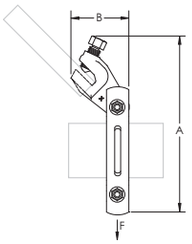
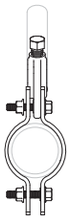
Standard Universal Sway Brace

- Use for both lateral and longitudinal sway brace applications
- Snap-off bolt head helps enable easy installation and inspection of seismic sway braces
- Works with 1" through 2" brace pipes and 1/4" angle iron braces to reduce inventory
- Slotted design grabs service pipe for added gripping strength
- Meets NFPA®-13 requirements for seismic sway bracing





Material: Steel

Part Number	Pipe Size	A	B
Finish: Electrogalvanized			
CSBSTU0100EG	1"	6 7/8"	1"
CSBSTU0125EG	1 1/4"	7 3/8"	1"
CSBSTU0150EG	1 1/2"	7 3/4"	1"
CSBSTU0200EG	2"	8 1/8"	1 3/16"
CSBSTU0250EG	2 1/2"	8 7/8"	1 3/16"
CSBSTU0300EG	3"	9 3/8"	1 3/16"
CSBSTU0400EG	4"	10 5/8"	1 1/2"
CSBSTU0500EG	5"	12 1/8"	1 1/2"
CSBSTU0600EG	6"	13 5/8"	2"
CSBSTU0800EG	8"	15 3/4"	2"
CSBSTU1000EG	10"	18"	2"
Finish: Hot-Dip Galvanized			
CSBSTU0100HD	1"	6 7/8"	1"
CSBSTU0125HD	1 1/4"	7 3/8"	1"
CSBSTU0150HD	1 1/2"	7 3/4"	1"
CSBSTU0200HD	2"	8 1/8"	1 3/16"
CSBSTU0250HD	2 1/2"	8 7/8"	1 3/16"
CSBSTU0300HD	3"	9 3/8"	1 3/16"
CSBSTU0400HD	4"	10 5/8"	1 1/2"
CSBSTU0500HD	5"	12 1/8"	1 1/2"

Part Number	Pipe Size	A	B
CSBSTU0600HD	6"	13 5/8"	2"
CSBSTU0800HD	8"	15 3/4"	2"
CSBSTU1000HD	10"	18"	2"

UL Loads (Listed for Restraints)			
Part Number	Dyna-Flow® Service Pipe	Sch 10 Service Pipe	Sch 40 Service Pipe
CSBSTU0100xx	N/A	655 lb	655 lb
CSBSTU0125xx	655 lb	655 lb	655 lb
CSBSTU0150xx	655 lb	655 lb	655 lb

UL Loads (Listed for Sway Braces)								
Part Number	Lateral				Longitudinal			
	Dyna-Flow® Service Pipe	EZ FLOW™ Service Pipe	Sch 10 Service Pipe	Sch 40 Service Pipe	Dyna-Flow® Service Pipe	EZ FLOW™ Service Pipe	Sch 10 Service Pipe	Sch 40 Service Pipe
CSBSTU0200xx	3,000 lb	N/A	3,000 lb	3,000 lb	N/A	N/A	N/A	N/A
CSBSTU0250xx	3,000 lb	N/A	3,000 lb	3,000 lb	2,015 lb	N/A	2,015 lb	2,015 lb
CSBSTU0300xx	3,000 lb	N/A	3,000 lb	3,000 lb	2,015 lb	N/A	2,015 lb	2,015 lb
CSBSTU0400xx	3,000 lb	3,000 lb	3,000 lb	3,000 lb	2,015 lb	N/A	2,015 lb	2,015 lb
CSBSTU0500xx	N/A	3,000 lb	3,000 lb	3,000 lb	N/A	N/A	2,015 lb	2,015 lb
CSBSTU0600xx	N/A	3,000 lb	3,000 lb	3,000 lb	N/A	2,015 lb	2,015 lb	2,015 lb
CSBSTU0800xx	N/A	N/A	3,000 lb	3,000 lb	N/A	N/A	2,015 lb	2,015 lb
CSBSTU1000xx	N/A	N/A	3,000 lb	3,000 lb	N/A	N/A	3,000 lb	3,000 lb

