## AF735

# Multi-Size Lateral Sway Brace Attachment 



## known as the <br> BE T T T P P

## About the Product

## Description

ASC Engineered Solutions AFCON ${ }^{\circledR}$ figure AF735 "Bear Trap ${ }^{\text {TM" }}$ is a multi-size lateral sway brace attachment. It's a time saving, innovative solution designed to install quickly and easily.
The AF735 is designed to work with 1 " through 2" brace pipe. Out of the box, it works with 1 " or $1 \frac{1}{4}$ " brace pipe and with a quick adjustment, it will work with $11 / 2^{\prime \prime}$ or 2" brace pipe. This size range capability enables a reduction in inventory and increased flexibility on the jobsite for adjustments.
The AF735 is designed to install quickly, in half the time of traditional lateral brace attachments.


This product is both UL Listed and FM Approved and ready for incorporation into your seismic bracing system design. Using Seis Brace 2.0, ASC's free seismic fire protection calculation software, enables spacing maximization and a reduction in material costs while ensuring NFPA 13 code compliance.

The AF735 can reduce your installation time by up to 50\%. See how.

## Features \& Benefits

- Compatible with 1" - 2" brace pipe
- Allows for less inventory \& more jobsite flexibility
- Easy to install
- Installs quickly in half the time of traditional sway brace attachments
- Lowers total install costs
- UL Listed \& FM Approved
- High load capacity
- Visual verification of torque \& installation
- Complies with NFPA 13, ASCE 7, IBC, \& MSS SP-127 bracing requirements.

Fig. AF735 Multi-Size Lateral Brace Attachment

| FIG. AF735: Weight |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Pipe Size |  |  |  |  |  |  |
| Weight (lbs.) | $21 / 2^{\prime \prime}$ | 3" |  |  | $6 "$ | 8" |
|  | 4.0 | 4.2 |  |  | 5.8 | 6.4 |
| FIG. AF735 cULus Listing per ANSI/UL 203a (ASD) |  |  |  |  |  |  |
| Service Pipe Size | Standard Service Pipe | Specialty Service Pipe | Horizontal Load Rating at Brace Angle |  |  |  |
|  |  |  | $30^{\circ}-44^{\circ}$ | $45^{\circ}-59^{\circ}$ | $60^{\circ}-90^{\circ}$ | Listed |
|  |  |  | $1 \mathrm{bf} / \mathrm{kN}$ | lbf/kN | $1 \mathrm{bf} / \mathrm{kN}$ | $\mathrm{lbf} / \mathrm{kN}$ |
| $21 / 2 "$ | Sch. 10 <br> Sch. 40 | Mega-Flow <br> Eddy Flow <br> Fire-Flow <br> Hydroflow |  |  |  |  |
| $3 "$ |  | Mega-Flow <br> Eddy Flow <br> Fire-Flow <br> Hydroflow | $942$ | $1333$ | $1632$ | $1885$ |
| 4" |  | Mega-Flow <br> Eddy Flow <br> Fire-Flow <br> Hydroflow |  |  |  |  |
| $6 "$ |  | Mega-Flow |  |  |  |  |
| 8" | $\begin{aligned} & \text { 0.188" Wall } \\ & \text { Sch. } 30 \end{aligned}$ |  |  |  |  |  |

1) Brace Angles are determined from Vertical.
2) Sch. $10 \& 0.188^{\prime \prime}$ Wall Load Ratings may be used for any thicker wall pipe of the same diameter.
3) Listed load ratings reduced for angle ranges in accordance with NFPA 13-2019 Table 18.5.2.3.
4) Load Ratings reflect 1 " - 2 " brace members.
5) Minimum safety factor of 2.2 in accordance with NFPA 13-2019 Section A.18.5.2.3.

| FIG. AF735 FM Approved (Listing) per FM 1950-13 (ASD) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Pipe Size | Standard Service Pipe | Specialty Service Pipe | Horizontal Load Rating at Brace Angle |  |  |  |
|  |  |  | $30^{\circ}-44^{\circ}$ | $45^{\circ}-59^{\circ}$ | $60^{\circ}-74^{\circ}$ | $75^{\circ}-90^{\circ}$ |
|  |  |  | $\mathrm{lbf} / \mathrm{kN}$ | lbf/kN | lbt/kN | $1 \mathrm{lb/kN}$ |
| $21 / 2 "$ |  | Mega-Flow <br> Eddy Flow <br> Fire-Flow <br> Hydroflow | $\begin{aligned} & 1780 \\ & 7.91 \end{aligned}$ | $\begin{aligned} & 2510 \\ & 11.16 \end{aligned}$ | $\begin{aligned} & 3080 \\ & 13.70 \end{aligned}$ | $\begin{aligned} & 3440 \\ & 15.30 \end{aligned}$ |
| $3 "$ | Sch. 10 <br> Sch. 40 | Mega-Flow <br> Eddy Flow <br> Fire-Flow <br> Hydroflow | $\begin{aligned} & 1670 \\ & 7.42 \end{aligned}$ | $\begin{aligned} & 2360 \\ & 10.49 \end{aligned}$ | $\begin{aligned} & 2890 \\ & 12.85 \end{aligned}$ | $\begin{aligned} & 3230 \\ & 14.36 \end{aligned}$ |
| 4" |  | Mega-Flow Eddy Flow Fire-Flow Hydroflow | $\begin{aligned} & 1660 \\ & 7.38 \end{aligned}$ | $\begin{aligned} & 2350 \\ & 10.45 \end{aligned}$ | $\begin{aligned} & 2880 \\ & 12.81 \end{aligned}$ | $\begin{aligned} & 3210 \\ & 14.27 \end{aligned}$ |
| $6 "$ |  | Mega-Flow | $\begin{aligned} & 1400 \\ & 6.22 \end{aligned}$ | $\begin{array}{r} 1990 \\ 8.85 \end{array}$ | $\begin{aligned} & 2440 \\ & 10.85 \end{aligned}$ | $\begin{aligned} & 2720 \\ & 12.09 \end{aligned}$ |
| 8" | $\begin{aligned} & \text { 0.188" Wall } \\ & \text { Sch. } 30 \end{aligned}$ | - | $\begin{array}{r} 1050 \\ 4.67 \end{array}$ | $\begin{aligned} & 1490 \\ & 6.62 \end{aligned}$ | $1830$ | $\begin{array}{r} 2040 \\ 9.07 \end{array}$ |

1) Brace Angles are determined from Vertical.
2) Sch. $10 \& 0.188$ " Wall Load Ratings may be used for any thicker wall pipe of the same diameter.
3) See table below for FM listed specialty pipes \& FM Listed metric service pipes.
4) Load Ratings reflect 1"- 2" brace members. See table below for listed brace members.
5) Load ratings include a 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 .
6) To convert to LRFD Load Ratings, ASD Load Ratings may be multiplied by a factor of 1.5 .

