

Vic-Flex® Sprinkler Fittings

Series AH5 Corrugated (Unbraided) Flexible Hose Assembly



Approvals/Listings:



See Victaulic Publication 10.01 for more details.

Product Description:

Vic-Flex™ 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.

System Components:

• Hoses:

Series AH5 7/8" Nominal ID Unbraided Hose

Assembly Lengths: 24, 31, 36, 48, 60, 72"/610, 790, 914, 1220, 1525, 1830 mm.

Note: length includes branch-line nipple and 5.5"/140 mm straight reducer.

- **Sprinkler Reducers:** ½" and ¾"/15 and 20 mm sprinkler connections in 5.5"/140 straight lengths.
- **Branch Connections:** 1"/25.4 mm NPT or BSPT branch line nipples for attaching to rigid pipe.

• Brackets:

Style AB7 for suspended ceilings

Job/Owner

System No.	
Location	

Contractor

Submitted By	
Date	

Technical Specifications:

Maximum Working Temperature: 225°F/107.2°C

Maximum Working Pressure:

- 175 psi/1206 kPa

Connections:

To branch line (inlet) via 1"/25.4 mm NPT or BSPT male thread

To sprinkler head (outlet) via ½" or ¾"/15 mm or 20 mm NPT or 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 2½"/63.5 mm from connection nut.

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

- K5.6/8,1 (S.I.) (½" reducer)
- K8.0/11,5 (S.I.) (¾" reducer)

Material Specifications:

• Series AH5 Hose:

Corrugated Flexible Hose: Type 304 Stainless Steel

Adapter Ring: Nylon

Seal: Nitrile Rubber

Nut and Nipple: Carbon Steel, Zinc-Plated

Reducer (½ or ¾"): Carbon Steel, Zinc-Plated

- **Bracket:** Carbon Steel, Zinc-Plated

Engineer

Spec Section	
Paragraph	
Approved	
Date	

Friction Loss Data – Series AH5 Unbraided Hose for use with Style AB7 VicFlex Brackets and Straight 5.5" Reducers

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

UL Notes:

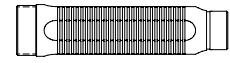
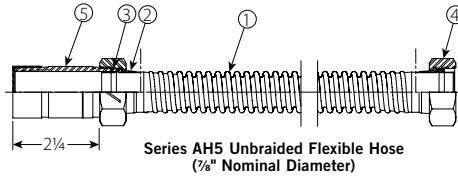
1 The Series AH5 Unbraided Hose has been tested and Listed by UL for use in wet and dry systems per NFPA 13, 13R, and 13D. UL 2443 standards for safety include, but are not limited to, pressure cycling, corrosion resistance, flow characteristics, vibration resistance, leakage, mechanical and hydrostatic strength.

Example: A 48-inch Series AH5 Unbraided 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.

