

# **CONNECT AND PROTECT**

Mechanical, Electrical and Plumbing Seismic **Bracing Systems** 



### Trapeze Bracing Attachments

xxxx designated in the part numbers refers to parts with multiple sizes and/or finishes available.

Trapeze Sway Brace, Pipe

CSBR1 - p. 27

#### RIGID BRACES STRUT BRACE MEMBER





#### CABLE BRACING



Ovsl Sleeve CSBxxSLVBxx – p. 30



Cable Spool CSBxxCBLxx – p. 30



URC Attachment Kit CSB2WxxURCxxLxx

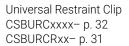


**RIGID BRACES** 

**PIPE / CONDUIT BRACE MEMBER** 

Cable Cutters – p. 31







Swaging Tools – p. 34



### Rod Stiffeners

#### STRUT



nVent CADDY Quick Clip CSBRSx – p. 35





Strut Rod Stiffener CSBRS37EG – p. 35



PIPE



Pipe Rod Stiffener CSBRS1 – p. 35



### Single Pipe/Conduit Braces

xxxx designated in the part numbers refers to parts with multiple sizes and/or finishes available.

#### RIGID BRACES PIPE / CONDUIT BRACE MEMBER



Universal Sway Brace CSBxxxx – p. 20





Quick Grip Jr. Lateral Sway Brace CSBQIKCLxxxxEG – p. 22



#### **CABLE BRACING**







Oval Sleeve CSBxxSLVBxx – p. 30





Swaging Tools - p. 34

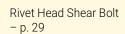


### Accessories

#### **REPLACEMENT HARDWARE**

Cone Point Shear Bolt – p. 29







Shear Nut – p. 29



#### **SWAY BRACING**

Clevis Bolt Spacer CSBCSxxxx – p. 28



Quick Grip Lateral Sway Brace CSBQGxxxxEG – p. 24



Lateral Telescoping Brace Assembly CSBTx – p. 19



### Structural Attachments - Steel

xxxx designated in the part numbers refers to parts with multiple sizes and/or finishes available.

#### **FLANGE ADAPTERS**



#### FLANGE ADAPTER ASSEMBLY - PIPE / CONDUIT BRACE



Steel Flange Adapter Assembly CSBS1A - p. 13



#### THROUGH BOLT ATTACHMENT - STRUT BRACE



Universal Structural Bracket, Strut Brace CSBUSx - p. 17



#### **CABLE BRACING**



CSBURCxxxx- p. 32

Universal Restraint Clip



No Pry Clip

Steel Flange Adapter

CSBSx - p. 12



CSBNPCxx - p. 31



Adjustable I-Beam Adapter CSBSx – p. 14



#### THROUGH BOLT ATTACHMENT - PIPE / CONDUIT BRACE



Universal Structural Bracket CSBUx - p. 18



Strut Seismic Hinge Bracket Assembly CSBUSxPA - p. 16



URC Attachment Kit CSB2WxxURCxxLxx



### nVent CADDY Pyramid Rooftop Anchor System



Rooftop Anchor CRAU24xxxx – p. 37



Rooftop Anchor Cable Bracing CRA36SS38Lx - p. 38



Deck Screw A927WxxxP100 - p. 38



### Structural Attachments -Concrete / Wood FOR STRUT BRACE MEMBER

Universal Structural Bracket, Strut Brace CSBUSx – p. 17



Strut Seismic Hinge Bracket Assembly CSBUSxPA - p. 16



xxxx designated in the part numbers refers to parts with multiple sizes and/or finishes available.

#### **FOR PIPE / CONDUIT BRACE MEMBER**

Universal Structural Bracket CSBUx - p. 18



#### FOR CABLE BRACING

Universal Restraint Clip CSBURCxxxx- p. 32



#### LOAD DOUBLER

Multi Attachment CSBMAxxxxxEG - p. 15



Seismic Lighting

Fixture Clamp

– p. 39

No Pry Clip CSBNPCxx - p. 31



URC Attachment Kit CSB2WxxURCxxLxx – p. 33

401 Clevis Hanger



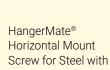




Telescoping

**Related Products** 

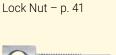
Pipe Stand – p. 41



**RS** Retrofit

- p. 39

Retainer Strap



**Pipe Clamps** – p. 42

**Telescoping Strut** 

Replacement

– p. 40

SN Series Nut / SNSW Flanged Nut for Strut – p. 40



Strut Clamps – p. 42



– p. 42

### nVent CADDY Seismic Bracing Systems Overview

nVent CADDY Seismic Solutions protect people, property and equipment during and after a seismic event by ensuring business continuity and continued operation of critical infrastructure and services. Areas of nVent CADDY expertise:

- Designing a complete, rightsized bracing system
- Identifying the appropriate product from our broad offering
- Offering compatible attachment and support products
- Explaining installation techniques and tips to meet evolving codes and standards requirements

From design to construction to inspection, the nVent CADDY team makes seismic simple by walking you through the full process for applications including Mechanical, HVAC, Electrical, Plumbing and Fire Protection.

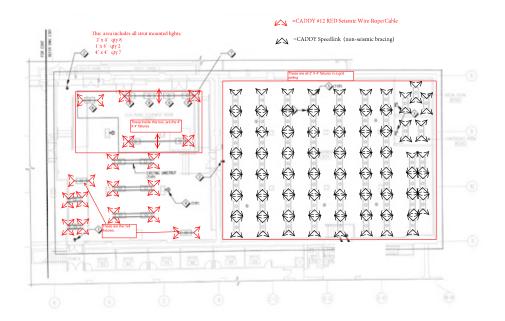
Both cable and rigid bracing solutions are available for single pipe or conduit, trapeze, and for floor-, roof-, and wall-mounted equipment.





#### **ENGINEERING SOLUTIONS**

- Design optimization to meet your needs
- Bracing layouts with bill of material using code compliant products
- Stamped drawings



#### **CUSTOMER EXPERIENCE**

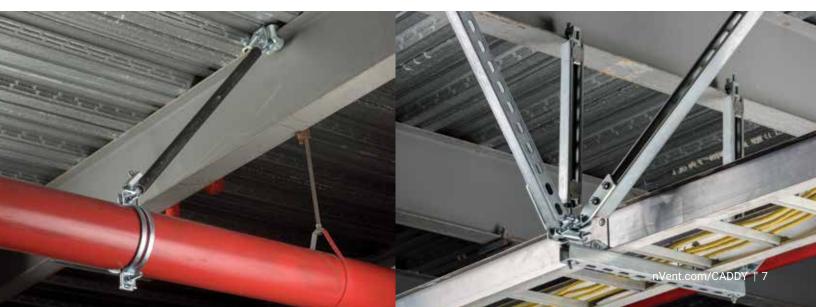
- Quick turnaround
- Local availability through distributors
- In-market support from the local nVent CADDY sales team

"nVent's seismic experts provide everything we need for a code compliant cable bracing system. Their patented, turn-key seismic solutions give us peace of mind that our building products are properly braced for a seismic event."

Tim Barmeier Mechanical Supply Company

#### **PRODUCT SOLUTIONS**

- Cable and rigid bracing solutions
- Innovative products
- Superior full range of bracing solutions



### nVent CADDY Seismic Bracing Systems Overview

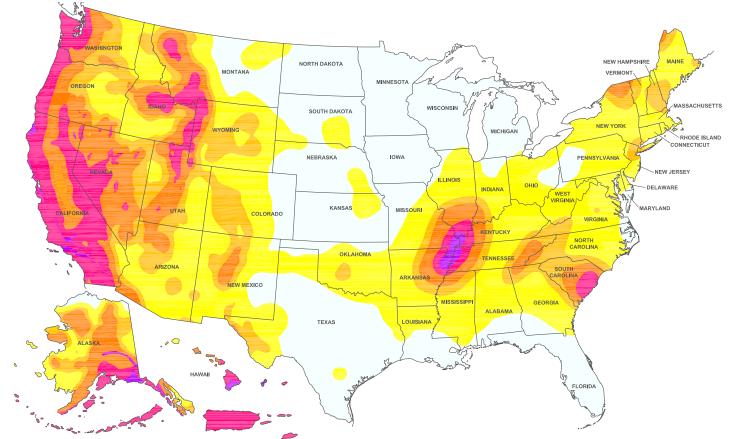
#### **DETERMINING FACTORS IN BRACING**

The requirements for seismic protection depend on the building risk category or risk classification as well as the building location. The higher the seismicity of the location and greater the building occupancy, the more stringent the requirements. For example, military or healthcare facilities in a generally seismically-moderate area will typically require some bracing because of the buildings importance to disaster recovery, when an adjacent strip mall may not require it.

