



TECHNICAL DATA

STANDARD/QUICK RESPONSE EXTENDED COVERAGE UPRIGHT SPRINKLER VK532 (K11.2)

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com

1. DESCRIPTION

Viking EC/QREC Upright Sprinkler VK532 is a thermosensitive spray sprinkler available in several different finishes and temperature ratings to meet varying design requirements. The extra-large orifice produces the flows required to meet Light and Ordinary Hazard density requirements at lower pressures than standard orifice or large orifice sprinklers. The glass bulb operating element and special deflector characteristics meet the challenges of quick response extended coverage standards. Upright Sprinkler VK532 is cULus Listed as standard and quick response and FM Approved as quick response. The special Polyester and Electroless Nickel PTFE (ENT) coatings can be used in decorative applications where colors are desired. In addition, ENT coating has been investigated for installation in corrosive atmospheres. See Approval Charts.

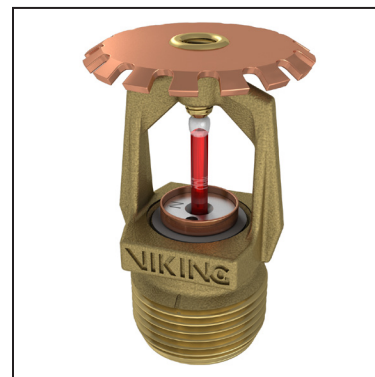
2. LISTINGS AND APPROVALS



cULus Listed: Category VNIV

FM Approved: Class 2022

Refer to Approval Chart 1 and Design Criteria for cULus Listing requirements, and refer to Approval Chart 2 and Design Criteria for FM Approval requirements that must be followed.



NOTE: As of May 2018 all logos have been removed from the wrench boss.

3. TECHNICAL DATA

Specifications:

Minimum Operating Pressure: Refer to the Approval Charts.

Maximum Working Pressure: 175 psi (12 Bar). Factory tested hydrostatically to 500 psi (34.5 bar).

Factory tested hydrostatically to 500 psi (34.5 bar).

Thread size: 3/4" (20 mm) NPT

Nominal K-Factor: 11.2 U.S. (161.3 metric†)

† Metric K-factor measurement shown is in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

Glass-bulb fluid temperature rated to -65 °F (-55 °C)

Overall Length: 2-5/16 (59 mm)

Material Standards:

Sprinkler Frame: Brass UNS-C84400

Deflector: Copper UNS-C19500

Bulb: Glass, nominal 3 mm diameter

Belleville Spring Sealing Assembly: Nickel Alloy, coated on both sides with Teflon Tape

Screw: Brass UNS-C36000

Pip Cap and Insert Assembly: Copper UNS-C11000 and Stainless Steel UNS-S30400

For Polyester Coated Sprinklers: Belleville Spring-Exposed

For ENT Coated Sprinkler: Belleville Spring-Exposed, Screw and Pipcap-ENT plated.

Ordering Information: (Also refer to the current Viking price list.)

Order Viking EC/QREC Upright Sprinkler VK532 by first adding the appropriate suffix for the sprinkler finish and then the appropriate suffix for the temperature rating to the sprinkler base part number.

Finish Suffix: Brass = A, Chrome = F, White Polyester = M-/W, Black Polyester = M-/B, and ENT = JN

Temperature Suffix: 135 °F (57 °C) = A, 155 °F (68 °C) = B, 175 °F (79 °C) = D, 200 °F (93 °C) = E, and 286 °F (141 °C) = G

For example, sprinkler VK532 with a Brass finish and a 155 °F (68 °C) temperature rating = Part No. 08687AB

Available Finishes And Temperature Ratings:

Refer to Table 1.

