Residential Low Flow Adjustable Concealed Pendent

#### **V3806 QUICK RESPONSE**

The V3806 concealed, designer style sprinkler allows up to 1/4"/8 mm adjustment to accommodate concealment needs. The separate two-piece mounting cup/cover plate allows easy installation and testing prior to ceiling installation. It also permits removal of suspended ceiling panels without system shutdown. Model V3806 is UL Listed for use under smooth flat horizontal ceilings. The design incorporates state-of-the-art, heat responsive, frangible glass bulb design (quick response) for prompt, precise operation. The V3806 sprinkler is now available with the aesthetically pleasing flat cover plate, which also is available in various finishes to meet many design requirements.





(V3806)

SPRINKLER	OPERATION:

The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient temperature rises causing the liquid in the bulb to expand. When the ambient temperature reaches the rated temperature of the sprinkler, the bulb shatters.

As a result, the waterway is cleared of all sealing parts and water is discharged towards the deflector. The deflector is designed to distribute the water in a pattern that is most effective in controlling the fire.

COVERAGE:					
	$\sim$	<b>\/</b> F	. D V	$\sim$	_
		v F	KΔ		٠.

Residential spray coverage up to 400sq.ft/37.2sq.m room sizes per NFPA.

#### SOCKET WRENCH

The V3806 sprinkler incorporates a new cup design which allows the sprinkler to be installed using the new V38-4 socket wrench. This wrench engages the slots in the cup instead of the sprinkler frame wrench boss. This virtually eliminates wrench slippage during installation. Because the cup is attached to the hex boss of the sprinkler frame, the cup cannot be rotated loose during installation. Only the V38-4 socket wrench can be used to install the V3806 sprinkler.

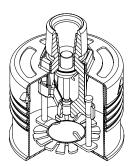
JOB/OWNER	CONTRACTOR	ENGINEER
System No	Submitted By	Spec Sect Para
Location	Date	Approved
		Date



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#### **V3806 QUICK RESPONSE**

#### **TECHNICAL SPECIFICATIONS:**



Models: V3806

Style: Residential Adjustable Concealed Nominal Orifice Size: 1/2 1/13 mm

**K-Factor:** 5.6 lmp./8.1 S.I.^

Nominal Thread Size: 1/2" NPT/15 mm Max. Working Pressure: 175 psi/1200 kPa

Factory Hydrostatic Test: 100% @ 500 psi/3450 kPa

**Min. Operating Pressure:** 8.2psi/57 kPa **Temperature Rating:** See chart on page 3

**Material Specifications** 

Deflector: Bronze per UNS C22000

Cover Plate: Fusible solder Bulb: Glass with glycerin solution. Bulb Nominal Diameter:

• Quick Response: 3.0 mm

Load Screw: Bronze per UNS C65100 Pip Cap: Bronze per UNS C65100 Cover Plate Spring: Stainless steel

per UNS S30100 **Seal:** Teflon\* tape

**Frame:** Die cast brass 65-30

Pins: Stainless steel per UNS S30400

Cup: Cold rolled steel, zinc

chrome plated

Cover/Escutcheon: Plated Steel

Lodgement Spring: Stainless steel per UNS

S30200

Protective Cap: Polyethylene

Accessories

**Installation Socket Wrench:** 

Concealed: V38-4

Sprinkler Finishes:

Plain brass (only)

**Cover Finishes:** 

· Chrome painted

White painted

Flat black

· Custom painted

 $\ ^{\wedge}$  For K-Factor when pressure is measured in

Bar, multiply S.I. units by 10.0.

\* Teflon is a registered trademark of Dupont Co.

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### **V3806 QUICK RESPONSE**

#### APPROVALS/LISTINGS

Model	Orifice Size	Nominal K-Factor	Response	Deflector Type		Approvals ‡	
	Inches mm	Imperial S.I.^	Standard or Quick		cULus	NYC/MEA†	CSFM §
V3806	½ 13	5.6 8.1	Quick	Concealed Pendent	155 68	155 68	155 68

<sup>^</sup> For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

#### **RATINGS**

All glass bulbs are rated for temperatures from  $-67^{\circ}\text{F}/-55^{\circ}\text{C}$  to those shown in table below.

		SPRINKLE	R - V3806	COVER - V38			
		Temperati	ıre – °F/°C			Temperati	ıre – °F/°C
Sprinkler Temperature Classification	Victaulic Part Identification	Nominal Temperature Rating	Maximum Ambient Temperature Allowed	Glass Bulb Color	Victaulic Part Identification	Nominal Temperature Rating	Maximum Ambient Temperature Allowed
Ordinary	С	155 68	100 38	Red	А	135 57	100 38

#### ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number	
Style	
Temperature Rating	
K-Factor	
Thread Size	
Quantity	
Cover Finish	
Wrench Model Number	

<sup>†</sup> MEA #62-99-E.

<sup>§</sup> CSFM #7690-0531:112

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#### **V3806 QUICK RESPONSE**

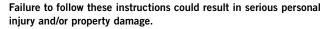


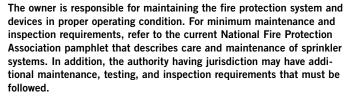


### **WARNING**



- Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.
- . Always wear safety glasses and foot protection.
- Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.
- Installation rules, especially those governing obstruction, must be strictly followed.
- Painting, plating, or any re-coating of sprinklers (other than that supplied by Victaulic) is not allowed.





