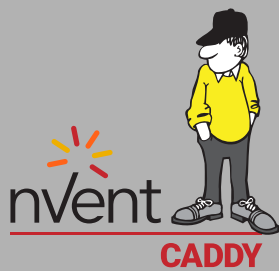
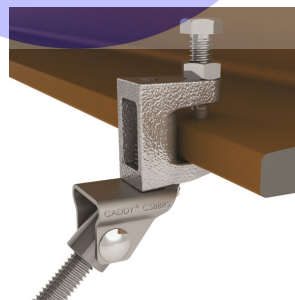
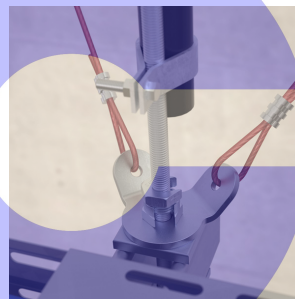
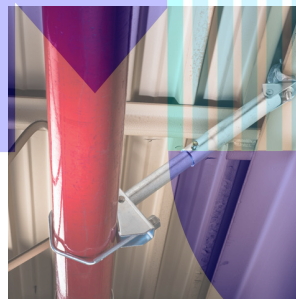
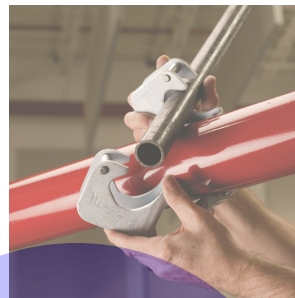
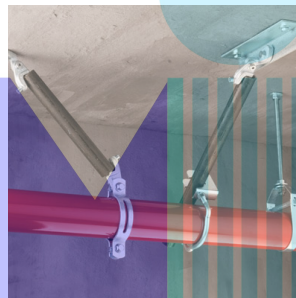
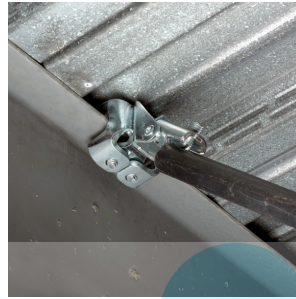


# FIXING, FASTENING AND SUPPORT PRODUCTS

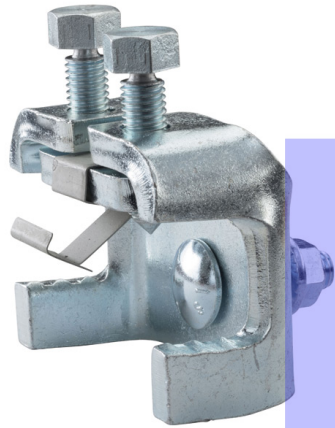
## FEATURED PRODUCTS



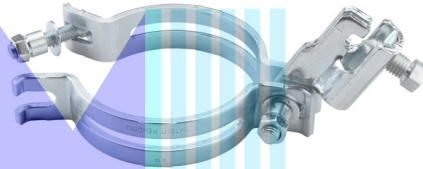
# Rigid Bracing

The nVent CADDY line of innovative rigid bracing products was designed to provide superior performance and meet the highest seismic load requirements. The products have been designed with the end user in mind and provide contractors with labor-saving features to promote quick and easy installation. The system of products supports lateral and longitudinal bracing and offers a wide range of structural and pipe attachments.

- Patent-pending lateral braces eliminate need for multiple trips up and down ladders
- Adjustable design can be used with different brace pipe sizes, providing flexibility on the jobsite and reducing contractor inventory
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- One wrench size fits all required hardware, eliminating the need to change tools
- cULus® Listed
- FM® Approved
- OSHPD® Pre-Approved (OPM-0062-13) to the 2013 California Building Code



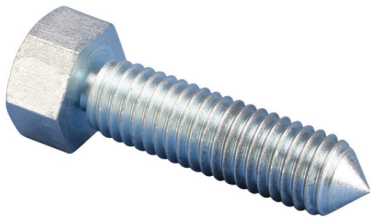
Structural Attachments  
for Rigid Bracing