#### **Risk Category**

Category I: Low hazard to human life, barns Category II: Residential, strip malls, individual commercial buildings

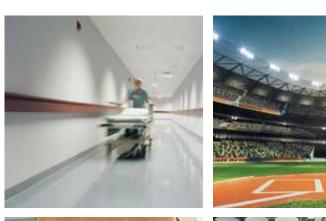
**Category III**: High occupancy, stadiums, buildings containing hazardous materials **Category IV**: Hospitals and essential facilities, government buildings





#### WHAT NEEDS TO BE BRACED

- Hospitals
- Airports
- Power Plants
- Schools
- Casinos
- Shelters
- Resorts Stadium
- Arenas
- Prisons
- Dams
- Water treatment
- Pharmaceutical
- Police stations
- Public utilities
- Government buildings







#### COMMON COMPONENTS THAT REQUIRE SEISMIC BRACING

Suspended mechanical, electrical, plumbing components:

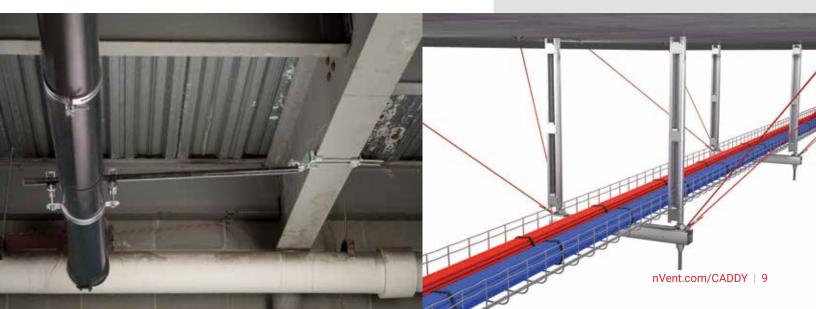
- Piping systems
- HVAC ductwork
- Conduits
- Bus ducts
- Cable trays
- Suspended equipment

Floor mounted, roof mounted and wall mounted:

- Panel boards
- Switchgears
- Generators
- Air conditioners
- Chillers
- Cooling towers
- Transformers
- Air handling units
- Pumps

Process equipment

Equipment with hazardous materials



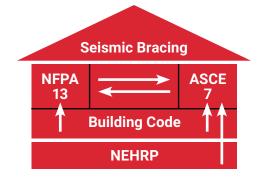
#### THE NEED FOR BRACING

#### Legal and Building Requirements

The need for earthquake protection of nonstructural building components is found in the structural design requirements of the building code and in the building code reference standard ASCE 7 (American Society of Civil Engineers). These nonstructural building components are: architectural, mechanical, electrical, and plumbing equipment and systems. Chapter 13 of ASCE 7 contains the seismic design requirements.

The Earthquake Hazard Reduction Act (Public Law 95-124) of 1977 was amended in 1990 (Public Law 101-614) to formulate policy diminishing the perils of earthquakes in the United States. This policy established the National Earthquake Hazard Reduction Program (NEHRP). Executive Order (EO) 13717 was enacted in 2016 ("Establishing a Federal Earthquake Risk Management Standard"), and mandates the implementation of the NEHRP standards for reducing earthquake vulnerabilities of facilities and systems.

EO 13717 orders that every new building covered by the order and for which project assumptions, scope, budgets and strategy for building start after May 2, 2016 shall comply with the seismic provisions of the 2015 or later edition of the International Building Code (IBC).

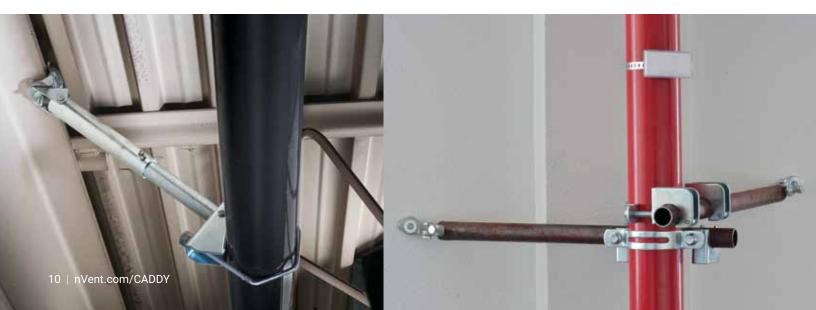


### Guidelines and specifications direct the implementation of seismic bracing

Reference standards

Legally adopted building code requirements

Laws



### Table of Contents

#### People, Property and Operation Continuity Protection

Earthquakes can lead to business disruption, causing damage to mechanical, HVAC, electrical, plumbing and fire protection systems or equipment. Differential movement of building systems during an earthquake may cause them to break, fall, or collide and damage other adjacent systems, damage assets and inventory, or injure people.

Rigid Bracing	p. 12
Structural Attachments	-
Lateral Telescoping Brace Assembly	
Sway Braces	
Replacement Nuts and Bolts	

Cable Bracing	p. 30
Cable Spool	
Oval Sleeve	
Restraint Clips	31, 32
Attachment Kits	
Cable Cutters and Swaging Tools	31, 34

# Rod Stiffenersp. 35nVent CADDY Quick Clip Rod Stiffener35Strut Rod Stiffener35Pipe Rod Stiffener35

#### nVent CADDY Pyramid Rooftop Anchor System......p. 36

nVent CADDY Pyramid Rooftop Anchor	.37
nVent CADDY Pyramid Rooftop Anchor Cable Bracing	
Deck Screw	.38

#### Related Products ......p. 39

Additional nVent CADDY products frequently used when installing mechanical, electrical, or plumbing applications

nVent CADDY Pyramid Rooftop Anchor System See page 36

#### **STEEL FLANGE ADAPTER**

- Meets requirements of the Buy American Act
- Installs on top or bottom flange of I-beams and top of bar joist (horizontal and vertical leg)
- Low profile easily fits between metal deck and steel structure
- Thumb spring retainer allows for ease of positioning
- Available pre-assembled to the Universal Structural Bracket, eliminating field assembly
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Meets NFPA® 13 as pre-qualified for seismic applications

#### Material: Steel Finish: Electrogalvanized

Part Number	Flange Thickness FT	Rod Size RS	Α	В	С	D	
CSBS1	1/4" - 3/4"	1/2"	13/16"	7/8"	3 5/8"	2 5/8"	
CSBS2	3/4" - 1 1/4"	1/2"	7/8"	7/8"	3 5/8"	3 1/8"	

UL Loads						
Part Number	Flange Thickness	Perpendicular to Structure	Parallel to Structure			
00001	1/4" - 3/8"	3,000 lb	2,200 lb			
CSBS1	3/8" - 3/4"	3,000 lb	2,765 lb			
CSBS2	3/4" - 1 3/8"	3,000 lb	2,500 lb			

	FM Loads							
	Horizontal Capacity per Installation Angle from Vertical							
Part Number	Perpendicular to Structure Parallel to Structure							
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°
CSBS1	850 lb	1,780 lb	2,770 lb	2,840 lb	880 lb	1,430 lb	2,020 lb	2,410 lb
CSBS2	1,220 lb	2,140 lb	2,580 lb	2,870 lb	1,100 lb	1,820 lb	2,190 lb	2,680 lb



RS



ŝ

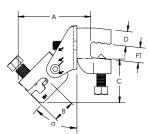


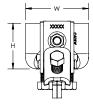
#### **STEEL FLANGE ADAPTER ASSEMBLY**

- Meets requirements of the Buy American Act
- Steel Flange Adapter and Universal Structural Bracket are preassembled, limiting work required in the field
- Installs on top or bottom flange of I-beams and top of bar joist (horizontal and vertical leg)
- Low profile easily fits between metal deck and steel structure
- Thumb spring retainer allows for ease of positioning
- Integrated angle gauge easily displays brace member angle of installation
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- · Works with 1" through 2" brace pipes to reduce inventory
- $\bullet$  Meets NFPA  $^{\ensuremath{\$}}$  13 as pre-qualified for seismic applications









Material: Steel
Finish: Electrogalvanized

Part Number	Flange Thickness FT	Height H	Width W	Angle a	A	В	С	D	
CSBS1A	1/4" - 3/4"	2 5/8"	3 5/8"	45°	4 1/8"	1 5/16"	2 9/16"	7/8"	

Note: This part is used in conjunction with Sway Brace CSBR1

– See p. 27

UL Loads						
Part Number	Flange Thickness	Perpendicular to Structure	Parallel to Structure			
	1/4" - 3/8"	3,000 lb	2,200 lb			
CSBS1A	3/8" - 3/4"	3,000 lb	2,765 lb			

FM Loads								
	Horizontal Capacity per Installation Angle from Vertical							
Part Number	Perpendicular to Structure				Parallel to Structure			
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°
CSBS1A	850 lb	1,780 lb	2,770 lb	2,840 lb	880 lb	1,430 lb	2,020 lb	2,410 lb

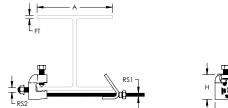
#### ADJUSTABLE I-BEAM ADAPTER

- Meets requirements of the Buy American Act
- No loose parts
- No assembly required
- Installs to the bottom of I-beams when attachment to both sides is required
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Meets NFPA®-13 requirements for seismic sway bracing