Product Details – Series AH5 Unbraided Hose

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

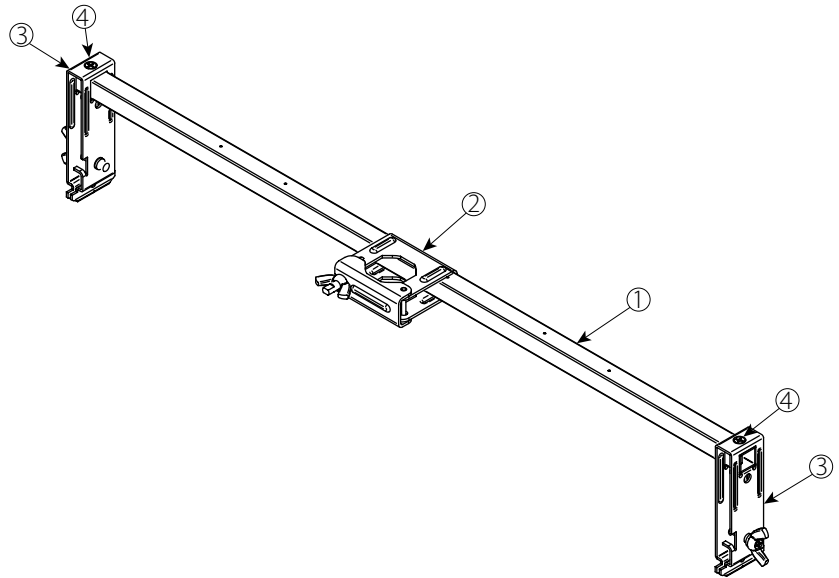


5.5\"/>

VicFlex™ Style AB7

- Suspended Ceilings

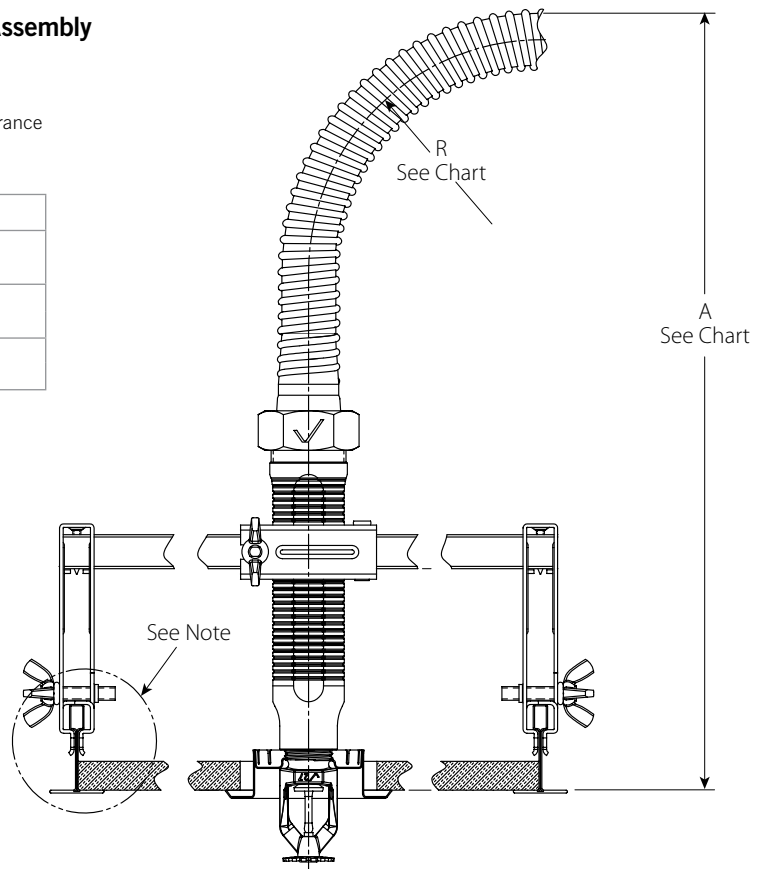
Item	Description
1	24\"/>
2	Patented 1-Bee2 Center bracket
3	End Bracket



Series AH5 Unbraided Hose and Style AB7 Bracket Assembly
Suspended Ceiling Grid with Recessed Sprinkler

