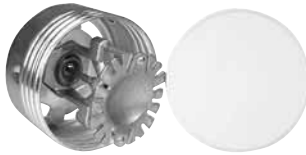


V38, K5.6

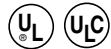
Model V3806

Residential Low Flow Adjustable
Concealed Pendent
and Specific Application
(Flat & Sloped Ceilings)
Quick Response

PRODUCT DESCRIPTION



V3806



See Victaulic publication 10.01 for details.

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 and sloped ceilings up to and including 4/12 (18.4°) pitch. The design incorporates state-of-the-art, heat responsive, frangible glass bulb design (quick response) for prompt, precise operation.

This sprinkler is available in various finishes to meet many design requirements. These sprinklers meet the residential sprinkler require-

ments of the 2002 or later edition of NFPA 13, 13R and 13D.

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

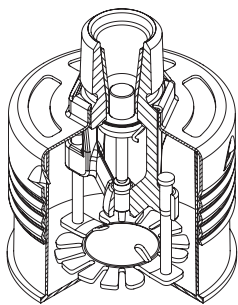
Residential spray coverage up to 20 feet X 20 feet (6,1 m X 6,1 m) room sizes per NFPA.

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.**

This sprinkler meets the requirements of UL 1626 that became effective September 26, 2004.

TECHNICAL SPECIFICATIONS



(Exaggerated for clarity)

- Model:** V3806
- Style:** Residential Adjustable Concealed
- Nominal Orifice Size:** 1/2" (13 mm)
- K-Factor:** 5,6 Imp. (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:** 8.2 psi (57 kPa)
- Temperature Rating:** See chart on page 2.

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:** Brass per UNS C26000
- 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 plated
 - White painted
 - Flat black
 - Custom painted

^ 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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APPROVALS/LISTINGS

Model	Orifice Size Inches/mm	Nominal K-Factor Imperial S.I. [^]	Response	Deflector Type	Approvals ‡			
					UL	ULC	NYC/MEA†	CSFM §
V3806	1/2 13	5.6 8,1	Quick	Concealed Pendent	155 68	155 68	155 68	155 68

‡ Listings and approval as of printing.

[^] For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

† MEA #62-99-E.

§ CSFM #7690-0531:112

RATINGS

All glass bulbs are rated for temperatures from -67°F (-55°C) up to those shown in table below.

Sprinkler Temperature Classification	SPRINKLER – V3806				COVER – V38		
	Victaulic Part Identification	Sprinkler Temperature – °F/°C		Glass Bulb Color	Victaulic Part Identification	Cover Temperature – °F/°C	
		Nominal Temperature Rating	Maximum Ambient Temp. Allowed			Nominal Temperature Rating	Maximum Ambient Temp. Allowed
Ordinary	C	155 68	100 38	Red	A	135 57	100 38

⚠ WARNING

- Proper temperature rated cover must be used with the correct sprinkler rating per the Temperature Chart Ratings.
- The plastic shipping cap must be removed for the sprinkler to operate properly.
- If shipping cap is replaced over an installed sprinkler for purposes of painting or plastering, then the fire protection system shall be considered out of service, the Authority Having Jurisdiction notified, and a firewatch is suggested.

Failure to do so may result in failure of sprinkler to operate causing serious personal injury or property damage.

ORDERING INFORMATION

Please specify the following when ordering:

- | | | |
|---|--------------------------------------|--|
| <input type="checkbox"/> Sprinkler Model Number | <input type="checkbox"/> K-Factor | <input type="checkbox"/> Cover Finish |
| <input type="checkbox"/> Style | <input type="checkbox"/> Thread Size | <input type="checkbox"/> Wrench Model Number |
| <input type="checkbox"/> Temperature Rating | <input type="checkbox"/> Quantity | |

⚠ 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.
- Failure to follow these instructions could result in serious personal injury and/or property damage.

The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to the current National Fire Protection Association pamphlet that describes care and maintenance of sprinkler systems. In addition, the authority having jurisdiction may have additional maintenance, testing, and inspection requirements that must be followed.

