

Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly

WARNING



- Read and understand all instructions before attempting to install any Victaulic® VicFlex™ products.
 - Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic® VicFlex™ products.
 - Wear safety glasses, hardhat, and foot protection.
- Failure to follow these instructions could result in death or serious personal injury and property damage.

- This Victaulic® VicFlex™ product shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- These installation instructions are intended for an experienced, trained installer. The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of stainless steel flexible hose for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on stainless steel components to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

Maximum Working Pressure Rating:

175 psi/12 Bar/1207 kPa

Connection to Branch Line (Inlet):

- 1 inch/DN25 IGS
- 1 inch/DN25 NPT/BSPT

Minimum Bend Radius:

2 inch/50 mm (UL)

K-Factor of Sprinkler:

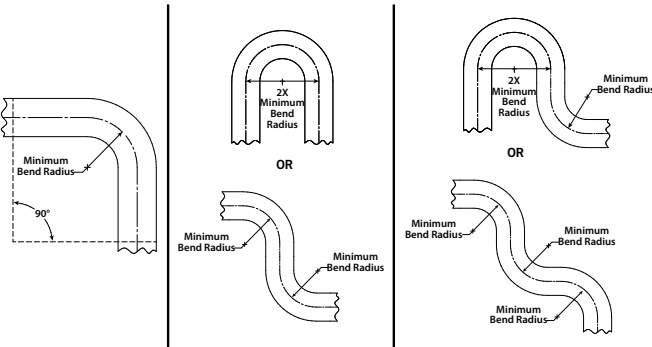
5.6 US/80 metric

Maximum Number of 90° Bends:

4 Bends (UL) – All Hose Lengths

Flexible Hose Bend Characteristics:

NOTE: Care shall be taken to avoid torquing the flexible hose.

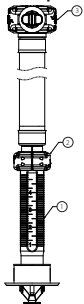


SCAN QR CODE FOR ACCESS TO THE FULL
I-VICFLEX.BRG BEND RADIUS GUIDE
INSTRUCTIONS ON VICTAULIC.COM

ASSEMBLY DRAWINGS

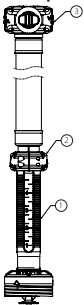
NOTE: The flexible hose and sprinkler are UL Listed as an assembly.

Recessed (with 1-inch/DN25 IGS connection to sprinkler piping)



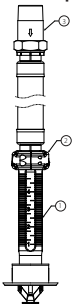
Item	Description
1	Reducer
2	Tamper-Evident Cover
3	Style 108 Coupling Assembly

Concealed (with 1-inch/DN25 IGS connection to sprinkler piping)



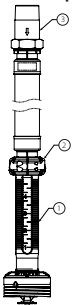
Item	Description
1	Reducer
2	Tamper-Evident Cover
3	Style 108 Coupling Assembly

Recessed (with threaded adapter nipple connection to sprinkler piping)



Item	Description
1	Reducer
2	Tamper-Evident Cover
3	Threaded Adapter Nipple

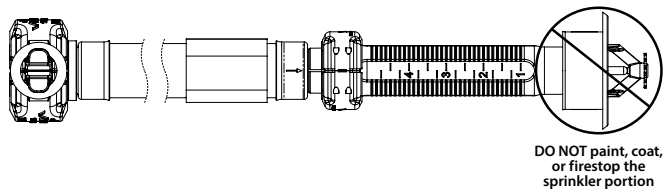
Concealed (with threaded adapter nipple connection to sprinkler piping)



