

RISER CLAMPS



FUNCTION: Designed for supporting and stabilizing vertical pipe runs. The PVC coating on Fig. 553 protects the pipe from the metal surface of the clamp. This product is not intended for use with hanger rods. Clamp is designed for standard iron pipe O.D. and must be considered when sizing other types of piping.

APPROVALS: Underwriters' Laboratories Listed in the U.S. (UL) and Factory Mutual Approved for sizes $\frac{3}{4}$ " (20mm) to 8" (200mm) only. Complies with Federal Specifications A-A-1192A (Type 8) and Manufacturers' Standardization Society ANSI/SP-69 and SP-58 (Type 8).

MATERIAL: Low carbon steel

ORDERING: Specify pipe size and figure number.

Fig. 550, 551 & 553 RISER CLAMP

Fig. 550* PLAIN

Fig. 551 ELECTRO-GALVANIZED

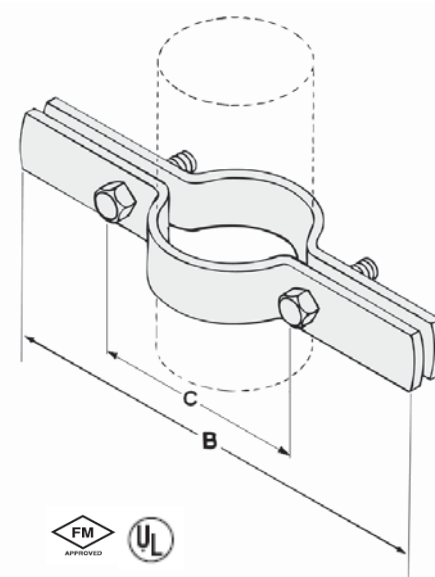
Fig. 553 PLAIN WITH PVC COATING

*Available in stainless steel.

To order, specify 304 or 316 and add suffix SS to figure number.

Price on request.

