

Building connections that last™



# Seismic Solutions

## Design Tools & Product Catalog



# The importance of seismic bracing



**Fig. AF735**  
Multi-Size Lateral  
Sway Brace Attachment

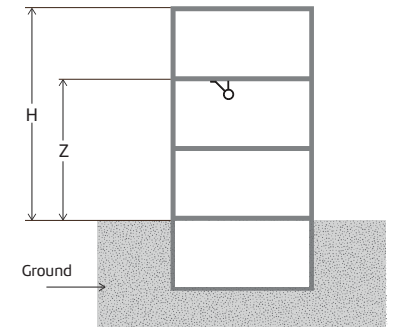


Seismic bracing is important because it ensures the operational state of a fire sprinkler system after an earthquake.

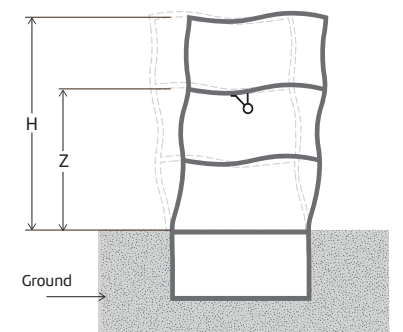
History has shown that much of the damage that occurs after an earthquake is due to fire.

Seismic bracing of the fire sprinkler systems and other non-structural systems in a building reduce or eliminate damage to these systems from earthquakes. This helps to protect the people inside the building, as well as the contents of the building from harm or damage. At a minimum seismic bracing reduces the amount of damage and associated clean-up costs from damage to these non-structural systems.

Experience has shown that most damage after an earthquake comes from the failure of the non-structural systems in a building not the failure of the structure itself. The Federal Emergency Management Agency (FEMA) has identified one of the primary causes of property damage from earthquakes as the failure of electrical, gas and water lines contributing to fires after an earthquake. NFPA 13 provides direction on how fire sprinkler systems should be braced to resist seismic forces, so that these critical systems will be operational for the protection of lives and property after a seismic event.



Before a seismic event



Software allows reduction of seismic coefficient based on sway base elevation

# Seis Brace® is the Leader in Seismic Bracing Software – the most comprehensive seismic bracing calculation software in Fire Protection.

## Report Sample



No software to buy or license fees.  
The software is web based and automatically updates.  
[www.seisbrace.com](http://www.seisbrace.com)

Seis Brace design software is self correcting and ensures compliance to NFPA 13. Its intuitive functionality makes the process of running zone of influence calculations consistent, fast and easy. The summary shows the actual formula and inputs used to derive the values in the submittal. In addition to this, Seis Brace includes multiple options for structural attachments, including pre and post installed concrete anchors, TJI wood joist, steel beams and bar joists, z-purlins and stainless steel applications.

- (2016, 2019, 2022, and 2022 TIA 22-8)
- ASCE7-10 and ASCE7-16
- Calculate Seismic Coefficient using one of three possible methods to optimize brace layout and design
- Choose pipe by manufacturer to ensure the most accurate seismic load calculation
- Choose UL or FM loads to comply with project specifications
- Choose NFPA or Specific manufacturer concrete anchor products to maximize structural attachment capacity
- Prying factors of ASC products used to maximize swivel component and anchor capacity
- Help buttons that show NFPA 13 references.
- Complete submittal with all sheets included
- And much more

**Fig. AF735**  
Multi-Size Lateral Sway Brace Attachment

Works with from 1" up to 2" brace pipe. Innovative design features allow fast installation method which reduces time to install by up to 50% or more. Same maximum load ratings as our AF700 Universal Swivel.



**Fig. AF700**

Universal Swivel Attachment

Best Prying Factors in the industry translates to best load ratings when installed in concrete and its open design makes it the easiest to install in the industry. Uses a range of brace pipe from 1" to 2".

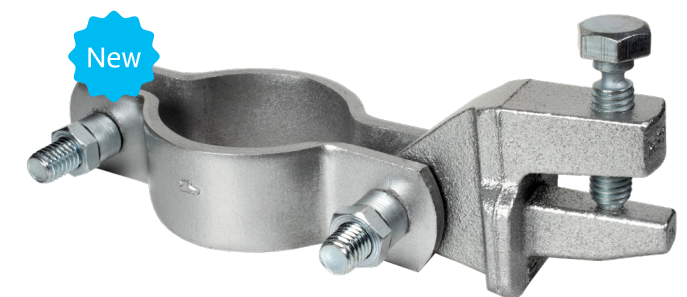
**Fig. AF700SS**

Universal Swivel Attachment – Stainless Steel

Made of 316 Stainless steel and meets requirements for non-magnetic project specifications and its open design makes it the easiest to install in the industry. Uses a range of brace pipe from 1" to 2".