Accessories: (Also refer to the Viking website)

Sprinkler Wrenches:

A. Standard Wrench: Part No. 05118CW/B (available since 1981)

B. Wrench for recessed pendent sprinkler: Part No. 11663W/B** (available since 2001)

**A 1/2" ratchet is required (not available from Viking).

Sprinkler Cabinets:

A. Six-head capacity: Part No. 01724A (available since 1971)

B. Twelve-head capacity: Part No. 01725A (available since 1971)



WARNING: Cancer and Reproductive Harm-
www.P65Warnings.ca.gov



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4. INSTALLATION

Refer to appropriate NFPA Installation Standards.

5. OPERATION

During fire conditions, the heat-sensitive liquid in the glass bulb expands, causing the glass to shatter, releasing the pip cap and sealing spring assembly. Water flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

6. INSPECTIONS, TESTS AND MAINTENANCE

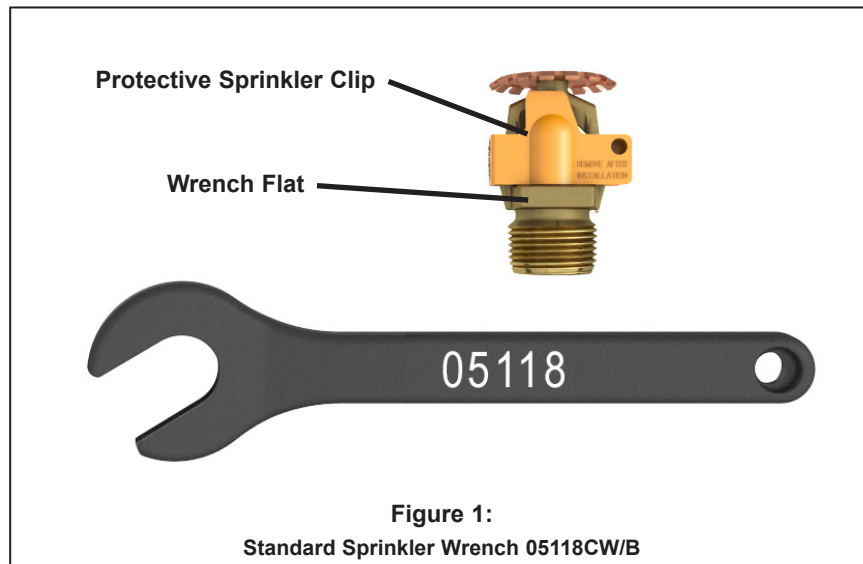
Refer to NFPA 25 for Inspection, Testing and Maintenance requirements.

7. AVAILABILITY

Viking Sprinkler VK532 is available through a network of domestic and international distributors. See The Viking Corporation web site for the closest distributor or contact The Viking Corporation.

8. GUARANTEE

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.





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TABLE 1: AVAILABLE SPRINKLER TEMPERATURE RATINGS AND FINISHES

| Sprinkler Temperature Classification | Sprinkler Nominal Temperature Rating ¹ | Maximum Ambient Ceiling Temperature ² | Bulb Color |
|--------------------------------------|---|--|------------|
| Ordinary | 135 °F (57 °C) | 100 °F (38 °C) | Orange |
| Ordinary | 155 °F (68 °C) | 100 °F (38 °C) | Red |
| Intermediate | 175 °F (79 °C) | 150 °F (65 °C) | Yellow |
| Intermediate | 200 °F (93 °C) | 150 °F (65 °C) | Green |
| High | 286 °F (141 °C) | 225 °F (107 °C) | Blue |

Sprinkler Finishes: Brass, Chrome, White Polyester³, Black Polyester³, and ENT

Corrosion-Resistant Coatings⁴: ENT

Footnotes

¹ The sprinkler temperature rating is stamped on the deflector.

² Based on NFPA-13. Other limits may apply, depending on fire loading, sprinkler location, and other requirements of the Authority Having Jurisdiction. Refer to specific installation standards.

³ For automatic sprinklers, the coatings indicated are applied to the exposed exterior surfaces only. Note that the spring is exposed on sprinklers with Polyester.