Sway Braces

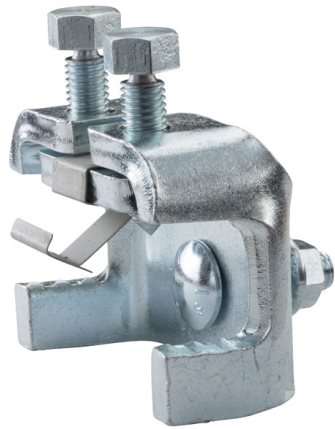


Lateral Telescoping Brace Assembly

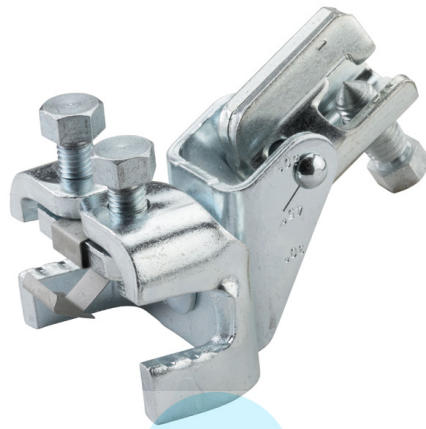


Replacement Nuts and  
Bolts for Rigid Bracing

# Structural Attachments for Rigid Bracing



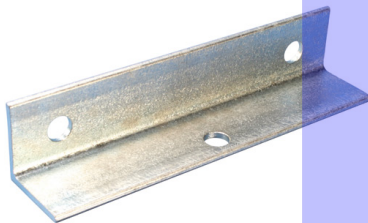
Steel Flange Adapter



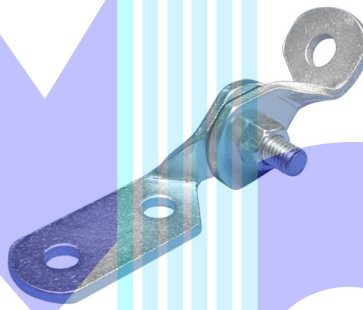
Steel Flange Adapter Assembly



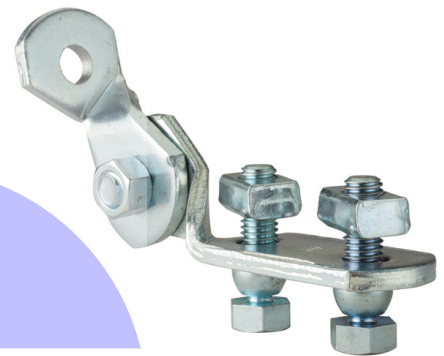
Adjustable I-Beam Adapter



Multi Attachment



Strut Seismic Hinge



Strut Seismic Hinge Bracket Assembly

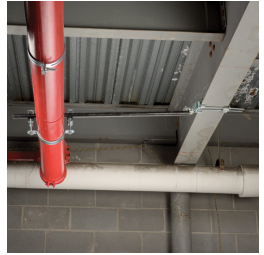


Universal Structural Bracket

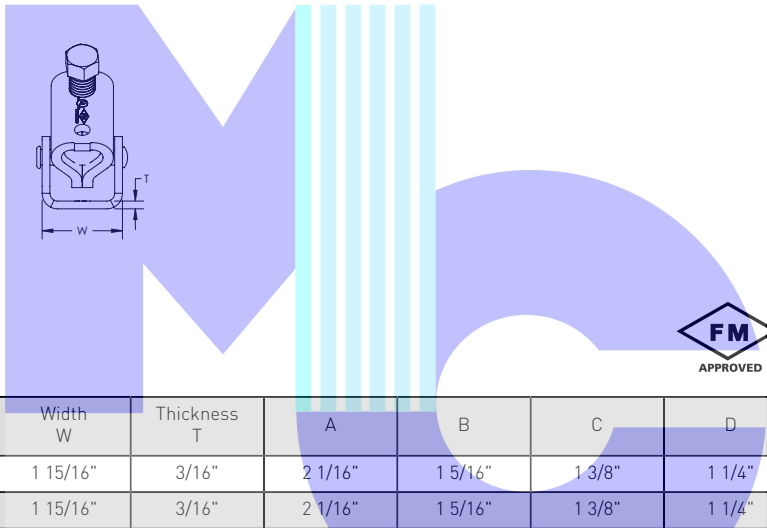
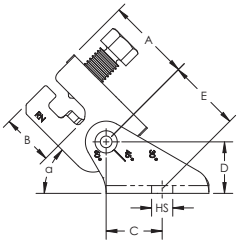


Universal Structural Bracket, Strut Brace

# 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
- Meets NFPA® 13 as pre-qualified for seismic applications
- FM® Specification Tested



Material: Steel  
Finish: Electrogalvanized



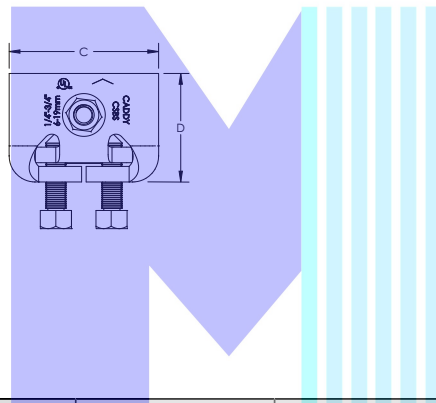
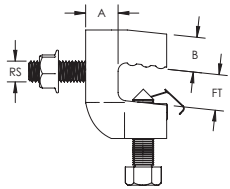
Part Number	Hole Size HS	Width W	Thickness T	A	B	C	D	E	UL Listed Load
CSBU1	1/2"	1 15/16"	3/16"	2 1/16"	1 5/16"	1 3/8"	1 1/4"	1 3/4"	3,000 lb
CSBU2	13/16"	1 15/16"	3/16"	2 1/16"	1 5/16"	1 3/8"	1 1/4"	1 3/4"	3,000 lb

FM Loads					
Part Number	Brace Member	Horizontal Capacity per Installation Angle from Vertical			
		30° - 44°	45° - 59°	60° - 74°	75° - 90°
CSBU1xx	Schedule 40 Pipe	1,690 lb	2,210 lb	2,660 lb	3,090 lb
	1" EMT Conduit	530 lb	911 lb	1108 lb	1223 lb
	1" Rigid Conduit	1,690 lb	2,210 lb	2,660 lb	3,090 lb
CSBU2xx	Schedule 40 Pipe	1,480 lb	2,290 lb	2,860 lb	3,090 lb
	1" EMT Conduit	530 lb	911 lb	1108 lb	1223 lb
	1" Rigid Conduit	1,480 lb	2,290 lb	2,860 lb	3,090 lb

# Steel Flange Adapter



- Meets requirements of the Buy American Act
- Installs on top or bottom flange of I-beams
- 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
- FM® Specification Tested



