

VicFlex™ Sprinkler Fittings



SERIES AQU CORRUGATED (UNBRAIDED) FLEXIBLE HOSE ASSEMBLY

VicFlex™ sprinkler fittings provide sprinkler installation on suspended ceiling grids utilizing a flexible, stainless steel hose. Refer to Installation Manual (I-AquaFlex) for all applicable ASTM ceiling material and installation standards.

The system requires no welding for assembly.

The Series AQU unbraided 7/8" nominal diameter system is UL 2443 Listed for T-Bar Grid suspended ceilings. This Listed system includes the VicFlex™ Style AB-7 bracket. For system dimensions, see pages 5-6.

- Series AQU system offering includes corrugated (unbraided) flexible stainless steel hose lengths: 24, 31, 36, 48, 60, 72"/610, 790, 914, 1220, 1525, 1830mm. Note: length includes branch-line nipple and 5.5"/140mm straight reducer.
- Available reducers for the Series AQU system include 1/2" and 3/4"/15 and 20 mm sprinkler connections in 5.5"/140mm straight lengths.

System includes nominal 1"/25.4mm NPT/BSPT branch line nipples for attaching to rigid pipe.

- VicFlex™ Style AB7 mounting bracket (see page 3)
 - cULus Listed. Pre-assembled, ready-to-install.
 - Available in 24" width.
 - Allows complete lateral alignment of sprinkler during installation.
 - Features the patented *I-Bee*® open-gate center bracket.
 - Provides center points and reference marks 6" and 12"/152 mm and 304 mm from the tile edge for ease of positioning without need for measuring.



VICFLEX™ SERIES AQU SYSTEM. VICFLEX™ STYLE AB7 BRACKET FEATURES PATENTED *I-BEE*® OPEN-GATE CENTER BRACKET.



TECHNICAL SPECIFICATIONS

Maximum Working Temperature: 225°F/107.2°C

Maximum Working Pressure:

- 175 psi/1206 kPa

Connections:

- To branch line (inlet) via 1"/25.4mm NPT/BSPT male thread
- To sprinkler head (outlet) via 1/2" or 3/4"/15 mm or 20mm NPT/BSPT female thread

Minimum Bend Radius:

- 4"/102mm

Maximum Number of Bends per Flexible Drop: See friction loss charts later in this document

- Do not bend within 2 1/2"/63.5mm from connection nut.

Maximum K-Factor of Sprinkler to be Connected to Reducer:

- K5.6/8,1 (S.I.) (1/2" reducer)
- K8.0/11,5 (S.I.) (3/4" reducer)

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

www.victaulic.com

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REV_B



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FRICITION LOSS DATA - STRAIGHT REDUCERS

Length of Stainless Steel Flexible Hose	Actual Length of Stainless Steel Flexible Hose inches/mm	Outlet Size	Equivalent Length of 1 inch/33.7mm Sch. 40 Pipe feet/meters	Maximum Number of 90° Bends at 4 inch/102mm Bend Radius ¹
inches	UL Series AQU	inches	UL (Series AQU)	
24*	28 700	½	18 5.5	2
		¾	32 9.8	
31	31 780	½	27 8.2	2
		¾	33 10.1	
36*	40 1000	½	44 13.4	3
		¾	48 14.6	
48	48 1220	½	53 16.2	3
		¾	55 16.8	
60	61 1540	½	68 20.7	3
		¾	63 19.2	
72	72 1830	½	73 22.3	3
		¾	76 23.2	

UL NOTES:

1. Series AQU systems have been tested and Listed by UL for use in wet and dry systems per NFPA 13, 13R, and 13D. UL 2443 standards for safety include, but are not limited to, pressure cycling, corrosion resistance, flow characteristics, vibration resistance, leakage, mechanical and hydrostatic strength.

¹Number of Bends: A higher number of bends may be permitted, provided the sum of degrees is equal to or less than the total maximum allowable degrees of bend (e.g. Two 90° bends equal 180°. Three 90° bends equal 270°).

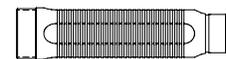
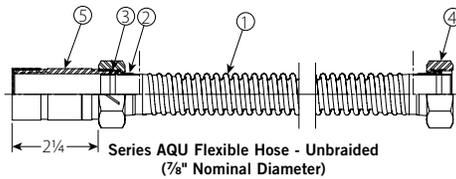
EXAMPLE: A 48-inch Series AQU hose installed with two 30° bends and two 90° bends at a 4-inch bend radius is permitted and considered equivalent to the data in the table shown above. In this example, the total number of degrees is 240°, which is less than the allowable 270°.