⁴ The corrosion-resistant coatings have passed the standard corrosion test required by the approving agencies indicated in the Approval Chart. These tests cannot and do not represent all possible corrosive environments. Prior to installation, verify through the end-user that the coatings are compatible with or suitable for the proposed environment. For ENT sprinklers, all exposed surfaces and the waterway are coated, but note that the spring is exposed.



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| Approval Chart 1 (UL) | | | | | | | | KEY | |
|--|--|--|----|---|---------------------|---|---|-------------|--------|
| SR/QR EC Upright Sprinkler VK532 | | | | | | | | Temperature | Finish |
| Sprinkler Base Part Number ¹ | SIN | NPT Thread Size | | Nominal K-Factor | | Maximum Water Working Pressure | Overall Length | | |
| | | Inches | mm | U.S. | metric ² | | Inches | mm | |
| 08687 Upright | VK532 | 3/4 | 20 | 11.2 | 161.3 | 175 psi (12 Bar) | 2-5/16 | 59 | |
| Max. Sprinkler Spacing (L x W ⁷) | Maximum Area per Sprinkler | Minimum Water Supply Requirements ⁵ | | | | | Listings and Approvals ³ (Refer also to UL Design Criteria) | | |
| | | Light Hazard | | Ordinary Hazard Group I | | Ordinary Hazard Group II | | | |
| | | Flow / Pressure | | Flow / Pressure | | Flow / Pressure | cULus ⁴ | | |
| Standard Response | | | | | | | | | |
| 16 ft. x 16 ft. (4.9 m x 4.9 m) | 256 ft ² (23.8 m ²) | -- | | 38 gpm @ 11.5 psi (143.9 L/min @ .79 Bar) | | 51 gpm @ 20.7 psi (193.1 L/min @ 1.43 Bar) | | C1, C2 | |
| 18 ft. x 18 ft. (5.5 m x 5.5 m) | 324 ft ² (30.1 m ²) | -- | | 49 gpm @ 19.1 psi (185.5 L/min @ 1.32 Bar) | | 65 gpm @ 33.7 psi (246.1 L/min @ 2.32 Bar) | | C1, C2 | |
| 20 ft. x 20 ft. (6.1 m x 6.1 m) | 400 ft ² (37.2 m ²) | -- | | 60 gpm @ 28.7 psi (227.1 L/min @ 1.98 Bar) | | 80 gpm @ 51.0 psi (302.8 L/min @ 3.52 Bar) | | C1, C2 | |
| Quick Response | | | | | | | | | |
| 12 ft. x 12 ft. (3.7 m x 3.7 m) | 144 ft ² (13.4 m ²) | -- | | 30 gpm @ 7.2 psi (113.6 L/min @ .50 Bar) | | 39 gpm @ 12.1 psi (147.7 L/min @ .84 Bar) | | D1, D2 | |
| 14 ft. x 14 ft. (4.3 m x 4.3 m) | 196 ft ² (18.2 m ²) | -- | | 30 gpm @ 7.2 psi (113.6 L/min @ .50 Bar) | | 39 gpm @ 12.1 psi (147.7 L/min @ .84 Bar) | | D1, D2 | |
| 16 ft. x 16 ft. (4.9 m x 4.9 m) | 256 ft ² (23.8 m ²) | 30 gpm @ 7.2 psi (113.6 L/min @ .50 Bar) | | -- | | -- | | B1, E2 | |
| 18 ft. x 18 ft. (5.5 m x 5.5 m) | 324 ft ² (30.1 m ²) | 33 gpm @ 8.7 psi (124.9 L/min @ .60 Bar) | | -- | | -- | | B1, E2 | |
| 20 ft. x 20 ft. (6.1 m x 6.1 m) | 400 ft ² (37.2 m ²) | 40 gpm @ 12.8 psi (151.4 L/min @ .88 Bar) | | -- | | -- | | A1, F2 | |
| Approved Temperature Ratings | | | | | | Approved Finishes | | | |
| A - 135 °F (57 °C) and 175 °F (79 °C) B - 135 °F (57 °C), 155 °F (68 °C), and 175 °F (79 °C) C - 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141 °C) D - 155 °F (68 °C) E - 155 °F (68 °C), and 175 °F (79 °C) F - 175 °F (79 °C) | | | | | | 1 - Brass, Chrome, White Polyester, and Black Polyester 2 - ENT ⁶ | | | |
| Footnotes | | | | | | | | | |
| ¹ Part number shown is the base part number. For complete part number, refer to current Viking price list schedule. ² Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0. ³ This chart shows listings and approvals available at time of printing. Check with the manufacturer for any additional approvals. ⁴ cULus Listed for use in the U.S. and Canada. ⁵ To determine "Minimum Water Supply Requirement" for areas of coverage where length and width of actual sprinkler spacing are not equal, select the "Maximum Sprinkler Spacing" from the chart that is equal to or greater than the larger of the actual spacing (length or width) dimensions used. Example: When using 10'-6" x 13'-0" sprinkler spacing, provide the "Minimum Water Supply Requirement" listed in the chart for 14'-0" x 14'-0" spacing. For areas of coverage smaller than shown, use the "Minimum Water Supply Requirement" in the appropriate hazard group for the next larger area listed. The distance from sprinklers to walls shall not exceed one-half the "Maximum Sprinkler Spacing" listed for the "Minimum Water Supply Requirement" used. ⁶ cULus Listed as corrosion-resistant. | | | | | | | | | |