Material: Steel  
Finish: Electrogalvanized

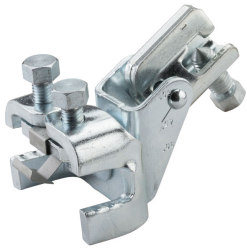


Part Number	Flange Thickness FT	Rod Size RS	A	B	C	D
CSBS1	1/4" - 3/4"	1/2"	13/16"	7/8"	3 5/8"	2 5/8"
CSBS2	3/4" - 1 1/4"	1/2"	7/8"	7/8"	3 5/8"	3 1/8"

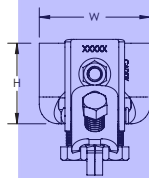
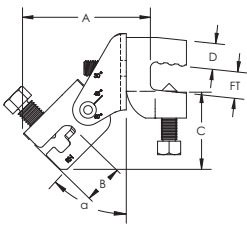
UL Loads			
Part Number	Flange Thickness	Perpendicular to Structure	Parallel to Structure
CSBS1xx	1/4" - 3/8"	3,000 lb	2,200 lb
	3/8" - 3/4"	3,000 lb	2,765 lb
CSBS2xx	3/4" - 1 3/8"	3,000 lb	2,500 lb

FM Loads								
Part Number	Horizontal Capacity per Installation Angle from Vertical							
	Perpendicular to Structure				Parallel to Structure			
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°
CSBS1xx	850 lb	1,780 lb	2,770 lb	2,840 lb	880 lb	1,430 lb	2,020 lb	2,410 lb
CSBS2xx	1,220 lb	2,140 lb	2,580 lb	2,870 lb	1,100 lb	1,820 lb	2,190 lb	2,680 lb

# 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
- 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
- Meets NFPA® 13 as pre-qualified for seismic applications
- FM® Specification Tested



Material: Steel  
Finish: Electrogalvanized

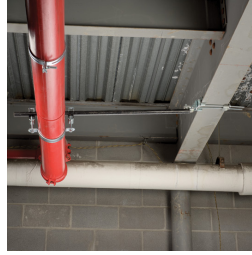


Part Number	Flange Thickness FT	Height H	Width W	Angle a	A	B	C	D
CSBS1A	1/4" - 3/4"	2 5/8"	3 5/8"	45°	4 1/8"	1 5/16"	2 9/16"	7/8"

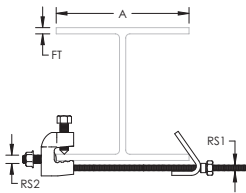
UL Loads			
Part Number	Flange Thickness	Perpendicular to Structure	Parallel to Structure
CSBS1A	1/4" - 3/8"	3,000 lb	2,200 lb
	3/8" - 3/4"	3,000 lb	2,765 lb

FM Loads								
Part Number	Horizontal Capacity per Installation Angle from Vertical							
	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
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Meets NFPA®-13 requirements for seismic sway bracing
- FM® Specification Tested



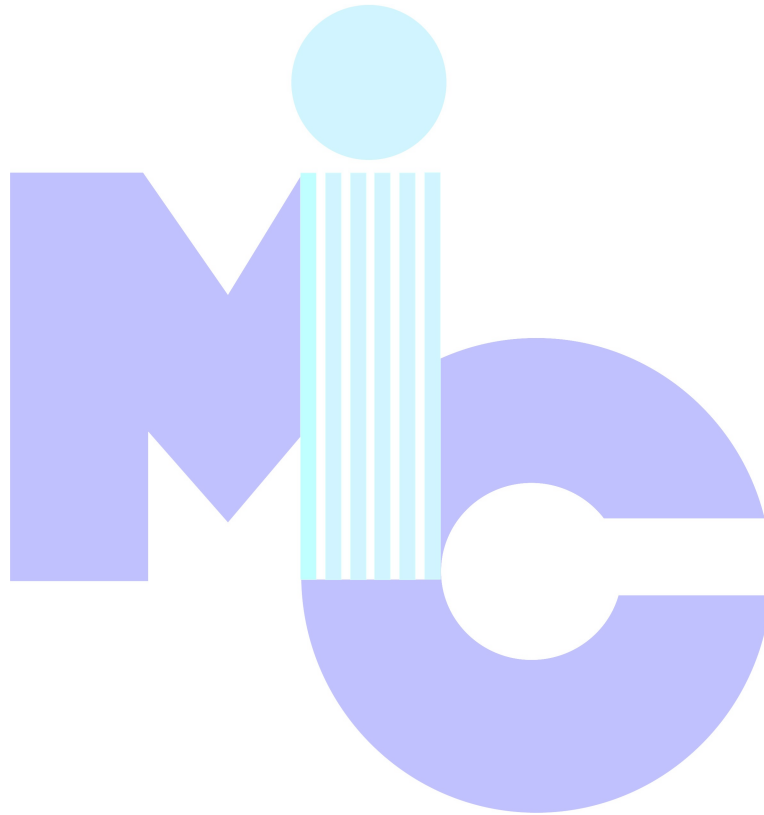
Material: Steel  
Finish: Electrogalvanized



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
CSBS3	1/4" - 3/8"	3,000 lb	2,200 lb
	3/8" - 3/4"	3,000 lb	2,765 lb
CSBS4	1/4" - 3/8"	3,000 lb	2,200 lb
	3/8" - 3/4"	3,000 lb	2,765 lb
CSBS5	3/4" - 1 1/4"	3,000 lb	2,500 lb