FM

(VL)<sub>US</sub>

OSHPD

Material: Steel Finish: Electrogalvanized

Part Number	Flange Thickness FT	A	Rod Size 1 RS1	Rod Size 2 RS2	Height H	Width W
CSBS3	1/4" - 3/4"	4" - 8 1/2"	3/8"	1/2"	2 5/8"	3 5/8"
CSBS4	1/4" - 3/4"	4" - 14 1/2"	3/8"	1/2"	2 5/8"	3 5/8"
CSBS5	3/4" - 1 1/4"	4" - 18"	3/8"	1/2"	3 1/8"	3 5/8"

	UL Loads						
Part Number	Flange Thickness	Perpendicular to Structure	Parallel to Structure				
00000	1/4" - 3/8"	3,000 lb	2,200 lb				
CSBS3	3/8" - 3/4"	3,000 lb	2,765 lb				
00004	1/4" - 3/8"	3,000 lb	2,200 lb				
CSBS4	3/8" - 3/4"	3,000 lb	2,765 lb				
CSBS5	3/4" - 1 1/4"	3,000 lb	2,500 lb				

	FM Loads								
	Horizontal Capacity per Installation Angle from Vertical								
Part Number		Perpendicu	Ilar to Structu	'e		Parallel	to Structure		
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°	
CSBS3	1,180 lb	2,210 lb	2,830 lb	2,940 lb	820 lb	1,380 lb	2,080 lb	3,010 lb	
CSBS4	1,180 lb	2,210 lb	2,830 lb	2,940 lb	820 lb	1,380 lb	2,080 lb	3,010 lb	
CSBS5	1,220 lb	2,140 lb	2,580 lb	2,870 lb	1,100 lb	1,820 lb	2,190 lb	2,680 lb	

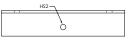
#### **MULTI ATTACHMENT**

- Disperses load over two anchors
- Minimizes the number of installed braces needed for concrete and wood structures
- Ideal for deck installations
- Use for both lateral and longitudinal sway brace applications
- Meets NFPA®-13 requirements for seismic sway bracing









Material: Steel Finish: Electrogalvanized



Part Number	Hole Size 1 HS1	Hole Size 2 HS2	Α	В	C	D	
CSBMA050050EG	9/16"	9/16"	12"	2 1/2"	2 1/2"	9"	
CSBMA050075EG	13/16"	9/16"	12"	2 1/2"	2 1/2"	9"	

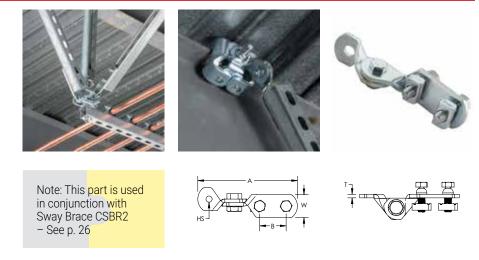
Mount to structure using holes indicated in HS1.

UL Loads					
Part Number	Service Pipe Size	Rating			
CSBMA050050EG	1" - 12"	3,740 lb			
CSBMA050075EG	1" - 12"	3,740 lb			

FM Loads						
Dout Number		y per Installation Angle fro	om Vertical			
Part Number	30° - 44°	45° - 59°	60° - 74°	75° - 90°		
CSBMA050050EG	3,290 lb	4,520 lb	5,540 lb	6,200 lb		
CSBMA050075EG	3,290 lb	4,520 lb	5,540 lb	6,200 lb		

#### STRUT SEISMIC HINGE BRACKET ASSEMBLY

- Used for installations where strut brace is parallel to structure
- One wrench size fits all required hardware, eliminating the need to change tools
- Shear-off head helps ensure correct torque and simplifies inspection
- Compatible with brace members of 12 GA strut type A



#### Material: Steel Finish: Electrogalvanized



Thildh: Electroga	vanizea		APPROVED		
Part Number	Hole Size 1	Width W	Thickness T	Α	В
CSBUS1PA	9/16"	1.6"	1/4"	7"	1.88"
CSBUS2PA	13/16"	1.6"	1/4"	7"	1.88"

	FM Loads					
Deut Number	Duese Member	н	orizontal Capacity p	er Installation Angle	from Vertical	
Part Number	Brace Member	30° - 44°	45° - 59°	60° - 74°	75° - 90°	
CSBUS1PA	12 GA Strut Channel	1,162 lb	1,864 lb	1,864 lb	1,680 lb	
CSBUS2PA	12 GA Strut Channel	1,162 lb	1,864 lb	1,864 lb	1,680 lb	

#### UNIVERSAL STRUCTURAL BRACKET, STRUT BRACE

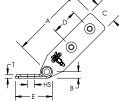
- Used for installations where strut brace is perpendicular to structure
- One wrench size fits all required hardware, eliminating the need to change tools
- Shear-off head helps ensure correct torque and simplifies inspection
- Compatible with brace members of 12 GA strut type A

Buy American Act COMPLIANT





Note: This part is used in conjunction with Sway Brace CSBR2 – See p. 26









FM

APPROVED

OSHPD

Material: Steel Finish: Electrogalvanized

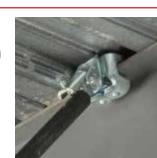
Part Number	Hole Size HS	Width W	Thickness T	Α	В	С	D	E
CSBUS1	9/16"	1.6"	1/4"	5 1/4"	1/2"	1.6"	2"	2.6"
CSBUS2	13/16"	1.6"	1/4"	5 1/4"	1/2"	1.6"	2"	2.6"

Cut length for strut member is +/- 1" (25 mm) of measured length.

FM Loads					
Deut Number	Due ee Mewsher	н	orizontal Capacity pe	er Installation Angle f	from Vertical
Part Number	Brace Member	30° - 44°	45° - 59°	60° - 74°	75° - 90°
CSBUS1	12 GA Strut Channel	2,010 lb	2,840 lb	3,420 lb	3,810 lb
CSBUS2	12 GA Strut Channel	2,010 lb	2,840 lb	3,420 lb	3,810 lb

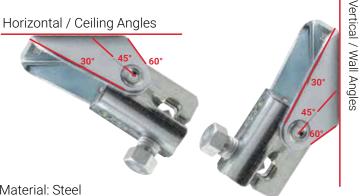
#### UNIVERSAL STRUCTURAL BRACKET

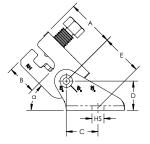
- Meets requirements of the Buy American Act
- Universal design allows one product to attach directly to concrete, wood, bar joist or I-beam adapters
- Integrated angle gauge easily displays brace member angle of installation
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Works with 1" through 2" brace pipes to reduce inventory
- Low profile minimizes prying effect on concrete fasteners decreasing the number of braces used
- $\bullet$  Meets NFPA® 13 as pre-qualified for seismic applications

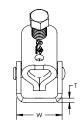




Note: This part is used in conjunction with Sway Brace CSBR1 – See p. 27







FM

APPROVED

OSHPD

Material: Steel Finish: Electrogalvanized

Part Number	Hole Size HS	Width W	Thickness T	A	В	С	D	E	UL Listed Load
CSBU1	1/2"	1 15/16"	3/16"	2 1/16"	1 5/16"	1 3/8"	1 1/4"	1 3/4"	3,000 lb
CSBU2	13/16"	1 15/16"	3/16"	2 1/16"	1 5/16"	1 3/8"	1 1/4"	1 3/4"	3,000 lb

COMPLIANT

FM Loads								
Dout Number	om Vertical							
Part Number	30° - 44°	45° - 59°	60° - 74°	75° - 90°				
CSBU1	1,690 lb	2,210 lb	2,660 lb	3,090 lb				
CSBU2	1,480 lb	1,480 lb 2,290 lb 2,860 lb 3,090 lb						

### **Rigid Bracing**

#### LATERAL TELESCOPING BRACE ASSEMBLY

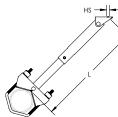
- Complete, out of the box assembly is compatible with both steel (IPS) and CPVC piping
- Telescoping brace member eliminates the need to cut pipe, minimizing waste and allowing one person to effectively complete the installation
- Easy "push-to-install" nVent CADDY Rod Lock feature allows the V-bolt to assemble quickly, and helps eliminate the risk of compressing CPVC pipe
- Length of telescoping lateral brace is fixed by installing the included self-drilling screw
- Electrogalvanized coating throughout the entire assembly provides superior corrosion resistance, and eliminates the risk of exposing CPVC pipe to any harmful oils or residue
- Designed to reduce the installation time of a complete brace by up to 80%
- Design allows center loading of brace on the service pipe
- Meets requirements of NFPA® 13
- FM<sup>®</sup> Specification Tested

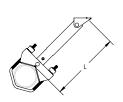
#### Material: Steel

#### Finish: Electrogalvanized











Part Number	Brace Length L	Pipe Size	Hole Size HS	Wrench Size	UL Listed Load
CSBT1	1' - 1 1/2'	1" - 4"	1/2"	5/16"	1,300 lb
CSBT2	1 1/2' – 3'	1" - 4"	1/2"	5/16"	1,300 lb
CSBT3	3' - 5 1/2'	1" - 4"	1/2"	5/16"	1,300 lb
CSBT4	5 1/2' - 7'	1" - 4"	1/2"	5/16"	1,300 lb

UL Listed Load applies to Sch 40, Sch 10, Youngstown Tube Fire-Flo (1-1/2" to 4"), Bull Moose Eddy Flo (1-1/4" to 4"), and Wheatland Mega Flow (1-1/4" to 4") service pipes.