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 3/8 346



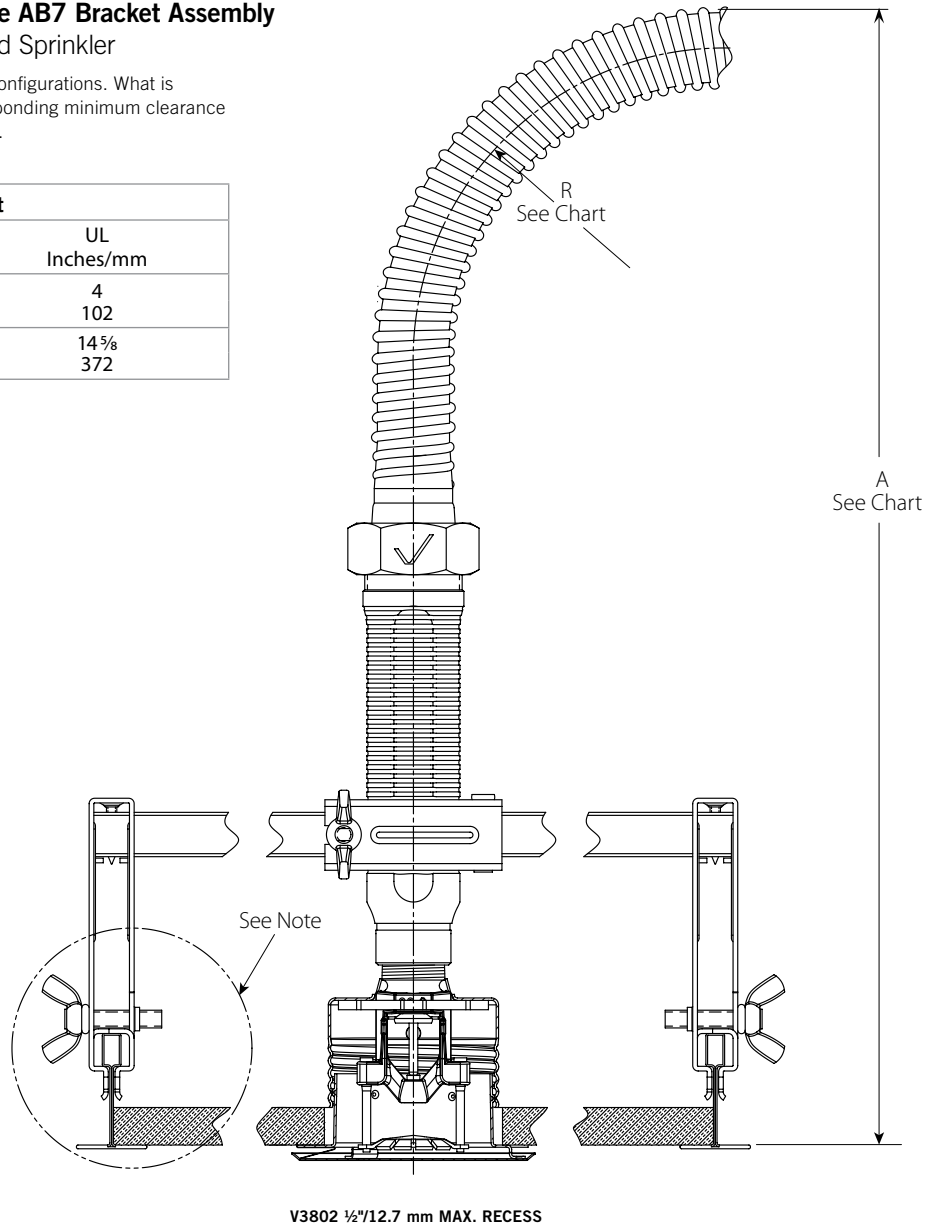
V2708 1/2\"/>

Series AH5 Unbraided Hose and Style AB7 Bracket Assembly

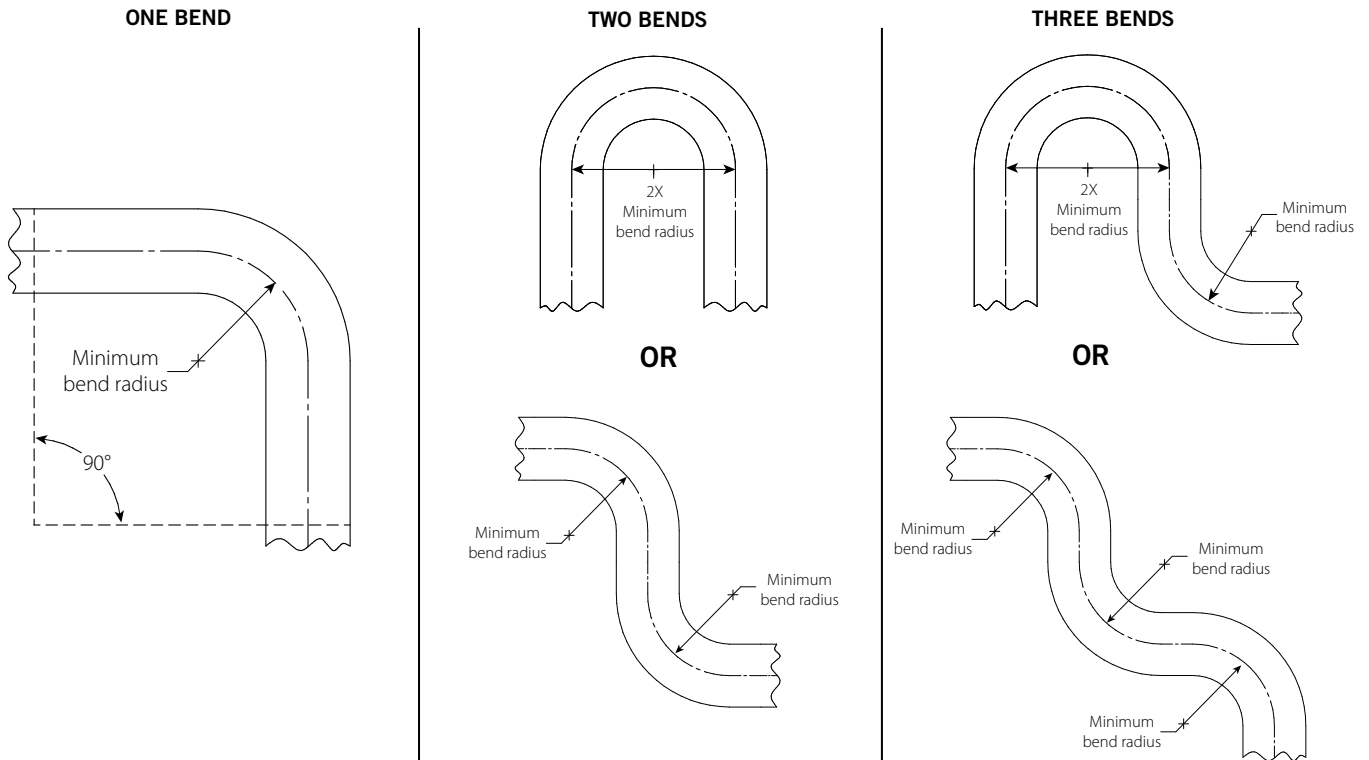
Suspended Ceiling Grid with Concealed Sprinkler

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 5/8 372



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.

Model Number Correlation

Series AH5 Hose Assembly Designation	Outlet Size	Series AQU Hose Assembly Designation	Series AF Hose Assembly Designation
AH5-31	1/2	AQU-31	AF-31H
	3/4		AF-31T
AH5-36	1/2	AQU-36	AF-36H
	3/4		AF-36T
AH5-48	1/2	AQU-48	AF-48H
	3/4		AF-48T
AH5-60	1/2	AQU-60	AF-60H
	3/4		AF-60T
AH5-72	1/2	AQU-72	AF-72H
	3/4		AF-72T

Installation

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

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.

Trademarks

Victaulic and VicFlex are registered trademarks of Victaulic Company.