Residential Concealed Pendent

V2742 QUICK RESPONSE

This Model V27 residential sprinkler is designed to meet the requirements of NFPA 13, 13D and 13R for residential use in a variety of room sizes, depending upon available operating pressure and room configuration. Model V2742 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 die cast frame is more streamlined and attractive than traditional sand cast frames. It is cast with a hex-shaped wrench boss to allow easy tightening from many angles, reducing assembly effort. This sprinkler is available in various finishes to meet many design require-

The V27 sprinkler is now available with the aesthetically pleasing dome cover plate, which also is available in various finishes to meet many design requirements.



SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS



DOME COVER PLATE (V2742)

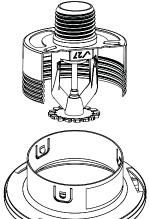
SPRINKLER OPERATION:

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.

TECHNICAL SPECIFICATIONS:



Exaggerated for Clarity

Model: V2742

Style: Concealed Residential Pendent Nominal Orifice Size: 1/16 / 12 mm

K-Factor: V2742 – 4.9 lmp./7.1 S.I.^ for room

sizes up to 201/6.1 m

Nominal Thread Size: ½" NPT/15 mm Max. Working Pressure: 175 psi/1200 kPa Factory Hydrostatic Test: 100% @ 500 psi/

3450 kPa

Min. Operating Pressure: 7 psi/48 kPa Temperature Rating: See chart on page 3

MATERIAL SPECIFICATIONS

Pendent Deflector: Bronze per UNS C51000

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

Seal: Teflon* tape

Frame: Die cast brass 65-30

Cup: Cold rolled steel, zinc-chrome plated. Cover/Escutcheon: Brass per UNS C26000

ACCESSORIES

Installation Wrench: Concealed: V39

Finishes:

- Chrome plated
- White painted
- Flat black
- Custom painted

For cabinets and other accessories refer to separate sheet.

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

*Teflon is a registered trademark of

Dupont Co.

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

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APPROVALS/LISTINGS

Model	Orifice Size	Nominal K-Factor	Response	Deflector Type	Approved Temperature Ratings °F/°C ‡
	Inches mm	Imperial S.I.^			cULus
V2742	7/16 12	4.9 7.1	Quick	Concealed Pendent	155 68

[‡] Listings and approval as of printing.

RATINGS

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

Sprinkler	Sprinkler – V2742					Cover – V27	
	Temperature – °F/°C					Cover Tempe	rature – °F/°C
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





- 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.

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

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V2742 QUICK RESPONSE

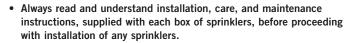
ORDERING INFORMATION

Please specify the following when ordering:

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



WARNING





- 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 USA, Telephone: 001-610-559-3300.





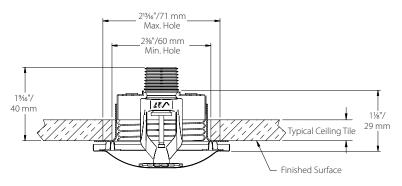


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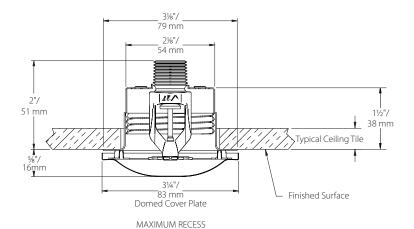
V2742 QUICK RESPONSE

DIMENSIONS

Model V2742 (drawing not to scale)



MAXIMUM EXTENSION



Residential Concealed Pendent

V2742 QUICK RESPONSE

ROOM SIZE

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

Model	Room Size	Min. Installation Spacing	Nominal K-Factor	Minimum Flow per Sprinkler for Horizontal Ceilings Max. 2/12 (9.5°) Pitch for NFPA 13R or 13D*
	Feet/meters	Feet/meters	Imperial S.I.^	GPM/LPM @ psi/kPa
V2742	12 x 12	8.0	4.9	13 GPM @ 7.0 psi
	3.7 x 3.7	2.4	7.1	49.2 LPM @ 48.5 kPa
V2742	14 x 14	8.0	4.9	13 GPM @ 7.0 psi
	4.3 x 4.3	2.4	7.1	49.2 LPM @ 48.5 kPa
V2742	16 x 16	8.0	4.9	13 GPM @ 7.0 psi
	4.9 x 4.9	2.4	7.1	49.2 LPM @ 48.5 kPa
V2742	18 x 18	8.0	4.9	17 GPM @ 12.0 psi
	5.5 x 5.5	2.4	7.1	64.3 LPM @ 83.0 kPa
V2742	20 x 20	8.0	4.9	20 GPM @ 16.7 psi
	6.1 x 6.1	2.4	7.1	75.7 LPM @ 114.9 kPa

NOTES:

AVAILABLE WRENCHES

Sprinkler Type	Concealed
V2742 Concealed Pendent	V39

[^] 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.

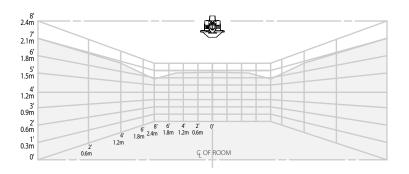
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V2742 QUICK RESPONSE

NOMINAL WETTING PATTERNS

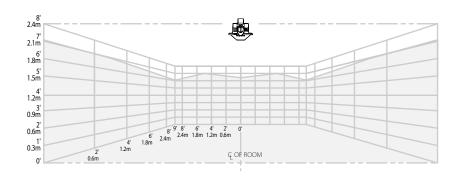
Model V2742 K4.9 residential concealed pendent

13 GPM/49.2 LPM - 16' x 16'/4.9 x 4.9 m coverage area



Model V2742 K4.9 residential concealed pendent

17 GPM/64.3 LPM - 18' x 18'/5.5 x 5.5 m coverage area



See notes on next page.

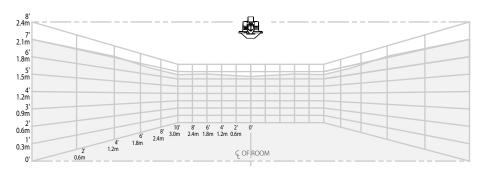
Residential Concealed Pendent

V2742 QUICK RESPONSE

NOMINAL WETTING PATTERNS

Model V2742 K4.9 residential concealed pendent

20 GPM/75.7 LPM - 20' x 20'/6.1 x 6.1 m 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 symmetric to waterway.

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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.

