

# V27, K4.9

Residential Pendent and Recessed Pendent

## V2740 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. 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.



SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS



PENDENT (V2740)

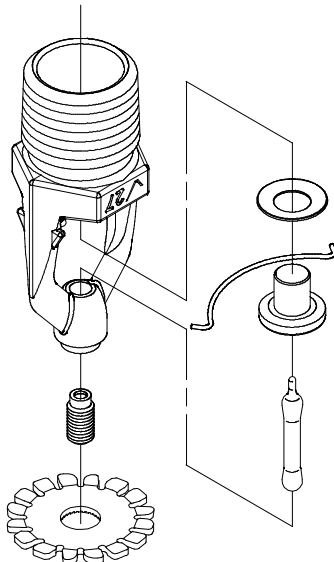
### SPRINKLER OPERATION:

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:** V2740
- Style:** Pendent and Recessed Pendent
- Nominal Orifice Size:** 7/16" / 12 mm
- K-Factor:** 4.9 Imp./7.1 S.I. ^ for room sizes up to 20' / 6.1 m
- 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:** 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

### ACCESSORIES

- Installation Wrench:**
- Open End: V27
  - Recessed: V27-1

- Sprinkler Finishes:**
- Plain brass
  - Chrome plated
  - White painted\*\*
  - Custom painted\*\*

For escutcheons, 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.

\*\*UL Listed for corrosion resistance in all configurations.

NOTE: Weather resistant recessed escutcheon available upon request.

### JOB/OWNER

System No. \_\_\_\_\_  
Location \_\_\_\_\_

### CONTRACTOR

Submitted By \_\_\_\_\_  
Date \_\_\_\_\_

### ENGINEER

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_  
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
V2740	7/16 12	4.9 7.1	Quick	Pendent	155, 175 68, 79
V2740	7/16 12	4.9 7.1	Quick	Recessed Pendent Up to 1/2" Adjustment *	155, 175 68, 79
V2740	7/16 12	4.9 7.1	Quick	Recessed Pendent Up to 3/4" Adjustment #	155, 175 68, 79

‡ Listings and approval as of printing.

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

\* For 12' x 12' to 20' x 20' rooms

# For 12' x 12' to 18' x 18' rooms

### RATINGS

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

Sprinkler Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color
		Nominal Temperature Rating	Maximum Ambient Temperature Allowed	
Ordinary	C	155 68	100 38	Red
Intermediate	E	175 79	150 65	Yellow

### ORDERING INFORMATION

Please specify the following when ordering:

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

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V2740 QUICK RESPONSE



WARNING

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

## AVAILABLE WRENCHES

Sprinkler Type	Open End	Recessed
V2740 Pendent	V27	V27-2
V2740 Recessed Pendent	—	V27-2

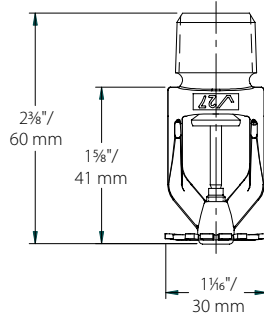
# V27, K4.9

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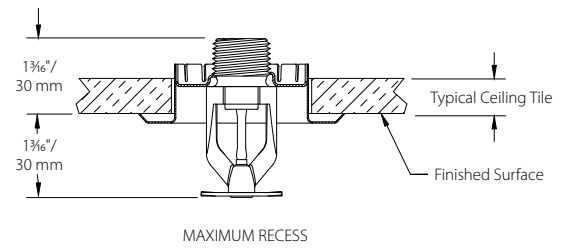
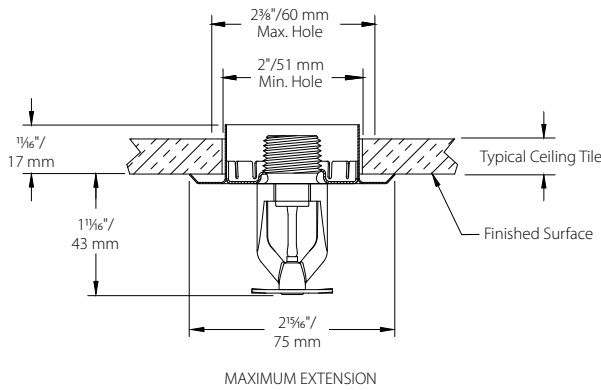
V2740 QUICK RESPONSE

## DIMENSIONS

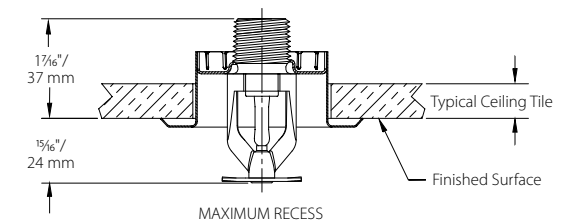
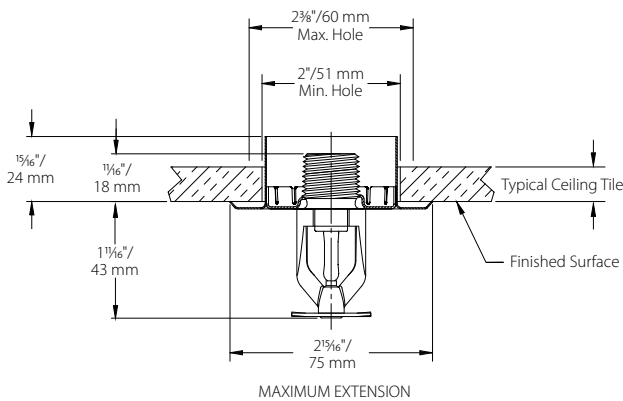
### Standard Pendant – V2740