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DESIGN CRITERIA - UL

(Also refer to Approval Chart 1.)

cULus Listing Requirements:

EC-ELO Upright Sprinkler VK532 is cULus Listed as indicated in Approval Chart 1 for installation in accordance with the latest edition of NFPA 13 for extended coverage upright sprinklers as indicated below:

- The minimum water supplies and maximum areas of coverage shown in Approval Chart 1 are designed to provide the following design densities: 0.10 gpm/ft² (4.1 mm/min) for Light Hazard densities; 0.15 gpm/ft² (6.1 mm/min) for Ordinary-Hazard Group I densities; 0.2 gpm/ft.² (8.1 mm/min) for Ordinary-Hazard Group II densities.
- The sprinkler installation rules contained in NFPA 13 for extended coverage upright spray sprinklers must be followed.
- Viking EC-ELO Upright Sprinklers are cULus Listed for use in unobstructed construction, and noncombustible obstructed construction consisting of solid steel and/or concrete beams as defined in the latest edition of NFPA 13.
- Ceiling slope not to exceed 2/12 (9.5°).

Also, Viking ECOH-ELO Upright Sprinkler VK532 is specifically cULus Listed for Ordinary Hazard Occupancies:

- For non-combustible obstructed construction within trusses or bar joists having non-combustible web members greater than 1" (25.4 mm) when applying the 4 times obstruction criteria rule as defined in NFPA 13 under "Obstructions to Sprinkler Discharge Pattern Development".
- For installation under concrete tees when installed as follows:
 1. The stems of the concrete tee construction must be spaced between 3 ft (0.9 m) and 7 ft-6 in (2.3 m) on center. The depth of the concrete tees must not exceed 30 in (762 mm). The maximum permitted concrete tee length is 32 ft (9.8 m). However, where the concrete tee length exceeds 32 ft (9.8 m), non-combustible baffles, equal in height to the depth of the tees, can be installed so that the space between the tees does not exceed 32 ft (9.8 m).
 2. The sprinkler deflector is to be located in a horizontal plane at or above 1" (25.4 mm) below the bottom of the concrete tee stems.
 3. When the sprinkler deflector is located higher than a horizontal plane 1" (25.4 mm) beneath the bottom of the concrete tee stems, the obstruction to sprinkler discharge criteria requirements of NFPA 13 for extended coverage upright sprinklers applies.