*These length hoses are only available in certain regions. Contact Victaulic for details.

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PRODUCT DETAILS - Series AQU Corrugated (Unbraided) System

Item	Description
1	Hose
2	Adapter Ring
3	Seal
4	Nut
5	Nipple



5.5\"/>

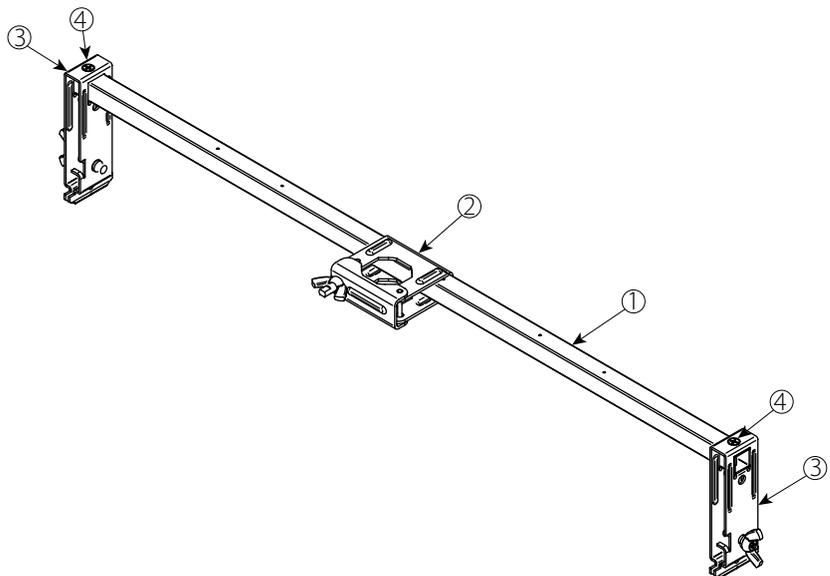
NOTE: For assembly options, including factory-installed sprinkler heads, consult Victaulic Product Order Form SF-35 which can be downloaded from www.victaulic.com. Regional availability.

VICFLEX™ STYLE AB7

- Commercial Suspended Ceilings

1-BEE²

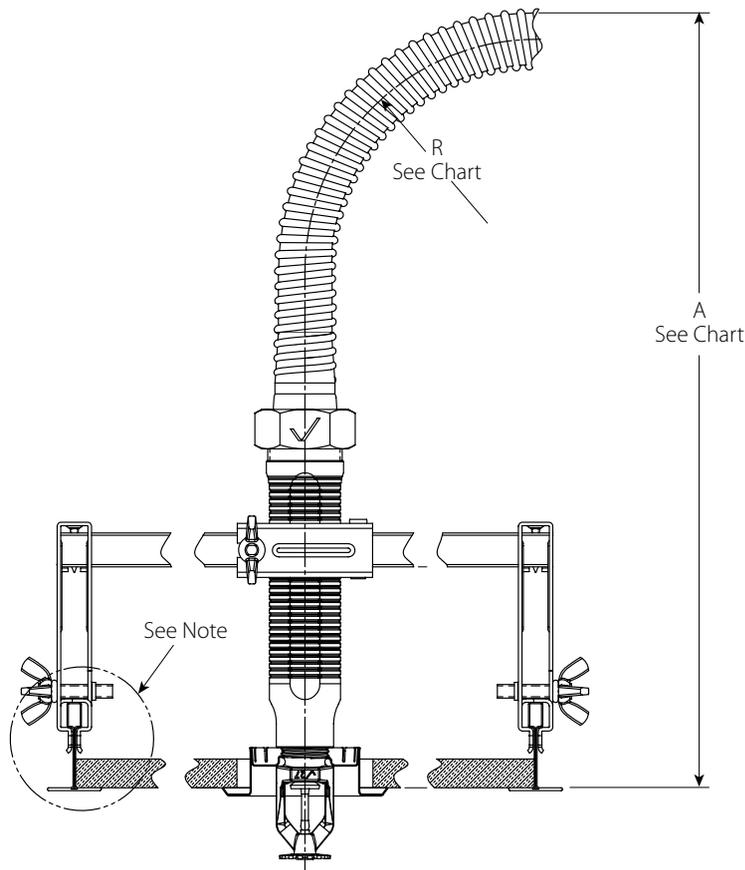
Item	Description
1	24\"/>
2	Patented 1-Bee ² Center bracket
3	End Bracket
4	Sheet Metal Screw



Features patented 1-BEE² open-gate center bracket

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**SERIES AQU CORRUGATED (UNBRAIDED) HOSE ASSEMBLY –
STYLE AB7 BRACKET
SUSPENDED CEILING GRID WITH RECESSED SPRINKLER**