Wrench Size represents the hex size used to tighten the self-drilling screw.

	Vertical Distance from Structure to Pipe Centerline Based on 45° Brace Angle							
Deut Neurale en		Pipe Size						
Part Number	1"	2"	3"	4"				
CSBT1	10" - 13"	10" - 13"	11" - 14"	11" - 14"				
CSBT2	12" - 22"	12" - 23"	13" - 23"	13" - 24"				
CSBT3	23" - 40"	24" - 41"	24" - 42"	25" - 42"				
CSBT4	41" - 51"	42" - 52"	43" - 52"	43" - 53"				

Part	Run Pipe	Run Pipe	Horizon	Horizontal Capacity per Installation Angle from Vertical				
Number	Nom. Size	Nom. Size Reference	30° - 44°	45° - 59°	60° - 74°	75° - 90°		
	Loads According to FM 1950-2013							
CSBTx	1" - 4"	LW, Sch. 10, Sch. 40	630 lb	1,050 lb	1,050 lb	1,190 lb		
	Loads According to ANSI/FM 1950-2016							
CSBTx	1" - 4"	LW, Sch. 10, Sch. 40	475 lb	790 lb	790 lb	890 lb		

Load rating for LW above refers to FM Approved Lightweight pipe, commonly referred to Sch. 7. These ratings may also be applied to EN 10220 and GB/T 8163 pipe.

Load rating for Sch. 10 above may be applied to GB/T 3091, GB/T 3092, EN 10255M and H, JIS G3452, FM Approved Thinwall pipe and Sch. 40.

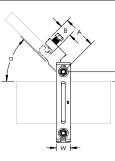
Load rating for Sch. 40 may be applied to Sch. 80.

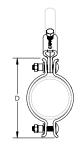
#### UNIVERSAL SWAY BRACE

- Meets requirements of the Buy American Act
- Use for both lateral and longitudinal sway brace applications
- Unique slotted holes provide for easy slip-on installation eliminating loose hardware
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Works with 1" through 2" brace pipes to reduce inventory
- Meets NFPA®-13 requirements for seismic sway bracing









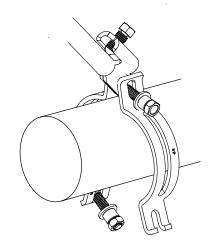
**OSHPD** 

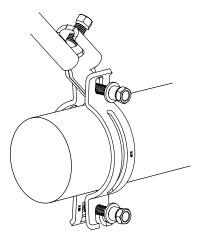
**FM** APPROVED

c(VL)us

Material: Steel Finish: Electrogalvanized

Part Number	Pipe Size	Brace Pipe Size	Width W	Angle a	Α	В	С	D
CSB0100	1"	1" – 2"	1 1/2"	45°	3 9/16"	1 5/16"	5/8"	5"
CSB0125	1 1/4"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	11/16"	5 1/2"
CSB0150	1 1/2"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	3/4"	5 3/8"
CSB0200	2"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	13/16"	6"
CSB0250	2 1/2"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	15/16"	6 3/4"
CSB0300	3"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	1"	7 3/8"
CSB0400	4"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	1 1/16"	8 1/2"
CSB0500	5"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	1"	10 1/16"
CSB0600	6"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	1 1/8"	10 7/8"
CSB0800	8"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	1 1/4"	13"
CSB1000	10"	1" - 2"	1 1/2"	45°	3 9/16"	1 5/16"	1"	15 3/16"





				UL Loads				
		Lat	eral			Longi	tudinal	
Part Number	Sch 10 / Sch 40 Service Pipe	Bull Moose Eddy Flow Service Pipe	Wheatland Mega-Flow Service Pipe	Youngstown Fire-Flo Service Pipe	Sch 10 / Sch 40 Service Pipe	Bull Moose Eddy Flow Service Pipe	Wheatland Mega-Flow Service Pipe	Youngstown Fire-Flo Service Pipe
CSB0100	2,765 lb	N/A	N/A	N/A	1,600 lb	N/A	N/A	N/A
CSB0125	2,765 lb	2,765 lb	2,765 lb	N/A	1,000 lb	1,000 lb	1,000 lb	1,000 lb
CSB0150	2,765 lb	2,765 lb	2,765 lb	2,765 lb	1,600 lb	1,600 lb	1,600 lb	1,600 lb
CSB0200	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,015 lb	2,015 lb	2,015 lb	2,015 lb
CSB0250	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,015 lb	2,015 lb	2,015 lb	2,015 lb
CSB0300	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,100 lb	2,100 lb	2,100 lb	2,100 lb
CSB0400	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,600 lb	2,600 lb	2,600 lb	2,600 lb
CSB0500	2,765 lb	N/A	N/A	N/A	2,600 lb	N/A	N/A	N/A
CSB0600	2,765 lb	N/A	2,765 lb	N/A	2,600 lb	N/A	2,600 lb	N/A
CSB0800	2,765 lb	N/A	N/A	N/A	2,600 lb	N/A	N/A	N/A
CSB1000	2,800 lb	N/A	N/A	N/A	2,800 lb	N/A	N/A	N/A

				FM Loads				
	Horizontal Capacity per Installation Angle from Vertical							
Part Number		Perpendicular to Structure				Paralle	to Structure	
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°
		FM Ap	proved Lightw	all, Sch 10 and	d Sch 40 Servi	ce Pipes		
CSB0100	1,490 lb	2,110 lb	2,580 lb	2,900 lb	1,290 lb	1,240 lb	1,260 lb	1,400 lb
CSB0125	1,380 lb	1,960 lb	2,400 lb	2,690 lb	1,290 lb	1,240 lb	1,260 lb	1,400 lb
CSB0150	1,380 lb	1,960 lb	2,400 lb	2,690 lb	1,200 lb	1,860 lb	2,180 lb	2,250 lb
CSB0200	1,380 lb	1,960 lb	2,400 lb	2,690 lb	1,200 lb	1,820 lb	2,180 lb	2,250 lb
CSB0250	1,440 lb	2,030 lb	2,490 lb	2,790 lb	1,320 lb	1,820 lb	2,190 lb	2,500 lb
CSB0300	1,390 lb	1,970 lb	2,420 lb	2,710 lb	1,300 lb	1,790 lb	2,190 lb	2,500 lb
CSB0400	1,390 lb	1,970 lb	2,420 lb	2,710 lb	1,300 lb	1,790 lb	2,190 lb	2,500 lb
CSB0500	1,390 lb	1,970 lb	2,420 lb	2,710 lb	1,300 lb	1,790 lb	2,190 lb	2,500 lb
CSB0600	1,460 lb	2,060 lb	2,520 lb	2,830 lb	1,410 lb	1,950 lb	2,350 lb	2,680 lb
CSB0800	2,765 lb	N/A	N/A	N/A	2,600 lb	N/A	N/A	N/A
CSB1000	2,800 lb	N/A	N/A	N/A	2,800 lb	N/A	N/A	N/A
	0.188" Wall and Sch 40 Service Pipes							
CSB0800	1,330 lb	1,880 lb	2,300 lb	2,580 lb	1,400 lb	1,920 lb	2,350 lb	2,640 lb
CSB1000	1,330 lb	1,880 lb	2,300 lb	2,580 lb	1,400 lb	1,920 lb	2,350 lb	2,640 lb

Load ratings for Sch 10 may also be applied to AS 1074 Medium, GB/T 3091, EN 10255 (Medium or Heavy), and JIS G3452 pipe. Load ratings for Sch 40 may also be applied to AS 1074 Heavy, GB/T 3091, EN 10255 (Heavy), and JIS G3454 pipe. Load ratings for FM approved lightwall may also be applied to AS 1074 Lightwall, EN 10255 L, EN 10220, and GB/T 8163 pipe.