IMPORTANT: Always refer to Bulletin Form No. F_091699 - Care and Handling of Sprinklers. Also refer to Form No. F_080614 for general care, installation, and maintenance information. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable.



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| Approval Chart 2 (FM) Quick Response Extended Coverage ELO Upright Sprinkler VK532 For HC-1, HC-2, and HC-3 Occupancies Maximum 175 PSI (12 Bar) WWP | | | |
|--|--|---|--|
| | | <div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> Temperature KEY </div> <div style="display: flex; justify-content: space-between;"> Finish </div> <div style="display: flex; justify-content: space-between;"> A1X ← Escutcheon (if applicable) </div> </div> | |
| Maximum Sprinkler Spacing (L x W ²) | Maximum Area per Sprinkler | Refer to Design Criteria below. | FM Approval ¹ Upright Sprinkler VK532 |
| 16 ft. x 16 ft. (4.9 m x 4.9 m) | 256 ft ² (23.8 m ²) | NOTE: FM installation guidelines may differ from cULus and/or NFPA criteria. Refer to the latest applicable FM Loss Prevention Data Sheets (including 2-0 and 3-26). | A1 |
| 18 ft. x 18 ft. (5.5 m x 5.5 m) | 324 ft ² (30.1 m ²) | | A1 |
| 20 ft. x 20 ft. (6.1 m x 6.1 m) | 400 ft ² (37.2 m ²) | | A1 |
| Approved Temperature Ratings A - 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141 °C) | | Approved Finishes 1 - Brass, Chrome, White Polyester, Black Polyester, ENT ³ | |
| Footnotes | | | |
| ¹ This chart shows the FM Approvals available at time of printing. Check with the manufacturer for any additional approvals. | | | |
| ² To determine "Minimum Water Supply Requirement" for areas of coverage where length and width of actual sprinkler spacing are not equal, select the "Maximum Sprinkler Spacing" from the chart that is equal to or greater than the larger of the actual spacing (length or width) dimensions used. Example: When using 10'-6" x 13'-0" sprinkler spacing, provide the "Minimum Water Supply Requirement" listed in the chart for 14'-0" x 14'-0" spacing. For areas of coverage smaller than shown, use the "Minimum Water Supply Requirement" in the appropriate hazard group for the next larger area listed. The distance from sprinklers to walls shall not exceed one-half the "Maximum Sprinkler Spacing" listed for the "Minimum Water Supply Requirement" used. | | | |
| ³ FM Approved as corrosion resistant. | | | |

DESIGN CRITERIA - FM

(Also refer to Approval Chart 2 above.)

FM Approval Requirements:

Sprinkler VK532 is FM Approved as a quick response **Non-Storage** extended coverage upright sprinkler as indicated in the FM Approval Guide for use in occupancy hazard classifications HC-1, HC-2, and HC-3. For specific application and installation requirements, reference the latest applicable FM Loss Prevention Data Sheets (including Data Sheets 2-0 and 3-26). FM Global Loss Prevention Data Sheets contain guidelines relating to, but not limited to: minimum water supply requirements, hydraulic design, ceiling slope and obstructions, minimum and maximum allowable spacing, and deflector distance below the ceiling.

NOTE: The FM installation guidelines may differ from cULus and/or NFPA criteria.

IMPORTANT: Always refer to Bulletin Form No. F_091699 - Care and Handling of Sprinklers. Also refer to Form No. F_080614 for general care, installation, and maintenance information. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, FM Global, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable.



BULLETIN

CARE AND HANDLING
OF SPRINKLERS

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SPRINKLERS ARE FRAGILE - HANDLE WITH CARE!

General Handling and Storage:

- Store sprinklers in a cool, dry place.
- Protect sprinklers during storage, transport, handling, and after installation.
- Use the original shipping containers. DO NOT place sprinklers loose in boxes, bins, or buckets.
- Keep sprinklers separated at all times. DO NOT allow metal parts to contact sprinkler operating elements.