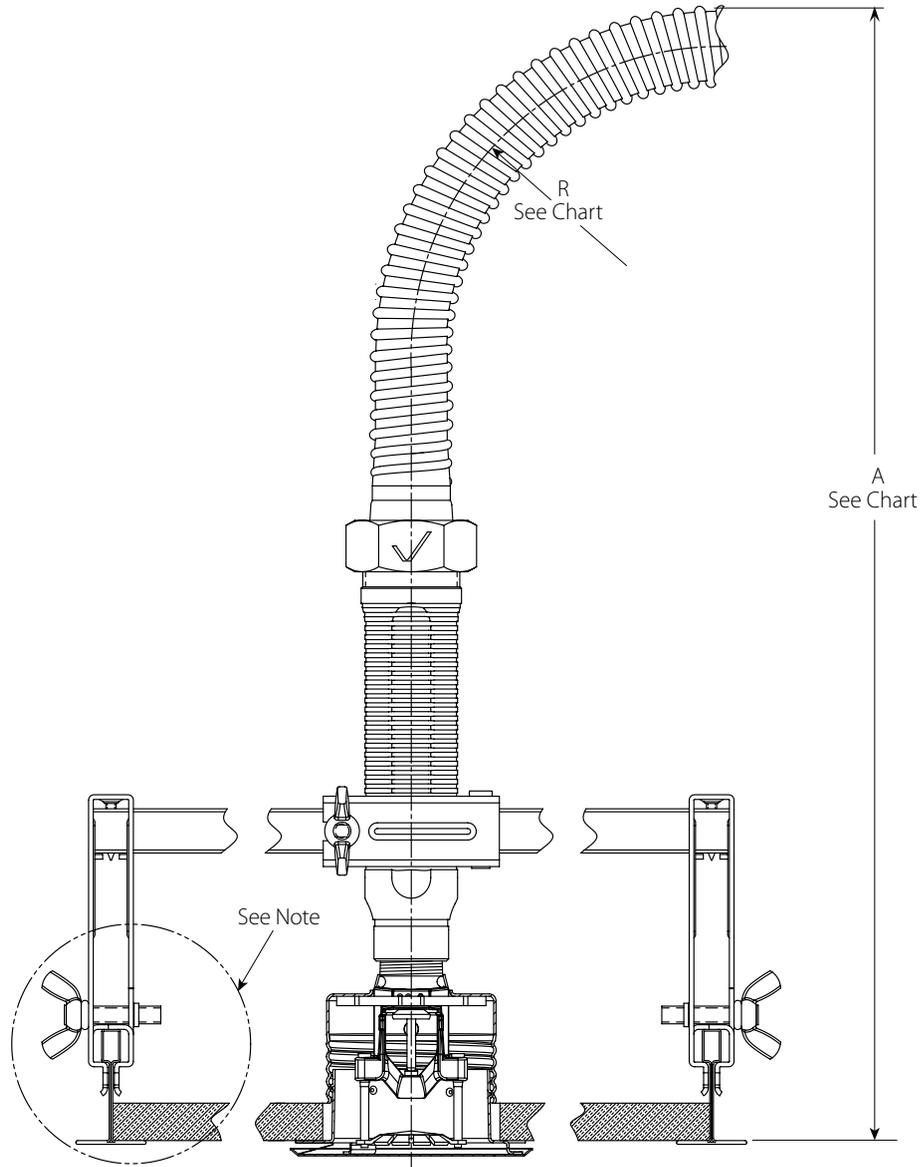
V2708 ½"/12.7 mm MAX. RECESS

NOTE: Hose is permitted to be bent in alternative configurations. What is shown is a typical T-Bar installation and the corresponding minimum clearance dimensions if one 90° bend is imparted to the hose.

Hose Clearance Chart		
Dimension		UL Inches/mm
R	Minimum Bend Radius	4 102
A	Min.	13 5/8 346

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**SERIES AQU CORRUGATED (UNBRAIDED) HOSE ASSEMBLY –
STYLE AB7 BRACKET
SUSPENDED CEILING GRID WITH CONCEALED SPRINKLER**



