

V27, K4.9

Residential Concealed Pendant

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 requirements.

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



DOMES COVER PLATE (V2742)

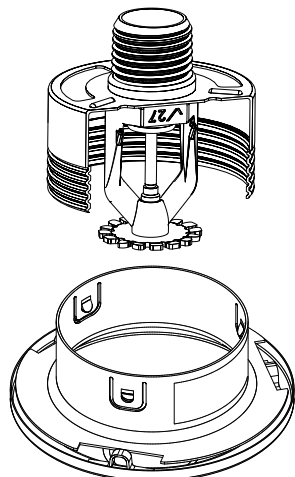
SPRINKLER OPERATION:

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 Pendant
Nominal Orifice Size: 7/16"/12mm
K-Factor: V2742 – 4.9 Imp./7.1 S.I.^ for room sizes up to 20'/6.1 m
Nominal Thread Size: 1/2" NPT/15mm
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
Pendant Deflector: Bronze per UNS C51000
Bulb: Glass with glycerin solution.
Bulb Nominal Diameter:
 • Quick Response: 3.0mm
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/V27-2
Sprinkler Finishes:

- Chrome plated
- Brass 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.

† These finishes require longer lead times. Contact Victaulic for details.

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

V27, K4.9

Residential Concealed Pendent

V2742 QUICK RESPONSE

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	4.9	Quick	Concealed Pendent	155
	12	7.1			68

‡ Listings and approval as of printing.

^ 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°F/-55°C to those shown in table below.

Sprinkler	Sprinkler – V2742				Cover – V27		
	Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color	Victaulic Part Identification	Cover Temperature – °F/°C
Nominal Temperature Rating			Maximum Ambient Temperature Allowed	Nominal Temperature Rating			Maximum Ambient Temperature Allowed
Ordinary	C	155 68	100 38	Red	A	135 57	100 38



WARNING

⚠ 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.

V27, K4.9

Residential Concealed Pendent

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

WARNING

  	<ul style="list-style-type: none"> 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. <p>Failure to follow these instructions could result in serious personal injury and/or property damage.</p> <p>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.</p> <p>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.</p>
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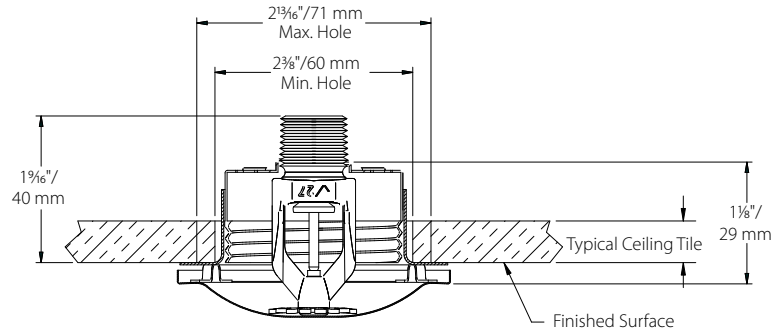
V27, K4.9

Residential Concealed Pendent

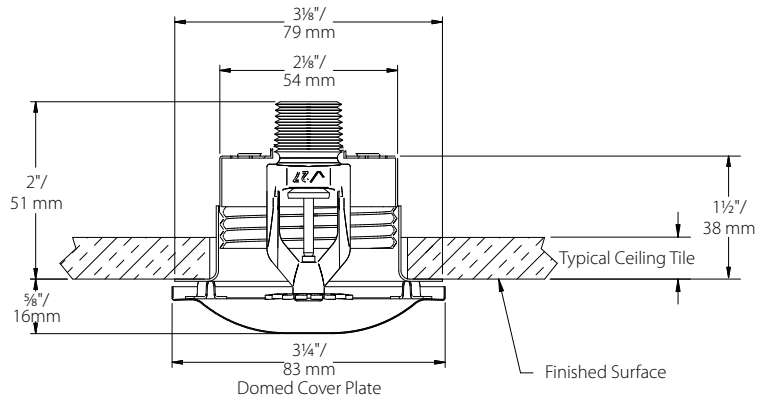
V2742 QUICK RESPONSE

DIMENSIONS

Model V2742 (drawing not to scale)



MAXIMUM EXTENSION



MAXIMUM RECESS

V27, K4.9

Residential Concealed Pendent

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ROOM SIZE

Victaulic V2742, 4.9 K-Factor Concealed Pendent Sprinkler
 For Ceiling types refer to NFPA 13, 13R or 13D 2013 Editions

