed cover plate/cup assemblies are listed only for use with specific sprinklers. The use of any other cover plate with the Model G6-80 Concealed Horizontal Sidewall Sprinkler, the use of the G6 cover plate assembly on any sprinkler with which is it not specifically listed, or alteration of the cover plate will void all guarantees, warranties, listings, and approvals.

**Note:** Do NOT install the Model G6-80 sprinkler in locations where there is positive pressure in the cavity behind the sprinkler.

### Model G6-80 Sprinkler Specifications

Table A

Sprinkler Model	Orientation	Listing or Approval	Max. Working Pressure psi (bar)	Sprinkler Identification Number (SIN)
G6-80	Horizontal Sidewall, Concealed	cULus	175 (12.0)	RA4762

**Technical Specifications**

**Style:** Concealed Horizontal Sidewall  
**Threads:** 3/4" NPT (R3/4)  
**Nominal K-Factor:** 8.0 (115)  
**Max. Working Pressure:** 175 psi (12 bar)

**Sensitivity**

Quick Response

**Cover Plate**

Model G6

**Material Specifications**

**Operating Element:** Nickel Alloy  
**Frame Arms:** Brass  
**Sprinkler Body:** Bronze  
**Cap:** Bronze  
**Sealing Washer:** Nickel Alloy  
**Load Screw:** Stainless Steel  
**Push Spring:** Stainless Steel  
**Deflector:** Bronze  
**Yoke:** Bronze  
**Lever Arms:** Bronze

**Cover Plate Finishes**

(See Table C)

**Temperature Ratings**

165°F (74°C) (Sprinkler)  
 135°F (57°C) (Cover Plate)

**Sprinkler Wrench**

G6 Wrench

**Listings and Approvals**

cULus Listed

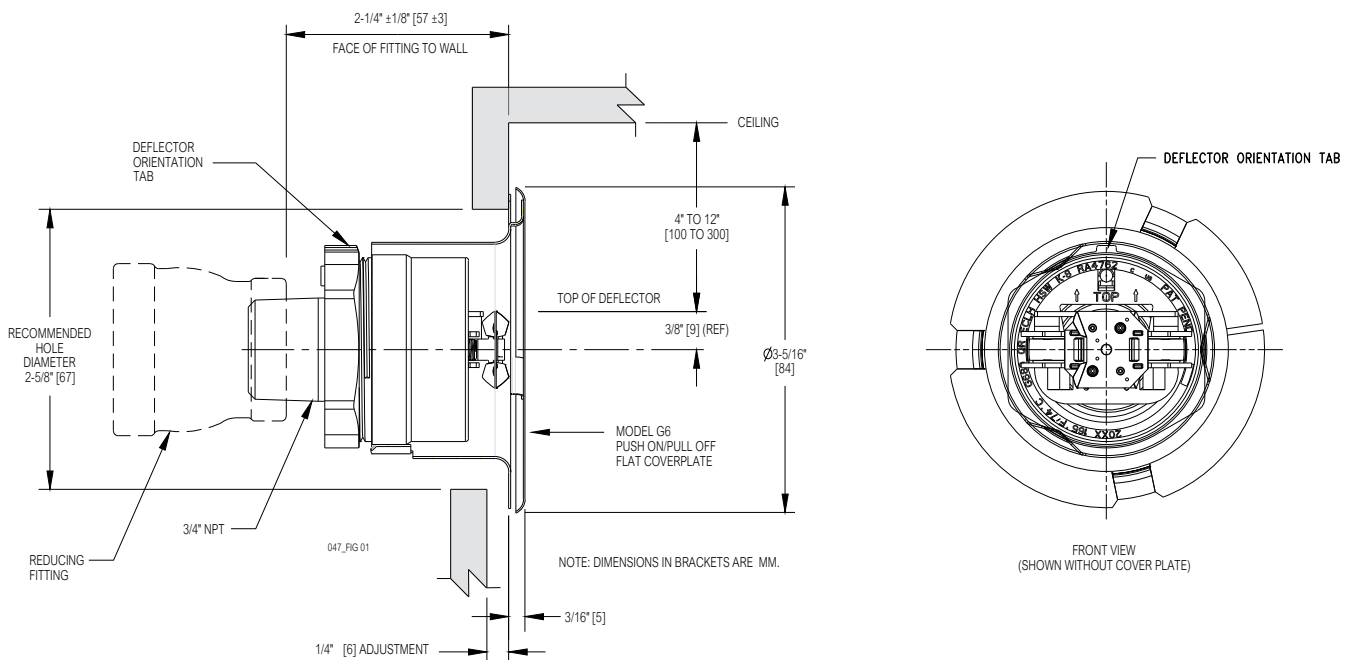


**Sprinkler Finishes**

Bronze (only)

**Model G6-80 Concealed Sidewall Sprinkler Components and Dimensions**

**Figure 1**



NOTE: MODEL G6-80 CONCEALED SPRINKLERS MAY NOT BE USED WHERE THE PRESSURE IN THE SPACE BEHIND THE SPRINKLER IS POSITIVE WITH RESPECT TO THE PRESSURE IN THE PROTECTED AREA. ENSURE THAT THE OPENINGS AROUND THE MODEL G6-80 BODY ARE UNOBSTRUCTED FOLLOWING INSTALLATION.

## Coverage Area

**Table B**

Max. Installed Coverage Area Width x Length		Deflector to Ceiling Dimension		Min. Required Flow Rate		Min. Required Pressure	
ft. x ft.	m x m	inches	mm	gpm	L/min	psi	bar
14 x 22	4.3 x 6.7	4 - 6	100 - 150	31	117.3	15.0	1,03
14 x 22	4.3 x 6.7	6 - 12	150 - 300	35	132.5	19.1	1,3
14 x 24	4.3 x 7.3	4 - 6	100 - 150	35	132.5	19.1	1,3
14 x 24	4.3 x 7.3	6 - 12	150 - 300	39	147.6	23.8	1,6
16 x 16	4.9 x 4.9	4 - 12	100 - 300	26	98.4	10.6	0,7
16 x 18	4.9 x 5.5	4 - 12	100 - 300	29	109.8	13.1	0,9
16 x 20	4.9 x 6.1	4 - 12	100 - 300	32	121.1	16.0	1,1
16 x 22	4.9 x 6.7	4 - 12	100 - 300	36	136.2	20.2	1,4
16 x 24	4.9 x 7.3	4 - 12	100 - 300	39	147.6	23.8	1,6
18 x 18	5.5 x 5.5	4 - 12	100 - 300	33	124.9	17.0	1,2
18 x 20	5.5 x 6.1	4 - 12	100 - 300	36	136.2	20.2	1,4
18 x 22	5.5 x 6.7	4 - 12	100 - 300	40	151.4	25.0	1,7

**Note:** Minimum spacing between sprinklers is 8 ft (2.4 m)

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

**Table C**

Standard Finishes	Special Application Finishes
White Paint Chrome	Custom Color Paint – Specify <sup>(2)</sup> Bright Brass Finished Bronze Satin Chrome Custom Printed

**Notes:**

1. Paint or any other coating applied over the factory finish will void all approvals and warranties.
2. Custom color paint is semi-gloss unless specified otherwise.

## 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. Replace any sprinkler or cover plate assembly which has been painted (other than factory applied) or damaged in any way. A stock of spare sprinkler and cover plate assemblies 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 Wrench

**Figure 2**



## Guarantee

For the Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit [www.reliablesprinkler.com](http://www.reliablesprinkler.com).

## Ordering Information

**Specify:**

- Model G6-80 Concealed Quick Response Sidewall Sprinkler
- Cover Plate Finish (See Table C)