

V27, K4.9

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

V2734 and V2736

These Model V27 residential sprinklers are 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 V2734 is UL Listed for use under smooth flat horizontal ceilings and sloped ceilings up to and including 8/12 (33.7°) pitch. 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 sprinklers are 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

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 × 20 feet (6.1 m × 6.1 m) room sizes per NFPA.

TECHNICAL SPECIFICATIONS:

Models: V2734, V2736

Style: Concealed Residential Pendent

Nominal Orifice Size: $\frac{1}{16}$ "/12mm

K-Factor:

- V2734 – 4.9 Imp./7.1 S.I.[▲] for room sizes up to 16'/4.9 m.
- V2736 – 4.9 Imp./7.1 S.I.[▲] for room sizes 18' to 20'/5.5 and 6.1 m.

Nominal Thread Size: $\frac{1}{2}$ " 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 2.

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.

MATERIAL SPECIFICATIONS

Pendent 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

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 ‡ @
	Inches mm	Imperial S.I.^	Standard or Quick		
V2734	7/16 12	4.9 7.1	Quick	Concealed Pendent	1, 3, 4, 5 – A
V2736	7/16 12	4.9 7.1	Quick	Concealed Pendent	1, 3, 4, 5 – A

‡ 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

APPROVED TEMPERATURE RATINGS

Approval	Temperature Rating
1 – UL	A – 135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C, 360°F/182°C
2 – FM	B – 135°F/57°C, 155°F/68°C, 175°F/79°C, 200°F/93°C, 286°F/141°C
3 – ULC	C – 135°F/57°C, 175°F/79°C, 200°F/93°C
4 – NYC/MEA †	D – No
5 – CSFM §	

† MEA #62-99-E

§ CSFM #7690-0531:112

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RATINGS

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

SPRINKLER – V2734/V2736				COVER – V27			
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	C	155 68	100 38	Red	A*	135 57	100 38

*A for use with Standard or Quick Response Concealed Sprinklers 135°F (57°C) or 155°F (68°C).

 **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:

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

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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.

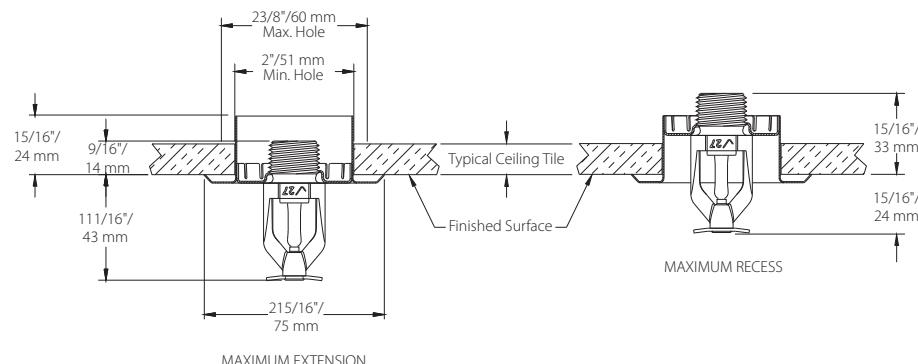
Failure to follow these instructions could result in serious personal injury and/or property damage.

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.

DIMENSIONS

Models V2734, V2736 (Drawings not to scale)