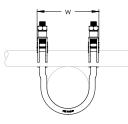
### QUICK GRIP JR. LATERAL SWAY BRACE

- Easy two-step installation eliminates extra trips between structure and service pipe
- Works with 1" and 1 1/4" (25 mm and 32 mm) brace pipes to reduce inventory
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Meets NFPA®-13 requirements for seismic sway bracing



c(UL)us

< FM APPBOVED





OSHPD

Material: Steel Finish: Electrogalvanized

Part Number	Pipe Size	Height H	Width W	
CSBQIKCL0100EG	1"	5 1/8"	2 5/8"	
CSBQIKCL0125EG	1 1/4"	5 3/8"	3"	
CSBQIKCL0150EG	1 1/2"	5 5/8"	3 1/4"	
CSBQIKCL0200EG	2"	6 3/8"	3 5/8"	

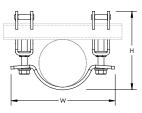
	UL Loads (Listed f	or Restraints)		
Part Number	Service Pipe Schedule	Lateral		
Fait Nullibei	Service Fipe Schedule	1" Brace Pipe	1 1/4" Brace Pipe	
	Dyna-Flow®	N/A	N/A	
CSBQIKCL0100EG	10	655 lb	655 lb	
	40	655 lb	655 lb	
	Dyna-Flow®	655 lb	540 lb	
CSBQIKCL0125EG	10	655 lb	540 lb	
	40	655 lb	540 lb	
	Dyna-Flow®	750 lb	655 lb	
CSBQIKCL0150EG	10	750 lb	655 lb	
	40	750 lb	655 lb	
	Dyna-Flow®	750 lb	540 lb	
CSBQIKCL0200EG	10	750 lb	540 lb	
	40	750 lb	540 lb	

	FM Loads								
			Lateral						
Part Number	Service Pipe Schedule	Horizo	Horizontal Capacity per Installation Angle from Vertical						
		30° - 44°	45° - 59°	60° - 74°	75° - 90°				
	Lightwall	290 lb	410 lb	495 lb	550 lb				
CSBQIKCL0100EG	10	150 lb	210 lb	280 lb	315 lb				
	40	475 lb	665 lb	825 lb	925 lb				
	Lightwall	290 lb	410 lb	495 lb	550 lb				
CSBQIKCL0125EG	10	150 lb	210 lb	280 lb	315 lb				
	40	475 lb	665 lb	825 lb	925 lb				
	Lightwall	290 lb	410 lb	495 lb	550 lb				
CSBQIKCL0150EG	10	150 lb	210 lb	280 lb	315 lb				
	40	475 lb	665 lb	825 lb	925 lb				
	Lightwall	390 lb	550 lb	670 lb	750 lb				
CSBQIKCL0200EG	10	350 lb	500 lb	620 lb	690 lb				
	40	490 lb	690 lb	850 lb	950 lb				

#### QUICK GRIP LATERAL SWAY BRACE

- Easy two-step installation eliminates extra trips between structure and service pipe
- Works with 1" and 1 1/4" (25 mm and 32 mm) brace pipes to reduce inventory
- Yellow tips provide a visual indicator that the bolts have been properly torqued
- Easy installation with an impact wrench from the bottom side of the clamp
- Meets NFPA®-13 requirements for seismic sway bracing







FM

c(VL)us

OSHPD

Material: Steel Finish: Electrogalvanized

Part Number	Pipe Size	Height H	Width W	
CSBQG0250EG	2 1/2"	5 7/16" – 5 7/8"	6 3/4"	
CSBQG0300EG	3"	6 1/8" – 6 1/2"	7 1/2"	
CSBQG0400EG	4"	7 1/8" – 7 1/2"	8 3/4"	
CSBQG0600EG	6"	9 1/4" - 9 5/8"	11 3/4"	
CSBQG0800EG	8"	11 3/8" – 11 13/16"	13 7/8"	

	UL Loads (Listed for Restraints)							
Dout Number	Convice Dine Cabadula	Lateral						
Part Number	Service Pipe Schedule	1" Brace Pipe	1 1/4" Brace Pipe					
	Dyna-Flow <sup>®</sup> , Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb					
CSBQG0250EG	10	2,015 lb	2,015 lb					
	40	2,015 lb	2,015 lb					
	Dyna-Flow <sup>®</sup> , Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb					
CSBQG0300EG	10	2,015 lb	2,015 lb					
	40	2,015 lb	2,015 lb					
	Dyna-Flow <sup>®</sup> , Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb					
CSBQG0400EG	10	2,015 lb	2,015 lb					
	40	2,015 lb	2,015 lb					
	Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb					
CSBQG0600EG	10	2,015 lb	2,015 lb					
	40	2,015 lb	2,015 lb					
CSBQG0800EG	10	2,015 lb	2,015 lb					
USDUGUOUUEG	40	2,015 lb	2,015 lb					

		FM Loads					
		Lateral Horizontal Capacity per Installation Angle from Vertical					
Part Number	Service Pipe Schedule						
		30° - 44°	45° - 59°	60° - 74°	75° - 90°		
	Lightwall	1,410 lb	2,000 lb	2,450 lb	2,740 lb		
CSBQG0250EG	10	1,410 lb	2,000 lb	2,450 lb	2,740 lb		
	40	1,410 lb	2,000 lb	2,450 lb	2,740 lb		
	Lightwall	1,190 lb	1,680 lb	2,060 lb	2,300 lb		
CSBQG0300EG	10	1,190 lb	1,680 lb	2,060 lb	2,300 lb		
	40	1,190 lb	1,680 lb	2,060 lb	2,300 lb		
	Lightwall	1,190 lb	1,680 lb	2,060 lb	2,300 lb		
CSBQG0400EG	10	1,190 lb	1,680 lb	2,060 lb	2,300 lb		
	40	1,190 lb	1,680 lb	2,060 lb	2,300 lb		
	Lightwall	870 lb	1,230 lb	1,510 lb	1,690 lb		
CSBQG0600EG	10	870 lb	1,230 lb	1,510 lb	1,690 lb		
	40	970 lb	1,370 lb	1,680 lb	1,870 lb		
	0.188" (Wall Thickness)	790 lb	1,110 lb	1,360 lb	1,520 lb		
CSBQG0800EG	40	790 lb	1,110 lb	1,360 lb	1,520 lb		

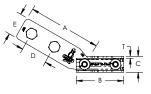
#### TRAPEZE SWAY BRACE, STRUT

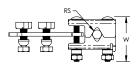
- Meets requirements of the Buy American Act
- Seismically braces trapeze hangers
- Retrofit ability allows for the brace to be installed after the trapeze assembly is installed
- Works with 3/8", 1/2", 5/8", and 3/4" threaded rod
- Compatible with brace members of 12 GA strut type A
- One wrench size fits all required hardware, eliminating the need to change tools
- Shear-off head helps ensure correct torque and simplifies inspection
- FM<sup>®</sup> Specification Tested

Buy American Act COMPLIANT









Material: Steel Finish: Electrogalvanized

OSHPD

Part Number	Rod Size RS	Width W	Thickness T	А	в	С	D	E
CSBR2	3/8", 1/2", 5/8", 3/4"	3.2"	0.14"	5 1/4"	3.4"	1.13"	1.88"	1.62"

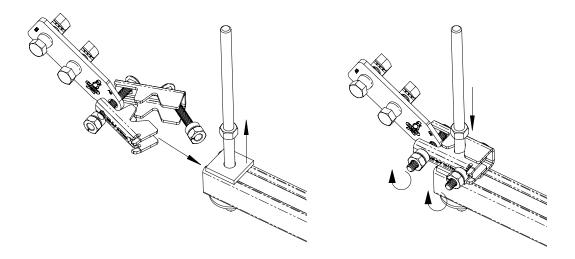
Note: This part is used in conjunction with Structural Attachment

CSBUS1 or CSBUS2

- See p. 16

Cut length for strut member is +/- 1" (25 mm) of measured length.