Item	Description
1	Reducer
2	Tamper-Evident Cover
3	Threaded Adapter Nipple

IMPORTANT INSTALLATION INFORMATION

- Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies shall be installed according to current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards or equivalent standards and in accordance with applicable building and fire codes. Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies are intended to be installed in wet, dry, or preaction actuated systems. Deviations from these standards or alterations to the assembly will void any Victaulic warranty and will impact system integrity. Installations shall meet the provisions of the local authority having jurisdiction and local codes, as applicable, and shall comply with all design specifications.
- Victaulic® VicFlex™ Sprinkler Fittings shall not be intermixed with other manufacturer's flexible sprinkler products.
- Transport and store Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies in a cool, dry environment in their original packaging.
- **Refer to the specific Victaulic product publication for applications and listing information. In addition, refer to the I-40 Installation and Maintenance Instructions for details on sprinkler installation requirements. Product publications and installation instructions can be downloaded at victaulic.com.**
- Size the piping system to provide the minimum operating pressure of 7 psi/0.5 Bar/48 kPa.
- Per NFPA requirements, flush the system to remove foreign material. Continue to flush the system until water runs clear.
- **DO NOT** install sprinkler system piping through heating ducts.
- **DO NOT** connect sprinkler system piping to domestic hot water systems.
- **DO NOT** allow electrical wiring or other cabling to be hung or wrapped around the sprinkler piping system.
- **DO NOT** install Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies where ambient conditions may fall below or exceed the maximum listed or approved temperature ratings.
- The flexible hose shall not be bent or fluctuated up-and-down or side-to-side when pressurized.
- **Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies have limited flexibility* and are intended only to be installed with bends not less than their respective minimum bend radii. DO NOT install flexible hose in a straight configuration.**
- Protect wet piping systems from freezing temperatures.
- If construction is altered, the building owner or their representative is responsible for referencing applicable standards to determine if additional Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies or other system adjustments are required.
- The building owner or their representative is responsible for maintaining the fire protection system in proper operating condition.
- **DO NOT** install Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies that have been dropped or struck by another object, even if they do not appear damaged. Never install glass bulb sprinklers if the bulb is cracked or if there is a loss of liquid from the bulb. Discard and replace any Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies that are damaged or show signs of corrosion.
- Before installation, verify that the sprinkler of Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly is the proper model, style, orifice size, temperature rating, and response for the intended service.
- Each Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly is shipped with a bulb protector, which protects the glass bulb from damage during shipment and installation. Bulb protectors shall remain installed until the sprinkler system is ready to be placed into service.



- **DO NOT** paint, coat, or firestop the sprinkler portion of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly, identified in the image to the left. Braided hose and fitting portions may be painted or coated, provided that the paint or coating is compatible with stainless steel material. This includes penetration through firestop-filled annular space of a firewall. The firestop material in direct contact with the flexible braided hose will not impede functionality of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly, provided that the components are installed in accordance with Victaulic's installation instructions.

- Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies may penetrate drywall.
- Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies that have been altered from their manufactured condition may not function properly and may void agency listings and/or approvals.
- **DO NOT** test Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies with a heat source. The glass bulb can weaken or shatter if exposed to a heat source during testing.
- Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies that have operated cannot be reassembled or reused, per NFPA requirements. When replacing sprinklers, use new sprinklers of the same type, orifice, temperature, and response.
- **DO NOT** clean Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies with soapy water, detergents, ammonia, cleaning fluids, or other chemicals. Remove any dust, lint, etc. with a soft, dry cloth.
- Inspect Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies on a regular basis for corrosion, mechanical damage, obstructions, etc. The frequency of inspections may vary due to corrosive atmospheres/water supplies and activities around the sprinklers.
- **DO NOT** hang anything from or attach anything to Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assemblies. Obstructing the discharge pattern will prevent the sprinkler from operating properly.
- After installation is complete, the entire sprinkler system shall be tested in accordance with applicable standards (NFPA 13, NFPA 25, etc.) that describe the care and maintenance of sprinkler systems. In addition, the authority having jurisdiction may have additional maintenance, testing, and inspection requirements that shall be followed. **NOTE:** A successful test is not a substitute for proper system installation and maintenance.

⚠ WARNING

- **Replacement/relocation of this Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly SHALL be performed by qualified personnel familiar with the system's original design criteria, sprinkler listings/approvals, and state and local codes (including NFPA 13 standards). Failure to properly replace/relocate this Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly could affect its performance during a fire, resulting in death or serious personal injury and property damage.**

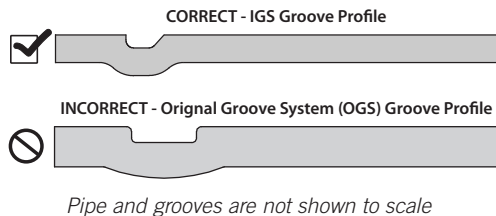
* Reference UL 2443: Section 25.1

VICTAULIC® VICFLEX™ BRACKET INSTALLATION

The Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly can be installed with Victaulic® VicFlex™ Style AB2, AB4, AB5, and AB10 Brackets (UL Listed in combination with the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly). Always refer to the current revision of the installation instructions and other supporting literature for the specific bracket, which can be downloaded by scanning this QR code.