AVAILABLE WRENCHES

Sprinkler Type	V39 Concealed
V2734, V2736 Concealed Pendent	yes

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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. [^]	Minimum Flow per Sprinkler for Horizontal Ceilings Maximum 2/12 (9.5°) Pitch For NFPA 13R or 13D* GPM/LPM @ PSI/kPa
V2734	12 x 12 3.7 x 3.7	8.0 2.4	4.9 7.1	13 GPM @ 7.0 PSI 49.2 LPM @ 48.5 kPa
V2734	14 x 14 4.3 x 4.3	8.0 2.4	4.9 7.1	13 GPM @ 7.0 PSI 49.2 LPM @ 48.5 kPa
V2734	16 x 16 4.9 x 4.9	8.0 2.4	4.9 7.1	14 GPM @ 8.2 PSI 53.0 LPM @ 57.0 kPa
V2736	12 x 12 3.7 x 3.7	8.0 2.4	4.9 7.1	13 GPM @ 7.0 PSI 49.2 LPM @ 48.5 kPa
V2736	14 x 14 4.3 x 4.3	8.0 2.4	4.9 7.1	17 GPM @ 12.0 PSI 64.3 LPM @ 83.0 kPa
V2736	16 x 16 4.9 x 4.9	8.0 2.4	4.9 7.1	17 GPM @ 12.0 PSI 64.3 LPM @ 83.0 kPa
V2736	18 x 18 5.5 x 5.5	8.0 2.4	4.9 7.1	17 GPM @ 12.0 PSI 64.3 LPM @ 83.0 kPa
V2736	20 x 20 6.1 x 6.1	8.0 2.4	4.9 7.1	20 GPM @ 16.7 PSI 75.7 LPM @ 114.9 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. [^]	Minimum Flow per Sprinkler for Sloped Ceilings Maximum 4/12 (18.4°) Pitch For NFPA 13R or 13D* GPM/LPM @ PSI/kPa
V2734	12 x 12 3.7 x 3.7	8.0 2.4	4.9 7.1	19 GPM @ 15 PSI 71.9 LPM @ 103.0 kPa
V2734	14 x 14 4.3 x 4.3	8.0 2.4	4.9 7.1	19 GPM @ 15 PSI 71.9 LPM @ 103.0 kPa
V2734	16 x 16 4.9 x 4.9	8.0 2.4	4.9 7.1	19 GPM @ 15 PSI 71.9 LPM @ 103.0 kPa
V2736	12 x 12 3.7 x 3.7	8.0 2.4	4.9 7.1	21 GPM @ 18.5 PSI 79.5 LPM @ 128.0 kPa
V2736	14 x 14 4.3 x 4.3	8.0 2.4	4.9 7.1	21 GPM @ 18.5 PSI 79.5 LPM @ 128.0 kPa
V2736	16 x 16 4.9 x 4.9	8.0 2.4	4.9 7.1	21 GPM @ 18.5 PSI 79.5 LPM @ 128.0 kPa
V2736	18 x 18 5.5 x 5.5	8.0 2.4	4.9 7.1	21 GPM @ 18.5 PSI 79.5 LPM @ 128.0 kPa
V2736	20 x 20 6.1 x 6.1	8.0 2.4	4.9 7.1	28 GPM @ 32.6 PSI 106.0 LPM @ 225.0 kPa

Installed Under Sloped Ceilings up to 8/12 (33.7°) Pitch

Model	Room Size Feet/meters	Min. Installation Spacing Feet/meters	Nominal K-Factor Imperial S.I. [^]	Minimum Flow per Sprinkler for Sloped Ceilings Maximum 8/12 (33.7°) Pitch For NFPA 13R or 13D* GPM/LPM @ PSI/kPa
V2734	12 x 12 3.7 x 3.7	8.0 2.4	4.9 7.1	21 GPM @ 18.4 PSI 79.5 LPM @ 127.0 kPa
V2734	14 x 14 4.3 x 4.3	8.0 2.4	4.9 7.1	21 GPM @ 18.4 PSI 79.5 LPM @ 127.0 kPa
V2734	16 x 16 4.9 x 4.9	8.0 2.4	4.9 7.1	21 GPM @ 18.4 PSI 79.5 LPM @ 127.0 kPa
V2736	12 x 12 3.7 x 3.7	8.0 2.4	4.9 7.1	— —
V2736	14 x 14 4.3 x 4.3	8.0 2.4	4.9 7.1	— —
V2736	16 x 16 4.9 x 4.9	8.0 2.4	4.9 7.1	— —
V2736	18 x 18 5.5 x 5.5	8.0 2.4	4.9 7.1	— —
V2736	20 x 20 6.1 x 6.1	8.0 2.4	4.9 7.1	— —

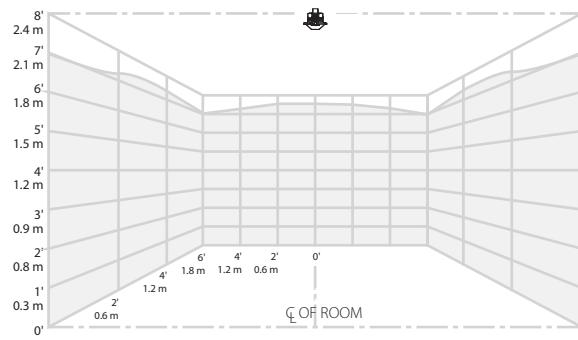
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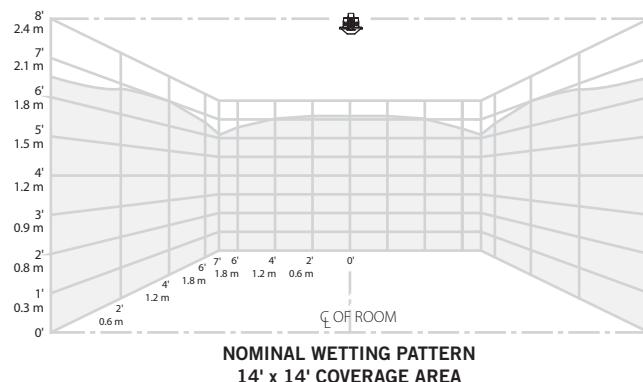
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NORMAL WETTING PATTERNS