FM Loads							
Part Number	Duese Mensher	Hori	Horizontal Capacity per Installation Angle from Vertical				
	Brace Member	30° - 44°	45° - 59°	60° - 74°	75° - 90°		
CSBR2	12 GA Strut Channel	1,031 lb	1,812 lb	2,000 lb	2,231 lb		



#### **TRAPEZE SWAY BRACE, PIPE**

- Meets requirements of the Buy American Act
- Seismically braces trapeze hangers
- Retrofit ability allows for the brace to be installed after the trapeze assembly is installed
- Works with 3/8", 1/2", 5/8", and 3/4" threaded rod
- Works with brace members of schedule 40 pipe, EMT conduit, and rigid conduit
- One wrench size fits all required hardware, eliminating the need to change tools
- Shear-off head helps ensure correct torque and simplifies inspection
- FM<sup>®</sup> Specification Tested

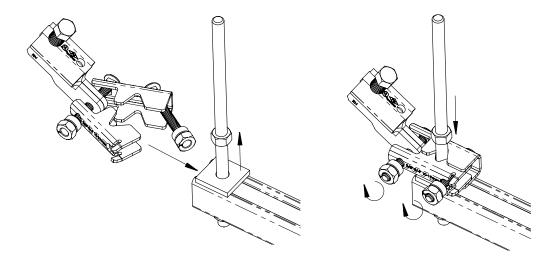
Note: This part is used in conjunction with Structural Attachment CSBU1 or CSBU2 - See p. 18

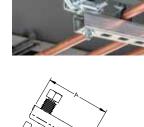
Material: Steel Finish: Electrogalvanized

Part Number	Rod Size RS	Width W	Thickness T	Α	В	с
CSBR1	3/8", 1/2", 5/8", 3/4"	3.2"	0.14"	3 1/2"	3.4"	1.14"

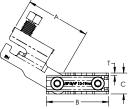
MPLIAN

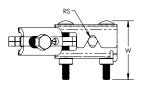
FM Loads						
Dout Number	Duese Merchen	Horiz	Horizontal Capacity per Installation Angle from Vertical			
Part Number	Brace Member	30° - 44°	45° - 59°	60° - 74°	75° - 90°	
CSBR1	1" EMT Conduit	623 lb	881 lb	1,148 lb	1,148 lb	
	1" Rigid Conduit	755 lb	1,109 lb	1,738 lb	1,738 lb	
	1" Schedule 40 Pipe	755 lb	1,109 lb	1,738 lb	1,738 lb	







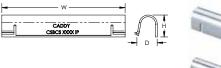




### OSHPD

#### **CLEVIS BOLT SPACER**

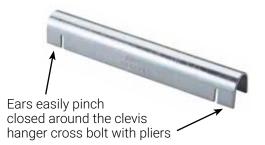
- Seismically braces the 401 Clevis Hanger series for lateral load
- Retrofit ability allows the spacer to be installed after the clevis and pipe are installed
- Ears easily pinch closed around the clevis hanger cross bolt with pliers
- FM<sup>®</sup> Specification Tested (up to 8" Pipe Size)





#### Material: Steel Finish: Electrogalvanized

Part Number	Pipe Size	Width W	Height H	Thickness T	Depth D	
CSBCS0100	1"	1.21"	0.51"	0.075"	0.51"	
CSBCS0125	1 1/4"	1.55"	0.51"	0.075"	0.51"	
CSBCS0150	1 1/2"	1.71"	0.51"	0.075"	0.51"	
CSBCS0200	2"	2.28"	0.51"	0.075"	0.51"	
CSBCS0250	2 1/2"	2.78"	0.67"	0.075"	0.65"	
CSBCS0300	3"	3.41"	0.67"	0.075"	0.65"	
CSBCS0350	3 1/2"	3.91"	0.67"	0.075"	0.65"	
CSBCS0400	4"	4.41"	0.67"	0.075"	0.65"	
CSBCS0500	5"	5.50"	0.98"	0.075"	0.90"	
CSBCS0600	6"	6.56"	0.98"	0.075"	0.90"	
CSBCS0800	8"	8.56"	1.22"	0.075"	1.09"	
CSBCS1000	10"	10.52"	1.22"	0.075"	1.09"	
CSBCS1200	12"	12.52"	1.22"	0.075"	1.09"	



### Rigid Bracing – Replacement Nuts and Bolts

#### CONE POINT SHEAR BOLT

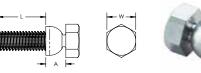


Material: Steel Finish: Electrogalvanized

Part Number	For Use With These Products
CSBSB50EG	Steel Flange Adapter (CSBS1, CSBS2) Steel Flange Adapter Assembly (CSBS1A) Adjustable I-Beam Adapter (CSBS3, CSBS4, CSBS5)
CSBUB62EG	Trapeze Sway Brace, Pipe (CSBR1) Universal Structural Bracket (CSBU1, CSBU2) Universal Sway Brace – 1" - 12" sizes (CSBxxxx)

#### **RIVET HEAD SHEAR BOLT**

• One wrench size fits all required hardware, eliminating the need to change tools



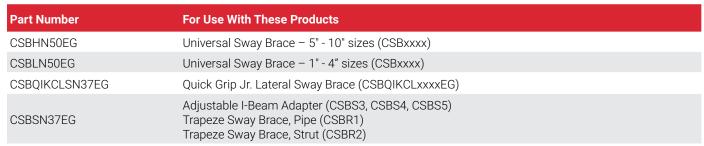


Material: Steel Finish: Electrogalvanized

Part Number	For Use With These Products	Width W	Screw Length L	А
CSBSBR50EG	Strut Seismic Hinge Bracket Assembly (CSBUS1PA, CSBUS2PA) Trapeze Sway Brace, Strut (CSBR2) Universal Structural Bracket, Strut Brace (CSBUS1, CSBUS2)	3/4"	1 1/4"	0.52"

#### **SHEAR NUT**

#### Material: Steel Finish: Electrogalvanized



#### **CABLE SPOOL**

- Cut to length as needed
- Pre-stretched restraint cable





(VL)

				Load Rating	Load Rating		
Part Number	Brace Size	Diameter	Cable Length	Safety Factor 1.5 UL Listed	Safety Factor 2.2	Color	Certifications
Material: Steel	Finish: Pregalvani	zed; Painted*					
CSB12CBL	#12	3/32"	250'	600 lb	418 lb	Red	UL
CSB18CBL	#18	1/8"	250'	1,100 lb	773 lb	White	UL
CSB36CBL	#36	3/16"	250'	2,800 lb	1,909 lb	Blue	UL
CSB48CBL	#48	1/4"	250'	4,600 lb	3,182 lb	Yellow	UL
Material: Stainle	ess Steel 316 (EN	1.4401)**		Safety Factor 1.5	Safety Factor 2.2		
CSB12CBLSS	#12	3/32"	250'	467 lb	318 lb	-	_
CSB18CBLSS	#18	1/8"	250'	907 lb	618 lb	-	-
CSB36CBLSS	#36	3/16"	250'	1,933 lb	1,318 lb	-	_
CSB48CBLSS	#48	1/4"	250'	3,667 lb	2,500 lb	-	-

\* Source referenced Standard: ASTM A1023/A1023M and the cable is color-coded.

\*\* Source referenced Standard: Federal Specification RR-W-410 Table XL per ASCE/SEI

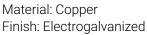
\*\*\* Due to changes in UL Standard for Safety Sway Brace Devices for Sprinkler System Piping UL 203A, on September 20, 2020 the UL listed load ratings will transition from a safety factor or 1.5 (S.F. 1.5) to a safety factor of 2.2 (S.F. 2.2)

#### **OVAL SLEEVE**

- Creates secure loop ends
- Swage with swaging tools







Part Number	Brace Size	Part Number
Material: Copper   Fini	sh: Electrogalvanized	Material: Stainless Ste
CSB12SLVB	#12 (Red)	CSB12SLVBSS
CSB18SLVB	#18 (White)	CSB18SLVBSS
CSB36SLVB	#36 ( Blue)	CSB36SLVBSS
CSB48SLVB	#48 (Yellow)	CSB48SLVBSS

Two side-by-side swages required on #12 and #18 cable. Three side-by-side swages required on #36 and #48 cable. Check swage with gauge (not included).

#### **CABLE CUTTER**

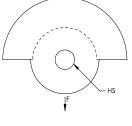
• Designed to reduce cable fraying

Designed to reduce cable fraying Material: Steel		CSBC48
Part Number	Brace Size	SLWC
SLWC	#12 (Red), #18 (White)	
CSBC48	#36 (Blue), #48 (Yellow)	

#### **NO PRY CLIP**

• Eliminates prying effect on fasteners and anchors





1



OSHPD

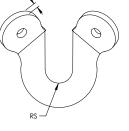
Material: Steel Finish: Electrogalvanized

Part Number	Brace Size	Hole Size HS	UL Listed Load
CSBNPC38	#12, #18, #36	7/16"	2,800 lb
CSBNPC12	#12, #18, #36	9/16"	2,800 lb
CSBNPC58	#12, #18, #36	11/16"	2,800 lb
CSBNPC34	#12, #18, #36	13/16"	2,800 lb

#### **UNIVERSAL RESTRAINT CLIP, RETROFIT**

• Slotted design ideal for attaching to existing threaded rod on trapezes







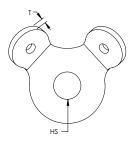
#### OSHPD

Material: Steel Finish: Electrogalvanized

Part Number	Brace Size	Rod Size RS	Thickness T
CSBURCR38	#12, #18	3/8"	1.68"
CSBURCR12	#12, #18	1/2"	1.68"
CSBURCR58	#12, #18	5/8"	1.68"

#### **UNIVERSAL RESTRAINT CLIP**

- Attaches cable brace to structure
- Attaches to threaded rod for trapeze bracing applications







