

**Business of the Village Board
Village of Saranac Lake**

SUBJECT: Award Bid

DATE: 6-26-2023

DEPT OF ORIGIN: Village Manager

BILL # 82-2023

DATE SUBMITTED: 6-21-2023

EXHIBITS: _____

APPROVED AS TO FORM:

Village Attorney

Village Administration

EXPENDITURE
REQUIRED

AMOUNT
BUDGETED

APPROPRIATION
REQUIRED:

Resolution awarding the bid for Water/Sewer Stock Parts

MOVED BY: scollin SECONDED BY: Brunette

VOTE ON ROLL CALL:

MAYOR WILLIAMS

yes

TRUSTEE BRUNETTE

yes

TRUSTEE CATILLAZ

yes

TRUSTEE SCOLLIN

yes

TRUSTEE SHAPIRO

yes

**RESOLUTION AUTHORIZING THE BID AWARD FOR
WATER AND SEWER STOCK PARTS**

WHEREAS, bids have been solicited and received for water and sewer system stock parts,
and,

WHEREAS, Village staff have evaluated the bids and recommended the contract be awarded
to Ferguson Waterworks based on the best value standard of the Village of Saranac Lake
Purchasing Policy.

TOTAL BID AMOUNT	\$245, 362.73
------------------	---------------

THEREFORE, BE IT RESOLVED, Ferguson Waterworks be rewarded the bid for water and
sewer stock parts.



Village of Saranac Lake

39 Main Street, Suite 9
Saranac Lake, NY 12983
Phone (518) 891-4150
Fax (518) 891-5928
www.saranaclakeny.gov

INVITATION TO BID

SEALED BIDS ARE HEREBY SOLICITED UNDER SECTION 103 OF THE GENERAL MUNICIPAL LAW BY THE VILLAGE BOARD OF THE VILLAGE OF SARANAC LAKE FOR THE FOLLOWING: "STOCK PARTS".

- 1 - Bids are to be addressed to the Village Clerk and the SEALED ENVELOPE SHOULD BE PLAINLY MARKED WITH THE NAME OF THE ITEM TO BE BID AND THE DATE OF THE BID OPENING.
- 2 - Bids must be detailed categorically in the same order as specification to facilitate reading and study.
- 3 - The bidder must be a duly authorized representative of the company he represents for a period of at least one year.
- 4 - If the bidder proposes to modify a product or service as to make it conform to the requirements of the Invitation for Bids, he shall (a) include in his bid a clear description of such proposed modifications, and (b) clearly mark any descriptive material to show the proposed modifications.
- 5 - Modifications proposed after bid opening to make a product or service conform to the specifications will not be considered.
- 6 - A non-collusion statement must accompany the bid(s).
- 7 - The Village reserves the right to reject, in its sole discretion, any apparent low bid on the ground that the bidder is not a responsible bidder, based on objective criteria, including but not limited to proper capabilities, experience, equipment, qualifications and other factors.
- 8 - The Village reserves the right to reject any and all bids if, in its' opinion, such action is in the best interest of The Village.
- 9 - All items in the following specifications shall be deemed to include the words "or approved equal". The bidder must submit with bid, detailed specifications, circulars, and all necessary data on supplies, and services he proposes to furnish. If supplies or services offered differ from the provisions contained in this specification, such differences must be explained in detail, and bid will receive careful consideration that such deviations do not depart from the

intent of these specifications and are to the best interests of the Village Board. Distributors **MUST** be a certified Mueller dealer. **Anyone who bids this project MUST be an authorized Mueller Distributer.**

All federal and state taxes will be excluded. Tax exemption certificates will be furnished to the successful bidder.

Description of the Items is as follows:

Item #1 is for the price per each for a **Mueller 4" Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #2 is for the price per each for a **Mueller 6" Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #3 is for the price per each for a **Mueller 8" Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #4 is for the price per each for a **Mueller 10" Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #5 is for the price per each for a **Mueller 12" Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #6 is for the price per each for a **2 Piece Telescopic Valve box with cover** delivered to our facility in Saranac Lake.

Item #7 is for the price per each for a **4" Alpha Romac Coupling** deliver to our facility in Saranac Lake

Item #8 is for the price per each for a **8" Alpha Romac Coupling** delivered to our facility in Saranac Lake.