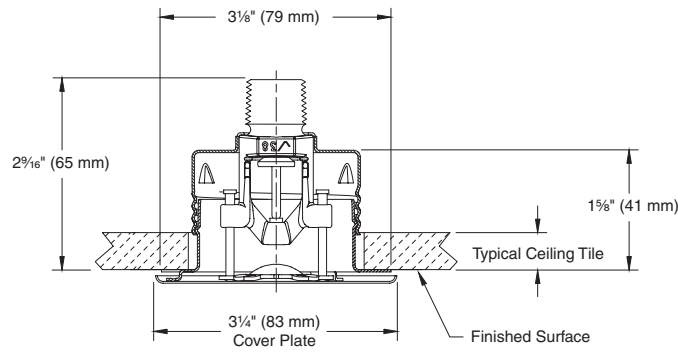
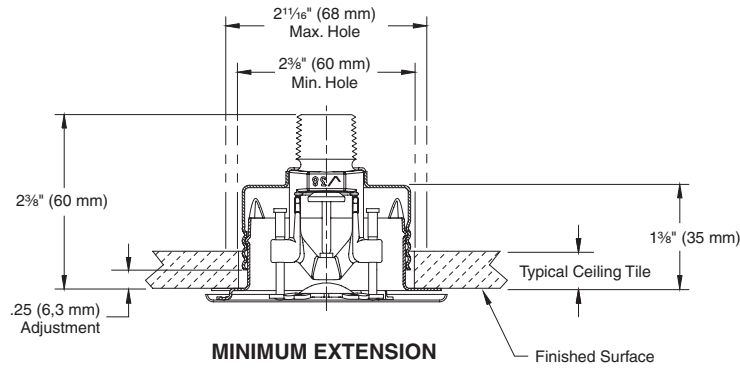
If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic World Headquarters, P.O. Box 31, Easton, Pennsylvania 18044-0031, 610-559-3300.

AVAILABLE WRENCHES

	Socket Wrench
V3806	V38-4 *

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

DIMENSIONS



ROOM SIZE

Installed Under Smooth Flat Horizontal Ceilings up to 2/12 (9.5°) Pitch

Model	Room Size Feet/meters	Min. Installation Spacing Feet/meters	Nominal K-Factor Imperial S.I. [^]	Min. Flow/Sprinkler for Horizontal Ceilings Max. 2/12 (9.5°) Pitch for NFPA 13R or 13D *
				GPM/LPM @ PSI/kPa 155°F/68°C
V3806	16 × 16	8.0	5.6	16 GPM @ 8.2 PSI
	4,9 × 4,9	2.4	8,1	60,6 LPM @ 57 kPa
V3806	18 × 18	8.0	5.6	21 GPM @ 14.1 PSI
	5,5 × 5,5	2.4	8,1	79,4 LPM @ 97 kPa
V3806	20 × 20	8.0	5.6	25 GPM @ 20 PSI
	6,1 × 6,1	2.4	8,1	94,5 LPM @ 138 kPa

Installed Under Sloped Ceilings up to 4/12 (18.4°) Pitch

Model	Room Size Feet/meters	Min. Installation Spacing Feet/meters	Nominal K-Factor Imperial S.I. [^]	Min. Flow/Sprinkler for Sloped Ceilings Max. 4/12 (18.4°) Pitch for NFPA 13R or 13D *
				GPM/LPM @ PSI/kPa
V3806	12 × 12	8.0	5.6	18 GPM @ 10.3 PSI
	3,7 × 3,7	2.4	8,1	68,1 LPM @ 71 kPa
V3806	14 × 14	8.0	5.6	18 GPM @ 10.3 PSI
	4,3 × 4,3	2.4	8,1	68,1 LPM @ 71 kPa
V3806	16 × 16	8.0	5.6	18 GPM @ 10.3 PSI
	4,9 × 4,9	2.4	8,1	68,1 LPM @ 71 kPa
V3806	18 × 18	8.0	5.6	23 GPM @ 16.9 PSI
	5,5 × 5,5	2.4	8,1	87,1 LPM @ 117 kPa