OSHPD

				Load Rating		
Part Number	Brace Size	Hole Size HS	Thickness T	Safety Factor 1.5 UL Listed	Safety Factor 2.2	Certifications
Material: Steel	Finish: Electrogalvanize	ed*				
CSBURC14	#12, #18, #36	5/16"	0.168"	1,600 lb	1,909 lb	UL
CSBURC38	#12, #18, #36	7/16"	0.168"	1,600 lb	1,909 lb	UL
CSBURC12	#12, #18, #36	9/16"	0.168"	1,600 lb	1,909 lb	UL
CSBURC58	#12, #18, #36	11/16"	0.168"	1,600 lb	1,909 lb	UL
CSBURC34	#12, #18, #36	13/16"	0.168"	1,600 lb	1,909 lb	UL
CSBURC78	#12, #18, #36	15/16"	0.168"	1,600 lb	1,909 lb	UL
CSBURC4812	#48	9/16"	0.250"	4,600 lb	3,182 lb	UL
CSBURC4858	#48	11/16"	0.250"	4,600 lb	3,182 lb	UL
CSBURC4834	#48	13/16"	0.250"	4,600 lb	3,182 lb	UL
Material: Stainles	s Steel 316 (EN 1.4401	)**		Safety Factor 1.5	Safety Factor 2.2	
CSBURC14SS	#12, #18, #36	5/16"	0.168"	1,933 lb	1,318 lb	_
CSBURC38SS	#12, #18, #36	7/16"	0.168"	1,933 lb	1,318 lb	_
CSBURC12SS	#12, #18, #36	9/16"	0.168"	1,933 lb	1,318 lb	_
CSBURC58SS	#12, #18, #36	11/16"	0.168"	1,933 lb	1,318 lb	_
CSBURC34SS	#12, #18, #36	13/16"	0.168"	1,933 lb	1,318 lb	_
CSBURC78SS	#12, #18, #36	15/16"	0.168"	1,933 lb	1,318 lb	_

Mount to the structure using the center hole. Loop cable through the holes in the bent tabs and swage in place. Fitting must develop the cable minimum breaking strength, fittings load rating is equivalent to cable rating.

\* Source referenced Standard: ASTM A1023/A1023M and the cable is color-coded.

\*\* Source referenced Standard: Federal Specification RR-W-410 Table XL per ASCE/SEI

\*\*\* Due to changes in UL Standard for Safety Sway Brace Devices for Sprinkler System Piping UL 203A, on September 20, 2020 the UL listed load ratings will transition from a safety factor or 1.5 (S.F. 1.5) to a safety factor of 2.2 (S.F. 2.2)

#### **URC ATTACHMENT KIT**

- Attaches cable brace to structure
- $\boldsymbol{\cdot}$  Two-way bracing kit with oval sleeves
- Wraps around structural steel members





#### Material: Steel Finish: Electrogalvanized; Painted

5 ,				<u> </u>
Part Number	Hole Size	Brace Length	Cable Length	UL Listed Load
Brace Size: #12   Color: Red				
CSB2W12URC38L10	7/16"	10'	14'	600 lb
CSB2W12URC38L20	7/16"	20'	24'	600 lb
CSB2W12URC12L10	9/16"	10'	14'	600 lb
CSB2W12URC12L20	9/16"	20'	24'	600 lb
Brace Size: #18   Color: White	e			
CSB2W18URC38L10	7/16"	10'	14'	1,100 lb
CSB2W18URC38L20	7/16"	20'	24'	1,100 lb
CSB2W18URC12L10	9/16"	10'	14'	1,100 lb
CSB2W18URC12L20	9/16"	20'	24'	1,100 lb
Brace Size: #36   Color: Blue				
CSB2W36URC12L10	9/16"	10'	14'	1,600 lb
CSB2W36URC12L20	9/16"	20'	24'	1,600 lb
CSB2W36URC58L10	11/16"	10'	14'	1,600 lb
CSB2W36URC58L20	11/16"	20'	24'	1,600 lb
Brace Size: #48   Color: Yello	W			
CSB2W48URC12L10	9/16"	10'	14'	3,500 lb
CSB2W48URC12L20	9/16"	20'	24'	3,500 lb
CSB2W48URC58L10	11/16"	10'	14'	3,500 lb
CSB2W48URC58L20	11/16"	20'	24'	3,500 lb

#### **BATTERY-OPERATED SWAGING TOOL**

- Battery-operated tool provides consistent swaging
- Provides less strenuous installation when compared to manual swaging tools
- Cordless design allows installers to easily move around the job site
- Compatible with large diameter cables
- Reduces the number of swages per sleeve saving time of installation



#### Material: Steel

Part Number	Brace Size
CSBBS121836	#12 (Red), #18 (White), #36 (Blue)

#### MANUAL SWAGING TOOL



Part Number	Brace Size
CSB12SBHS	#12 (Red)
CSB48	#48 (Yellow)

#### **MULTI-SIZE MANUAL SWAGING TOOL**



Material: Steel	
Part Number	Brace Size
CSB3346SB	#12 (Red), #18 (White), #36 (Blue)

### Rod Stiffeners

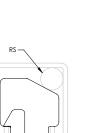
#### NVENT CADDY QUICK CLIP ROD STIFFENER

- Secures strut channel to threaded rod for stiffening
- One hand, snap-in place installation
- No tools or bolt tightening required



#### Material: Stainless Steel 316 (EN 1.4401)

Part Number	Strut Type	Rod Size RS
CSBRS2	A (1 5/8" x 1 5/8")	3/8"
CSBRS3	A (1 5/8" x 1 5/8")	1/2"
CSBRS4	A (1 5/8" x 1 5/8")	5/8"
CSBRS5	A (1 5/8" x 1 5/8")	3/4"
CSBRS6	A (1 5/8" x 1 5/8")	7/8"



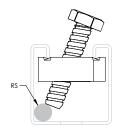
Position the strut so the rod is in the right corner

Insert the rod stiffener into the strut as shown and rotate the rod stiffener clockwise 90 degrees, so the arrow points up,

Push down rod stiffener to lock in place.

#### **STRUT ROD STIFFENER**

• Secures strut channel to threaded rod for stiffening







Material: Steel Finish: Electrogalvanized

Part Number	Strut Type	Rod Size RS
CSBRS37EG	A (1 5/8" x 1 5/8")	3/8", 1/2", 5/8", 3/4"

#### **PIPE ROD STIFFENER**

• For use with Schedule 40 or Schedule 10 pipe • Secures pipe to threaded rod for stiffening Material: Steel Finish: Electrogalvanized Material Steel Received Size

Part Number	Brace Pipe Size	Rod Size RS
CSBRS1	1"	3/8", 1/2", 5/8"

### nVent CADDY Pyramid Rooftop Anchor System

nVent CADDY Pyramid Rooftop Anchor Systems help ensure the safety and protection of your rooftop mechanical and electrical equipment applications. The system fastens directly to the roof deck. The anchor is permanently sealed to the roof membrane, creating a watertight barrier. The system offers a superior method of securing rooftop equipment by replacing evasive anchoring techniques and ballasting. Pyramid Rooftop Anchor Systems provide contractors with high-quality products and engineering services.

#### **FEATURES**

- System requires minimal roof membrane penetration
- · Elimination of ballasting significantly reduces weight to roof structure
- · Speed of installation results in lower total installed cost
- System preserves membrane manufacturers' warranty
- Design and engineering services are available, from simple layouts to PE stamped designs
- · Combines with other Pyramid products for a total rooftop solution

#### **ROOFTOP ANCHOR**

This watertight, membrane-matching rooftop anchor utilizes a threaded stud for bracing applications.



#### ROOFTOP ANCHOR CABLE BRACING

This watertight, membrane-matching rooftop anchor utilizes a threaded stud for bracing applications.



#### **DECK SCREW**

Secures nVent CADDY Pyramid Rooftop Anchors to various roof substrate materials





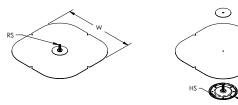
### nVent CADDY Pyramid Rooftop Anchor System

#### **NVENT CADDY PYRAMID ROOFTOP ANCHOR**

- Anchors require minimal roof membrane penetration
- System preserves membrane manufacturers' warranty
- Matching membrane material allows for consistent performance and aesthetic
- Installation creates a watertight seal, limiting water intrusion and damage to the structure



.



Material: Steel Finish: Electrogalvanized

Part Number	Membrane Manufacturer	Color	Rod Size RS	Diameter Ø	Hole Size HS	Width W
Material: EPDM-SBR Rubber						
CRAU24EB1C	CARLISLE®	Black	3/8"	5 1/2"	0.275"	11 3/4"
Material: Modified Asphalt						
CRAU26SW12C	CERTAINTEED®	-	3/8"	5 1/2"	0.275"	18"
Material: Polyvinylchloride						
CRAU24PW3J	JOHNS MANVILLE®	White	3/8"	5 1/2"	0.275"	11 3/4"
CRAU24PW8S	SIKA SARNAFIL®	White	3/8"	5 1/2"	0.275"	11 3/4"
Material: Thermoplastic Poly	volefin (TPO)					
CRAU24TW1C	CARLISLE®	White	3/8"	5 1/2"	0.275"	11 3/4"
CRAU24TW2F	FIRESTONE <sup>®</sup>	White	3/8"	5 1/2"	0.275"	11 3/4"
CRAU24TW3J	JOHNS MANVILLE®	White	3/8"	5 1/2"	0.275"	11 3/4"
CRAU24TW4G	GAF®	White	3/8"	5 1/2"	0.275"	11 3/4"

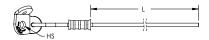
Anchor system must be installed by a certified roofing contractor according to membrane manufacturer's guidelines to preserve membrane warranty.