1-INCH/DN25 IGS CONNECTION TO THE SPRINKLER PIPING



The Style 108 Coupling of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly shall be used **ONLY** with sprinkler piping connections that are prepared to Victaulic IGS proprietary groove specifications. **DO NOT** attempt to install the coupling on sprinkler piping connections that are prepared to any other groove specification. Refer to Victaulic publication 25.14 for the IGS groove specification, which can be downloaded at victaulic.com.

DO NOT use the Style 108 Coupling for sprinkler-piping-to-sprinkler connections. For sprinkler-piping-to-sprinkler connections, the Style V9 shall be used.

WARNING

- The flexible hose shall not be bent or fluctuated up-and-down or side-to-side when pressurized.

Failure to follow this instruction could cause improper sprinkler operation, resulting in death or serious personal injury and property damage.



1. DO NOT DISASSEMBLE THE COUPLING: The Style 108 Coupling of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly is designed so that the installer does not need to remove the nut, bolt, or linkage for initial installation. This facilitates installation by allowing the installer to directly insert the sprinkler piping's grooved end into the coupling.

2. The outside surface of the sprinkler piping, between the groove and the end of the sprinkler piping, shall be generally free from indentations, projections, weld seam anomalies, and roll marks to ensure a leak-tight seal. All oil, grease, loose paint, dirt, and cutting particles shall be removed.

The sprinkler piping's outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in current Victaulic IGS specifications, publication 25.14, which can be downloaded at victaulic.com.

3. Check the gasket to verify that it is suitable for the intended service. The color code identifies the material grade. Refer to Victaulic publication 05.01 for the color code chart, which can be downloaded at victaulic.com, and the "NOTICE" below for important gasket information.

CAUTION

- If any conditions listed in the "NOTICE" below are met, a thin coat of a compatible lubricant shall be applied only to the gasket sealing lips to help prevent the gasket from pinching, rolling, or tearing during assembly.
- DO NOT** use excessive lubricant on the gasket sealing lips.

Failure to use a compatible lubricant may cause gasket damage, resulting in joint leakage and property damage.

3a. If any conditions listed in the "NOTICE" below are met, apply a thin coat of a compatible lubricant, such as Victaulic Lubricant or an EPDM-compatible lubricant, only to the gasket sealing lips. Silicone grease may be used (silicone spray is not a compatible lubricant).

NOTICE

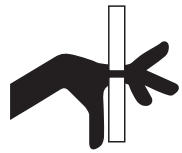
- Gaskets for Style 108 Coupling assemblies are pre-lubricated. Additional lubrication is not required for the initial installation of wet pipe systems that are installed at or continuously operating above 0°F/-18°C.

Supplemental lubrication is required only if any of the following conditions exist. Apply a thin coat of a compatible lubricant to the gasket sealing lips, as noted in step 3a on this page. It is not necessary to remove the gasket from the housings to apply additional lubricant to the gasket sealing lips.

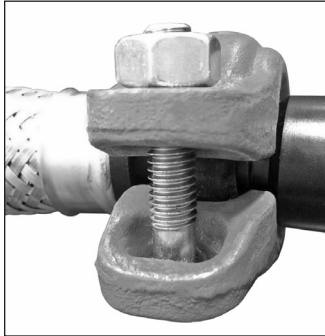
- If the installation or continuous operating temperature is below 0°F/-18°C
- If the gasket has been exposed to fluids prior to installation
- If the surface of the gasket has a dark black or shiny appearance
- If the gasket is being installed into a dry pipe system
- If the system will be subjected to air tests prior to being filled with water
- If the gasket was involved in a previous installation

Lubricated gaskets will not enhance sealing capabilities on adverse sprinkler piping conditions. Sprinkler piping condition and preparation shall conform to the requirements listed in these product installation instructions.