Max. Coverage Area ^(a)	Ordinary Temp Rating 155°F/68°C		Intermediate Temp Rating 175°F/79°C		Deflector to Ceiling	Installation Type	Minimum Spacing
	Ft. x Ft. m x m	Flow ^(b) GPM L/min	Pressure ^(b) PSI bar	Flow ^(b) GPM L/min			
12 X 12 3.7 X 3.7	13 49.2	7.0 0.48	N/A	N/A	N/A	Concealed Sprinkler using Model V27 Coverplate Assembly	8.0 2.4
14 X 14 4.3 X 4.3	13 49.2	7.0 0.48	N/A	N/A			
16 X 16 4.9 X 4.9	13 49.2	7.0 0.48	N/A	N/A			
18 X 18 5.5 X 5.5	17 64.3	12 0.83	N/A	N/A			
20 X 20 6.1 X 6.1	20 75.7	16.7 1.15	N/A	N/A			

Notes:

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

(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.

(b) For NFPA 13 residential applications, the greater of 0.1gpm/ft² over the design area of the flow in accordance with the criteria in the table must be used.

AVAILABLE WRENCHES

Sprinkler Type	Concealed
V2742 Concealed Pendent	V39/V27-2

V27, K4.9

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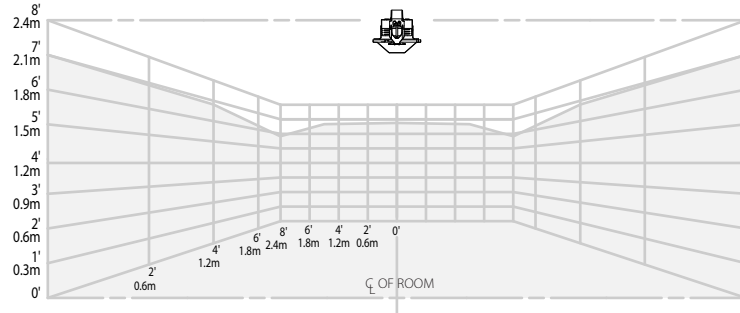
V2742 QUICK RESPONSE

NOMINAL WETTING PATTERNS

Model V2742

K4.9 residential concealed pendent

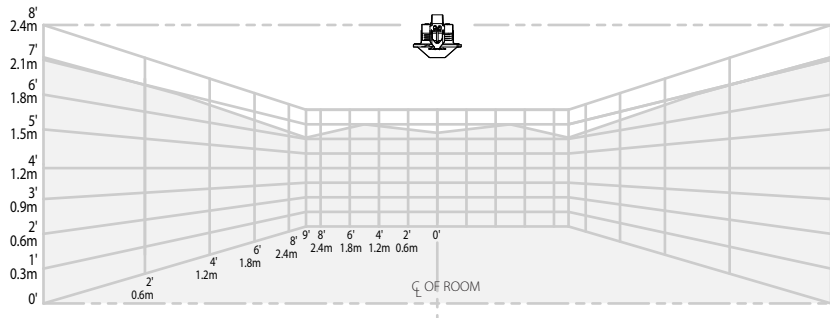
13 GPM/49.2 LPM – 16' x 16'/4.9 x 4.9m coverage area



Model V2742

K4.9 residential concealed pendent

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



See notes on next page.

V27, K4.9

Residential Concealed Pendent

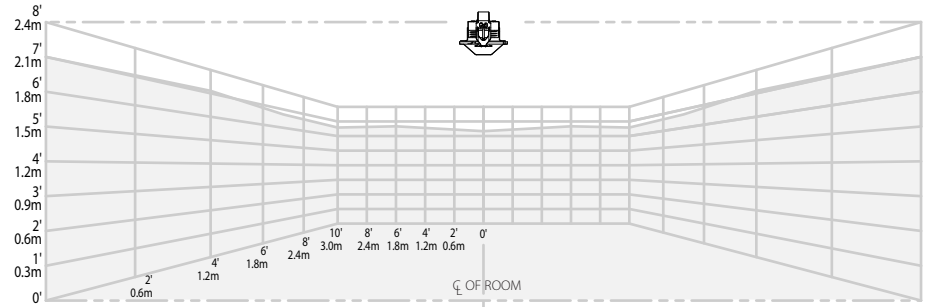
V2742 QUICK RESPONSE

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.

V27, K4.9

Residential Concealed Pendent

V2742 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.

For complete contact information, visit www.victaulic.com

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