Item #9 is for the price per each for a **10" Alpha Romac Coupling** delivered to our facility in Saranac Lake.

Item #10 is for the price per each for a **12" Alpha Romac Coupling** delivered to our facility in Saranac lake.

Item #11 is for the price per each for a **12" Stainless Steel Full Circle Repair Clamp 12" in length** delivered to our facility in Saranac Lake.

Item #12 is for the price per each for **1" Type K Copper (100' Rolls)** delivered to our facility in Saranac Lake.

Item #13 is for the price per each for a **5-6 foot Telescopic Curb Box w/Rod (erie box)** delivered to our facility in Saranac Lake.

Item #14 is for the price per each for a **Mueller Centurion Fire Hydrant, 5'-6" bury depth and left hand open** delivered to our facility in Saranac Lake.

Item #15 is for the price per each for a **12" Mueller Centurion Hydrant Riser with hardware** delivered to our facility in Saranac Lake.

Item #16 is for the price per each for a **6" Mueller Centurion Hydrant Riser with hardware** delivered to our facility in Saranac Lake.

Item #17 is for the price per linear foot of **8" Class 52 Ductile Iron Pipe** delivered to our facility in Saranac Lake.

Item #18 is for the price per linear foot of **6" SDR 26/35 PVC PIPE** delivered to our facility in Saranac Lake.

Item #19 is for the price per linear foot of **12" SDR 26/35 PVC Pipe** delivered to our facility in Saranac Lake.

Item #20 is for the price per each for a **32"x4" Manhole Frame and Cover** delivered to our facility in Saranac Lake.

Item #21 is for the price per each for a **26"x4' Manhole Frame and Cover** delivered to our facility in Saranac Lake.

Item #22 is for the price per each for a **32"x1" Manhole Riser** delivered to our facility in Saranac Lake.

Item #23 is for the price per each for a **32"x1.5" Manhole Riser** delivered to our facility in Saranac Lake.

Item #24 is for the price per each for a **32"x2" Manhole Riser** delivered to our facility in Saranac Lake

Item #25 is for the price per each for a **26"x1" Manhole Riser** delivered to our facility in Saranac Lake

Item #26 is for the price per each for a **26"x1.5" Manhole Riser** delivered to our facility in Saranac Lake

Item # 27 is for the price per each for a **26"x2" Manhole Riser** delivered to our facility in Saranac Lake

Item #28 is for the price per each for a **32"x2" HDPE Manhole Grade Ring** Delivered to our facility in Saranac Lake.

Item #29 is for the price per each for a **32"x4" HDPE Manhole Grade Ring** Delivered to our facility in Saranac Lake.

Item #30 is for the price per each for a **32"x6" HDPE Manhole Grade Ring** Delivered to our facility in Saranac Lake.

Item #31 is for the price per each for a **24"x24"x4" Storm Water Frame and Grate** Delivered to our Facility in Saranac Lake.

Item #32 is for the price per each for a **36"x36"x2" HDPE Catch Basin Grade Ring** Delivered to our Facility in Saranac Lake.

Item #33 is for the price per each for a **36"x36"x4" HDPE Catch Basin Grade Ring** Delivered to our Facility in Saranac Lake.

Item #34 is for the price per each for a **36"x36"x6" HDPE Catch Basin Grade Ring** Delivered to our Facility in Saranac Lake.

ITEM NUMBER	ESTIMATED QUANTITY	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE	AMOUNT BID
1	4	4" MUELLER GATE VALVE PER E.A	805.80	3,223.20
2	4	6" MUELLER GATE VALVE PER E.A	1,028.00	4,112.00
3	10	8" Mueller Gate Valve PER E.A	1,635.98	16,359.80
4	8	10" MUELLER GATE VAVLE PER E.A	2,547.00	20,376.00
5	8	12" MUELLER GATE VAVLE PER E.A	3,219.00	25,752.00
6	20	TELESCOPIC Valve Box with cover PER E.A	137.40	2,748.00
7	4	4" ALPHA ROMAC COUPLING PER E.A	383.15	1,532.60
8	4	8" ALPHAA ROMAC COUPLING PER E.A	681.65	2,726.60
9	4	10" ALPHA ROMAC COUPLING PER E.A	863.35	3,453.40
10	2	12" ALPHA ROMAC COUPLING PER E.A	1,007.53	2,015.06
11	2	12" STAINLESS STEEL REPAIR CLAMP PER E.A	232.45	464.90
12	4	1" TYPE K COPPER 100' ROLLS PER E.A	796.14	3,184.56