⚠ WARNING



- Never leave a Style 108 Coupling partially assembled on grooved sprinkler piping. **ALWAYS TIGHTEN THE HARDWARE IMMEDIATELY, IN ACCORDANCE WITH THESE INSTRUCTIONS.** A partially assembled coupling poses a drop or fall hazard during installation and a burst hazard during testing.
 - Keep hands away from the grooved sprinkler piping and the openings of the coupling when attempting to insert the grooved sprinkler piping into the coupling.
 - Keep hands away from coupling openings during tightening.
- Failure to follow these instructions could result in death or serious personal injury and property damage.



4. Assemble the joint by inserting the grooved end of the sprinkler piping into the opening of the coupling. The grooved sprinkler piping shall be inserted into the coupling until contact with the center leg of the gasket occurs. A visual check is required to verify that the coupling keys align with the groove in the sprinkler piping and engage with the spacer on the inlet end of the flexible hose.

⚠ WARNING

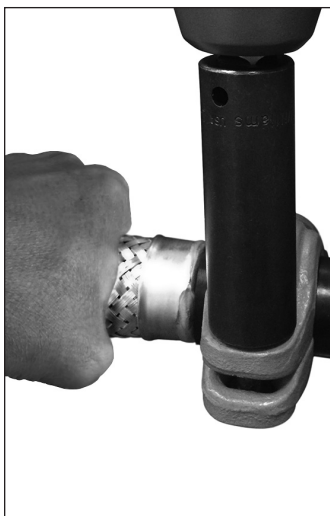
- The nut shall be tightened until metal-to-metal contact occurs at the bolt pads, as indicated in steps 5 and 6.
- **DO NOT** continue to tighten the nut after the visual, metal-to-metal bolt pad inspection requirement is achieved.

Failure to follow instructions for tightening hardware could result in:

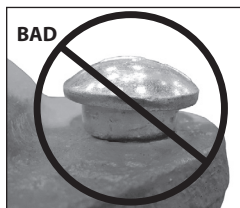
- Damage to the assembled joint (damaged or broken bolt pads or fractures to housings)
- Bolt damage or fracture
- Joint leakage and property damage
- A negative impact on system integrity
- Personal injury or death

NOTICE

- During tightening, support the hose near the Style 108 Coupling to verify that the inlet end of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly remains straight and aligned with the coupling.



OVAL NECK OF BOLT
SEATED PROPERLY



OVAL NECK OF BOLT
NOT SEATED PROPERLY

5. Using an impact tool or a standard socket wrench with an $\frac{1}{16}$ -inch (for Imperial nuts)/17-mm (for Metric nuts) deep-well socket, tighten the nut until metal-to-metal contact occurs at the bolt pads. **MAXIMUM ALLOWABLE BOLT TORQUE IS 55 ft-lbs/75 N•m.** Verify that the oval neck of the bolt seats properly in the bolt hole. **DO NOT** continue to tighten the nut after the visual, metal-to-metal bolt pad inspection requirement is achieved. **If you suspect that any hardware has been over-tightened (as indicated by a bend in the bolt, bulging of the nut at the bolt pad interface, or damage to the bolt pad, etc.), the entire coupling assembly shall be replaced immediately.** Refer to the I-IMPACT for impact tool usage/selection guidelines, which can be downloaded by scanning the QR code on the following page.

