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

Issued to: ERICO INTERNATIONAL CORPORATION 34600 SOLON RD SOLON OH 44139-2631

This certificate confirms that representative samples of

SEE ADDENDUM PAGE

SYSTEMS

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

SWAY-BRACE DEVICES, RIGID TYPE FOR SPRINKLER

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.

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Bruce Mahrenholz, Director North American Certification Program



Certificate Number Report Reference Issue Date EX3956 EX3956-20080422 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 <sup>+</sup>	Structure Attachment Model <sup>+</sup>	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 <sup>1</sup> , Z <sup>2</sup>	680	Finish: PL, EG, HD
CSBMA050075( XX)	CSBUNIV050( XX)	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	680	Finish: PL, EG, HD
CSBMA050050( XX)	CSBU1	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	680	Finish: PL, EG, HD
CSBMA050075( XX)	CSBU1	Schedule 40	1, 1- 1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	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
	Member	Size,	Pipe	Size,	n	1	
	Туре	in.	Туре	NPS		lbf	
CSBEZU0200(XX	KSD	25A,32A	KSD	50A	Lateral	1200	Finish: PL, EG, HD
	3562	,	3562;	5			シリシリシ
	$\sim$		KSD 3507	$\sim$			$\mathbf{x} \mathbf{x} \mathbf{x}$

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CSBEZU0250(XX)	KSD 3562	25A,32A,	KSD	65A	Lateral	1600	Finish: PL, EG	G,
CSBEZU0300(XX)			3562;	80A			Н	HD
			KSD 3507					
CSBEZU0400(XX)	KSD 3562	25A,32A,	KSD	100A	Lateral	2000	Finish: PL, EG	З,
CSBEZU0500(XX)			3562;	125A				HD
CSBEZU0600(XX)			KSD 3507	150A				
CSBEZU0250(XX)	KSD 3562	25A,32A,	KSD	65A	Longitudinal	680	Finish: PL, EG	G,
CSBEZU0300(XX)	ייעאי	. Л Ч Г Л	3562;	80A				HD
	5		KSD 3507					
CSBEZU0400(XX)	KSD 3562	25A,32A,	KSD	100A	Longitudinal	1000	Finish: PL, EG	Ĵ,
f Ur Y Ur Y	Ur Y Ur	YUrY	3562;	i Y Ui	YUrYUr	W Ur	H	HD
СЛЛЛ	-17-1	ハーハ	KSD 3507	Ь <b>Д</b> ТІ	- 人・ 人・ I			
CSBEZU0500(XX)	KSD 3562	25A,32A,	KSD	125A	Longitudinal	1090	Finish: PL, EG	G,
CSBEZU0600(XX)	n. Mn.	Mu.M	3562;	150A	MILMIL	V/II.	H	HD
	ייגע		KSD 3507	L X U		JU UI		
CSBSTU0200 (XX)	Schedule	1, 1-	Schedule	2	Lateral	1200	Finish: PL, EG	G,
	40 Pipe	1/4, 1-	10,				H	HD
Alle Ville V	h VII.	1/2, 2	Schedule	. V II.		N/H-		
ГЛЛЛ	ЧГУЛЧ	.ЛЧЛ	40	۱۸ч	.人 、 し 人 、 l	<b>Л</b> Ч		
CSBSTU0300(XX)	Schedule	1, 1-	Schedule	3	Lateral	1600	Finish: PL, EG	G,
	40 Pipe	1/4, 1-	10,				HI III H	HD
		1/2, 2	Schedule		XUIXUI	XUI		
			40					

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Model <sup>+</sup>	Bracing	Bracing	Sprinkle	Sprinkle	Bracing	Load	Description/Comment