13	20	TELESCOPIC CURB BOX W/ROD PER E.A	63.89	1,277.80
14	7	5'-6" BURY MUELLER HYDRANT PER E.A	3,708.70	25,960.90
15	4	12" MUELLER HYDRANT RISER PER E.A	874.35	3,497.40
16	4	6" MUELLER HYDRANT RISER PER E.A	738.30	2,953.20
17	1596	8" CLASS 52 DUCTILE IRON PIPE PER L.F.	38.96	62,180.16
18	140	6" SDR 26/32 PVC PIPE PER L.F.	7.68	1,075.20
19	84	12" SDR 26/32 PVC PIPE PER L.F.	30.95	2,599.80
20	10	32"x4" MANHOLE FRAME AND COVER PER E.A.	380.35	3,803.50
21	10	26"x4" MANHOLE FRAME AND COVER PER E.A.	275.63	2,756.30
22	25	32"x1" Manhole Riser. PER E.A,	156.31	3,907.75
23	25	32"x1.5" Manhole Riser PER E.A.	165.50	4,137.50
24	25	32"x2" Manhole Riser PER E.A	173.08	4,327.00
25	25	26"x1" Manhole Riser Per E.A.	112.70	2,817.50
26	25	26"1.5" Manhole Riser PER E.A.	72.65	1,816.25
27	25	26"x2" Manhole Riser PER E.A.	77.60	1,940.00
28	25	32"x2" Grade Ring PER E.A.	111.75	2,793.75
29	25	32"x4" Grade Ring PER E.A.	223.34	5,583.50
30	25	32"x6" Grade Ring PER E.A.	335.70	8,392.50
31	8	24"x24"x4" Frame and Grate PER E.A	226.45	1,811.60
32	25	36"x36"x2" Grade Ring	105.00	2,625.00
33	25	36"x36"x4" Grade Ring	209.32	5,233.00
34	25	36"x36"x6" Grade Ring	317.00	7,925.00
		Total Bid Amount		245,362.73

Alternate #1 is for the price per each for a **Kennedy Guardian K81-D Fire Hydrant** Delivered to our facility in Saranac Lake.

ITEM NUMBER	ESTIMATED QUANTITY	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE	AMOUNT BID
1	7	Kennedy K81-D Fire Hydrant PER E.A	NO BID	NO BID
		Total bid Amount		NO BID

THE VILLAGE OF SARANAC LAKE RESERVES THE RIGHT TO INCREASE OR DECREASE THE QUANTITY AS DEEMED NECESSARY WITHOUT AN INCREASE TO THE UNIT BID PRICE.

SEALED BIDS TO BE OPENED AT 2:30 PM ON WEDNESDAY JUNE 21st, 2023 IN THE BOARD ROOM OF THE VILLAGE OFFICE AT 39 MAIN STREET, 2ND FLOOR SUITE 9, SARANAC LAKE, NY 12983

Published: 6-2023

Name of bidder: FERGUSON WATERWORKS

Address: 612 PIERCE ROAD

CLIFTON PARK, NY 12065

TO THE BOARD OF TRUSTEES, VILLAGE OF SARANAC LAKE, NEW YORK

NON-COLLUSIVE BIDDING CERTIFICATION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party hereto certifies as to its own organization under penalty of perjury, that to the best of his knowledge and belief:

- 1 - The prices in this bid have been arrived at independently without collusion, consultation, communications, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other bidder or competitor.
- 2 - Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
- 3 - No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

WE, THE UNDERSIGNED, PROPOSE TO FURNISH ALL MATERIALS CALLED FOR IN FULL ACCORDANCE WITH THE SPECIFICATIONS AND INSTRUCTIONS IN THE ATTACHED BID, OR PROPOSAL, AND AGREE TO ALL CONDITIONS THEREIN.

