



No. 20 Tee



No. 10 Elbow

1.0 PRODUCT DESCRIPTION

Available Sizes

- ¾ – 60"/20 – 1500 mm

Maximum Working Pressure

- Fitting pressure ratings are equivalent to the pressure ratings of the coupling used to install them.

Application

- Connects pipe, provides change in direction and adapts sizes or components.
- Supplied with Victaulic OGS grooves.
- Exclusively for use with Victaulic couplings, valves, accessories and pipe which feature ends formed with the Victaulic OGS groove profile.

Pipe Materials

- Carbon Steel or Stainless Steel

NOTE

- These fittings are not intended for use with Victaulic plain end couplings. Intended for use only in grooved piping systems. When connecting wafer or lug type butterfly valves directly to Victaulic fittings using Style 741 or Style 743 flange adapters, be sure to check disc clearance dimensions with I.D. dimension of fitting.

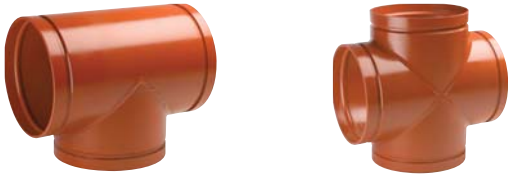
ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

1.0 PRODUCT DESCRIPTION (Continued)

Other Fitting Styles



AGS - Advanced Groove System
from 14 – 60"/350 – 1500 mm
[Publication 20.05](#)



Ductile Iron for AWWA size pipe
[Publication 23.05](#)



Stainless Steel
[Publication 17.16](#)



XL fittings for abrasive services
[Publication 07.07](#)



Galvanized
[Publication 07.01](#) for Original Groove Fittings
[Publication 20.05](#) for AGS Fittings



Aluminum
[Publication 21.03](#)



Extra Heavy EndSeal "ES"
[Publication 07.03](#)



Shouldered Ends
[Publication 07.06](#)



Copper
[Publication 22.04](#)



Plain End
[Publication 14.04](#)

2.0 CERTIFICATION/LISTINGS



NOTES

- When supplied as "hot dip galvanized" the following fittings are UL Classified in accordance with ANSI/NSF 61 and for use on cold +86°F/+30°C potable water service and ANSI/NSF 372: No. 10 90° Elbow, No. 11 45° Elbow, No. 12 22 ½° Elbow, No. 13 11 ¼° Elbow, No. 100 90° Long Radius Elbow, No. 110 45° Long Radius Elbow, No. 20 Tee, No. 25 Tee with Grooved Branch, No. 30 45° Lateral, No. 60 Cap, No. 50 Concentric Reducers, No. 51 Eccentric Reducers.
- The following Victaulic fittings are VdS approved: No.10 90° Elbow, No.11 45° Elbow, No.20 Tee and No.60 Cap.
- The following Victaulic fittings are LPCB approved: No.10 90° Elbow, No.11 45° Elbow, No.12 22 ½° Elbow, No.13 11 ¼° Elbow, No.30 45° Lateral, No.30-R Reducing Lateral, No.100 Long Radius Elbow, No.110 Long Radius Elbow, No.20 Tee, No.35 Cross, No.60 Cap, No.25 Reducing Tee, No.33 True Wye, No.50 Concentric Reducer, No.51 Eccentric Reducer and No.29M Tee with Threaded Branch.

3.0 SPECIFICATIONS - MATERIAL

Fitting: (specify choice)

- ☒ Standard: Ductile iron conforming to ASTM A-536, Grade 65-45-12.
- ☐ Optional: Segmentally welded steel as shown under nipples

Nipples: (specify choice)

- ☐ ¾ – 4"/20 – 100 mm: Carbon steel, Schedule 40, conforming to ASTM A-53, Type F
- ☐ 5 – 6"/125 – 150 mm: Carbon steel, Schedule 40, conforming to ASTM A-53, Type E or S, Gr. B
- ☐ 8 – 12"/200 – 300 mm: Carbon steel, Schedule 30 or 40, conforming to ASTM A-53, Type E or S, Gr. B

Flanged Adapter Nipples: (specify choice)

- ☐ Class 125 Flange: Cast iron conforming to ANSI B-16.1
- ☐ Class 150 Flange: Carbon steel conforming to ANSI B-16.5, raised or flat face
- ☐ Class 300 Flange: Carbon steel conforming to ANSI B-16.5, raised or flat face