If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic World Headquarters: P.O. Box 31, Easton, Pennsylvania 18044-0031 USA, Telephone: 001-610-559-3300.





#### **AVAILABLE WRENCHES**

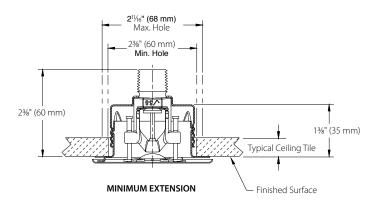
	Socket Wrench
V3806	V38-4 *

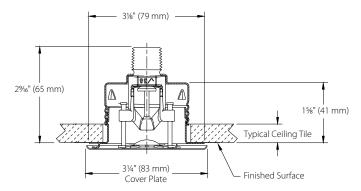
<sup>\*</sup> The V38-3 recessed wrench CANNOT be used to install the V3806 sprinklers. Only the V38-4 socket wrench will engage properly

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#### **V3806 QUICK RESPONSE**

#### **DIMENSIONS**





MAXIMUM EXTENSION

### **ROOM SIZE**

Victaulic V3806, 5.6 K-Factor Concealed Pendent Sprinkler For Ceiling types refer to NFPA 13, 13R or 13D 2013 Editions

Max. Coverage Area <sup>(a)</sup>	Ordinary Temp Intermediate Ten Rating Rating 155°F/68°C 175°F/79°C				Deflector to Ceiling	Installation Type	Minimum Spacing
Ft. x Ft. m x m	Flow <sup>(b)</sup> GPM L/min	Pressure <sup>(b)</sup> PSI bar	Flow <sup>(b)</sup> GPM L/min	Pressure <sup>(b)</sup> PSI bar			Ft. m
12 X 12 3.7 X 3.7	16 60.6	8.2 0.57	N/A	N/A			
14 X 14 4.3 X 4.3	16 60.6	8.2 0.57	N/A	N/A	N/A	Concealed Sprinkler using Model V38 Coverplate Assembly	8.0 2.4
16 X 16 4.9 X 4.9	16 60.6	8.2 0.57	N/A	N/A			
18 X 18 5.5 X 5.5	21 79.5	14.1 0.97	N/A	N/A			
20 X 20 6.1 X 6.1	25 94.6	20.0 1.38	N/A	N/A			

<sup>(</sup>a) For coverage area dimensions less than or between those indicated, use the minimum required flow for the next highest coverage area for which hydraulic design criteria are stated.

<sup>(</sup>b) For NFPA 13 residential applications, the greater of  $0.1 \text{gpm/ft}^2$  over the design area of the flow in accordance with the criteria in the table must be used.

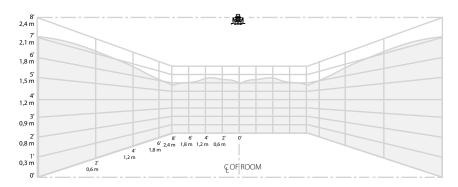
Residential Low Flow Adjustable Concealed Pendent

#### **V3806 QUICK RESPONSE**

#### **NOMINAL WETTING PATTERNS**

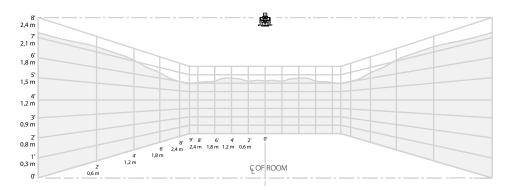
#### Model V3806 K5.6 Residential Concealed

16 GPM/60.5 LPM - 16' x 16'/4.9 x 4.9 m coverage area



#### Model V3806 K5.6 Residential Concealed

21 GPM/79.4 LPM - 18' x 18'/5.5 x 5.5m

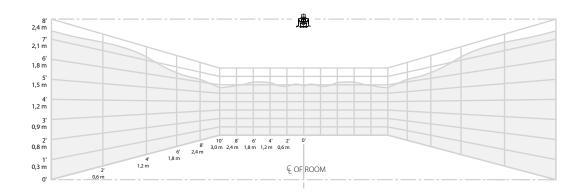


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#### **V3806 QUICK RESPONSE**

#### Model V3806 K5.6 Residential Concealed

25 GPM/94.5 LPM - 20' x 20'/6.1 x 6.1m coverage area



#### NOTES:

- 1 Data shown is approximate and can vary due to differences in installation.
- 2 These graphs illustrate approximate wall-wetting patterns for these specific Victaulic FireLock Automatic Sprinklers. They are provided as information for guidance and should not be used as minimum sprinkler spacing rules for installation. Sprinkler location shall be in accordance with the obstruction rules for residential sprinklers in NFPA 13 (2002 or later revision). Failure to follow these guidelines could adversely affect the performance of the sprinkler and will void all Listings, Approvals and Warranties.
- 3 All patterns are symmetrical to waterway.

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### **V3806 QUICK RESPONSE**

WARRANTY	Refer to the Warranty section of the current Price List or contact Victaulic for details.
NOTE	This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