FM Loads								
Part Number	Horizontal Capacity per Installation Angle from Vertical							
	Perpendicular to Structure				Parallel to Structure			
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°
CSBS3xx	1,180 lb	2,210 lb	2,830 lb	2,940 lb	820 lb	1,380 lb	2,080 lb	3,010 lb
CSBS4xx	1,180 lb	2,210 lb	2,830 lb	2,940 lb	820 lb	1,380 lb	2,080 lb	3,010 lb
CSBS5xx	1,220 lb	2,140 lb	2,580 lb	2,870 lb	1,100 lb	1,820 lb	2,190 lb	2,680 lb

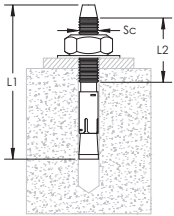




# Wedge Expansion Anchor Bolt



- ICC® approved for use in cracked and uncracked concrete
- Includes nut and washer
- Meets NFPA® 13 as pre-qualified for seismic applications



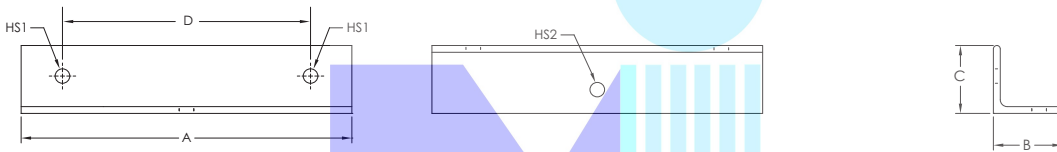
Material: Steel  
Finish: Electrogalvanized

Part Number	Screw Diameter Sc	Length 1 L1	Length 2 L2	Drill Bit Diameter	Torque TQ
CSBCAB030037EG	3/8"	3"	1 3/4"	3/8"	20 ft lb
CSBCAB037550EG	1/2"	3 3/4"	2 1/8"	1/2"	40 ft lb
CSBCAB045050EG	1/2"	4 1/2"	2 7/8"	1/2"	40 ft lb
CSBCAB055050EG	1/2"	5 1/2"	3 7/8"	1/2"	40 ft lb
CSBCAB047562EG	5/8"	4 3/4"	2 7/8"	5/8"	60 ft lb
CSBCAB060062EG	5/8"	6"	4 1/8"	5/8"	60 ft lb
CSBCAB055075EG	3/4"	5 1/2"	3 1/4"	3/4"	110 ft lb
CSBCAB062575EG	3/4"	6 1/4"	4"	3/4"	110 ft 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	A	B	C	D	UL Listed Load
CSBMA050050EG	9/16"	9/16"	12"	2 1/2"	2 1/2"	9"	3,740 lb
CSBMA050075EG	13/16"	9/16"	12"	2 1/2"	2 1/2"	9"	3,740 lb

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

FM Loads				
Part Number	Horizontal Capacity per Installation Angle from Vertical			
	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

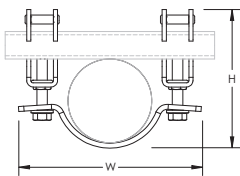
Mount to structure using holes indicated in HS1.

# Quick Grip Lateral Sway Brace

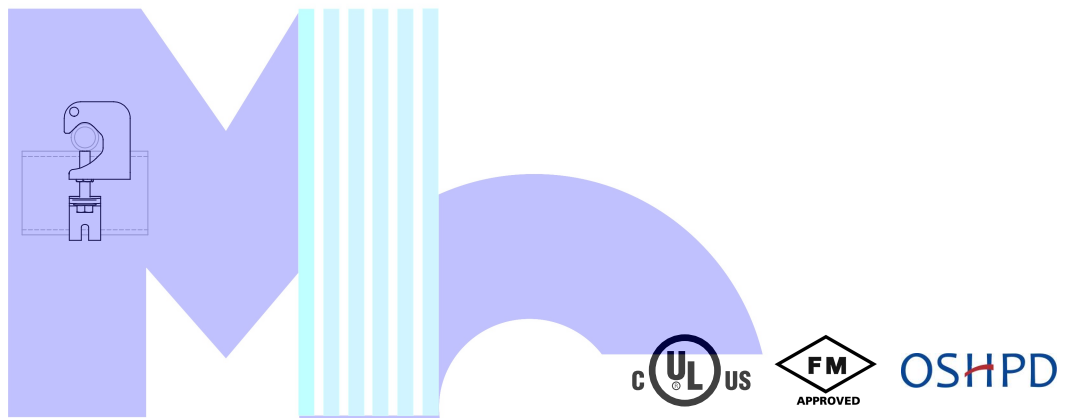


The Quick Grip Lateral Brace, part of the nVent CADDY line of fire sprinkler bracing systems from nVent, is designed to help simplify installations when bracing service pipe for seismic or other catastrophic events. It features an innovative design for quick attachment of brace pipe to service pipe saving time and money.