Fitting Coating: (specify choice)

- ☐ Standard: Orange enamel
- ☒ Optional: Hot dip galvanized and others. Some fittings supplied electroplated as standard – see product specifications

Flanged Adapter Nipple Coating: (specify choice)

- ☐ Standard: None (Unfinished)
- ☐ Optional: Orange enamel, hot dip galvanized and others

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: October 11, 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	221116P01A	(Submittal No.'s) -
		(Cannon #221116-001) – (Paric #15051-0257) – (WES #607)
		• Domestic Water Piping Product Data REV 1 - Resubmittal

***Remarks: See Submittal Review from Webb Engineering.**

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

☒ ***Reviewed**

☒ ***No Exceptions Taken**

☐

☒ ***Amend and Resubmit**

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: **October 8, 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 – Resubmittal 22 1116 Domestic Water Piping	1	10-10-2016

•Signature: Mike Whitworth

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

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 ISBLOCATION: St. Louis MissouriCLIENT PROJ. No.: N/AWES PROJ. No.: 607SPEC SECTION: 22 1116
Domestic Water PipingSUBMITTAL ITEM:: See Below -CONTRACTOR: Deluca Plumbing, LLC.CTR. SUBMITTAL # 22 1116-01R (RESUBMITTA)LSUBMITTAL DATE: August 31, 2016DATE RECEIVED: October 04, 2016RECEIVED VIA: E-MailRECEIVED FROM: WTADATE RETURNED: OCTOBER 08, 2016RETURNED VIA: E-MAILRETRURNED TO: WTASHOP@WMTAO.COM

STATUS KEY:

NEC	NO EXCEPTION TAKEN					
	MCN	MAKE CORRECTIONS NOTED, NO RESUBMITTAL:				
		AAR	AMEND AND RESUBMIT			
			REJ	REJECTED, SEE REMARKS:		
				REV	REVIEWED ONLY	
					ITEM	REMARKS
This resubmittal is the same as what was reviewed and commented on prior, without addressing the comments on that submittal review.						
X					Copper Tubing Mueller Industries, Inc. Type 'L' Copper	
X					Copper Fittings – 2" and smaller Elkhart Products Corp. Wrought Copper Solder Joint	
		X			Fabricated Flange Pipes U.S. Pipe Fabrication, LLC	1. Type and size not indicated on submittal. Mark on the submittal page the type/style that is intended for this project.
		X			Wheatland Tube Co. Hot Dipped Galvanized Interior Combined Domestic Water/Fire Service	1. Submittal does not address service pipe size. The submittal data sheet does not show piping above 4 inch. The combination service size is 8". Submit a data sheet that covers service pipe size.
X					Grooved End Fittings Victaulic Cat. 07.01, Pgs 1, 2 3	
X					Rigid Coupling Victaulic Style 107N Cat. 06.023, Pgs 1 ,2	

REVIEWED BY: Michael R. WhitworthDATE: October 08, 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 ☐ Certification / Qualifications ☐ Coordination Drawing
☐ Samples ☐ Record Documents ☐ Calculations
 (_____ copies) ☐ Product Data ☐ Schedules
☐ LEED Submittal ☐ 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 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. 15051-0257

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 09/30/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Domestic water piping product data REV 1

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: 08/26/2016

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		221116-001	2		09/30/2016	Domestic water piping product data REV 1	Submitted

NOTES:

CC:

Signed: _____
Devin Gates

Shop Drawing Submittal

Project Name: **WEBSTER ISB**

Specification # **221116-01R**

Specification Description: Domestic Water Piping

Schedule

- Ductile Iron from 5' out through Foundation Wall - 8"
- Grooved Galvanized Pipe (combined Fire / Water Inside Building) - 8"
- Copper w/ Sweat Fittings (2" and Smaller)
- Grooved Copper with Victaulic Fittings (2.5" and Larger)

Date: 08-31-16

General Contractor / Construction Manager: Paric

Contractor: DeLuca Plumbing, L.L.C.
8465 Delport Drive
St. Louis, MO 63114

Supplier: Various

Manufacturer: Various

Reviewed & Approved by: DeLuca Plumbing 08-31-16

Action: Forward to GC/CM for Review & Approval

EoR Comments in Blue Text and Clouds