FIRM: FERGUSON WATERWORKS

ADDRESS: 612 PIERCE ROAD

CLIFTON PARK, NY 12065

PHONE NUMBER: 518-877-3086

SIGNED BY:  Melissa Visconte

TITLE BRANCH MANAGER

Infra-Riser Rectangular



AVAILABLE SIZES:

INTERNAL ID./ID.	EXTERNAL OD./OD.	
13X19	19X26	
330X482 MM	482X660 MM	
24X36	34X46	
610X610 MM	838X838 MM	
36X43	30X36	EJ 7510Z
914X1092 MM	762X914 MM	
36X38	30X32	EJ 7390 & 5419
914X965 MM	762X812 MM	
24X45	33X54	PENNDOT 2X4 FRAME
610X1143 MM	838X1372 MM	FLAT ONLY
24X48	33X57	EJ V8455
610X1219 MM	838X1448 MM	FLAT ONLY

NOTE: 24X36 HAS ROUNDED CORNERS

FLAT: THICKNESS

H= .25(6MM)
H= .50(12MM)
H= 1.00(25MM)
H= 1.50(38MM)
H= 2.00(51MM)
H= 2.50(64MM)
H= 3.00(76MM)

TAPERED: AVAILABLE ON LONG OR SHORT SIDE (SPECIFY)
24X45 & 24X48 TAPERS NOT AVAILABLE

h= .50(12MM)	H= 1.00(25MM)
h= 1.00(25MM)	H= 1.50(38MM)
h= 1.50(38MM)	H= 2.00(51MM)
h= 2.00(51MM)	H= 2.50(64MM)
h= 2.50(64MM)	H= 3.00(78MM)

PRODUCT SPECIFICATIONS:

- MATERIAL COMPOSITE OF RECYCLED RUBBER, NYLON FIBER AND POLYURETHANE PREPOLYMER
- COLOR: BLACK
- SHORE HARDNESS 75A +/- 7 POINTS
- TENSILE STRENGTH MINIMUM 1.0 MPa
- INITIAL COMPRESSION DEFORMATION 2.9%
- COMPRESSION SET 1.5%
- BRITTLENESS AT LOW TEMPERATURE -40 C
- COEFFICIENT OF THERMAL EXPANSION 12.95 X 10⁻⁵

Product Number

IR-RT

Design Features

- Materials See Notes
- Design Load Traffic
- Open Area N/A
- Coating None
- √ Designates Machined Surface

Certification

- Country of Origin: USA

Drawing Revision

07/24/2007 Designer: BDD
06/25/2019 Revised By: BDD

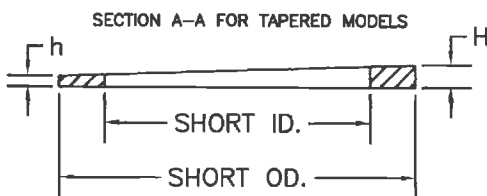
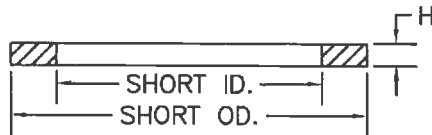
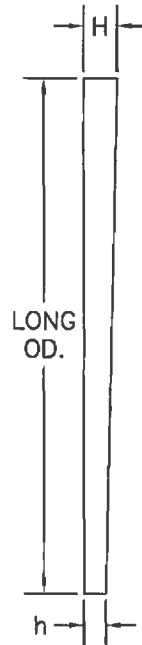
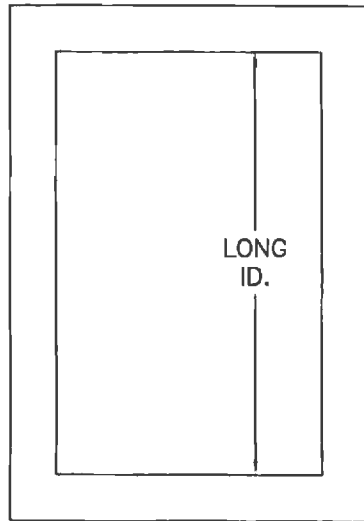
Disclaimer

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ Group, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know-how that is the property of EJ Group, Inc. Copyright © 2011 EJ Group, Inc. All rights reserved.

Contact

800 626 4653
ejco.com





NATIONAL PIPE & PLASTICS, INC.