### Maximum Recess – 1/2" Adjustment Recessed – V2740 (drawing not to scale)



### Maximum Recess – 3/4" Adjustment Recessed – V2740 (drawing not to scale)



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## V2740 QUICK RESPONSE

### ROOM SIZE

Victaulic V2740, 4.9 K-Factor Pendent Sprinkler  
 For Ceiling types refer to NFPA 13, 13R or 13D 2013 Editions

Max. Coverage Area <sup>(a)</sup>	Ordinary Temp Rating 155°F/68°C		Intermediate Temp Rating 175°F/79°C		Deflector to Ceiling	Installation Type	Minimum Spacing
	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			
12 X 12 3.7 X 3.7	13 49.2	7.0 0.48	13 49.2	7.0 0.48	1 3/16 to 4 inch	3/4" recessed Escutcheon <sup>(c)</sup> or non-recessed per NFPA 13, 13R or 13D	8.0 2.4
14 X 14 4.3 X 4.3	13 49.2	7.0 0.48	13 49.2	7.0 0.48			
16 X 16 4.9 X 4.9	13 49.2	7.0 0.48	13 49.2	7.0 0.48			
18 X 18 5.5 X 5.5	17 64.3	12 0.83	17 64.3	12 0.83			
20 X 20 6.1 X 6.1	20 75.7	16.7 1.15	20 75.7	16.7 1.15			

- (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/ft<sup>2</sup> over the design area of the flow in accordance with the criteria in the table must be used.
- (c) For 20 x 20 Coverage Area- 1/2" Maximum Recess

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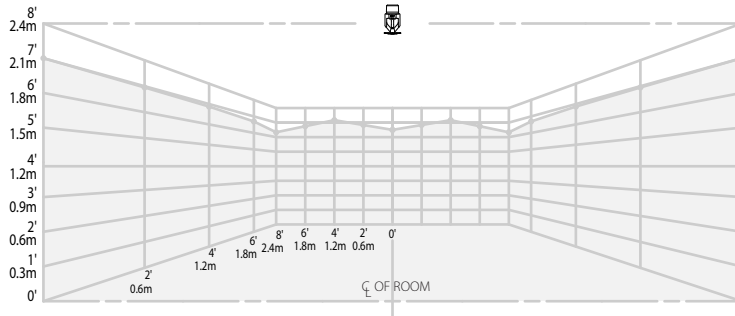
**V2740 QUICK RESPONSE**

**NOMINAL WETTING PATTERNS**

**Model V2740**

**K4.9 residential pendant and recessed pendant (¾")**

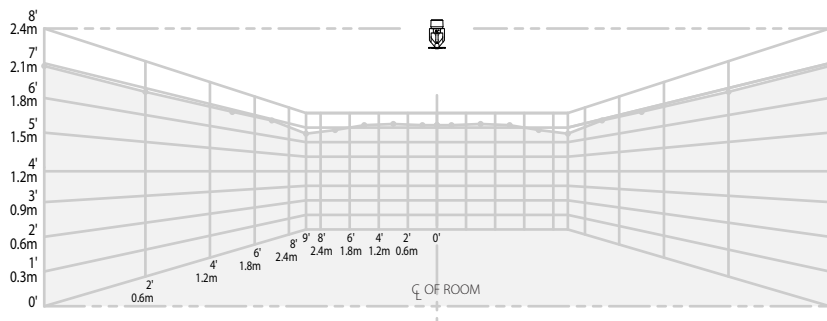
13 GPM/49.2 LPM – 16' x 16'/4.9 x 4.9m coverage area



**Model V2740**

**K4.9 residential pendant and recessed pendant (¾")**

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



See notes on next page.

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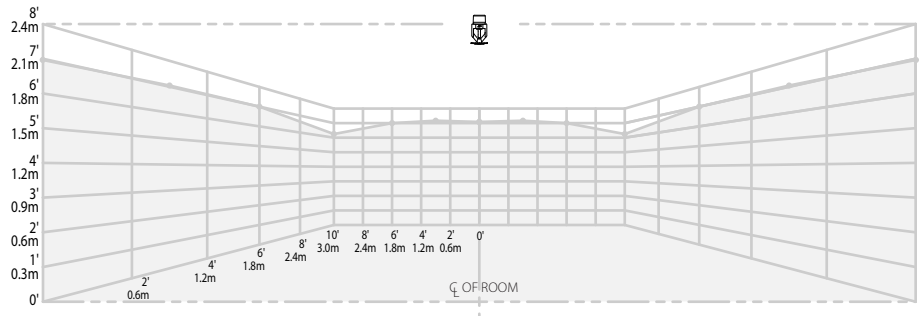
**V2740 QUICK RESPONSE**

## NOMINAL WETTING PATTERNS

### Model V2740

**K4.9 residential pendent and recessed pendent (1/2")**

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 trajectories, floor-wetting, and wall-wetting patterns for these specific Victaulic FireLock automatic sprinklers. They are provided as information for guidance in avoiding obstructions to sprinklers and should not be used as minimum sprinkler spacing rules for installation. Refer to the appropriate NFPA National Fire Code or the authority having jurisdiction for specific information regarding obstructions, spacing limitations and area of coverage requirements. 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.

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**WARRANTY**

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

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**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.

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For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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