- 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



Material: Steel  
Finish: Electrogalvanized



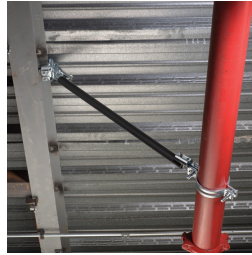
Part Number	Pipe Size	Height H	Width W
CSBQG0250EG	2 1/2"	5 7/16" – 5 7/8"	6 3/4"
CSBQG0300EG	3"	6 1/8" – 6 1/2"	7 1/2"
CSBQG0400EG	4"	7 1/8" – 7 1/2"	8 3/4"
CSBQG0600EG	6"	9 1/4" – 9 5/8"	11 3/4"
CSBQG0800EG	8"	11 3/8" – 11 13/16"	13 7/8"

UL Loads			
Part Number	Service Pipe Schedule	Lateral	
		1" Brace Pipe	1 1/4" Brace Pipe
CSBQG0250EG	Dyna-Flow®, Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb
	10	2,015 lb	2,015 lb
	40	2,015 lb	2,015 lb
CSBQG0300EG	Dyna-Flow®, Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb
	10	2,015 lb	2,015 lb
	40	2,015 lb	2,015 lb

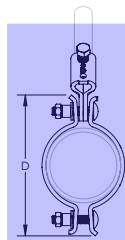
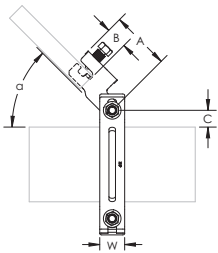
UL Loads			
Part Number	Service Pipe Schedule	Lateral	
		1" Brace Pipe	1 1/4" Brace Pipe
CSBQG0400EG	Dyna-Flow®, Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb
	10	2,015 lb	2,015 lb
	40	2,015 lb	2,015 lb
CSBQG0600EG	Mega-Flow, Eddy Flow, Fire-Flo	2,015 lb	2,015 lb
	10	2,015 lb	2,015 lb
	40	2,015 lb	2,015 lb
CSBQG0800EG	10	2,015 lb	2,015 lb
	40	2,015 lb	2,015 lb

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

# 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
- FM® Specification Tested



Material: Steel  
Finish: Electrogalvanized



Part Number	Pipe Size	Brace Pipe Size	Width W	Angle a	A	B	C	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"

Part Number	UL Loads							
	Lateral				Longitudinal			
	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
CSB0100xx	2,765 lb	N/A	N/A	N/A	1,600 lb	N/A	N/A	N/A
CSB0125xx	2,765 lb	2,765 lb	2,765 lb	N/A	1,000 lb	1,000 lb	1,000 lb	1,000 lb
CSB0150xx	2,765 lb	2,765 lb	2,765 lb	2,765 lb	1,600 lb	1,600 lb	1,600 lb	1,600 lb
CSB0200xx	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,015 lb	2,015 lb	2,015 lb	2,015 lb

UL Loads								
Part Number	Lateral				Longitudinal			
	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
CSB0250xx	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,015 lb	2,015 lb	2,015 lb	2,015 lb
CSB0300xx	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,100 lb	2,100 lb	2,100 lb	2,100 lb
CSB0400xx	2,765 lb	2,765 lb	2,765 lb	2,765 lb	2,600 lb	2,600 lb	2,600 lb	2,600 lb
CSB0500xx	2,765 lb	N/A	N/A	N/A	2,600 lb	N/A	N/A	N/A
CSB0600xx	2,765 lb	N/A	2,765 lb	N/A	2,600 lb	N/A	2,600 lb	N/A
CSB0800xx	2,765 lb	N/A	N/A	N/A	2,600 lb	N/A	N/A	N/A
CSB1000xx	2,800 lb	N/A	N/A	N/A	2,800 lb	N/A	N/A	N/A

FM Loads								
Part Number	Horizontal Capacity per Installation Angle from Vertical							
	Lateral				Longitudinal			
	30° - 44°	45° - 59°	60° - 74°	75° - 90°	30° - 44°	45° - 59°	60° - 74°	75° - 90°
FM Approved Lightwall, Sch 10 and Sch 40 Service Pipes								
0.188" Wall and Sch 40 Service Pipes								
CSB0100xx	1,490 lb	2,110 lb	2,580 lb	2,900 lb	1,290 lb	1,240 lb	1,260 lb	1,400 lb
CSB0125xx	1,380 lb	1,960 lb	2,400 lb	2,690 lb	1,290 lb	1,240 lb	1,260 lb	1,400 lb
CSB0150xx	1,380 lb	1,960 lb	2,400 lb	2,690 lb	1,200 lb	1,860 lb	2,180 lb	2,250 lb
CSB0200xx	1,380 lb	1,960 lb	2,400 lb	2,690 lb	1,200 lb	1,820 lb	2,180 lb	2,250 lb
CSB0250xx	1,440 lb	2,030 lb	2,490 lb	2,790 lb	1,320 lb	1,820 lb	2,190 lb	2,500 lb
CSB0300xx	1,390 lb	1,970 lb	2,420 lb	2,710 lb	1,300 lb	1,790 lb	2,190 lb	2,500 lb
CSB0400xx	1,390 lb	1,970 lb	2,420 lb	2,710 lb	1,300 lb	1,790 lb	2,190 lb	2,500 lb
CSB0500xx	1,390 lb	1,970 lb	2,420 lb	2,710 lb	1,300 lb	1,790 lb	2,190 lb	2,500 lb
CSB0600xx	1,460 lb	2,060 lb	2,520 lb	2,830 lb	1,410 lb	1,950 lb	2,350 lb	2,680 lb
CSB0800xx	1,330 lb	1,880 lb	2,300 lb	2,580 lb	1,400 lb	1,920 lb	2,350 lb	2,640 lb
CSB1000xx	1,330 lb	1,880 lb	2,300 lb	2,580 lb	1,400 lb	1,920 lb	2,350 lb	2,640 lb