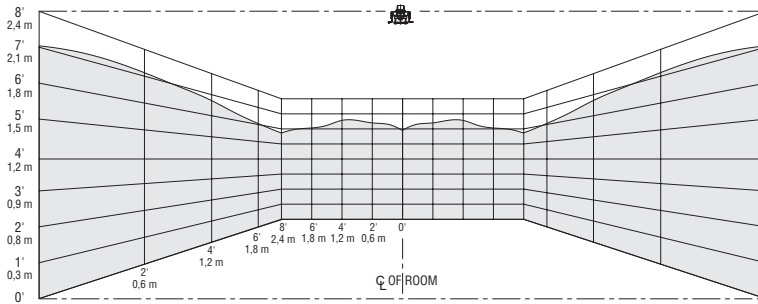
NOTES:

[^] For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

* For systems designed to NFPA 13, the number of design sprinklers is to be the four most demanding sprinklers. The minimum required discharge from each of the four sprinklers is to be the greater of the flow rates provided in the table for NFPA 13D and 13R systems and the maximum allowable coverage area or a minimum discharge of 0.1 gpm/ft.² over the design area of the four most demanding sprinklers for the actual coverage areas being protected by four sprinklers.

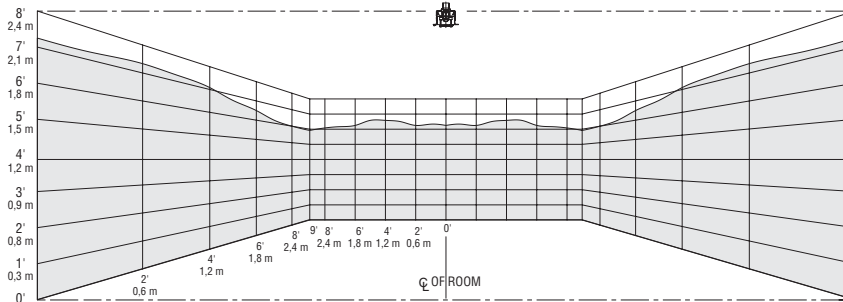
NOMINAL WETTING PATTERNS

MODEL V3806
K5.6 RESIDENTIAL CONCEALED
16 GPM (60,5 LPM)



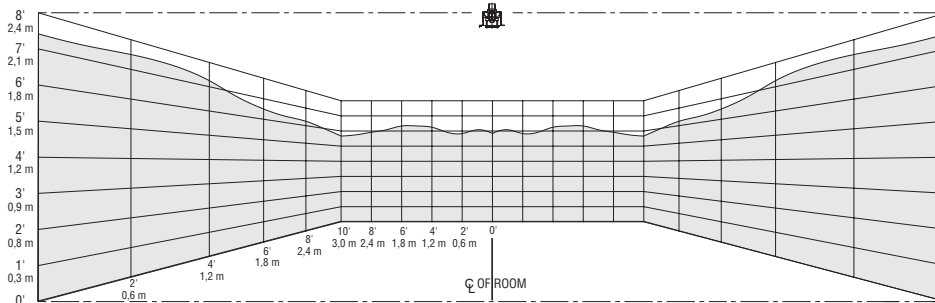
NOMINAL WETTING PATTERN
16' X 16' COVERAGE AREA

MODEL V3806
K5.6 RESIDENTIAL CONCEALED
21 GPM (79,4 LPM)



NOMINAL WETTING PATTERN
18' X 18' COVERAGE AREA

MODEL V3806
K5.6 RESIDENTIAL CONCEALED
25 GPM (94,5 LPM)



NOMINAL WETTING PATTERN
20' X 20' 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 edition). 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 the centerline of the waterway.

WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

This product shall be manufactured by Victaulic Company. 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.