

# Universal Structural Seismic Brace Attachment for Fire Protection Systems



## **About the Product**

ASC Engineered Solutions<sup>™</sup> new figure AF720 Afcon<sup>®</sup> universal structural brace attachment is designed for use as the structural attachment component of a complete sway brace assembly for fire protection systems. It is made of ductile iron with carbon steel hardware and can attach to any structural steel member from ¼ to ¾ thick, including I-beams, bar joists, steel trusses or steel columns. AF720 rigidly braces piping systems that are subjected to horizontal and vertical seismic loads.

The AF720 universal brace attachment has the highest UL listed load rating in the industry for similar structural attachments. It is cULus Listed (ANSI/UL 203a) and FM Approved (FM 1950–13). It also complies with NFPA 13, ASCE 7, IBC & MSS SP–27 bracing requirements.

This product is ready for installation right out of the box; it comes with all required installation hardware. It installs fast, saving time and money. The AF720 universal brace provides built-in visual verification that the required installation torque has been met. The AF720 is made in the USA and complies with the Buy America, Buy American, and American Iron & Steel Act (AIS) program requirements.

Please contact your local ASC Engineered Solutions sales representative for more information about structural brace attachment Fig. AF720.

### Features & Benefits

- Fast & low cost installation
- Can attach to I-beams, bar joists, steel trusses or steel columns
- Complete ready for installation solution
- Built in visual verification for required torque on set screws
- cULus Listed
- FM Approved
- Made in USA, meets Buy American, Buy America & AIS regulations
- Complies with NFPA 13, ASCE 7, IBC & MSS SP-127 bracing requirements



## Fig. AF720 Structural Brace Attachment: Dimensions (in) & Weight (lbs)



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Service Pipe Size	А	В	L	W	Н	Weight
	In./mm	In./mm	In./mm	In./mm	In./mm	Lbs/kg
1/2	0.78	0.75	4.22	3.96	2.31	3.28
	19.8	19.1	107.2	100.6	58.7	1.49

#### Notes:

ASC Engineered Solutions<sup>TM</sup> brand bracing components are designed to be compatible ONLY with other ASC Engineered Solutions brand bracing components, resulting in a Listed seismic bracing assembly. Updated UL listing information may be viewed at www.ul.com and updated FM approval information may be viewed at www.approvalguide.com.

## FIG. AF720 cULus Listing per ANSI/UL 203a (ASD)

Structure	Load Orientation	Flange Thickness	Horizontal Load Rating at Brace Angle				
			30°-44°	45°-59°	60°-90°	Listed	
Horizontal Steel Flange and Vertical Steel Flange	Parallel to Flange Perpendicular to Flange	0.1875-0.750 in (4.76-19.05 mm)	800 lbf (3.56 kN)	1,131 lbf (5.03 kN)	1,385 lbf (6.16 kN)	<b>1600 lbf</b> (7.12 kN)	

Listed for installation with Fig. AF700, AF771, and AF076
Brace Angles are determined from Vertical.

3) Listed load ratings reduced for angle ranges in accordance with NFPA 13-2019 Table 18.5.2.3.
4) Minimum safety factor of 2.2 in accordance with NFPA 13-2019 Section A.18.5.2.3.

#### FIG. AF720 FM Approved (Listing) per FM 1950-13 (ASD)

Structure	Load Orientation	Flange Thickness	Horizontal Load Rating at Brace Angle				
			30°-44°	45°-59°	60°-74°	75°-90°	
Horizontal Steel Flange	Parallel to Flange	<b>0.125-0.750 in</b> (3.18-19.05 mm)	870 lbf (3.87kN)	1440 lbf (6.41 kN)	1230 lbf (5.47 kN)	1360 lbf (6.05 kN)	
	Perpendicular to Flange		1030 lbf (4.58kN)	2260 lbf (10.05 kN)	2490 lbf (11.08 kN)	2750 lbf (12.23 kN)	
Vertical Steel Flange	Parallel to Flange		1280 lbf (5.69 kN)	1840 lbf (8.18 kN)	2210 lbf (9.83 kN)	2470 lbf (10.99 kN)	
	Perpendicular to Flange		1570 lbf (6.98 kN)	1490 lbf (6.63 kN)	1040 lbf (4.63 kN)	1150 lbf (5.12 kN)	

1) Listed for installation with Fig. AF700 & AF771

2) Brace Angles are determined from Vertical.

3) Listed load ratings reduced for angle ranges in accordance with NFPA 13-2019 Table 18.5.2.3.

4) Minimum safety factor of 1.5 in accordance with NFPA 13-2016 Section A.9.3.5.2.3. To convert the load ratings above

to a safety factor of 2.2 per NFPA 13-2019 Section A.18.5.2.3, multiply load ratings by a factor of 0.68. 5) To convert to LRFD Load Ratings, ASD Load Ratings may be multiplied by a factor of 1.5.







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