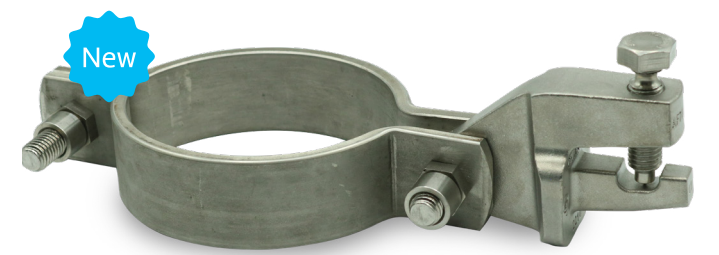
known as the  
**BEAR TRAP™**



**Fig. AF730**

Longitudinal & Lateral Seismic Clamp

From 1" to 12" IPS size range UL listed, and FM approved as both lateral and longitudinal applications. Uses a range of brace pipe from 1" to 2".



**Fig. AF730SS**

Longitudinal & Lateral Seismic Clamp – Stainless Steel

Made of 316 stainless steel and meets requirements for non-magnetic project specifications. From 1" to 8" IPS size range UL listed, and FM approved as both lateral and longitudinal applications. Uses a range of brace pipe from 1" to 2".



**Fig. AF720**

Structural Brace Attachment

Best UL load rating in the industry for a structural attachment to steel structural members and Universal application to both I-beam and Steel Truss (Bar Joist). Can be installed in any orientation, horizontal (beam) or vertical (column).



## Seismic Braces

Adjustable Structural  
Brace Attachment  
Fig. AF086



Structural Brace Attachment  
Fig. AF087



Adjustable Steel  
Beam Attachment  
Fig. AF772



Afcon® seismic swivels and clamps are designed to provide seismic bracing in fire protection systems, offering industry-leading prying factors allowing support of greater design loads in concrete and reduction of bracing location required. Available with 1/2", 5/8" and 3/4" fastener holes for flexibility with a variety of anchor sizes, and featuring break away set screws that provide visual indication of proper installation torque.

- Many products can be certified compliant with Buy America, Buy American, and AIS upon request
- Service 1" - 12" system pipe
- Fits 1" - 2" brace pipe
- Break away set screws & nuts
- Visual verification of installation torque (AF700, AF720, AF730, AF735)
- UL Listed & FM Approved
- Supported by Seis Brace® software

## Technical Support & Consultation

Our new Seismic Hanger Sales Engineer specializing in Fire Protection applications, **John Deutsch**, is here to support your technical consultation needs.

John has over 30 years of experience in the Fire Protection Industry and comes to ASC highly accredited.

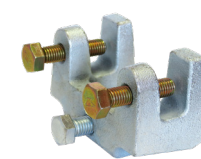
- An active NFPA 13 member of the Hanging and Bracing Committee for the past 13 years
- Train your team on seismic bracing per NFPA 13 and our Seis Brace software
- Actively involved in recent changes to the standard and is a contributing author to the 2016 version of the NFPA 13 Handbook
- AHJs and plan reviewer questions and requests for information



Please reach out to John.  
[Book a consult today!](#)



Universal Structural  
Brace Attachment  
Fig. AF778



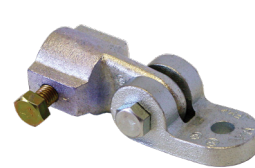
Universal Swivel  
Brace Attachment  
Fig. AF075



Universal Swivel Sway  
Brace Attachment  
Fig. AF076



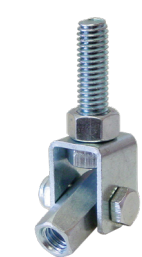
Sway Brace  
Swivel Attachment  
Fig. AF771



Structural Brace  
Attachment  
Fig. AF775



Swivel Attachment  
Fig. AF777



Model Q Brace Clamp  
Fig. AF001



Model K Brace Clamp  
Fig. AF035



Surge Restrainer  
Fig. AF310



Surge Restrainer  
Fig. AF773



## Additional ASC Products & Services

### Flow Control

Industrial Valves  
Actuators & Controls  
Commercial & Residential Valves

### Support Systems

Pipe Hangers & Supports  
Bolted Framing

### Fire Protection Products & Fabrication

Seismic Bracing  
Welded Outlets  
Flexible Sprinkler Hose & Brackets  
Fire Sprinkler Accessories  
Fabrication Equipment

### Pipe Joining Systems

Grooved Products  
Pipe Fittings, Nipples & Couplings  
High Pressure Fittings  
Press Products  
Pipe & Tubing  
Plumbing Specialities & Accessories

### Performance Products

Engineered Pipe Supports  
Hydraulic & Mechanical  
Snubbers

### Services

Mechanical VDC Service  
Critical Component Repairs  
Snubber Support Services



### **About ASC Engineered Solutions**

ASC Engineered Solutions (formerly Anvil International & Smith-Cooper International) is defined by quality—in its products, services and support. With nearly 2,000 employees, the company’s portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPP1®, Gruvlok®, J.B. Smith, Merit®, NAP®, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF®, SprinkFLEX®, Trenton Pipe, and VEP. With headquarters in Oak Brook, IL, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI .



[asc-es.com](http://asc-es.com)

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