FM Loads (Lightwall, Sch 10 and Sch 40 Service Pipes)								
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°
CSBSTU0100xx	860 lb	1,220 lb	1,500 lb	1,670 lb	970 lb	720 lb	860 lb	960 lb
CSBSTU0125xx	860 lb	1,220 lb	1,500 lb	1,670 lb	970 lb	720 lb	860 lb	960 lb
CSBSTU0150xx	860 lb	1,220 lb	1,500 lb	1,670 lb	970 lb	720 lb	860 lb	960 lb
CSBSTU0200xx	1,530 lb	2,160 lb	2,650 lb	2,960 lb	870 lb	690 lb	830 lb	930 lb
CSBSTU0250xx	1,530 lb	2,160 lb	2,650 lb	2,960 lb	870 lb	690 lb	830 lb	930 lb
CSBSTU0300xx	1,530 lb	2,160 lb	2,650 lb	2,960 lb	870 lb	690 lb	830 lb	930 lb
CSBSTU0400xx	1,570 lb	2,220 lb	2,720 lb	3,030 lb	1,550 lb	1,390 lb	1,680 lb	1,870 lb
CSBSTU0500xx	1,570 lb	2,220 lb	2,720 lb	3,030 lb	1,550 lb	1,390 lb	1,680 lb	1,870 lb
CSBSTU0600xx	1,980 lb	2,810 lb	3,440 lb	3,840 lb	1,470 lb	1,170 lb	1,410 lb	1,570 lb

FM Loads (0.188" wall and Sch 40 Service Pipes)								
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°
CSBSTU0800xx	2,040 lb	2,890 lb	3,540 lb	3,950 lb	1,200 lb	1,700 lb	2,090 lb	2,330 lb
CSBSTU1000xx	2,040 lb	2,890 lb	3,540 lb	3,950 lb	1,200 lb	1,700 lb	2,090 lb	2,330 lb

Dyna-Flow is a registered trademark of Allied Tube & Conduit Corporation. FM is a registered certification mark of FM Approvals LLC, LTD. NFPA is a registered trademark of National Fire Protection Association, Inc. UL, UR, cUL, cUR, cULus and cURus are registered certification marks of UL LLC.

WARNING
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WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: December 15, 2016

Attention: **stl-cac@cannondesign.com**

Contact Person / WTA Field Inspector: Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Mike Whitworth (WES)

Project No. WT 14127.01
WES 607

[ ] UPS [ ] Courier [X] **Email**

Copies	No.	Description
1 PDF	210523F01	(Submittal No.'s:)
		(Cannon #210548-001) - (Paric #15051-0351) – (WES #607)
		➢ **Seismic Controls for Fire Protection Piping Product Data**

*Remarks: See Submittal Review from Webb Enginnering.

c: **Kelvin Patel**
Kpatel@cannondesign.com

[X] ***Reviewed**

[X] ***No Exceptions Taken**

[ ]

[ ] *Make Corrections As Noted, No Resubmittal Required

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

WEBB ENGINEERING SERVICES INC.

1400 S. 3rd Street, Suite 201
St. Louis, Missouri 63104
Phone: (314) 588-0600
Fax: (314) 588-0604

Letter of Transmittal

To: wtashop@wmtao.com

From: Mike Whitworth

Date: December 11, 2016

Re: Webster University ISB

WES No: 607

☐ For your Files ☐ For Review ☐ Please Comment ☐ Please Reply

Item No.	Description	No. of Copies	Date
1	Shop Drawing Review – (210548-001) 210548 Vibration and Seismic Controls for Fire Suppression Piping and Equipment	1	12/11/16