Pipe Size		B		C		Bolt Size	Max. Rec. Load		Wt. Each	
							lbs.	kN	lbs.	kg
$\frac{1}{2}$	(15)	9	(228.60)	$2\frac{1}{2}$	(63.50)	$\frac{3}{8} \times 1\frac{1}{4}$	220	(0.98)	1.05	(.48)
$\frac{3}{4}$	(20)	$8\frac{7}{8}$	(225.43)	$2\frac{3}{8}$	(60.33)	$\frac{3}{8} \times 1\frac{1}{4}$	220	(0.98)	1.05	(.48)
1	(25)	$8\frac{3}{4}$	(222.25)	$2\frac{1}{4}$	(57.15)	$\frac{3}{8} \times 1\frac{1}{4}$	220	(0.98)	1.05	(.48)
$1\frac{1}{4}$	(32)	$9\frac{1}{4}$	(234.95)	$2\frac{3}{4}$	(69.85)	$\frac{3}{8} \times 1\frac{1}{4}$	250	(1.11)	1.10	(.50)
$1\frac{1}{2}$	(40)	10	(254.00)	$2\frac{3}{4}$	(69.85)	$\frac{3}{8} \times 1\frac{1}{4}$	250	(1.11)	1.17	(.53)
2	(50)	$10\frac{1}{4}$	(260.35)	$3\frac{1}{2}$	(88.90)	$\frac{3}{8} \times 1\frac{1}{4}$	300	(1.33)	1.20	(.54)
$2\frac{1}{2}$	(65)	$11\frac{1}{8}$	(282.58)	$3\frac{3}{4}$	(95.25)	$\frac{3}{8} \times 1\frac{1}{2}$	400	(1.78)	1.89	(.86)
3	(80)	$11\frac{3}{4}$	(298.45)	$4\frac{5}{8}$	(117.48)	$\frac{3}{8} \times 1\frac{1}{2}$	500	(2.22)	1.99	(.90)
$3\frac{1}{2}$	(90)	$12\frac{1}{2}$	(317.50)	$5\frac{1}{4}$	(133.35)	$\frac{3}{8} \times 1\frac{1}{2}$	600	(2.67)	2.17	(.98)
4	(100)	13	(330.20)	6	(152.40)	$\frac{1}{2} \times 1\frac{3}{4}$	750	(3.34)	2.21	(1.00)
5	(125)	$14\frac{1}{4}$	(361.95)	$6\frac{1}{2}$	(165.10)	$\frac{1}{2} \times 1\frac{3}{4}$	1500	(6.67)	3.24	(1.47)
6	(150)	$15\frac{3}{8}$	(390.53)	$7\frac{3}{4}$	(196.85)	$\frac{1}{2} \times 1\frac{3}{4}$	1600	(7.12)	3.89	(1.76)
8	(200)	$18\frac{1}{2}$	(469.90)	$8\frac{7}{8}$	(225.43)	$\frac{5}{8} \times 2$	2500	(11.12)	7.60	(3.45)
10	(250)	$20\frac{1}{2}$	(520.70)	12	(304.80)	$\frac{5}{8} \times 2$	2500	(11.12)	11.10	(5.03)
12	(300)	$22\frac{1}{2}$	(571.50)	14	(355.60)	$\frac{5}{8} \times 2\frac{1}{2}$	2700	(12.01)	16.50	(7.48)
14	(350)	$25\frac{1}{8}$	(638.18)	16	(406.40)	$\frac{5}{8} \times 3$	2700	(12.01)	17.70	(8.03)
16	(400)	$26\frac{1}{4}$	(666.75)	$18\frac{5}{8}$	(473.08)	$\frac{3}{4} \times 3\frac{1}{2}$	2900	(12.90)	30.40	(13.79)
18	(450)	$27\frac{7}{8}$	(708.03)	$20\frac{3}{4}$	(527.05)	$\frac{3}{4} \times 3\frac{1}{2}$	2900	(12.90)	33.30	(15.10)
20	(500)	30	(762.00)	$22\frac{3}{8}$	(568.33)	$\frac{3}{4} \times 3\frac{1}{2}$	2900	(12.90)	36.30	(16.47)
24	(600)	35	(889.00)	$24\frac{1}{2}$	(622.30)	$\frac{7}{8} \times 3\frac{1}{2}$	2900	(12.90)	48.68	(22.08)
30	(750)	$42\frac{3}{8}$	(1076.33)	$29\frac{1}{2}$	(749.30)	$\frac{7}{8} \times 3\frac{1}{2}$	2900	(12.90)	60.16	(27.29)



Installation practice for Model 550 Riser Clamps

When possible the clamp should be placed under a coupling, hub or welded lugs on steel pipe. Bolt torques should be per industry standards.

Recommended Torque For Pipe Clamp Hardware						
Bolt Size	$1/4$ "-20	$5/16$ "-18	$3/8$ "-16	$1/2$ "-13	$5/8$ "-11	$3/4$ "-10 & Larger
ft/lbs	6	11	19	50	65	75
N/m	(8)	(15)	(26)	(68)	(88)	(102)

Unless otherwise specified, all dimensions on drawings and in charts are in inches and dimensions shown in parentheses are in millimeters.

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 ☒ **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 Engineering.**

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

☒ ***Reviewed**

☒ ***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.



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

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 - CSBBARJFG	

X					Universal Structural Attachment Caddy Models – CSBUNIV050EG and CSBUNIO75EG	
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.

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

PROJECT NAME	
ADDRESS	
NUMBER	
OWNER	
ARCHITECT / ENGINEER	
SUBMITTED BY	
CONTRACTOR / CM SUBMITTAL NO.	CANNON DESIGN SUBMITTAL NO.
DRAWING / DETAIL REFERENCE	SPECIFICATION SECTION / PARAGRAPH
MANUFACTURER / SUPPLIER	ITEM / PRODUCT ID
REQUIRED DATE	PRIORITY
CRITICAL	☐

To be completed by Reviewer

CANNON DESIGN SUBMITTAL NUMBER
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.

ITEM BEING SUBMITTED (check only one)

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

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 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.

Ry:

By:
Devin D. Gates

REVIEWED BY	DATE

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