HOUCT	Member	Member	r	r Pipe	Direction	Rating	peser perony conunent
$/\Pi_{\rm c}$ $/\Pi_{\rm c}$ $\wedge$	Type	Size,	Pipe	Size,	DITECTION	Racing	
	туре	in.	Type	NPS		, lbf	
CSBSTU0250 (XX	Schedul	1, 1-	Schedule	2-1/2	Lateral	2000	Finish: PL, EG, HD
)	e 40	1/4, 1-	10,	4	Lacerar	2000	FINISH. FL, EG, HD
CSBSTU0400(XX	Pipe	1/2, 2	Schedule	5			
	Pipe	1/2, 2	40	8		JUXU	
) CSBSTU0500 (XX			40	10		-	
	$\sim$	$\sim$		10	$\langle \rangle$		
) CSBSTU0800(XX	n > n	L. VIII.	VII.	n. Vn	Mu.M	$1. \sqrt{11}$	
)		JXU	XUI)			лжи	
CSBSTU1000(XX			シトシ			-	
CSBSI01000 (XX		$\times$					
CSBSTU0600 (XX	Cabadul	1 1	Schedule	6	Tatawal	1100	Finish: PL, EG, HD
	Schedul	1, 1-		0	Lateral	1100	FINISN: PL, EG, HD
	e 40	1/4, 1-	10,				
$\times$ $\times$	Pipe	1/2, 2	Schedule	$\times$		$\leq$	
	KOD		40 KSD	200A	Tabased	2000	
CSBSTU0800 (XX	KSD	25A, 32A		200A 250A	Lateral	2000	Finish: PL, EG, HD
	3562		3562;	ZJUA			
CSBSTU1000 (XX		$\times$ >	KSD 3507	$\sim$			
) CSBSTU0250 (XX	Schedul	1, 1-	Schedule	2-1/2	Longitudina	1300	Finish: PL, EG, HD
			and the second s		Longitudina	1300	Finisn: PL, EG, HD
	e 40	1/4, 1-	10,	4			
CSBSTU0400 (XX	Pipe	1/2, 2	Schedule	5		$\leq$	
) CSBSTU0500(XX	(11.)(1	L. M.L.	40	/II. X/II	$-\mathcal{M}$	$1. \sqrt{11}$	
			XUI)			J X U	
) CSBSTU0800(XX	Schedul	1, 1-	Schedule	8	Longitudina	1370	Finish: PL, EG, HD
	e 40			8		1370	FINISN: PL, EG, HD
		1/4, 1-	10, Schedule	/m. \/m		1. \/11	
	Pipe	1/2, 2	40			1 1 0	
CSBSTU0200 (XX	Schedul	1, 1-	Schedule	2	Longitudina	700	Finish: PL, EG, HD
	e 40	1/4, 1-		3	Longitudina	700	FINISN: PL, EG, HD
) CSBSTU0300(XX			10, Schedule			I. V/II	
CSBS100300 (XX	Pipe	1/2, 2	40				
CSBSTU0600(XX	(Cab a du l	1, 1-		6	Longitudina	1100	Finish: DI EC UD
	Schedul		Schedule	0		1100	Finish: PL, EG, HD
$\mathbf{P}_{\mathbf{H}}$	e 40 Dino	1/4, 1-	10,	/II. X/II		I. X/II	
	Pipe	1/2, 2	Schedule 40	ULXU		LIU	
CSBSTU1000 (XX	Schedul	1, 1-	Schedule	10	Longitudina	1885	Finish: PL, EG, HD
	e 40	1/4, 1-	10,	10		1003	rinion. EL, EG, AD
<b>7</b> 11. V 11. V	Pipe	1/2, 2	Schedule			$\sim 11$	
	TTPE	1/2, 2	40	U UL A U		'L Л Ч	
	~~~		UF				

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CSBSTU0800(XX)	KSD 3562	25A,32A, 40A, 50A	KSD 3562;	200A	Longitudinal	1370	Finish: PL, EG, HI
			KSD 3507				
CSBSTU1000 (XX)	KSD 3562	25A, 32A, 40A, 50A	KSD 3562; KSD 3507	250A	Longitudinal	1885	Finish: PL, EG, HI
CSBQG0250 (XX) CSBQG0400 (XX)	Schedule 40 Pipe	1, 1-1/4	Schedule 10, Schedule 40	2-1/2 4	Lateral	1500	Finish: PL, EG, HI
CSBQG0300(XX)	Schedule 40 Pipe	1, 1-1/4	Schedule 10, Schedule 40	3	Lateral	1300	Finish: PL, EG, HI