•Signature: Mike Whitworth

WEBB ENGINEERING SERVICES INC.
www.webb-engineering.com

1400 S. 3rd Street, Suite 201 • St. Louis, Missouri 63104 • 314.588.0600 • *fax* 314.588.0604

The review of this submittal is limited to the general conformance with the designated design concept and intent of this project and with the general compliance of the information provided in the contract documents. All comments, remarks and notations made on the submittal(s) as a result of this review do not relieve the contractor from full compliance with requirements of the contract documents. Approval for a specific item shall not include approval of an assembly of which the item is not a component. The contractor is solely responsible for rough-in and installation confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordination of this work with that of other trades on this project; and in a safe and satisfactory manner. All work shall be installed in full compliance with the manufacturer's recommendation, Federal, State and Local rules and regulation and the Authority Having Jurisdiction (AHJ) and applicable adopted codes and standards.

PROJECT NAME:	Webster University ISB
LOCATION:	St. Louis Missouri
CLIENT PROJ. NO.:	N/A
WES PROJ. NO.:	607
SPECIFICATION SECTION:	210548 Vibration and Seismic Controls for Fire-Suppression Piping and Equipment
SUBMITTAL ITEM:	See Below -

CONTRACTOR:	J.F. Ahern Co.
CTR. SUBMITTAL #:	21 0523-002
SUBMITTAL DATE:	November 29, 2016
DATE RECEIVED:	December 07, 2016
RECEIVED VIA:	E-Mail
RECEIVED FROM:	WTA
DATE RETURNED:	DECEMBER 11, 2016
RETURNED VIA:	E-MAIL
RETRURNED TO:	WTASHOP@WMTAO.COM

STATUS KEY:

NO EXCEPTION TAKEN
MAKE CORRECTIONS NOTED, NO RESUBMITTAL:
AMEND AND RESUBMIT
REJECTED, SEE REMARKS:
REVIEWED ONLY

NEC	MCN	AAR	REJ	REV	ITEM	REMARKS
X					Schedule 40 Pipe Various Manufacturers	
X					Riser Clamp PHD Manufacturing Inc. Model – Fig. 550, 551, 553	
X					Pipe Clamp B-Line Model – B3140	
X					Sleeve Expansion Anchor Powers Fasteners Models – Lok-Bolt Hex Head and Rod Hanger	
X					Surge Restraint Caddy Model – SR6	
X					Bar Joist Attachment Caddy Model - CSBBARJEG	

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www.webb-engineering.com

X					Universal Structural Attachment Caddy Models – CSBUNIV050EG and CSBUNI075EG	
X					Easy Universal Sway Brace Caddy Model - CSBEZU0XXXEG – for pipe sizes 1" thru 6"	
X					Standard Universal Sway Brace Caddy Models – CSBSTU0800EG and CSBSTU1000EG	
X					Quick Grip Jr. Lateral Sway Brace Caddy Model – CSBQIKCL0XXXEG – for pipe sizes 1" THRU 2"	
X					Quick Grip Lateral Sway Brace Caddy Model – CSBQG0XXXEG – for pipe sizes 2.5" thru 8"	

REVIEWED BY: Michael R. Whitworth DATE: December 11, 2016

THESE COMMENTS ARE TO BE ATTACHED TO ALL COPIES OF THE SHOP DRAWING REFERENCED ABOVE.

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

210548-001
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

210548
SPECIFICATION SECTION / PARAGRAPH

Ahern Fire Protection
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◯ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◉ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

11/30/16
DATE

To be completed by Reviewer

21 0548-001
CANNON DESIGN SUBMITTAL NUMBER

11/30/16
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

REVIEWED BY

DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0351

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 11/29/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: Seismic Controls for Fire Protection Piping Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		210548-001	1		11/29/2016	Seismic Controls for Fire Protection Piping Product Data	Submitted

NOTES:

CC:

Signed: _____

Devin Gates