### nVent CADDY Pyramid Rooftop Anchor System

#### **NVENT CADDY PYRAMID ROOFTOP ANCHOR CABLE BRACING**

- Stainless steel components of cable assembly provides superior corrosion performance
- Multiple length configurations provide flexibility for various installations
- Pre-assembled cable terminations enable easy installation





#### Material: Stainless Steel 316 (EN 1.4401)

Part Number	Brace Size	Length L	Hole Size HS
CRA36SS38L2	#36	6.6'	7/16"
CRA36SS38L3	#36	9.8'	7/16"
CRA36SS38L4	#36	13.1'	7/16"

#### **NVENT CADDY PYRAMID ROOFTOP ANCHOR CABLE BRACING**

• Secures nVent CADDY Pyramid Rooftop Anchors to various roof substrate materials



#### Material: Steel Finish: Epoxy Coated Color: Black

Part Number	Screw Diameter	Screw Length
A927W001P100	#14	2"
A927W002P100	#14	3"
A927W003P100	#14	4"
A927W004P100	#14	5"
A927W005P100	#14	6"
A927W006P100	#14	7"
A927W007P100	#14	8"

#14 deck screws are for general purpose use.

Part Number	Screw Diameter	Screw Length
A927W008P100	#15	2"
A927W009P100	#15	3"
A927W010P100	#15	4"
A927W011P100	#15	5"
A927W012P100	#15	6"
A927W013P100	#15	7"
A927W014P100	#15	8"

#15 deck screws are specially suited for OSB and light gauge steel.

#### SEISMIC LIGHTING FIXTURE CLAMP

- Secures fluorescent light fixtures to the ceiling frame members
- Requires no additional chains, cables or slack wires attached to the fixture
- Helps strengthen integrity of the T-Grid system
- Holds in place against the force of standard fire-hose pressure
- Meets U.S. building code and electrical code specifications

Material: Steel

Finish: Plain

• Also satisfies NEC<sup>®</sup> 410.16(C) positive attachment for secure fastening of luminaires (fixtures) complying with Building Code Reference AC184



Part Number	Fixture Configuration	Standard Packaging Quantity
SFCLT	One Standard Tapered 2' x 4' Fixture	25 x 4 pc
SFCLTCF	One 2' x 2' Fixture	50 x 2 pc
SFCLTCFS	Reinforcement of T-Bar Main Runner/Cross Runner Connections	50 x 2 pc
SFCLTE	Two Standard Tapered 2' x 4' Fixtures End-to-End	25 x 2 pc
SFCLTS	Two Standard Tapered 2' x 4' Fixtures Side-by-Side	25 x 2 pc

Tested for compliance to the UBC, NEC®, NBC, and CEC.

#### **RS RETROFIT RETAINER STRAP**

- · Ideal for both new and existing applications
- Can be installed without disassembly of the hanging system and/or removing the clamp
- Compatible with all standard nVent CADDY beam clamps and can be secured to either the set screw or threaded rod
- Large teardrop-shaped opening is compatible with multiple threaded rod diameters, reducing inventory by 50%
- Coined edge on teardrop-shaped opening locks into rod, eliminating shifting during install
- Provides a secure attachment in seismic zones and complies with NFPA<sup>®</sup> requirements
- Meets the UL® load test for retainer straps (3/8" and 1/2" rod sizes)





#### NVENT CADDY ROD LOCK TELESCOPING STRUT REPLACEMENT

- Easy "push-to-install" design allows installers to simply push the threaded rod through the mounting hole, instantly holding it in position
- Part No: TSR122038RL

#### TELESCOPING STRUT REPLACEMENT

- Captive threaded nuts enable fastening to threaded rod supports without loose parts
- Part No: TSR122025, TSR1220



#### TELESCOPING STRUT REPLACEMENT, NO NUT

 Can be attached directly to a wall for wallmounted applications



- Part No: TSR1220N

#### **TELESCOPING STRUT REPLACEMENT, RETROFIT**

• Slotted ends allow the bracket to be installed with four nVent CADDY SN Nuts on threaded rod above an existing trapeze, saving contractor time and limiting building downtime



- Part No: TSR1220R

#### **SNSW FLANGED NUT**

- Ideal for retrofit projects, such as trapeze installations, where disassembly of the support system is not desired
- Use as a stopper when installing nVent CADDY Rod Lock assemblies
- Can be easily installed, removed, and repositioned at any location along the threaded rod
- Ready to use out of the box and eliminates multiple pieces of standard hardware
- Functions as a hex nut and flat washer combined
- Washer is wide enough to work with standard strut channel profiles
- Part No: SNSW37, SNSW50







40 | nVent.com/CADDY

#### **TELESCOPING PIPE STAND**

- Supports and fastens low to the ground horizontal pipe runs
- Complete out-of-the-box assembly provides a compact solution, simplifying material handling and reducing the amount of storage space required
- Designed to minimize fabrication and reduce the installation time of a complete stand by up to 80%
- Telescoping post provides fast vertical height adjustment
- V-bolt fastener accommodates multiple pipe sizes, reducing inventory by over 65%
- Easy "push-to-install" nVent CADDY Rod Lock feature allows the V-bolt to assemble quickly
- Integrated weep hole at bottom of stand provides drainage for condensation
- Conforms with Federal Specification WW-H-171 (Type 37, 38), Manufacturers Standardization Society ANSI®/MSS-SP-58 (Type 37)





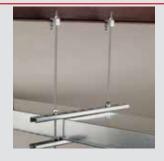
#### - Part No: CTS04, CTS10

#### HANGERMATE® HORIZONTAL MOUNT SCREW FOR STEEL WITH LOCK NUT

- · Convenient design allows fast and easy installation
- Eliminates the need for labor-intensive operations, such as pre-punching or drilling of steel components
- Only one driver needed for all anchor sizes
- Cross-drilled and tapped head permits horizontal mounting of threaded rod systems
- Part No: HMZH476

#### **SN SERIES NUT**

- · Allows side mounting of nut to threaded rod
- Reduces the need for threading compared to standard nuts and washers
- Ideal for retrofit projects, such as trapeze installations, where disassembly of the support system is not desired
- Works with slightly damaged threads and minor burrs on the threaded rod
- Reduces installation time up to 50%
- Part No: SN25, SN37, SN50





**401 CLEVIS HANGER** 

- Recommended for the suspension of stationary non-insulated pipe lines
- Flared edges help prevent sharp surfaces from coming into contact with the pipe (1/2" to 2" pipe sizes)
- Clevis bottom pivots to allow pipe to be fed from either direction
- Conforms with U.S. Federal Specification WW-H-171 (Type 1), Manufacturers Standardization Society (MSS) SP-58 (Type 1)
- Available for pipe sizes from 1/2" to 24"
- Part No: 401xxxx

**PIPE CLAMPS** 

nVent CADDY Macrofix Plus NI EZ with Easy Closure

– Part No: 429xxxx



455 Malleable Split Ring Hanger

– Part No: 455xxxx



nVent CADDY EZ Riser

- Part No: EZRxxxx

#### **STRUT CLAMPS**

nVent CADDY Superfix

454 Standard Duty

- Part No: 454xxxx



SCH2 Single Piece Strut Clamp for Cable/Conduit

- Part No: SCHxxB



RIGD/COPC Single Piece Strut Clamp for Pipe/Rigid Conduit/ Copper Tube

- Part No: RIGDxxx, COPCxxxx



nVent CADDY Swift Clip Strut Clamp for Tube/Pipe

- Part No: TMSxxxx

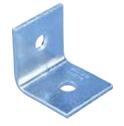


nVent CADDY Cushion Clamp Insulated Strut Clamp for Pipe/Tube

- Part No: CCCxxxx



#### SIDE BEAM ATTACHMENTS



325 Steel Side Beam Attachment

#### - Part No: 325xxxx

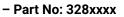


327 Malleable Iron Side Beam Attachment

- Part No: 327xxxx



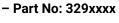
328 Threaded Steel Side Beam Attachment





xxxx designated in the part numbers refers to parts with multiple sizes and/or finishes available.

329 Side Beam Attachment





37 Steel Eye Socket Rod Hanger

- Part No: 03700xxxx



38 Offset Steel Eye Socket Rod Hanger

- Part No: 03800xxxx

CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER



nVent.com/CADDY

Our powerful portfolio of brands:

