





PRODUCT TECHNICAL STATEMENT

Incorporating BPIR requirements as per Building Product Information Regulations 2022

Erico / Caddy Fire Systems brackets, clamps & struts

Supplied by Hydroflow

HYDROFLOW DISTRIBUTORS LTD 221 Bush Road Rosedale, Albany, North Shore Auckland

Tel: +64 9 415 6151

At nVent, we believe that safer systems ensure a more secure world. We connect and protect our customers with inventive electrical solutions. We're a high-performance electrical company with a dedicated team of 10,000+ people at more than 100 sites around the world, representing nVent's trusted brands CADDY, ERICO / CADDY, HOFFMAN, RAYCHEM, SCHROFF and TRACER. From heat trace cables to enclosures to fastening solutions, we deliver value to industrial, commercial, residential, energy and infrastructure customers, providing mission critical solutions that improve performance, lower costs and reduce downtime.

This PTS covers all of the products supplied by Hydroflow, on behalf of Erico / Caddy, in New Zealand.

Document type	Revision	Revision date
Product Technical Specification & BPIR	1	F Docombor 2022
Erico / Caddy Fire Systems brackets, clamps & struts	V 1	5 December 2023

Revision control

Revision number	Revision information	Date	
v1	New PTS (BPIR)	27 November 2023	

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Product Technical Specification & BPIR	v 1	F Docombor 2022
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Purpose and use

Erico / Caddy Fire Systems brackets, clamps & struts for use in fire prevention systems water supply installations.

Product description

Erico / Caddy Fire Systems brackets, clamps & struts complies with the NZBC as shown below in the BPIR section.

A full product listing is available on the Hydroflow website: <u>Hydroflow - Homepage</u> or from the <u>Caddy</u> and/or <u>Erico</u> websites.

Key advantages

Erico / Caddy product specification, features and benefits are available from nVent Caddy or Erico, links as shown above.

Technical Information, Installation Instructions, Maintenance Instructions

Erico / Caddy product specification, features and benefits are available from Hydroflow. Erico / Caddy recommends that all installation is done by registered plumber or trained personnel.

The following information is available from the Erico and Caddy websites:

- Full technical specifications and diagrams
- Installation instructions
- UL load specifications
- FM load specifications
- Including application images, 3D models, brochures, case studies, catalogues, drawings, certifications

An example of this information is from the Universal Sway brace website:

Universal Sway Brace | nVent CADDY

Erico / Caddy Fire Systems brackets, clamps & struts QA processes

Erico / Caddy Fire Systems brackets, clamps & struts undertake testing and inspections of all products as part of the QA requirements.

Erico / Caddy is an ISO9001 certified manufacturer - See Appendix 1

Contribution to Compliance

Erico / Caddy Fire Systems brackets, clamps & struts are in full compliance with the requirements as set out in the New Zealand Building Code, as follows:

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Building code	Requirement	Compliance evidence
B2 (Durability) B2.3.1 (c) applies	(B2.3.1 Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or: (b) 15 years if: (i) Those building elements (including the building envelope, exposed plumbing in the subfloor space, and in-built chimneys and flues) are moderately difficult to access or replace, or (ii) Failure of those building elements to comply with the building code would go undetected during normal use of the building but would be easily detected during normal maintenance. (c) 5 years if: (i) The building elements (including services, linings, renewable protective coatings, and fixtures) are easy to access and replace, and (ii) Failure of those building elements to comply with the building code would be easily detected during normal use of the building.	As part of a plumbing system for supply of cold, hot or mixed water temperatures. These products can be used in residential and/or commercial buildings where cold, hot or mixed water temperatures water is required to be supplied. Not suitable for use in areas which are being permanently concealed such as behind concrete. Proof of durability – Service history Erico / Caddy products have been manufactured and supplied worldwide. Warranty calls are at a minimum and within the quality principles of Erico / Caddy. All Warranty claims are investigated, and corrective/preventive actions are implemented.
NZ Building Code C		
AS 1 to AS 7	Appendix B Automated fire sprinkler systems to comply with NZS 4541	Erico / Caddy products has a variety of international product certifications. UL metallic sprinkler brackets, clamps and strut certification For example, refer to Appendix 2.

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Design, construction and installation instructions

Installation Instructions

Erico / Caddy Fire Systems brackets, clamps & struts installation is to be done by registered plumbers or trained personnel.

All products have relevant installation instructions.

For an example, refer to Appendix 3.

Maintenance requirements

No specific maintenance instructions are given. Inspection by licensed plumber is recommended.

Limitations

Limitations and use are specified in the technical information sheets obtainable from the website and differs by product.

Quality assurance

The following certifications has been accredited to the product and/or manufacturer.

Erico / Caddy has a variety of certifications including:

- ISO 9001 Quality Management
- Seismic compliance certifications.

Warranty

A copy of the Erico products warranty statement is shown below:

WARRANTY. ERICO products are warranted to be free from defects in material and workmanship at the time of shipment. NO OTHER WARRANTY, WHETHER EXPRESSED OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF ANY ERICO PRODUCTS. Claims for errors, shortages, defects or nonconformities ascertainable upon inspection must be made in writing within 5 days after Buyer's receipt of products. All other claims must be made in writing to ERICO within 6 months from the date of shipment or transport. Products claimed to be nonconforming or defective must, upon ERICO's prior written approval in accordance with Clause 16 below, promptly be returned to ERICO for inspection. Claims not made as provided above and within the applicable time period will be barred. ERICO shall in no event be responsible if the products have not been stored or used in accordance with its specifications and recommended procedures. ERICO will, at its option, either repair or replace nonconforming or defective products for which it is responsible or return the purchase price to the Buyer. THE FOREGOING STATES BUYER'S EXCLUSIVE REMEDY FOR ANY BREACH OF ERICO WARRANTY AND FOR ANY CLAIM, WHETHER SOUNDING IN CONTRACT, TORT OR NEGLIGENCE, FOR LOSS OR INJURY CAUSED BY THE SALE OR USE OF ANY PRODUCT.

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Product support

Product data available are as shown above in section: Technical Information

For an example of the Bracing catalogue, see Appendix 4 (a few pages shown). The full catalogue is available for download from the website.

Full product support can be found at:

HYDROFLOW DISTRIBUTORS LTD
221 Bush Road
Rosedale, Albany, North Shore
Auckland
Tel: +64 9 415 6151

Manufacturer

All Erico / Caddy products are manufactured by Erico / Caddy and imported and distributed by Hydroflow.

Contact details are available for world-wide offices here:

Contact nVent CADDY, ERICO, ERIFLEX, LENTON | nVent EFS

Warnings and Bans

There is no warning or ban applicable on any Erico / Caddy products, subject to the Building Act 2004, Section 26.

Document type	Revision	Revision date
Product Technical Specification & BPIR	v 1	5 December 2023
Erico / Caddy Fire Systems brackets, clamps & struts	V 1	3 December 2023



Appendix 1 – ISO 9001 certificate



Document type	Revision	Revision date
Product Technical Specification & BPIR	v 1	5 December 2023
Erico / Caddy Fire Systems brackets, clamps & struts	V I	5 December 2023



CERTIFICATE OF REGISTRATION



nV∈nt

34600 Solon Road, Solon, Ohio 44139 USA 31700 Solon Road, Solon, Ohio 44139 USA 188 Carolina Road, Aberdeen, North Carolina 28315 USA

American Global Standards, LLC (AGS) issues this certificate to the firm named above, having assessed and approved the firm's Quality Management system and finding the system conforms to the standards of:

150 9001:2015

The Quality Management System is applicable to the following:

The Design & Manufacture of Electrical Products, Flexible Insulated Bus Bar Assemblies, Fastening Products, Concrete Reinforcement Products. The Provision of Ground Enhancement Materials & Tools

This approval is subject to the firm maintaining its system to the required standards, which will be monitored by AGS. In the issuance of this certificate, AGS assumes no liability to any party other than the firm named above, and then only in accordance with the agreed upon Quality System Assessment Agreement.

Certification Number: AGS-US0430I5-4/4
Original Approval: October 23, 1996
Date of Issue: April 30, 2021
Date of Expiration: April 29, 2024

For and On Behalf of American Global Standards, LLC Stephen Keneally, President



Appendix 2 – Product performance certifications



Document type	Revision	Revision date
Product Technical Specification & BPIR	v 1	5 December 2023
Erico / Caddy Fire Systems brackets, clamps & struts	V I	5 December 2023



Certificate Number EX3956

Report Reference EX3956-20080422 Issue Date 2022-JULY-13

Issued to: ERICO INTERNATIONAL CORPORATION

34600 SOLON RD

SOLON OH 44139-2631

This certificate confirms that representative samples of

SWAY-BRACE DEVICES, RIGID TYPE FOR SPRINKLER

SYSTEMS

SEE ADDENDUM PAGE

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL Subject 203A, Outline of Investigation for Sway Brace

Devices for Sprinkler System Piping.

ULC/ORD-C203A, Sway Brace Devices for Sprinkler

System Piping.

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC





Certificate Number EX3956

Report Reference EX3956-20080422 Issue Date 2022-JULY-13

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

USL, CNL - Sway Brace Devices for Sprinkler System Piping

Structure Attachment Fittings and Adapters

Structural Adapter Model ⁺	Structure Attachment Model+	Bracing Member Type	Bracing Member Size, in.	Bracing Direction	Load Rating lbf.	Description/ Comments
CSBMA050050(XX)	CSBUNIV050(XX)	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z ¹ , Z ²	680	Finish: PL, EG, HD
CSBMA050075(XX)	CSBUNIV050(XX)	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z ¹ , Z ²	680	Finish: PL, EG, HD
CSBMA050050(XX)	CSBU1	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z ¹ , Z ²	680	Finish: PL, EG, HD
CSBMA050075 (XX)	CSBU1	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z ¹ , Z ²	680	Finish: PL, EG, HD

+XX indicates the coating finish designation

EG = Electrogalvanized

HD = Hot-Dipped

PL = Plain

As shown in the table above, Structure Adapter Models CSBMA050050(XX) and CSBMA050075(XX) are intended for use with the Listed CSBUNIV050 or CSBU1 structure attachment fitting.

Sway Brace Fittings

Model ⁺	Bracin	Bracing	Sprinkle	Sprinkle	Bracing	Load	Description/Commen
	g	Member	r	r Pipe	Directio	Rating	ts
\times	Member	Size,	Pipe	Size,	n	,	
	Туре	in.	Type	NPS		lbf	
CSBEZU0200(XX	KSD	25A,32A	KSD	50A	Lateral	1200	Finish: PL, EG, HD
	3562	,	3562;				ソトソトソ
\times	\sim		KSD 3507	\nearrow		\sim	



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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Certificate Number EX3956

Report Reference EX3956-20080422 Issue Date 2022-JULY-13

CSBEZU0250(XX)	KSD 3562	25A,32A,	KSD	65A	Lateral	1600	Finish:	PL,	EG,
CSBEZU0300(XX)			3562;	80A					HD
(ii) (ii) (KSD 3507				1/11/		
CSBEZU0400(XX)	KSD 3562	25A,32A,	KSD	100A	Lateral	2000	Finish:	PL,	EG,
CSBEZU0500(XX)			3562;	125A		/\ "			HD
CSBEZU0600(XX)	\times		KSD 3507	150A					
CSBEZU0250(XX)	KSD 3562	25A, 32A,	KSD	65A	Longitudinal	680	Finish:	PL,	EG,
CSBEZU0300(XX)	ULAU	\mathcal{M}	3562 ;	80A		ハリ			HD
			KSD 3507	/ \ <u>'</u>					
CSBEZU0400(XX)	KSD 3562	25A,32A,	KSD	100A	Longitudinal	1000	Finish:	PL,	EG,
$I \cup I \cup Y \cup I \cup Y$	Ur W Ur	$M \cup M$	3562;	· W Ui	-Wu-W	$_{\rm WHz}$			HD
		/\L/\	KSD 3507	->/\~		\mathcal{N}^{-1}			
CSBEZU0500(XX)	KSD 3562	25A,32A,	KSD	125A	Longitudinal	1090	Finish:	PL,	EG,
CSBEZU0600(XX)		N/III. N	3562;	150A	MIL MIL	1/11-			HD
		NULN	KSD 3507			N U			
CSBSTU0200(XX)	Schedule	1, 1-	Schedule	2	Lateral	1200	Finish:	PL,	EG,
	40 Pipe	1/4, 1-	10,	1/5		100			HD
/II. VII. V	A-WA	1/2, 2	Schedule	- W III-		WILL			
	FLAT	V A LV	40	L/(V)		\mathcal{N}^{L}			. /
CSBSTU0300(XX)	Schedule	1, 1-	Schedule	3	Lateral	1600	Finish:	PL,	EG,
	40 Pipe	1/4, 1-	10,	1/11		1/11			HD
(UIXUIX	UI X UI	1/2, 2	Schedule	I X U I	MUI WUI	MUI)
			40						



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EX3956 **Certificate Number**

EX3956-20080422 **Report Reference** 2022-JULY-13 **Issue Date**

Model ⁺	Bracing	Bracing	Sprinkle	Sprinkle	Bracing	Load	Description/Comment
	Member	Member	r	r Pipe	Direction	Rating	s
/ U+ Y/ U+ 1	Type	Size,	Pipe	Size,	- Y U+ Y I	,	- W U+ W U+ Y
/_L//_L/		in.	Type	NPS	Y-LV.	lbf	「ソートソート)
CSBSTU0250 (XX	Schedul	1, 1-	Schedule	2-1/2	Lateral	2000	Finish: PL, EG, HD
)	e 40	1/4, 1-	10, Schedule	5		1. \/11	
CSBSTU0400(XX	Pipe	1/2, 2	40	8))(U)(U)(U)
CSBSTU0500(XX			40	10			
)				10			
CSBSTU0800(XX	$(U_L)(U_L)$	$J_{L})(U_{l})$	(U_L)		1)(U1)(\)	ĮL)(U	$L)(U_L)(U_L)$
CSBSTU1000(XX							
)			1				
CSBSTU0600(XX	Schedul	1, 1-	Schedule	6	Lateral	1100	Finish: PL, EG, HD
)	e 40	1/4, 1-	10,		A/C_FN		
\times	Pipe	1/2, 2	Schedule				
CSBSTU0800 (XX	KSD	057 207	40 KSD	200A	Lateral	2000	Finish: PL, EG, HD
CSBSTUU8UU(XX	3562	25A,32A	3562;	250A	Lateral	2000	FINISM: PL, EG, HD
CSBSTU1000(XX	3302		KSD 3507	250A			
)			1182 3007				
CSBSTU0250 (XX	Schedul	1, 1-	Schedule	2-1/2	Longitudina	1300	Finish: PL, EG, HD
)	e 40	1/4, 1-	10,	4	1	LA	
CSBSTU0400 (XX	Pipe	1/2, 2	Schedule	5		\leq	
)			40				
CSBSTU0500(XX	UIX		X UI X	UIXU	I X U I X	JI X U	(U) (U)
CSBSTU0800(XX	Schedul	1, 1-	Schedule	8	Longitudina	1370	Finish: PL, EG, HD
(SBS100000 (XX	e 40	1/4, 1-	10,	0	1 longitudina	1370	FINISH: FL, EG, HD
//II- WII- \	Pipe	1/2, 2	Schedule	m. VII	- WILWI	I. VII	WIII VIII V
(ULX UL)	ALW.	LEW P	40	CLA		LA	LV OLV OL)
CSBSTU0200 (XX	Schedul	1, 1-	Schedule	2	Longitudina	700	Finish: PL, EG, HD
)	e 40	1/4, 1-	10,	3	1	1 1	
CSBSTU0300(XX	Pipe	1/2, 2	Schedule		I X UI X I		I X UI X UI)
)			40	F/\		74.00	
CSBSTU0600(XX	Schedul	1, 1-	Schedule	6	Longitudina	1100	Finish: PL, EG, HD
711-3/11-3	e 40 Pipe	1/4, 1-1/2, 2	10, Schedule	/II. \/II	. \/11. \/1		. //11. //11. /
(ひしん ひし)	ripe	1/2, 2	40	ULKU	LXULX		L ハ ロ L ハ ロ L ノ
CSBSTU1000(XX	Schedul	1, 1-	Schedule	10	Longitudina	1885	Finish: PL, EG, HD
)	e 40	1/4, 1-	10,		1	1000	11110111. 111, 110, 110
/ III	Pipe	1/2, 2	Schedule			II W II	. Y II : Y II : \
	/_FV/	LLVAI	40	L FY	L/_L\	LLA	レハーレハーレ



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CSBSTU0800(XX)	KSD 3562	25A,32A, 40A, 50A	KSD 3562; KSD 3507	200A	Longitudinal	1370	Finish: PL, EG, HD
CSBSTU1000(XX)	KSD 3562	25A, 32A, 40A, 50A	KSD 3562; KSD 3507	250A	Longitudinal	1885	Finish: PL, EG, HD
CSBQG0250(XX) CSBQG0400(XX)	Schedule 40 Pipe	1, 1-1/4	Schedule 10, Schedule 40	2-1/2	Lateral	1500	Finish: PL, EG, HD
CSBQG0300(XX)	Schedule 40 Pipe	1, 1-1/4	Schedule 10, Schedule 40	3	Lateral	1300	Finish: PL, EG, HD
CSBQG0600 (XX) CSBQG0800 (XX)	Schedule 40 Pipe	1, 1-1/4	Schedule 10, Schedule 40	6	Lateral	1400	Finish: PL, EG, HD

Model ⁺	Bracing	Bracin	Sprinkler	Sprinkle	Bracing	Load	Description/Comment
/ LIV LIV	Member	g	Pipe Type	r Pipe	Directio	Rating	s .
	Type	Member		Size,	n	,	
		Size,	1/	NPS	1	lbf	
/ III W III W		in.	WHI WI	h William	V II - WI	II WIII	
CSBQG0250(XX)	Schedule	1, 1-	Bull Moose	2-1/2	Lateral	1500	Finish: PL, EG, HD
CSBQG0400(XX)	40 Pipe	1/4	Eddy Flow	4			
CSBQG0300(XX)	Schedule	1, 1-	Bull Moose	3	Lateral	1300	Finish: PL, EG, HD
7 U i 17 U i 18	40 Pipe	1/4	Eddy Flow	I W U i	M U - M	Ji W U	MIN UT YOUT Y
CSBQG0250(XX)	Schedule	1, 1-	Wheatland	2-1/2	Lateral	1500	Finish: PL, EG, HD
CSBQG0400(XX)	40 Pipe	1/4	Mega Flow	4			
CSBQG0300(XX)	Schedule	1, 1-	Wheatland	3	Lateral	1300	Finish: PL, EG, HD
l' Ur Y Ur M	40 Pipe	1/4	Mega Flow	n W Un		Jr W U	Y Y U1 Y U1 1
CSBQG0600(XX)	Schedule	1, 1-	Wheatland	6	Lateral	1400	Finish: PL, EG, HD
	40 Pipe	1/4	Mega Flow				
CSBQG0250(XX	Schedul	1, 1-	Youngstow	2-1/2	Lateral	1500	Finish: PL, EG,
	e 40	1/4	n Tube	4	K UI X I		HD
CSBQG0400(XX)	Pipe		Fire Flow				
CSBQG0300(XX)	Schedul	1, 1-	Youngstow	3	Lateral	1300	Finish: PL, EG,
MILWIL W	e 40	1/4	n Tube	L VIII	VIII. VI		HD
I YLA YLA	Pipe	VAL	Fire Flow	LAUL	VALV.	LA	LAULAUL

NPS = Nominal Pipe Size

*XX indicates the coating finish designation

EG = Electrogalvanized HD = Hot-Dipped

PL = Plain



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Appendix 3 – Installation instructions

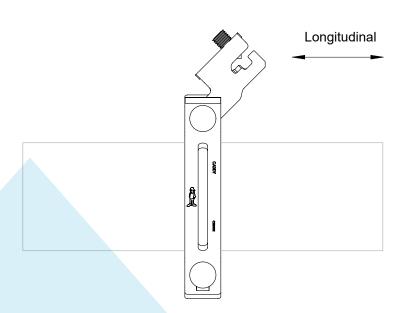


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Scory Broxe Drusy

EG F	-inish*	Service I	Pipe Size
Part Number	Article Number	NPS (in)	mm**
CSB0100	404516	1	25
CSB0125	404517	1-1/4	32
CSB0150	404518	1-1/2	38
CSB0200	404519	2	50
CSB0250	404520	2-1/2	65
CSB0300	404521	3	80
CSB0400	404522	4	100
CSB0500	404523	5	125
CSB0600	404524	6	150
CSB0800	404525	8	200
CSB1000	404526	10	250
CSB1200	404551	12	300

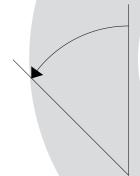


Sway Brace assemblies are intended to be installed in accordance with NFPA®-13 and the manufacturer's installation instructions.

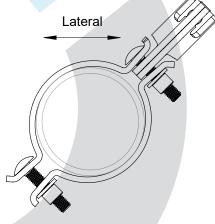
The required type, number, and size of fasteners used for the structure attachment fitting shall be in accordance with NFPA-13.

*Part numbers and article numbers are for EG only. Other coatings available. Contact customer service for availability.

**Metric pipe sizes are not UL listed.



Installation Angle from Vertical



- RNING:

 Nent products shall be installed and used only as indicated in nVent product instruction sheets and training materials. Instruction sheets are available at www.nVent.com and from your nVent customer service representative.

 NVent products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.

 All instructions must be completely followed to ensure proper and safe installation and performance.

 Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, properly damage, serious bodily injury and/or death, and void your warranty.

 Products that are manufactured using spring steel components shall be used only in a non-corrosive indoor environment.

 All pipe supports, hangers, intermediate components and structural attachments must ONLY be used as described herein and are NEVER to be used for any other purpose.

NOTE: All load ratings are for static conditions and do not account for dynamic loading such as wind, water or seismic loads, unless otherwise noted.

The customer is responsible for:

- a. Conformance to all governing codes.
 b. The integrity of structures to which the products are attached, including their capability of safely accepting the loads imposed, as evaluated by a qualified
- engineer.

 c. Using appropriate industry standard hardware as noted above.

CFS544_E

right to change specifications without prior notice.

SAFETY INSTRUCTIONS:
All governing codes and regulations and those required by the job site must be observed.
Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.



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UL® Loads (Listed for Sway Braces) lbs (N)									
EG Finish*		Lateral							
Part Number	Youngstown Tube Fire Flow	Bull Moose Eddy Flow	Wheatland Mega Flow	Sch 10 Service Pipe	Sch 40 Service Pipe				
CSB0100	N/A	N/A	N/A	1,885 (8,385)	1,885 (8,385)				
CSB0125	N/A	1,885 (8,385)	1,885 (8,385)	1,885 (8,385)	1,885 (8,385)				
CSB0150									
C\$B0200									
CSB0250	1,885 (8,385)								
CSB0300									
CSB0400									
CSB0500	N/A	N/A	N/A	1,885 (8,385)	1,885 (8,385)				
CSB0600	N/A N/A 1,885 (8,385) 1,885 (8,385) 1,885 (8,385								
CSB0800	N/A	N/A	N/A	1,885 (8,385)	1,885 (8,385)				
CSB1000	N/A	N/A	N/A	1,909 (8,492)	1,909 (8,492)				

	UL® Loads (Listed for Sway Braces) lbs (N)									
EG Finish*		Longitudinal								
Part Number	Youngstown Tube Fire Flow	Bull Moose Eddy Flow	Wheatland Mega Flow	Sch 10 Service Pipe	Sch 40 Service Pipe					
CSB0100	N/A	N/A	N/A	1,090 (4,849)	1,090 (4,849)					
CSB0125	N/A	680 (3,025)	680 (3,025)	680 (3,025)	680 (3,025)					
CSB0150			1,090 (4,849)							
CSB0200			1 270 (4 004)							
CSB0250			1,370 (6,094)							
CSB0300			1,431 (6,365)							
CSB0400	1,772 (7,882)	1,772 (7,882)	1,772 (7,882)	1,772 (7,882)	1,772 (7,882)					
CSB0500	N/A	N/A	N/A	1,772 (7,882)	1,772 (7,882)					
CSB0600	N/A	N/A	1,772 (7,882)	1,772 (7,882)	1,772 (7,882)					
CSB0800	N/A	N/A	N/A	1,772 (7,882)	1,772 (7,882)					
CSB1000	N/A	N/A	N/A	1,909 (8,492)	1,909 (8,492)					

A) UL Listed for use with Lightwall Service Pipe, Schedule 10, and Schedule 40 Service Pipe, for use with 1 to 2 NPS Schedule 40 brace pipe.





B) *Part numbers and article numbers are for EG only. Other coatings available. Contact customer service for availability.

EG Finish*	0	Service I	Pina Siza	FM	N Horizontal Lo	ad Ratings Ibs	(N)	5.
Part	Orientation to Sprinkler Pipe	361 VICE I	ripe size		Installati	on Angle		Pipe Schedule
Number		Inch	mm	30° - 44°	45° - 59°	60° - 74°	75° - 90°	
CSB0100		1	25	1,490 (6,628)	2,110 (9,386)	2,580 (11,476)	2,900 (12,900)	
CSB0125		1 - 1/4	32					
CSB0150		1 - 1/2	40	1,380 (6,139)	1,960 (8,719)	2,400 (10,676)	2,690 (11,966)	
CSB0200		2	50					
CSB0250		2 - 1/2	65	1,440 (6,405)	2,030 (9,030)	2,490 (11,076)	2,790 (12,411)	LW, 10, 40
CSB0300	Lateral	3	85					
CSB0400	Laieiai	4	100	1,390 (6,183)	1,970 (8,763)	2,420 (10,765)	2,710 (12,055)	
CSB0500		5	125					
CSB0600		6	150	1,460 (6,494)	2,060 (9,163)	2,520 (11,210)	2,830 (12,588)	
CSB0800		8	200	1 000 (0 2/2)	1,880 (8,363) 2,300 (10,231) 2,580 (11,4	2 590 (11 474)	,	
CSB1000		10	250	1,330 (3,716)	3,916) 1,880 (8,363)	2,300 (10,231)	2,300 (11,470)	0.188, 40
CSB1200		12	300	1,680 (7,470)	2,370 (10,540)	2,910 (12,940)	3,260 (14,500)	
CSB0100		1	25	1,290 (5,738)	1,240 (5,516)	1,260 (5,605)	1 400 (4 228)	
CSB0125		1 - 1/4	32		1,240 (3,310)	1,200 (3,003)	1,400 (0,220)	
CSB0150		1 - 1/2	40	1,200 (5,338)	1,860 (8,274)	2 190 (0 (07)	2,250 (10,008)	
CSB0200		2	50		1 900 (9 00 ()	2,100 (7,077)	2,230 (10,006)	
CSB0250		2 - 1/2	65	1,320 (5,872)	1,820 (8,096)		2,500 (11,121)	LW, 10, 40
CSB0300	Longitudinal	3	80			2,190 (9,742)	2,300 (11,121)	
CSB0400	Longilodina	4	100	1,300 (5,783)	1,790 (7,962)	2,170 (7,742)	2 (20 (11 (00)	
CSB0500		5	125				2,630 (11,699)	
CSB0600		6	150	1,410 (6,272)	1,950 (8,674)		2,680 (11,921)	
CSB0800		8	200	1,400 (6,228)	1,920 (8,541)	2,350 (10,453)	2,640 (11,743)	
CSB1000		10	250	1,400 (0,228)	1,720 (0,341)			0.188, 40
CSB1200		12	300	1,600 (7,110)	1,860 (8,270)	2,240 (9,960)	2,590 (11,520)	

Notes:

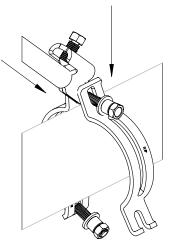
- FM approved when used with 1", 1-1/4" or 2" (DN25, DN32, DN40, DN50) NPS Schedule 40, GB/T 3091, EN 10255 (Heavy), AS 1074 (Heavy) or JIS G3454 brace pipe.
 Load ratings for Schedule 40 above may also be applied to AS 1074 (Heavy), GB/T 3091, EN 10255 (Heavy) and
- JIS G3454 pipe.
- Load ratings for Schedule 40 above may also be applied to AS 1074 (Meduim), GB/T 3091, EN 10255 (Medium or 3.
- Heavy), JIS G3452, FM approved Thinwall, and Schedule 40 pipes unless otherwise indicated. Load ratings for LW above refers to FM Approved Lightwall Pipe, commonly referred to as "Schedule 7". These ratings may also be applied to A1074 Lightwall, EN 10255 L, EN 10220, and GB/T 8163 pipe unless otherwise
- Load ratings for "0.188 wall" above may be applied to any thicker walled pipe unless otherwise specified. *Part numbers and article numbers are for EG only. Other coatings available. Contact customer service for availability.





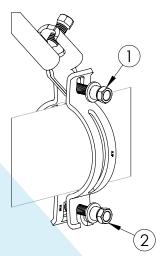
CFS544_E

#1



Insert brace pipe and drop clamp over service pipe

#2



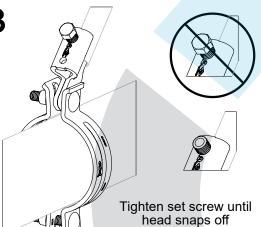
Tighten nuts until head snaps off





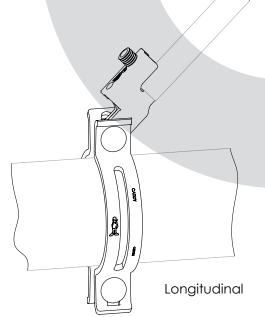
Note: Tighten Top Nut First

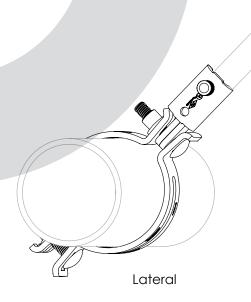
#3



CSBXXXX is a Sway Brace Fitting to be combined with a nVent CADDY brand Structural Attachment Fitting and "Bracing Pipe" to form a complete bracing assembly.

Sway Braces shall be installed in accordance with NFPA®-13.







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Appendix 4 – A few pages from the Bracing Catalogue



Document type	Revision	Revision date
Product Technical Specification & BPIR	v 1	5 December 2023
Erico / Caddy Fire Systems brackets, clamps & struts	V 1	5 December 2023





CONNECT AND PROTECT

Fire Sprinkler Hanging & Bracing Products

Innovative Hanging & Bracing Fire Protection Solutions



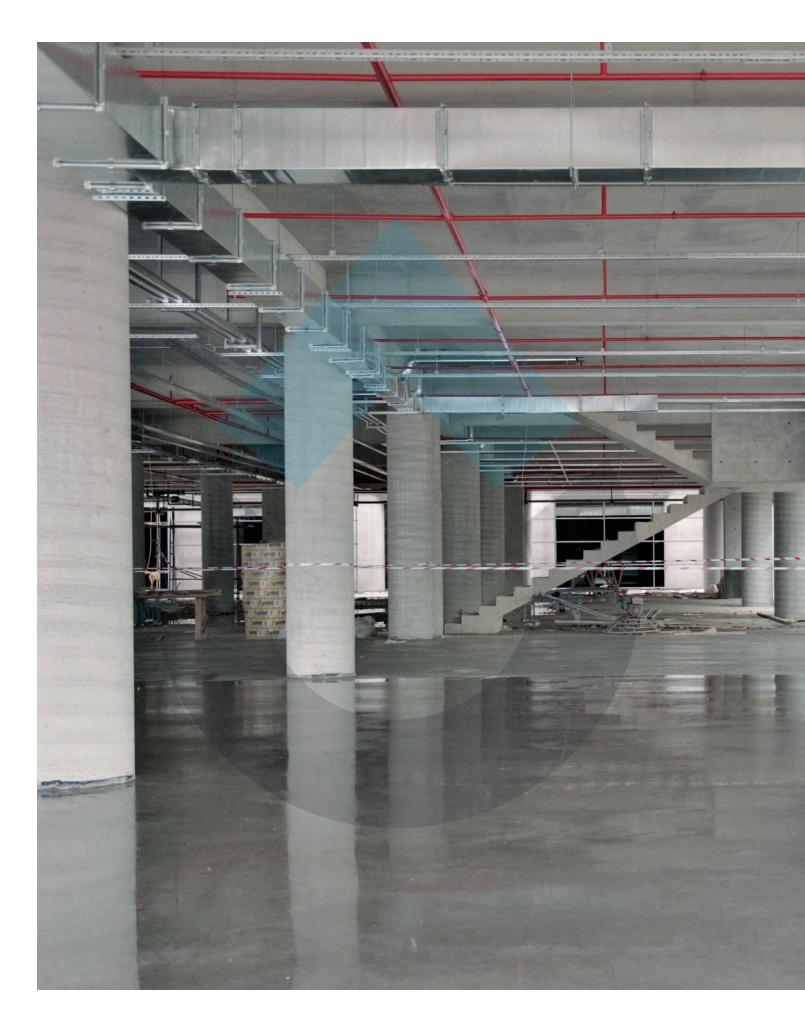




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See how easy it is to install our nVent CADDY products.

Watch videos on our fire and seismic applications.







5

12

nVent CADDYFire Sprinkler and Seismic Bracing Solutions

To help ensure the availability and operation of safety systems after an earthquake event, many building and industry codes now include requirements for the design and installation of seismic sway bracing for non-structural components, such as fire sprinkler, mechanical, electrical and plumbing systems. The innovative line of nVent CADDYBracing Systems was developed to help keep fire sprinkler systems intact after a seismic event and to minimize water damage resulting from leaks or ruptures.