For Pre-Assembled Drops:

- Protect sprinklers during handling and after installation.
- For recessed assemblies, use the protective sprinkler cap (Viking Part Number 10364).

Sprinklers with Protective Shields or Caps:

- DO NOT remove shields or caps until after sprinkler installation and there no longer is potential for mechanical damage to the sprinkler operating elements.
- **Sprinkler shields or caps MUST be removed BEFORE placing the system in service!**
- Remove the sprinkler shield by carefully pulling it apart where it is snapped together.
- Remove the cap by turning it slightly and pulling it off the sprinkler.

Sprinkler Installation:

- DO NOT use the sprinkler deflector or operating element to start or thread the sprinkler into a fitting.
- **Use only the designated sprinkler head wrench!** Refer to the current sprinkler technical data page to determine the correct wrench for the model of sprinkler used.
- DO NOT install sprinklers onto piping at the floor level.
- Install sprinklers after the piping is in place to prevent mechanical damage.
- DO NOT allow impacts such as hammer blows directly to sprinklers or to fittings, pipe, or couplings in close proximity to sprinklers. Sprinklers can be damaged from direct or indirect impacts.
- DO NOT attempt to remove drywall, paint, etc., from sprinklers.
- **Take care not to over-tighten the sprinkler and/or damage its operating parts!**

Maximum Torque:

1/2" NPT: 14 ft-lbs. (19.0 N-m)

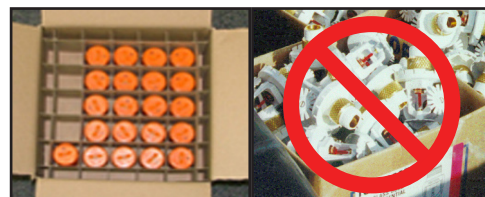
3/4" NPT: 20 ft-lbs. (27.1 N-m)

1" NPT: 30 ft-lbs. (40.7 N-m)



CORRECT
(Original container used)

INCORRECT
(Placed loose in box)



CORRECT
(Protected with caps)

INCORRECT
(Protective caps not used)



CORRECT
(Piping is in place at the ceiling)

INCORRECT
(Sprinkler at floor level)



CORRECT
(Special installation wrenches)

INCORRECT
(Designated wrench not used)



WARNING: Cancer and Reproductive Harm-
www.P65Warnings.ca.gov

! WARNING

Any sprinkler with a loss of liquid from the glass bulb or damage to the fusible element should be destroyed. Never install sprinklers that have been dropped, damaged, or exposed to temperatures exceeding the maximum ambient temperature allowed. Sprinklers that have been painted in the field must be replaced per NFPA 13. Protect sprinklers from paint and paint overspray in accordance with the installation standards. Do not clean sprinklers with soap and water, ammonia, or any other cleaning fluid. Do not use adhesives or solvents on sprinklers or their operating elements.

Refer to the appropriate technical data page and NFPA standards for complete care, handling, installation, and maintenance instructions. For additional product and system information Viking data pages and installation instructions are available on the Viking Web site at www.vikinggroupinc.com.



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PROTECTIVE SPRINKLER SHIELDS AND CAPS

General Handling and Storage:

Many Viking sprinklers are available with a plastic protective cap or shield temporarily covering the operating elements. The snap-on shields and caps are factory installed and are intended to help protect the operating elements from mechanical damage during shipping, storage, and installation. NOTE: It is still necessary to follow the care and handling instructions on the appropriate sprinkler technical data sheets* when installing sprinklers with bulb shields or caps.

WHEN TO REMOVE THE SHIELDS AND CAPS:

NOTE: SHIELDS AND CAPS MUST BE REMOVED FROM SPRINKLERS BEFORE PLACING THE SYSTEM IN SERVICE!