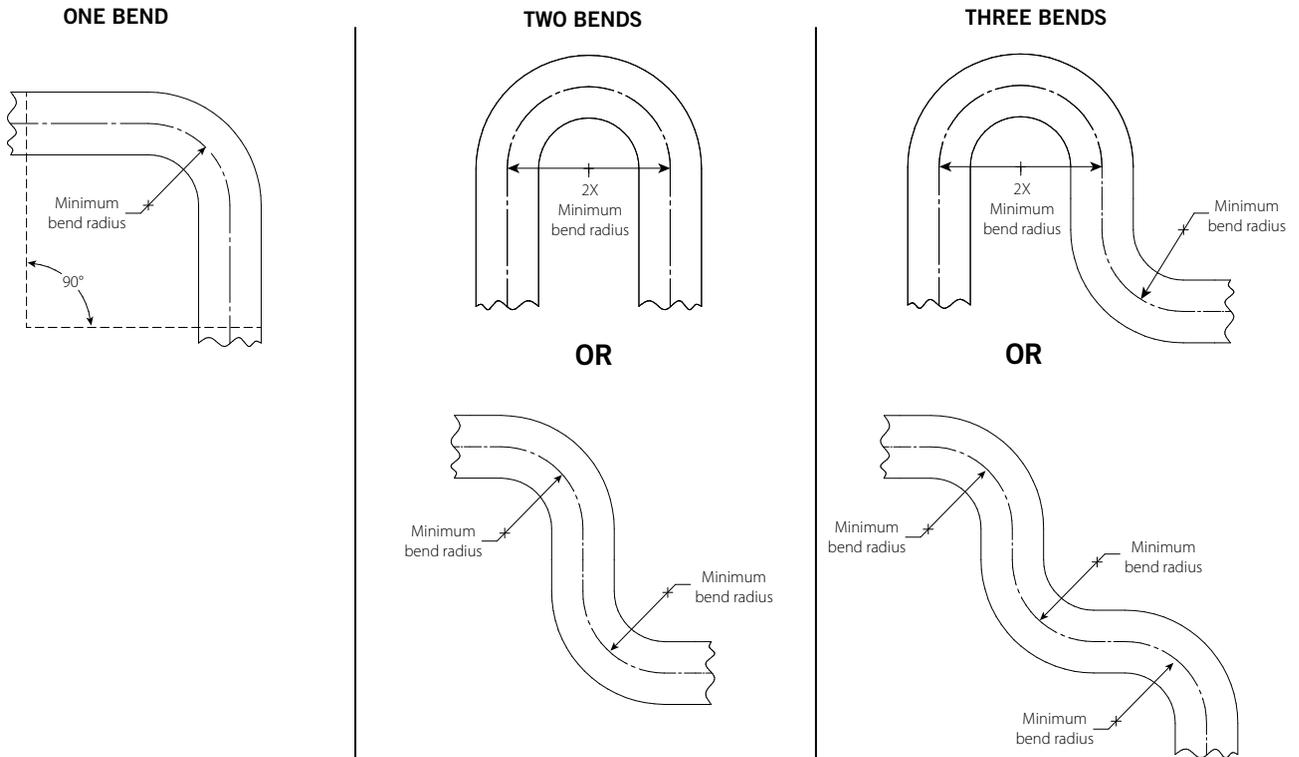
V3802 1/2"/12.7 mm MAX. RECESS

NOTE: Hose is permitted to be bent in alternative configurations. What is shown is a typical T-Bar installation and the corresponding minimum clearance dimensions if one 90° bend is imparted to the hose.

Hose Clearance Chart		
Dimension		UL Inches/mm
R	Minimum Bend Radius	4 102
A	Min.	14 3/8 372

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FLEXIBLE HOSE IN-PLANE BEND CHARACTERISTICS



Note: For out-of-plane (three-dimensional) bends, care must be taken to avoid imparting torque on the hose.

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MATERIAL SPECIFICATIONS

- Corrugated Flexible Hose:** SS304
- Adapter Ring:** Nylon
- Seal:** Nitrile Rubber
- Nut and Nipple:** Zinc Plated Steel
- Reducer (½ or ¾"):** Zinc Plated Steel
- Bracket Stock Bar:** Zinc Plated Steel
- End and Center Brackets:** Zinc Plated Steel
- Staked Center Bracket Wing Nut:** Zinc Plated Steel
- End Bracket Screw:** Zinc Plated Steel
- Tamper-Resistant Screw:** Zinc Plated Steel

MODEL NUMBER CORRELATION

Series AQU	
Original	Series AQU Hose Assembly
AF-31H	31" (AQU-31H)
AF-36H	36" (AQU-36H)
AF-48H	48" (AQU-48H)
AF-60H	60" (AQU-60H)
AF-72H	72" (AQU-72H)
Original	Series AQU Hose Assembly
AF-31T	31" (AQU-31T)
AF-36T	36" (AQU-36T)
AF-48T	48" (AQU-48T)
AF-60T	60" (AQU-60T)
AF-72T	72" (AQU-72T)

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

10.89 6324 REV B UPDATED 07/2012
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