CSBQG0600(XX) CSBQG0800(XX)	Schedule 40 Pipe	1, 1-1/4	Schedule 10, Schedule 40	6 8	Lateral	1400	Finish: PL, EG, HI

Model <sup>+</sup>	Bracing	Bracin	Sprinkler	Sprinkle	Bracing	Load	Description/Comment
<b>\~L/\~L/</b>	Member	g	Pipe Type	r Pipe	Directio	Rating	s
	Туре	Member		Size,	n	,	
		Size,		NPS		lbf	
		in.			$\mathbf{V} = \mathbf{V}$		
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	$\sim$		
CSBQG0300(XX)	Schedule	1, 1-	Bull Moose	3	Lateral	1300	Finish: PL, EG, HD
/ Un Y Un Y	40 Pipe	1/4	Eddy Flow		V UT V I		- Y U+ Y U+ )
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
(UI YUI Y	40 Pipe	1/4	Mega Flow	h Mur	Y.UT Y.		
CSBQG0600(XX)	Schedule	1, 1-	Wheatland	6	Lateral	1400	Finish: PL, EG, HD
	40 Pipe	1/4	Mega Flow	$\leq$			
CSBQG0250(XX	Schedul	1, 1-	Youngstow	2-1/2	Lateral	1500	Finish: PL, EG,
	e 40	1/4	n Tube	4	XUIXI	JIXU	HD
CSBQG0400(XX)	Pipe		Fire Flow	5		5	5 5 5
CSBQG0300(XX)	Schedul	1, 1-	Youngstow	3	Lateral	1300	Finish: PL, EG,
	e 40	1/4	n Tube	I. VII.	V11. V1	$\mathbf{I} \cdot \mathbf{V} \mathbf{I}$	HD
	Pipe	L / Y	Fire Flow	LAL	<u>ለግር እ</u>		L/U/U/

NPS = Nominal Pipe Size

\*XX indicates the coating finish designation EG = Electrogalvanized HD = Hot-Dipped

PL = Plain

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

**Restraint Devices** 

USL, CNL – Restraint Device Model CSBQIKCL is intended for lateral restraint. The 1 inch through 4 inch sprinkler pipe sizes of the CSBQIKCL are intended to function with the "Quick-Claw" brackets in a closed position.

Model	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Description/ Comments
CSBQIKCL	Schedule 10 and Schedule 40		1 in. Bracing Pipe, 655 lbf Load Rating
CSBQIKCL	Schedule 10 and Schedule 40	1	1-1/4 in. Bracing Pipe, 655 lbf Load Rating
CSBQIKCL	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/4	1 in. Bracing Pipe, 655 lbf Load Rating
CSBQIKCL	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/4	1-1/4 in. Bracing Pipe, 540 lbf Load Rating
CSBQIKCL	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/2	1 in. Bracing Pipe, 750 lbf Load Rating
CSBQIKCL	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/2	1-1/4 in. Bracing Pipe, 655 lbf Load Rating
CSBQIKCL	Schedule 10, Schedule 40 and Allied DynaFlow	2	1 in. Bracing Pipe, 750 lbf Load Rating
CSBQIKCL	Schedule 10, Schedule 40 and Allied DynaFlow	2	1-1/4 in. Bracing Pipe, 540 lbf Load Rating

USL, CNL – Restraint Device Models CSBEZU and CSBSTU, for lateral and longitudinal restraint; intended for use with 1, 1-1/4, 1-1/2, and 2 in. Schedule 40 bracing pipe. For use with sprinkler pipe and sizes as outlined in the tables below.

Model	Sprinkler	Sprinkler	Description/
	Pipe Type	Pipe Size, NPS	Comments
CSBEZU	Schedule 10 and Schedule 40	1	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Lateral, 655 lbf Load Rating
CSBEZU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/4	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Lateral, 655 lbf Load Rating
CSBEZU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/2	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Lateral, 655 lbf Load Rating
CSBSTU	Schedule 10 and Schedule 40	1	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Lateral, 655 lbf Load Rating
CSBSTU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/4	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Lateral, 655 lbf Load Rating
CSBSTU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/2	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Lateral, 655 lbf Load Rating
CSBEZU	Schedule 10 and Schedule 40		1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating
CSBEZU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/4	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating

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

CSBEZU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/2	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating
CSBEZU	Schedule 10, Schedule 40 and Allied DynaFlow	2	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating
CSBSTU	Schedule 10 and Schedule 40		1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating
CSBSTU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/4	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating
CSBSTU	Schedule 10, Schedule 40 and Allied DynaFlow	1-1/2	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating
CSBSTU	Schedule 10, Schedule 40 and Allied DynaFlow	2	1, 1-1/4, 1-1/2, 2 in. Bracing Pipe, Longitudinal, 655 lbf Load Rating

#### **Restraint Devices**

USL, CNL – Restraint Device Models CSBBRP, for lateral restraint; intended for use with threaded rod as brace 3/8 and 1/2 in. For use with sprinkler pipe type and sizes as outlined in the table below.

Model	Sprinkler	Sprinkler	Description/
	Pipe Type	Pipe Size,	Comments
> > > > > > > > > > > > > > > > > > >		NPS	
CSBBRP	Schedule 10 and Schedule	1"	3/8" and ½" Threaded Rod Brace, Lateral, 475 lbf Load Rating
	40		
CSBBRP	Schedule 10 and Schedule	1-1/4"	3/8" and 1/2" Threaded Rod Brace, Lateral, 475 lbf Load Rating
	40		
CSBBRP	Schedule 10 and Schedule	1-1/2"	3/8" and 1/2" Threaded Rod Brace, Lateral, 475 lbf Load Rating
	40	2.7.9	
CSBBRP	Schedule 10 and Schedule	2"	3/8" and ½" Threaded Rod Brace, Lateral, 475 lbf Load Rating
	40		
CSBBRP	Allied DynaFlow	1-1/4"	3/8" and 1/2" Threaded Rod Brace, Lateral, 300 lbf Load Rating
CSBBRP	Allied DynaFlow	1-1/2"	3/8" and 1/2" Threaded Rod Brace, Lateral, 300 lbf Load Rating
CSBBRP	Allied DynaFlow	2"	3/8" and 1/2" Threaded Rod Brace, Lateral, 300 lbf Load Rating

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Certificate Number Report Reference Date	EX3956 EX3956-2009-03-17 2022-July-13
Issued to:	ERICO INTERNATIONAL CORPORATION 34600 SOLON RD SOLON OH, 44139-2631 US
This is to certify that representative samples of	SWAY-BRACE DEVICES, RIGID TYPE FOR SPRINKLER SYSTEMS
	See Addendum Page for Product Designation(s).
	Have been evaluated 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 <a href="https://iq.ulprospector.com">https://iq.ulprospector.com</a> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance 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.

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UL LLC

Certificate Number Report Reference Date

EX3956 EX3956-2009-03-17 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	Structure	Bracin	Bracing	Bracing	Load	Description/ Comments
Adapter	Attachment	g	Member	Directio	Ratin	AR. VII. VII. VII
Model+	Model+	Member	Size,	n	g	
	00	Туре	in.	20	lbf.	
CSBIB075085	CSBUNIV050	Schedu	1, 1-	X, Y, Z <sup>1</sup> ,	1090	Finish: PL, EG, HD
(XX)	(XX)	le 40	1/4, 1-	$\mathbb{Z}^2$		1/4 in. to 3/4 in.
	1 LA L	<b>N_LV</b>	1/2, 2	LV.L	1.11	flange, 4 in. through
	$\times \times$	~	$\geq$	$\leq \sim$	1	8.5 in. flange width
CSBIB075145	CSBUNIV050	Schedu	1, 1-	X, Y, Z <sup>1</sup> ,	1090	Finish: PL, EG, HD
(XX)	(XX)	le 40	1/4, 1-	$\mathbb{Z}^2$	( U I . )	1/4 in. to 3/4 in.
			1/2, 2	2	1	flange, 4 in. through
	~~		~ /	5.5		14.5 in. flange width
CSBIB125180	CSBUNIV050	Schedu	1, 1-	X, Y, Z <sup>1</sup> ,	1370	Finish: PL, EG, HD
(XX)	(XX)	le 40	1/4, 1-	$\mathbb{Z}^2$	1 ° L J	3/4 in. to 1-1/4 in.
	$\sim \sim$		1/2, 2	~~	$\sim$	flange, 4 in. through
		1.	· · · /	10	1.	18 in. flange width
CSBBARJ(XX)	CSBUNIV050	Schedu	1, 1-	X, Y, Z <sup>1</sup> ,	900	Finish: PL, EG, HD
	(XX)	le 40	1/4, 1-	$\mathbb{Z}^2$	1. 19	1/4 in. to 1/2 in
			1/2, 2			flange
CSBBC075 (XX	CSBUNIV050	Schedu	1, 1-	X, Y, Z <sup>1</sup> ,	680	Finish: PL, EG, HD
)	(XX)	le 40	1/4, 1-	$Z^2$		1/4 in. to 3/4 in.
			1/2, 2		$\sim$	flange

Structure Adapter series CSBIB, CSBBARJ and CSBBC are intended for use with the Listed model CSBUNIV050 structure attachment fitting.

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Bruce Mahrenholz, Director North American Certification Program



Certificate Number Report Reference Issue Date 20130627-EX3956 EX3956-20130626 2013-JUNE-27

Issued to: ERICO INTERNATIONAL CORPORATION 34600 SOLON RD SOLON OH 44139

This is to certify 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:Outline of Investigation for Sway Brace Devices for<br/>Sprinkler System Piping, Subject 203AAdditional Information:See the UL Online Certifications Directory at<br/>www.ul.com/database for additional information

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle: W with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, plea contact a local UL Customer Service Representative at <u>www.ul.com/contactus</u>

Certificate Number Report Reference Issue Date 20130627-EX3956 EX3956-20130626 2013-JUNE-27

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

Restraint Device Models CSBBRS1, CSBBRS2, CSBBRS3EG for lateral restraint; intended for use with threaded rod as brace 3/8 and 1/2 in. and attachment to concrete, steel or wood. The CSBBRS3EG can be used in conjunction with a Listed Erico Model 300 beam clamp. Installation requirements are outlined in the installation instructions provided with the product. Bracing rod, orientations and loads as outlined in the table below.

Model	Rod Size in.	Brace Orientation	Load lbs.
CSBBRS1	3/8, 1/2	Parallel to Structure	425
		Perpendicular to Structure	
CSBBRS2	3/8, 1/2	Parallel to Structure	425
$\times$ $\times$ $\times$	$\langle \times \rangle$	Perpendicular to Structure	$\sim$
CSBBRS3EG	3/8, 1/2	Parallel to Structure	425
	[,, u], u], u]	Perpendicular to Structure	A PLAY
CSBBRS3EG w/Listed	3/8	Parallel to Structure	300
300 Beam Clamp	Mir. Mi	Perpendicular to Structure	300
	いいい	Vertically Down from Structure	425
CSBBRS3EG w/Listed	1/2	Parallel to Structure	300
300 Beam Clamp	i XUi XU	Perpendicular to Structure	525
		Vertically Down from Structure	425

William R. Carney

William R. Carney, Director, North American Certification Programs



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Certificate Number Report Reference Date	EX3956 EX3956-2013-09-19 2022-July-05
Issued to:	ERICO INTERNATIONAL CORPORATION 34600 SOLON RD SOLON OH, 44139-2631 US
This is to certify that representative samples of	SWAY-BRACE DEVICES, RIGID TYPE FOR SPRINKLER SYSTEMS
	See Addendum Page for Product Designation(s).
	Have been evaluated 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 <a href="https://iq.ulprospector.com">https://iq.ulprospector.com</a> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance 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.

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UL LLC

Certificate Number Report Reference Date

EX3956 EX3956-2013-09-19 2022-July-05

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

#### Sway Brace Devices for Sprinkler System Piping

Model+	Bracing Member Type	Bracing Member Size, in.	Bracing Direction	Load Rating lbf.	Description/ Comments
Structure Attachmer	nt Fittings			$\overline{\checkmark}$	
CSBUNIV050(XX)	Schedule 40	1, 1-1/4, 1- 1/2, 2	N/A	1370	Finish: PL, EG, HD
CSBUNIV075(XX)	Schedule 40	1, 1-1/4, 1- 1/2, 2	N/A	2000	Finish: PL, EG, HD

\*XX indicates the coating finish designation EG = Electrogalvanized HD = Hot-Dipped PL = Plain

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Certificate Number Report Reference Date	EX3956 EX3956-20170929 2022-JULY-13
Issued to:	ERICO INTERNATIONAL CORPORATION 34600 SOLON RD SOLON OH, 44139-2631 US
This is to certify that representative samples of	SWAY-BRACE DEVICES, RIGID TYPE FOR SPRINKLER SYSTEMS
	See Addendum Page for Product Designation(s).
	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 <a href="https://iq.ulprospector.com">https://iq.ulprospector.com</a> 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.

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Bruce Mahrenholz, Director North American Certification Program

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Certificate Number Report Reference Date

EX3956 EX3956-20170929 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 - Structure Attachment Fittings:

	Structu	ire Attachment	t Fittings ar	nd Adapter	S
Model	Bracing Member Type	Bracing Member Size, in.	Bracing Direction	Load Rating lbf.	Description/ Comments
Structure Attachmen	nt Fittings		· \/		Var Var Var
CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	N/A	2000	Finish: PL, EG, HD 1/2 in. Mounting Hole
CSBU2	Schedule 40	1, 1-1/4, 1- 1/2, 2	N/A	2000	Finish: PL, EG, HD 3/4 in. Mounting Hole
CSBU58	Schedule 40	1, 1-1/4, 1- 1/2, 2	N/A	2000	Finish: PL, EG, HD 5/8 in. Mounting Hole

Structural Adapter Model	Structure Attachment Model	Bracing Member Type	Bracing Member Size, in.	Bracing Direction	Load Rating, lbf	Description/ Comments
Structure A	dapters	$\sim$		$\sim$ $\sim$		~~~~
CSBS1	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	$X, Y, Z^{1}, Z^{2}$	1500	Finish: PL, EG, HD 1/4 in. to 5/16 in. flange
CSBS1A		Schedule 40	1, 1-1/4, 1- 1/2, 2	$X, Y, Z^{1}, Z^{2}$	1500	Finish: PL, EG, HD 1/4 in. to 5/16 in. flange
CSBS1	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	$X, Y, Z^{1}, Z^{2}$	1700	Finish: PL, EG, HD 3/8 in. to 3/4 in. flange
CSBS1A	$D(U_{\rm D})$	Schedule 40	1, 1-1/4, 1- 1/2, 2	$X, Y, Z^{1}, Z^{2}$	1700	Finish: PL, EG, HD 3/8 in. to 3/4 in. flange
CSBS2	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	$X, Y, Z^{1}, Z^{2}$	1700	Finish: PL, EG, HD 3/4 in. to 1-1/4 in. flange
CSBS3	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	1500	Finish: PL, EG, HD 1/4 in. to 5/16 in. flange, 4 in. through 8.5 in flange width
CSBS3	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	1700	Finish: PL, EG, HD 3/8 in. to 3/4 in. flange, 4 in. through 8.5 in flange width
CSBS4	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	1500	Finish: PL, EG, HD 1/4 in. to 5/16 in. flange, 4 in. through 14.5 in flange width
CSBS4	CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	1700	Finish: PL, EG, HD 3/8 in. to 3/4 in. flange, 4 in. through 14.5 in flange width

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**Report Reference** 

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CSBS5 CSBU1	Schedule 40	1, 1-1/4, 1- 1/2, 2	X, Y, Z <sup>1</sup> , Z <sup>2</sup>	1700	Finish: PL, EG, HD 3/4 in. to 1-1/4 in. flange, 4 in. through 18 in. flange width
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Structure Adapter Models CSBS1, CSBS2, CSBS3, CSBS4 and CSBS5 are only intended for use with the Listed Model CSBU1 structure attachment fitting. Model CSBS1A is the name of the pre-assembled CSBS1 + CSBU1.