Remove the shield or cap from the sprinkler only after checking all of the following:

- The sprinkler has been installed*.
- The wall or ceiling finish work is completed where the sprinkler is installed and there no longer is a potential for mechanical damage to the sprinkler operating elements.

SHIELDS AND CAPS MUST BE REMOVED FROM SPRINKLERS BEFORE PLACING THE SYSTEM IN SERVICE!



Figure 1: Sprinkler shield being removed from a pendent sprinkler.



Figure 2: Sprinkler cap being removed from a pendent sprinkler.



Figure 3: Sprinkler cap being removed from an upright sprinkler.

HOW TO REMOVE SHIELDS AND CAPS:

No tools are necessary to remove the shields or caps from sprinklers. DO NOT use any sharp objects to remove them! **Take care not to cause mechanical damage to sprinklers when removing the shields or caps.** When removing caps from fusible element sprinklers, use care to prevent dislodging ejector springs or damaging fusible elements. NOTE: Squeezing the sprinkler cap excessively could damage sprinkler fusible elements.

- To remove the shield, simply pull the ends of the shield apart where it is snapped together. Refer to Figure 1.
- To remove the cap, turn it slightly and pull it off the sprinkler. Refer to Figures 2 and 3.

NOTICE

Refer to the current sprinkler technical data page to determine the correct sprinkler wrench for the model of sprinkler used.

WARNING

Never install sprinklers that have been dropped, damaged, or exposed to temperatures in excess of the maximum ambient temperature allowed.

* Refer to the appropriate current technical data pages for complete care, handling, and installation instructions. Data pages are included with each shipment from Viking or Viking distributors. They can also be found on the Web site at www.vikinggroupinc.com.



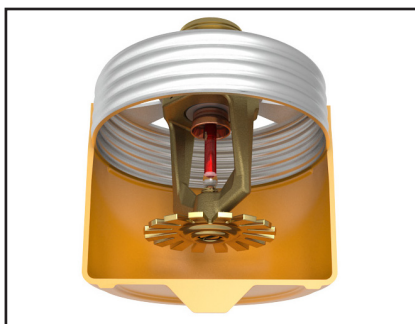
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CONCEALED COVER ASSEMBLIES ARE FRAGILE!
TO ASSURE SATISFACTORY PERFORMANCE OF THE PRODUCT, HANDLE WITH CARE.



Concealed Sprinkler and Adapter
 Assembly with Protective Cap

Concealed Sprinkler and Adapter
 Assembly (Protective Cap Removed)



Cover Plate Assembly
 (Pendent Cover 12381 shown)



GENERAL HANDLING AND STORAGE INSTRUCTIONS:

- Do not store in temperatures exceeding 100 °F (38 °C). Avoid direct sunlight and confined areas subject to heat.
- Protect sprinklers and cover assemblies during storage, transport, handling, and after installation.
 - Use original shipping containers.
 - Do not place sprinklers or cover assemblies loose in boxes, bins, or buckets.
- Keep the sprinkler bodies covered with the protective sprinkler cap any time the sprinklers are shipped or handled, during testing of the system, and while ceiling finish work is being completed.
- Use only the designated Viking recessed sprinkler wrench (refer to the appropriate sprinkler data page) to install these sprinklers. **NOTE:** The protective cap is temporarily removed during installation and then placed back on the sprinkler for protection until finish work is completed.
- Do not over-tighten the sprinklers into fittings during installation.
- Do not use the sprinkler deflector to start or thread the sprinklers into fittings during installation.
- Do not attempt to remove drywall, paint, etc., from the sprinklers.
- Remove the plastic protective cap from the sprinkler before attaching the cover plate assembly. **PROTECTIVE CAPS MUST BE REMOVED FROM SPRINKLERS BEFORE PLACING THE SYSTEM IN SERVICE!**

Refer to the appropriate current technical data pages for complete care, handling, and installation instructions. Data pages are included with each shipment from Viking or Viking distributors. They can also be found on the Web site at www.vikinggroupinc.com.