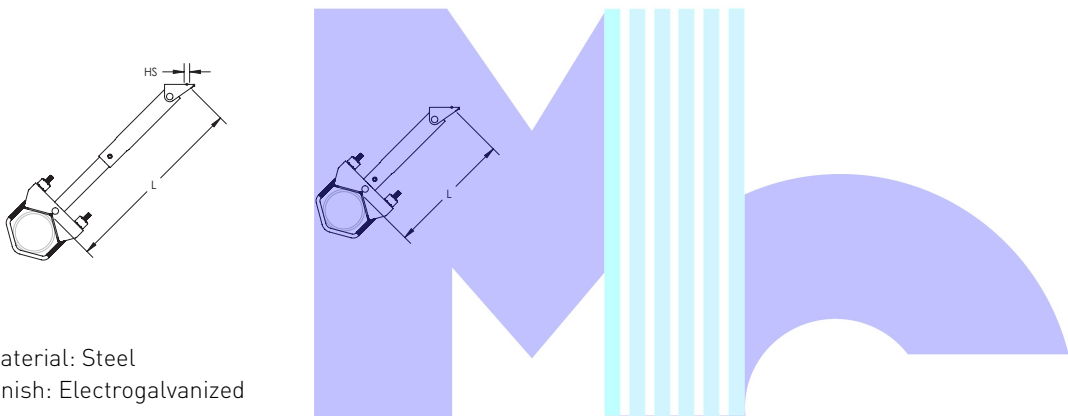
FM® Specification Tested for 1-1/2" to 4" pipe sizes using no hub cast iron pipe.  
 Load ratings for Sch 10 may also be applied to AS 1074 Medium, GB/T 3091, EN 10255 (Medium or Heavy), and JIS G3452 pipe.  
 Load ratings for Sch 40 may also be applied to AS 1074 Heavy, GB/T 3091, EN 10255 (Heavy), 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.



# Lateral Telescoping Brace Assembly



- 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
- Length of telescoping lateral brace is fixed by installing the included self-drilling screw
- Electrogalvanized coating throughout the entire assembly provides superior corrosion resistance
- 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® Specification Tested



Material: Steel  
Finish: Electrogalvanized

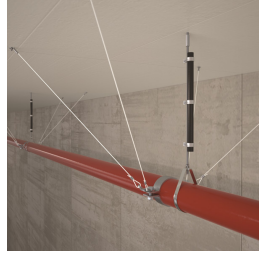
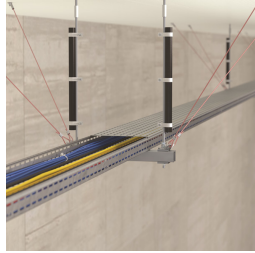
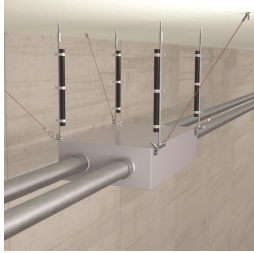
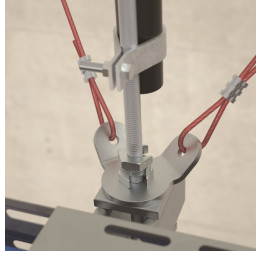


Part Number	Brace Length L	Pipe Size	Hole Size HS	Wrench Size	UL Listed Load
CSBT1	1' - 1 1/2'	1" - 4"	1/2"	5/16"	1,300 lb
CSBT2	1 1/2' - 3'	1" - 4"	1/2"	5/16"	1,300 lb
CSBT3	3' - 5 1/2'	1" - 4"	1/2"	5/16"	1,300 lb
CSBT4	5 1/2' - 7'	1" - 4"	1/2"	5/16"	1,300 lb

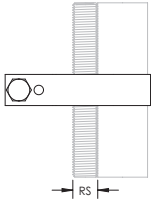
Vertical Distance from Structure to Pipe Centerline Based on 45° Brace Angle				
Part Number	Pipe Size			
	1"	2"	3"	4"
CSBT1	10" - 13"	10" - 13"	11" - 14"	11" - 14"
CSBT2	12" - 22"	12" - 23"	13" - 23"	13" - 24"
CSBT3	23" - 40"	24" - 41"	24" - 42"	25" - 42"
CSBT4	41" - 51"	42" - 52"	43" - 52"	43" - 53"

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.

# Pipe Rod Stiffener

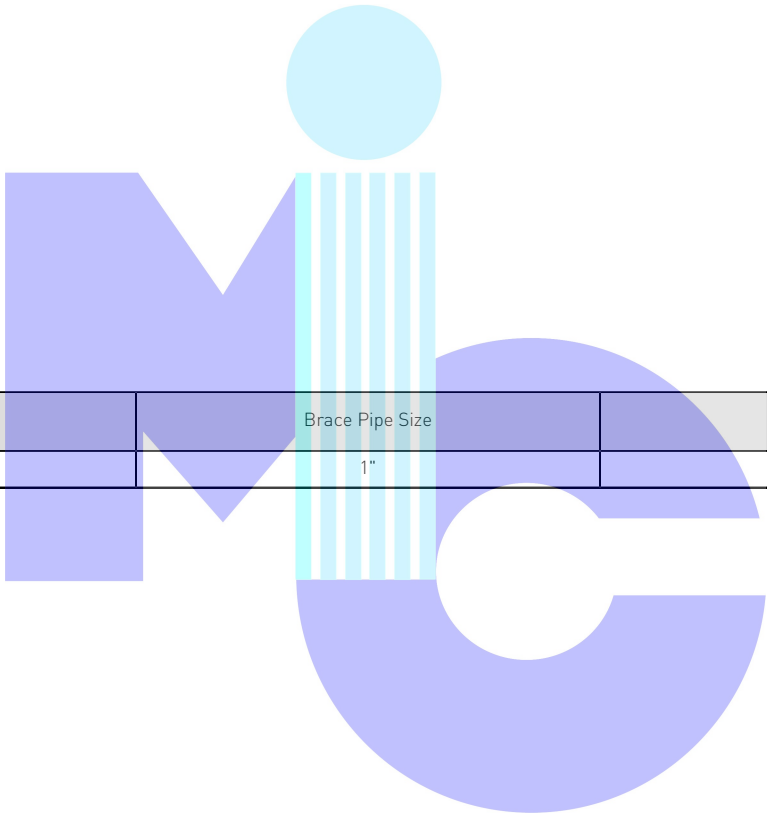


- For use with Schedule 40 or Schedule 10 pipe
- Secures pipe to threaded rod for stiffening



Material: Steel  
Finish: Electrogalvanized

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





# Branch Line Restraint System

Traditional methods for installing branch line restraints in fire sprinkler systems are cumbersome and time-consuming. Contractors often cut (and re-cut) threaded rod to precise measurements to restrain the sprinkler pipe with a loop hanger and surge restraint. Traditional methods also commonly require five or more parts per restraint.

To avoid these labor-intensive methods, nVent has streamlined the process and developed the Branch Line Restraint System, part of the nVent CADDY line of hanging and bracing solutions for the fire protection market. Ideal for restraining 1" (25 mm) through 2" (50 mm) branch lines, this innovative system is significantly faster and easier to install than current methods. It attaches directly to steel bar joists, I-beams or purlins, as well as concrete and wood structures. The hardware is installed with only one tool, a 5/16" (8 mm) socket drill driver, which provides significant labor savings and convenience. It features a simple, two-step installation process, allowing a time savings of up to 80% compared to other methods.

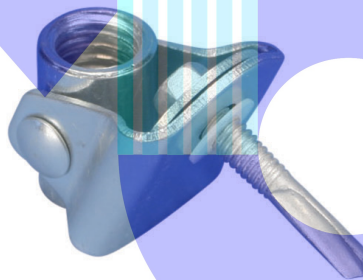
Unlike most solutions that only accept 3/8" (M10) threaded rod, the versatile Branch Line Restraint System features a swivel attachment that can be rotated to accept 3/8" or 1/2" (M10 or M12) threaded rod. This allows greater restraint distances from the pipe to structure with 1/2" (M12) threaded rod.

The system meets the requirements of NFPA® 13, making it ideal for new construction applications. The total system is cULus® Listed and FM® Approved, and has been pre-approved by the state of California (OSHPD OPA-2629-10).

- Complete restraint system is quick and easy to install
- Offers up to 80% time savings per branch line restraint
- Eliminates need to cut threaded rod to exact dimensions
- Works with 3/8" and 1/2" (M10 and M12) rod
- Capable of restraint distances up to 40" (960 mm) from pipe to structure with 1/2" (M12) threaded rod
- Meets requirements of NFPA® 13 section 9.3.6



Branch Line Restraint  
Pipe Attachment



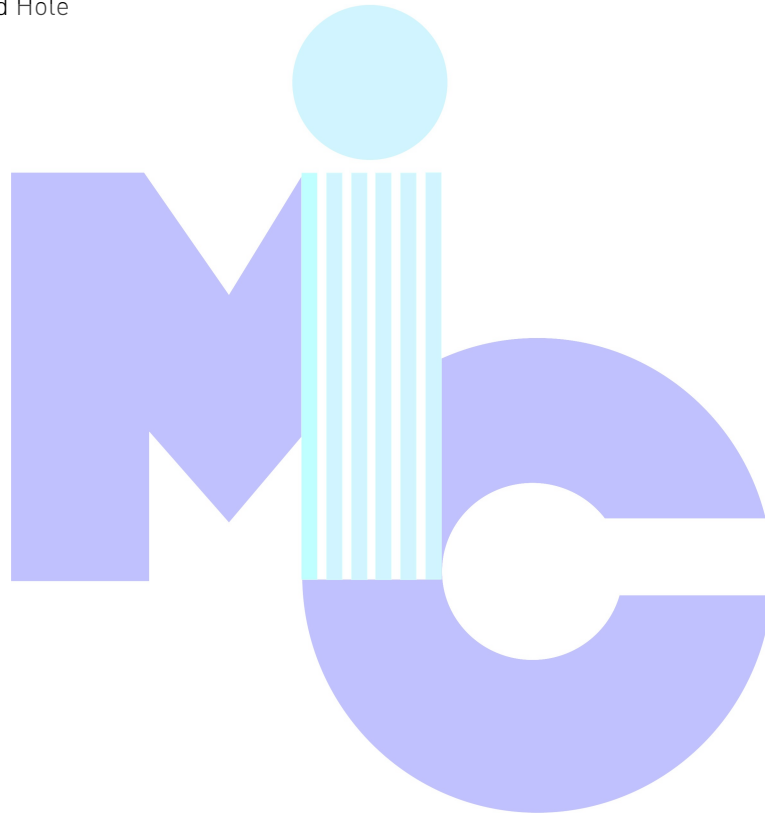
Branch Line Restraint  
Structure Attachment to Steel



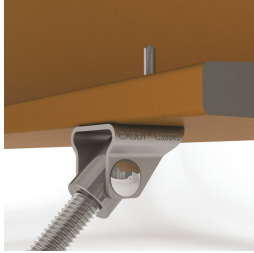
Branch Line Restraint Structure  
Attachment to Wood/Concrete



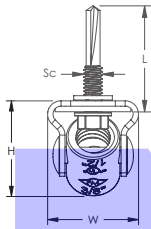
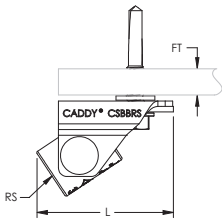
Branch Line Restraint Structure  
Attachment to Threaded Hole



# Branch Line Restraint Structure Attachment to Steel



- Swivel barrel nut accepts 3/8" or 1/2" (M10 or M12) threaded rod
- Attaches to steel members with self-drilling/tapping screw



Material: Steel  
Finish: Electrogalvanized



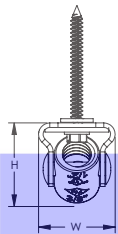
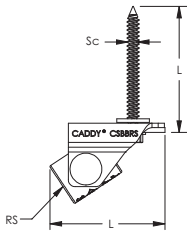
Part Number	Rod Size RS	Flange Thickness FT	Height H	Length L	Width W	Screw Diameter Sc	Screw Length L
CSBBS1EG	3/8", 1/2"	0.105" - 0.500"	1.11"	1.59"	1.06"	#12	1 1/4"

Branch line structural attachments are for restraint only and not for the hanging of fire sprinkler piping.

# Branch Line Restraint Structure Attachment to Wood/Concrete



- Swivel barrel nut accepts 3/8" or 1/2" (M10 or M12) threaded rod
- Attaches to wood or concrete where cracked concrete approval is not needed



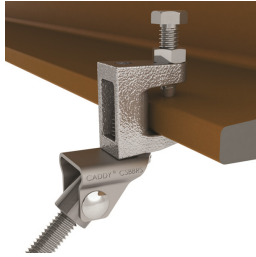
Material: Steel  
Finish: Electrogalvanized



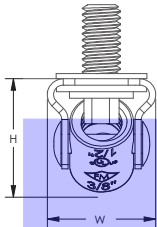
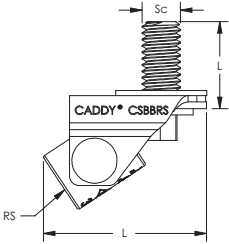
Part Number	Rod Size RS	Height H	Length L	Width W	Screw Diameter Sc	Screw Length L	Drill Bit Diameter
CSBBS2EG	3/8", 1/2"	1.11"	1.59"	1.06"	1/4"	1 3/4"	3/16"

Branch line structural attachments are for restraint only and not for the hanging of fire sprinkler piping.

# Branch Line Restraint Structure Attachment to Threaded Hole



- Swivel barrel nut accepts 3/8" or 1/2" (M10 or M12) threaded rod
- Attaches to concrete anchors or structural attachments with female threads
- Can be used for bolting through steel



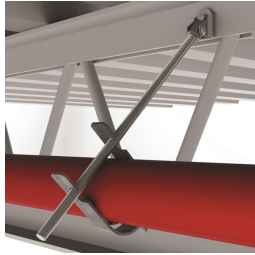
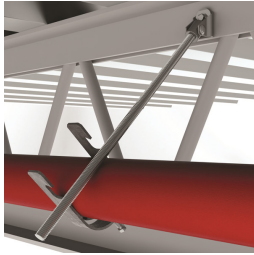
Material: Steel  
 Finish: Electrogalvanized



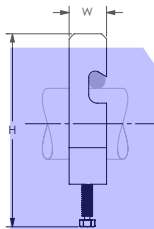
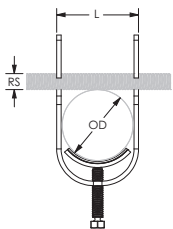
Part Number	Rod Size RS	Height H	Length L	Width W	Screw Diameter Sc	Screw Length L
CSBRS3EG	3/8", 1/2"	1.11"	1.59"	1.06"	3/8"	3/4"

Branch line structural attachments are for restraint only and not for the hanging of fire sprinkler piping.

# Branch Line Restraint Pipe Attachment



- Accepts 3/8" or 1/2" (M10 or M12) threaded rod
- Quick grip clamp simplifies measuring and cutting of threaded rod
- Eliminates need to cut threaded rod to exact dimensions
- Works with rough-cut threaded rod and eliminates pipe-side deburring
- Can be installed with threaded rod above or below the service pipe
- Shear-off head helps ensure correct torque and simplifies inspection



Material: Steel  
Finish: Electrogalvanized



Part Number	Pipe Size	Outer Diameter OD	Rod Size RS	Height H	Length L	Width W
CSBBRP0100EG	1"	1.32"	3/8", 1/2"	6.67"	1.63"	0.88"
CSBBRP0125EG	1 1/4"	1.66"	3/8", 1/2"	7.56"	1.97"	0.88"
CSBBRP0150EG	1 1/2"	1.90"	3/8", 1/2"	8.20"	2.21"	0.88"
CSBBRP0200EG	2"	2.38"	3/8", 1/2"	9.45"	2.69"	0.88"

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**WARNING**

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