

# Reliable®

## Model SWC Concealed Quick Response Extended Coverage Horizontal Sidewall Sprinkler

**The Sidewall Concealer®**  
**Coverage to 14 ft. x 26 ft.**  
**(4.3m x 7.9m). 300 psi (20,7 bar) Rated.**

### Features:

1. Tamper resistant cover plate can prevent the sprinkler from being used for unintended purposes. No exposed thermal element.
2. 8.0 K Factor.
3. Sprinkler is approved for both 175 psi (12,0 bar) and 300 psi (20,7 bar) applications.
4. Quick response, extended coverage performance.
5. Push-on/thread-off, sturdy convenient cover plate.
6. Factory assembled sprinkler and cup, shipped complete with protective cap.
7. Sprinkler assembly and cover plate separately packaged.
8. 1/2" (13mm) adjustment.
9. Utilizes the Model F1FR-300 QREC-9 Horizontal Sidewall Sprinkler.
10. Cover plate available in 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).
2. NYC MEA 258-93-E

**Patents: U.S. Patent No. 6,374,919**

### Product Description

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

The Model CCP/HSW cover plate is attached to the skirt using 135°F (57°C) ordinary temperature classification solder. The sprinkler and cup are easily installed into the sprinkler fitting using the Model GFR1 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 SWC utilizes a 3.0mm frangible glass bulb. This quick response enables the sprinkler to apply water to a fire sooner than standard sprinklers of the same temperature rating.



This sprinkler can handle a maximum service pressure of 300 psi (20,7 bar).

### Application and Installation

The Model SWC 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, and can be used where the pressure entering the sprinkler system is in excess of 175 psi (12 bar).

Model SWC Concealed Horizontal Sidewall sprinklers utilize a Model F1FR-300 QREC-9 Horizontal Sidewall Sprinkler with a threaded cup which is factory attached to the sprinkler. The assembly is completed by the installation of the attractive, 135°F (57°C) rated Model CCP/HSW push on / thread off cover plate assembly.

Apply a Teflon\* - based thread sealant to the sprinkler threads. After a 2<sup>5</sup>/<sub>8</sub>" (67mm) diameter hole is cut in the wall, the sprinkler is easily installed with the Model GFR1 Wrench. When installing the sprinkler, the protective cap is removed and the wrench is positioned into the sprinkler/cup assembly until the two wrench faces engage the wrenching flats on the sprinkler. 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.** The cover plate assembly is then pushed onto the cup. Cover plate assemblies provide 1/2" (13mm) of cover adjustment. Final adjustment is made by turning the cover plate clockwise until the skirt flange makes full contact with the wall surface. Cover plate removal requires turning in the counter clockwise direction.

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 F1FR-300 QREC-9 Horizontal Sidewall Sprinkler or the use of the Model CCP/HSW 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

**The Reliable Automatic Sprinkler Co., Inc., 103 Fairview Park Drive, Elmsford, New York 10523**

**Technical Data:**

Orifice Size	"K" Factor		Thread Size	Maximum Ambient Temperature	Sprinkler Identification Number (SIN)	Approvals
	US	Metric				
<sup>17</sup> / <sub>32</sub> " (20mm)	8.0	115.3	<sup>3</sup> / <sub>4</sub> " ( <sup>3</sup> / <sub>4</sub> )	100°F (38°C)	R5962	1, 2

Coverage Area									
Flow Rate		Pressure		Max. Coverage Area Width x Length		Temperature Rating		Deflector to Ceiling Dimension	
gpm	L/min	psi	bar	ft. x ft.	m x m	Sprinkler	Cover	inches	mm
29	109.8	13.1	0.9	16 x 14	4.9 x 4.3	135°F (57°C)/ 155°F (68°C)	135°F (57°C)	4 - 12	102 - 305
29	109.8	13.1	0.9	16 x 16	4.9 x 4.9	135°F (57°C)/ 155°F (68°C)	135°F (57°C)	4 - 12	102 - 305
29	109.8	13.1	0.9	16 x 18	4.9 x 5.5	135°F (57°C)/ 155°F (68°C)	135°F (57°C)	4 - 12	102 - 305
37	140.1	21.4	1.5	16 x 20	4.9 x 6.0	135°F (57°C)	135°F (57°C)	4 - 12	102 - 305
37	140.1	21.4	1.5	16 x 22	4.9 x 6.7	135°F (57°C)	135°F (57°C)	4 - 12	102 - 305
39	147.6	23.8	1.6	14 x 26	4.3 x 7.9	135°F (57°C)	135°F (57°C)	4 - 6	102 - 153
46	174.1	33.1	2.25	14 x 26	4.3 x 7.9	135°F (57°C)	135°F (57°C)	6 - 12	153 - 305
33	124.9	17.0	1.2	18 x 18	5.5 x 5.5	135°F (57°C)	135°F (57°C)	4 - 12	102 - 305
40	151.4	25.0	1.7	18 x 22	5.5 x 6.7	155°F (68°C)	135°F (57°C)	4 - 12	102 - 305
46	174.1	33.1	2.25	14 x 26	4.3 x 7.9	155°F (68°C)	135°F (57°C)	6 - 12	153 - 305
33	124.9	17.0	1.2	18 x 18	5.5 x 5.5	155°F (68°C)	135°F (57°C)	4 - 12	102 - 305

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

**Approval Type**

Quick Response Extended Coverage - Light Hazard

## Maintenance

Model SWC Concealed Sprinklers should be inspected quarterly and the sprinkler 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 SWC Concealed Quick Response Extended Coverage Horizontal Sidewall Sprinkler Specification

Sprinklers shall be a [quick response – cULus Listed] [quick response - New York City MEA Approved (258-93-E)] extended coverage concealed horizontal sprinkler with EC-9 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 with 3 mm glass bulb containing no plastic parts. Method of attaching the cover plate to the sprinkler cup shall be a push-on and thread-off design allowing a 1/2" 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 135°F (57°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 22 ft. (4.9 m x 6.7 m), with a minimum lateral spacing of 8 ft. (2.4 m). Rated working pressure shall be 300 psi (20,7 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: [White] [Custom Color– specify]. Concealed horizontal sidewall sprinklers shall be Reliable Model SWC, SIN R5962 (Bulletin 163).

## UL Listing Category

Sprinklers, Automatic and Open Quick Response Extended coverage Sprinklers

## Ordering Information

Specify:

1. Model SWC Sidewall Concealer®
2. Cover Plate Finish.

## Installation Wrench

Model GFR1 Sprinkler Wrench

## Installation Aid

A protective plastic cap is included for use during installation.

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

Standard Finishes
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.

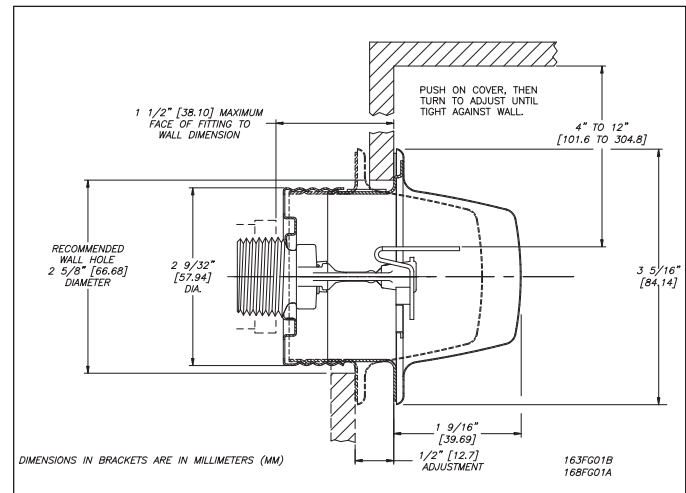


Figure 1

\*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

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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 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.

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Manufactured by

**Reliable**<sup>®</sup>

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

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