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USE THE FOLLOWING PRECAUTIONS WHEN HANDLING WAX-COATED SPRINKLERS

Many of Viking's sprinklers are available with factory-applied wax coating for corrosion resistance. These sprinklers MUST receive appropriate care and handling to avoid damaging the wax coating and to assure satisfactory performance of the product.

General Handling and Storage of Wax-Coated Sprinklers:

- Store the sprinklers in a cool, dry place (in temperatures below the maximum ambient temperature allowed for the sprinkler temperature rating. Refer to Table 1 below.)
- Store containers of wax-coated sprinklers separate from other sprinklers.
- Protect the sprinklers during storage, transport, handling, and after installation.
- Use original shipping containers.
- Do not place sprinklers in loose boxes, bins, or buckets.

Installation of Wax-Coated Sprinklers:

Use only the special sprinkler head wrench designed for installing wax-coated Viking sprinklers (any other wrench may damage the unit).

- Take care not to crack the wax coating on the units.
- For touching up the wax coating after installation, wax is available from Viking in bar form. Refer to Table 1 below. The coating MUST be repaired after sprinkler installation to protect the corrosion-resistant properties of the sprinkler.
- Use care when locating sprinklers near fixtures that can generate heat. Do not install sprinklers where they would be exposed to temperatures exceeding the maximum recommended ambient temperature for the temperature rating used.
- Inspect the coated sprinklers frequently soon after installation to verify the integrity of the corrosion resistant coating. Thereafter, inspect representative samples of the coated sprinklers in accordance with NFPA 25. Close up visual inspections are necessary to determine whether the sprinklers are being affected by corrosive conditions.

TABLE 1

| Sprinkler Temperature Rating (Fusing Point) | Wax Part Number | Wax Melting Point | Maximum Ambient Ceiling Temperature ¹ | Wax Color |
|---|-----------------|-------------------|--|-------------|
| 155 °F (68 °C) / 165 °F (74 °C) | 02568A | 148 °F (64 °C) | 100 °F (38 °C) | Light Brown |
| 175 °F (79 °C) | 04146A | 161 °F (71 °C) | 150 °F (65 °C) | Brown |
| 200 °F (93 °C) | 04146A | 161 °F (71 °C) | 150 °F (65 °C) | Brown |
| 220 °F (104 °C) | 02569A | 170 °F (76 °C) | 150 °F (65 °C) | Dark Brown |
| 286 °F (141 °C) | 02569A | 170 °F (76 °C) | 150 °F (65 °C) | Dark Brown |

¹ Based on NFPA-13. Other limits may apply, depending on fire loading, sprinkler location, and other requirements of the Authority Having Jurisdiction. Refer to specific installation standards.



Never install sprinklers that have been dropped, damaged, or exposed to temperatures in excess of the maximum ambient temperature allowed.

Refer to the appropriate current technical data pages for complete care, handling, and installation instructions. Data pages are included with each shipment from Viking or Viking distributors. They can also be found on the Web site at www.vikinggroupinc.com.

**BULLETIN****REGULATORY AND HEALTH
WARNINGS**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com

1. DESCRIPTION

Regulatory and Health Warnings applying to materials used in the manufacture and construction of fire protection products are provided herein as they relate to legally mandated jurisdictional regions.

⚠ WARNING**STATE OF CALIFORNIA, USA**

Installing or servicing fire protection products such as sprinklers, valves, piping etc. can expose you to chemicals including, but not limited to, lead, nickel, butadiene, titanium dioxide, chromium, carbon black, and acrylonitrile which are known to the State of California to cause cancer or birth defects or other reproductive harm.

For more information, go to www.P65Warnings.ca.gov

2. WARRANTY TERMS AND CONDITIONS

For details of warranty, refer to Viking's current list price schedule at www.vikinggroupinc.com or contact Viking directly.