Bracing Systems provide contractors with high-quality, engineered solutions, which include rigid bracing, cable bracing and rod stiffeners.

FEATURES:

- · Quick and easy installation
- · Lower total installed cost
- OSHPD® Pre-Approved
- · cULus® Listed
- Meets NFPA® 13
- FM[®] Approved

Buy American Compliant Solutions are available.













Specifying a Trusted Solution – nVent CADDYSeismic Bracing Software

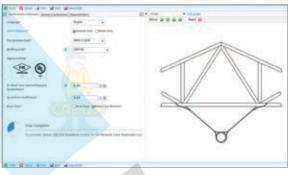


Now it's easierthan everto select the correct bracing products for use in fire protection applications. nVent CADDYBracing Systems Calculator is a webbased calculator which allows users to create and save designs for multiple projects while providing the necessary submittal forms. This time-saving calculator simplifies the selection of products and provides the necessary engineering calculations – providing a complete solution to support rigid bracing, cable bracing and branch line restraints.

FEATURES:

- · 3D models
- · North American and European product lines
- · No installation needed access via a current web browser
- · Offers dynamic design preview and uses visual design tools
- Generates a complete submittal for NFPA® or FM designs
- · Create, manage, and re-use designs
- Supports NFPA® 13 including 2013 ed., IBC® and other building codes
- Ability to generate a material list (bill of material) with nVent CADDYproducts as well as other required materials (pipe, anchors, etc.)





Building a Complete Solution with Engineering Support Services



ENGINEERING

- Design Optimization
- Bracing Layouts with Bill of Material
- Stamped Drawings



PRODUCTS

- Cable and Rigid Bracing
- Innovative Products
- Superior Solutions



CUSTOMER EXPERIENCE

- Quick Turnaround
- Local Availability
- In-Market Support

The nVent CADDYteam makes seismic simple by:

- Working with you to design a turn-key, fully engineered, complete bracing system that meets your needs
- · Identifying the appropriate products from the broad offering
- · Offering compatible fixing, fastening and support products
- Explaining installation techniques and tips to meet the evolving codes and standards requirements

From design to construction to inspection, we keep our process transparent to ensure a full understanding of the final bracing installation, whether it requires cable or rigid bracing solutions.



What's New to nVent CADDYRigid Seismic Bracing

nVent CADDYis the industry leader in seismic bracing solutions. From our clamps and brackets to innovations with telescoping solutions that fit any size application.

CSBS – STEEL FLANGE ADAPTER



Low profile easily fits into tight spaces

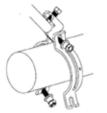


Includes spring retainer clip



Pre-assembled version available

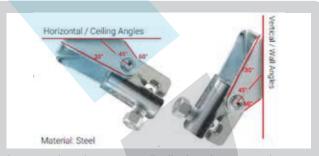
CSB UNIVERSAL SWAY BRACE





Used in both lateral and longitudinal sway brace applications, the unique slotted holes provide for an easy slip-on installation that eliminates loose hardware. Now featuring both snapoff nuts and bolt head, making installation and inspection of seismic sway braces a breeze.

CSBU UNIVERSAL STRUCTURAL BRACKET



Integrated angle gauge easily displays brace member angle of installatio

CSBT TELESCOPING LATERAL BRACE







Learn how to reduce install time. Watch our Lateral Telescoping





This is a complete lateral brace solution that works with 1"to 4" service pipe, including CPVC. A telescoping brace member eliminates the need to measure and cut pipe and combines with a push-to-install v-bolt head making installations up to 80% faster than standard bracing.

CSBQG AND CSBQIK QUICK GRIP LATERAL SWAY BRACES



These lateral braces feature an easy two-step installation that minimizes extra trips between structure and the service pipe. The unique quick attachment eliminates the need of cutting brace pipe to exact dimensions and accommodates both 1" and 11/4" brace pipe sizes in a single product.

Learn more about our Rigid Bracing Solutions on page 8.

What's New to nVent CADDYCable Seismic Bracing

Cable Seismic Bracing is a NFPA® 13 approved solution that offers added design flexibility in instances where there are long drops from structure, a congested ceiling where access to structure is limited, and where a more visually integrated solution is needed in open ceiling construction.

- · Effective end of branch line restraint to meet these newer requirements
- · Compact, space saving solution, that is easy to move around job site

BATTERY OPERATED TOOL



Speeds and eases both bracing and branch line restraint installation. Provides consistent swaging and reduces the number of swages per sleeve compared to manual tools.



NO PRY CLIP



A structural attachment that maximizes the load capacity on a post-installed concrete anchor by neutralizing the prying effect from the cable load. This increases the allowable design load per anchor and results in the need for fewer bracing locations.

QUICK CLIP ROD STIFFENER







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

A tool-free rod stiffener that quickly and easily snaps into place, securing a threaded rod to a strut channel to prevent buckling from up thrust forces.

Learn about our bracing tools.

Watch our Quick Clip Rod Stiffener video.

Watch our Quick Clip Rod Stiffener video.