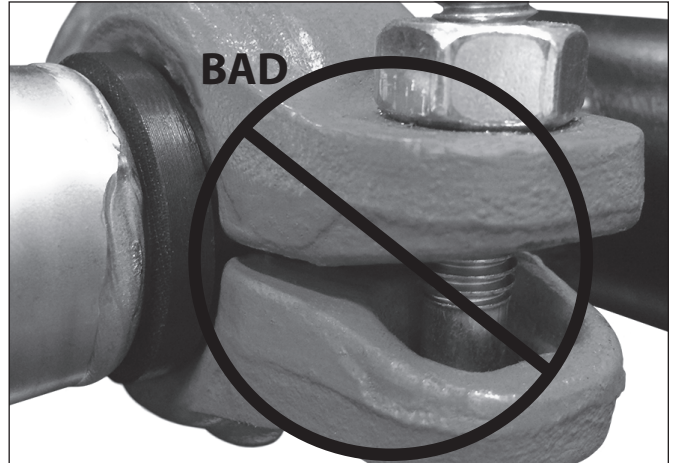
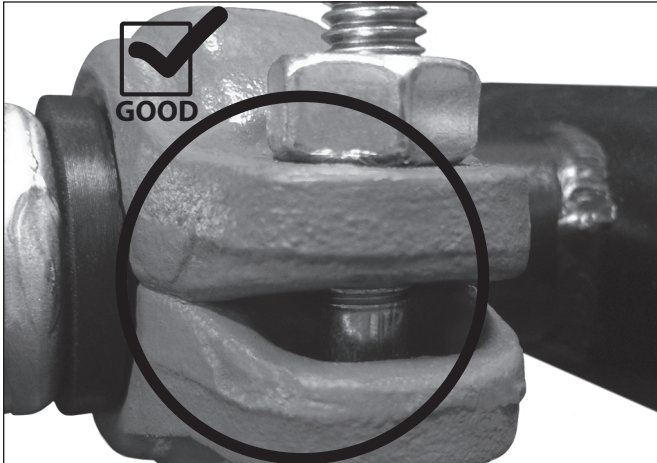
⚠ WARNING

- Visual inspection of each joint is required.
- Improperly assembled joints shall be corrected before the system is filled, tested, or placed into service.
- Any components that exhibit physical damage due to improper assembly shall be replaced before the system is filled, tested, or placed into service.

Failure to follow these instructions could cause joint failure, resulting in death or serious personal injury and property damage.



Scan QR code for access to the I-IMPACT, Impact Tool Usage/Selection Guidelines, document on victaulic.com.



6. Visually inspect the bolt pad location at every joint to verify that metal-to-metal contact is achieved, in accordance with step 5.

NOTICE

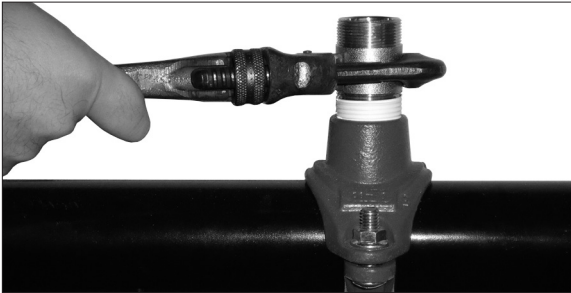
- Refer to the instructions on pages 6 – 7 for reassembly requirements.

CONNECTION TO THE SPRINKLER PIPING USING THE THREADED ADAPTER NIPPLE

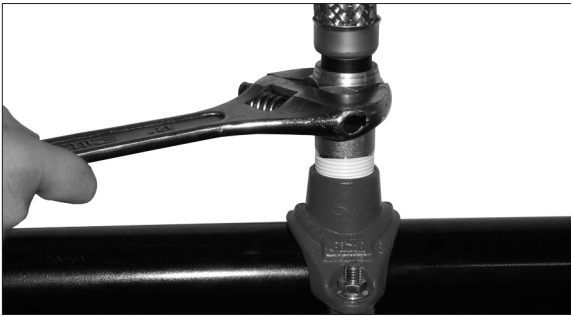
⚠ WARNING

- The flexible hose shall not be bent or fluctuated up-and-down or side-to-side when pressurized.

Failure to follow this instruction could cause improper sprinkler operation, resulting in death or serious personal injury and property damage.



1. Apply pipe joint compound or PTFE thread sealant tape to the tapered threads of the adapter nipple, in accordance with the pipe joint compound or tape manufacturer's instructions. Using a pipe wrench, tighten the adapter nipple into the sprinkler piping.