USL, CNL - Sway Brace Fittings

Sway Brace Fittings

Model	Bracing Member Type	Bracing Member Size, in.	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Bracing Direction	Load Rating, lbf	Description/ Comments
CSB0100	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1	Longitudinal	1000	N/A
CSB0125	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1-1/4	Longitudinal	680	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1-1/2	Longitudinal	1000	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	2	Longitudinal	1300	n/a
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	2-1/2	Longitudinal	1300	n/a
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	3	Longitudinal	1400	n/a

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Certificate Number Report Reference Date EX3956 EX3956-20170929 2022-JULY-13

Model	Bracing Member Type	Bracing Member Size, in.	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	-	Load Rating, lbf	Description/ Comments
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	4	Longitudinal	1700	N/A
CSB0500	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	5	Longitudinal	1700	N/A
CSB0600	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	6	Longitudinal	1700	N/A
CSB0800	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	8	Longitudinal	1700	N/A
CSB1000	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	10	Longitudinal	1900	N/A
CSB0125	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	1-1/4	Longitudinal	680	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	1-1/2	Longitudinal	1000	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	2	Longitudinal	1300	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	2-1/2	Longitudinal	1300	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	3	Longitudinal	1400	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	4	Longitudinal	1700	N/A
CSB0125	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	1-1/4	Longitudinal	680	N/A

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Certificate Number Report Reference Date EX3956 EX3956-20170929 2022-JULY-13

Model	Bracing Member Type	Bracing Member Size, in.	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Bracing Direction	Load Rating, lbf	Description/ Comments
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	1-1/2	Longitudinal	1000	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	2	Longitudinal	1300	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	2-1/2	Longitudinal	1300	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	3	Longitudinal	1400	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	4	Longitudinal	1700	N/A
CSB0600	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	6	Longitudinal	1700	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	1-1/2	Longitudinal	1000	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	2	Longitudinal	1300	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	2-1/2	Longitudinal	1300	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	3	Longitudinal	1400	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	4	Longitudinal	1700	N/A
Model	Bracing Member Type	Bracing Member Size, in.	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Direction	Load Rating, lbf	Description/ Comments

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Certificate Number Report Reference Date EX3956 EX3956-20170929 2022-JULY-13

CSB0100	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1	Lateral	1800	N/A
CSB0100	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1	Lateral	1800	N/A
CSB0125	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1-1/4	Lateral	1800	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	1-1/2	Lateral	1800	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	2	Lateral	1800	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	2-1/2	Lateral	1800	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	3	Lateral	1800	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	4	Lateral	1800	N/A