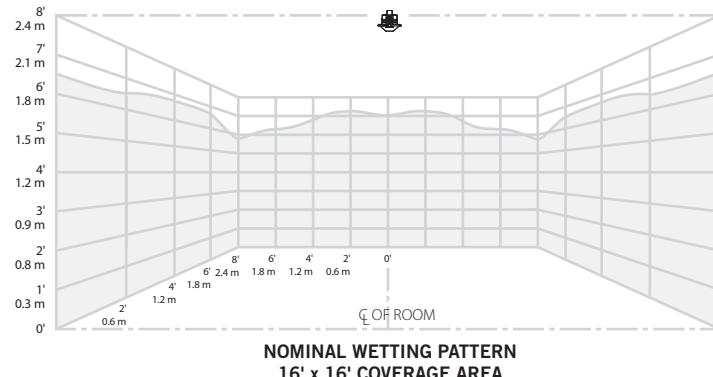
**MODEL V2734
K4.9 RESIDENTIAL CONCEALED
13 GPM (49.2 LPM)**



**MODEL V2734
K4.9 RESIDENTIAL CONCEALED
13 GPM (49.2 LPM)**



**MODEL V2734
K4.9 RESIDENTIAL CONCEALED
14 GPM (53.0 LPM)**



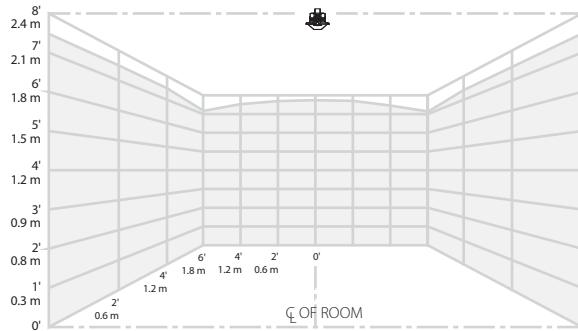
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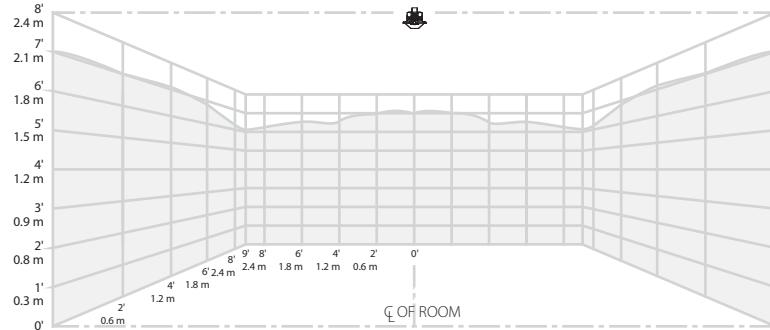
NORMAL WETTING PATTERNS

MODEL V2736
K4.9 RESIDENTIAL CONCEALED
13 GPM (49.2 LPM)



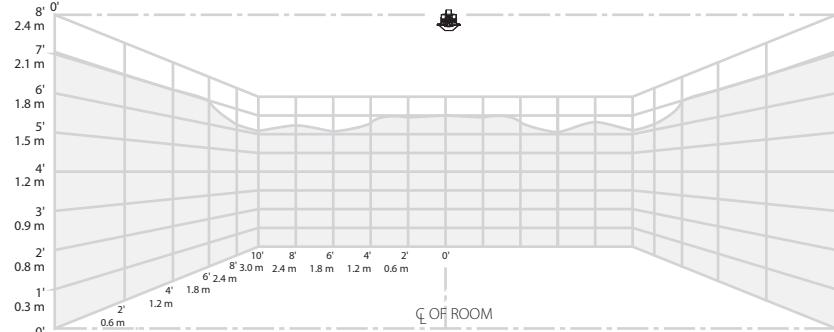
NOMINAL WETTING PATTERN
12' x 12' COVERAGE AREA

MODEL V2736
K4.9 RESIDENTIAL CONCEALED
17 GPM (64.3 LPM)



NOMINAL WETTING PATTERN
18' x 18' COVERAGE AREA

MODEL V2736
K4.9 RESIDENTIAL PENDENT AND RECESSED PENDENT
20 GPM (75.7 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 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.

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

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