2. Confirm that the seal inside the nut of the flexible hose is in place and is free from damage prior to installation. Connect the nut to the adapter nipple, as shown.
- DO NOT use pipe joint compound or PTFE thread sealant tape on the threads of the adapter nipple. The seal inside the nut of the flexible hose provides the leak-proof connection.
- Tighten the connection nut to a torque of 40ft-lbs/54 N•m (approximately ½ to ¾ of a turn past hand-tight). **NOTE:** To prevent damage to the seal, tighten the assembly by applying torque only to the connection nut and DO NOT exceed the specified torque.

INSTRUCTIONS FOR REASSEMBLY OF THE STYLE 108 COUPLING

⚠ WARNING

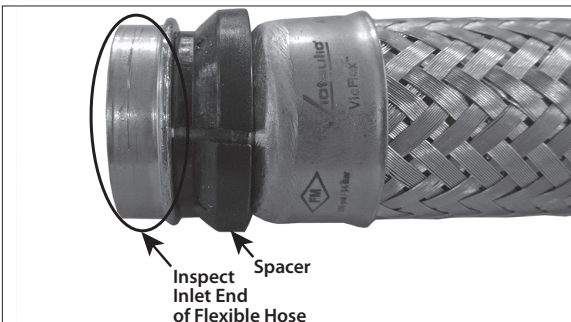


- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.

Failure to follow this instruction could result in death or serious personal injury and property damage.

1. Verify that the system is depressurized and drained completely before attempting to remove a Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly from the sprinkler piping.
2. While supporting the Style 108 Coupling, loosen the nut until backed off no further than flush with the end of the bolt. Carefully remove the flexible hose/coupling assembly from the sprinkler piping.
3. Fully disassemble the Style 108 Coupling from the inlet end of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly by removing the nut, bolt, gasket, and linkage from the housings. Inspect all components for any damage or wear. If any damage or wear is present, use a new Victaulic-supplied coupling assembly.
4. Verify that the outside surface of the sprinkler piping, between the groove and the end of the sprinkler piping, is generally free from indentations, projections, weld seam anomalies, and roll marks to ensure a leak-tight seal. All oil, grease, loose paint, dirt, and cutting particles shall be removed.

The sprinkler piping's outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in current Victaulic IGS specifications, publication 25.14, which can be downloaded at victaulic.com.



5. Inspect the end of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly to verify that there is no damage (dents, crushed edges, etc.). A new, Victaulic-supplied assembly shall be used if any damage is present.
6. Verify that the spacer is oriented on the inlet end of the Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly, as shown to the left.

⚠ CAUTION

- A thin coat of a compatible lubricant shall be used to help prevent the gasket from pinching, rolling, or tearing during reassembly.
- DO NOT use excessive lubricant on the gasket sealing lips and exterior.

Failure to use a compatible lubricant may cause gasket damage, resulting in joint leakage and property damage.



7. Apply a thin coat of a compatible lubricant, such as Victaulic Lubricant or an EPDM-compatible lubricant, to the gasket sealing lips and exterior. Silicone grease may be used (silicone spray is not a compatible lubricant).



8. Place the lubricated gasket onto the inlet end of the flexible hose, then place the Style 108 Coupling housings over the gasket. Verify that the gasket is seated fully in the gasket pocket of each housing and that the housings' keys engage with the spacer.



9. Install the linkage onto the housings, as shown to the left.



10. Install the bolt, and thread a nut onto the bolt. **NOTE:** Verify that the oval neck of the bolt seats properly in the bolt hole. DO NOT tighten the nut completely. The bolt pads need to be set at a gap for reinstallation of the coupling. The nut should be flush with the top of the bolt to provide the proper gap.

11. Follow all steps on pages 4 and 5.

MODEL V32 SPRINKLER REPLACEMENT INSTRUCTIONS

Replacement of Model V32 Sprinklers shall be made by following all instructions in the I-40 Victaulic® FireLock™ Automatic Sprinklers Installation and Maintenance Instructions, which can be downloaded by scanning this QR code. Always verify that the replacement sprinkler is the proper model, style, orifice, size, temperature rating, and response for the intended service.



Victaulic® VicFlex™ Model V32 K-Factored Sprinkler Assembly

For complete contact information, visit victaulic.com