CSB0500	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	5	Lateral	1800	N/A
CSB0600	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	6	Lateral	1800	N/A
CSB0800	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	8	Lateral	1800	N/A
CSB1000	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Schedule 10 and Schedule 40	10	Lateral	1900	N/A

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Certificate Number Report Reference Date EX3956 EX3956-20170929 2022-JULY-13

Model	Bracing Member Type	Bracing Member Size, in.	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Bracing Direction	Load Rating, lbf	Description/ Comments
CSB0125	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	1-1/4	Lateral	1800	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	1-1/2	Lateral	1800	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	2	Lateral	1800	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	2-1/2	Lateral	1800	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	3	Lateral	1800	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Bull Moose Eddy Flow	4	Lateral	1800	N/A
CSB0125	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	1-1/4	Lateral	1800	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	1-1/2	Lateral	1800	N/A

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Certificate Number Report Reference Date EX3956 EX3956-20170929 2022-JULY-13

Model	Bracing Member Type	Bracing Member Size, in.	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Bracing Direction	Load Rating, lbf	Description/ Comments
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	2	Lateral	1800	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	2-1/2	Lateral	1800	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	3	Lateral	1800	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	4	Lateral	1800	N/A
CSB0600	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Wheatland Mega Flow	6	Lateral	1800	N/A
CSB0150	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	1-1/2	Lateral	1800	N/A
CSB0200	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	2	Lateral	1800	N/A
CSB0250	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	2-1/2	Lateral	1800	N/A
CSB0300	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	3	Lateral	1800	N/A
CSB0400	Schedule 40 Pipe	1, 1- 1/4, 1- 1/2, 2	Youngstown Tube Fire Flow	4	Lateral	1800	N/A

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Certificate Number Report Reference Date	EX3956 EX3956-20170926 2022-August-26
Issued to:	ERICO INTERNATIONAL CORPORATION 34600 SOLON RD SOLON OH, 44139-2631 US
This is to certify that representative samples of	SWAY-BRACE DEVICES, RIGID TYPE FOR SPRINKLER SYSTEMS
	See Addendum Page for Product Designation(s).
	Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	Sway Brace Devices for Sprinkler System Piping, Subject 203A.
	Sway Brace Devices for Sprinkler System Piping, ULC/ORD C203A.
Additional Information:	See the UL Online Certifications Directory at <a href="https://iq.ulprospector.com">https://iq.ulprospector.com</a> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance 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.

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Certificate Number Report Reference Date

EX3956 EX3956-20170926 2022-August-26

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

			Sway-bra	ace Assemblies			
Model	Bracing Member Type	Bracing Member Size, in.	Bracing Direction	Sprinkler Pipe Type	Sprinkler Pipe Size, NPS	Load Rating Ibf.	Description/ Comments
CSBT	CSBT1, CSBT2	1 to 1-1/2 ft, 1-1/2 to 3 ft	Lateral	Schedule 10, Schedule 40	1, 1-1/4, 1- 1/2, 2, 2-1/2, 3, 4	680	
CSBT	CSBT1, CSBT2	1 to 1-1/2 ft, 1-1/2 to 3 ft	Lateral	Bull Moose Eddy Flow	1-1/4, 1-1/2, 2, 2-1/2, 3, 4	680	4
CSBT	CSBT1, CSBT2	1 to 1-1/2 ft, 1-1/2 to 3 ft	Lateral	Youngstown Tube Fire Flow	1-1/2, 2, 2- 1/2, 3, 4	680	ՍՍ
CSBT	CSBT1, CSBT2	1 to 1-1/2 ft, 1-1/2 to 3 ft	Lateral	Wheatland Mega Flow	1-1/4, 1-1/2, 2, 2-1/2, 3, 4	680	

NPS = Nominal Pipe Size

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Bruce Mahrenholz, Director North American Certification Program

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