American-made products since 1970

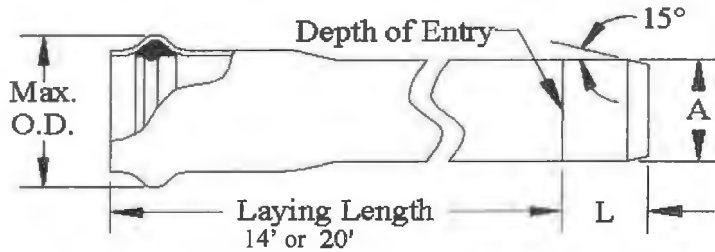
EVER-GREEN®

Corporate Offices
 New York Plant
 3421 Old Vestal Road, Vestal, NY 13850
 800.836.4350 607.729.9381 Fax: 607.729.6130

PVC SEWER & STORM DRAINAGE PIPE (4 - 15")

Scope: This submittal designates the general requirements for Unplasticized Polyvinyl Chloride (PVC) Plastic PSM Sewer Pipe from compound with a cell class 12454, as defined in ASTM Standard D-1784.

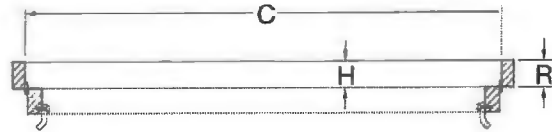
Pipe: Pipe in trade size diameter of 4" through 15" shall meet the requirements of the latest ASTM D-3034 Standard. The pipe shall conform to the requirements of CSA B-182.2, BNQ NQ 3624-130 and NQ 3624-135 Standards as indicated in the table below. If integral gasketed bell ends are provided on the pipe, the pipe joint must meet the requirements of ASTM Standard D-3212, and the sealing gasket must conform to the requirements of ASTM Standard F-477 for sizes 4"-15". Pipe in trade size diameters of 4 and 6 inch are available with solvent-weld bells. Pipe is manufactured to a standard laying length of 14 feet. Other lengths available upon request.



ASTM D-3034 Sewer Pipe Size and Dimensions

Nominal Size (in)	Metric (mm)	Dimension Ratio (SDR)	Approvals	Min Stiffness (psi)	"A" Average (OD) Outside Diameter	Minimum Wall	Max OD Reference	"L" Dimension (Min/Max)
4	100	35	CSA, BNQ	46	4.215	.120	5.050	3.250
		28	CSA, BNQ	91		.151		-
		26	CSA	115		.162		3.500
5	135	28	CSA, BNQ	91	5.640	.201	6.188	3.750 - 4.125
6	150	35	CSA, BNQ	46	6.275	.180	7.305	4.000
		28	CSA, BNQ	91		.224		-
		26	CSA	115		.241		4.375
8	200	35	CSA, BNQ	46	8.400	.240	9.605	4.125 -
		26	CSA	115		.323		4.375
10	250	35	CSA, BNQ	46	10.500	.300	12.030	5.750 -
		26	CSA	115		.404		6.000
12	300	35	CSA, BNQ	46	12.500	.360	14.100	5.875 -
		26	CSA	115		.481		6.125
15	375	35	CSA, BNQ	46	15.300	.437	17.200	6.125 -
		26	CSA	115		.588		6.375





PRODUCT NO.	COVER DIAMETER C	COVER THICKNESS H	COVER RAISE R	SUITABLE FOR PRODUCT NO.
SFR2410	24-1/4	1-3/8	1	12441, 12461, 12471, 12481, 12442, 12462, 12472, 12482, 12448
SFR2415	24-1/4	1-3/8	1-1/2	
SFR2420	24-1/4	1-3/8	2	
SFR2425	24-1/4	1-3/8	2-1/2	
SFR2430	24-1/4	1-3/8	3	
SFR2510	25-5/8	2	1	12583, 12580
SFR2515	25-5/8	2	1-1/2	
SFR2520	25-5/8	2	2	
SFR2611	26-1/4	1-1/8	1	12645, 12665, 12685, 12644, 12664, 12694
SFR2616	26-1/4	1-1/8	1-1/2	
SFR2621	26-1/4	1-1/8	2	
SFR2626	26-1/4	1-1/8	2-1/2	
SFR2631	26-1/4	1-1/8	3	
SFR2720	27	1-1/2	2	12741, 12781, 12782
SFR3210	31-7/8	1-3/4	1	13251, 13261, 13281, 13252, 13262, 13282
SFR3215	31-7/8	1-3/4	1-1/2	
SFR3220	31-7/8	1-3/4	2	

NOTES:

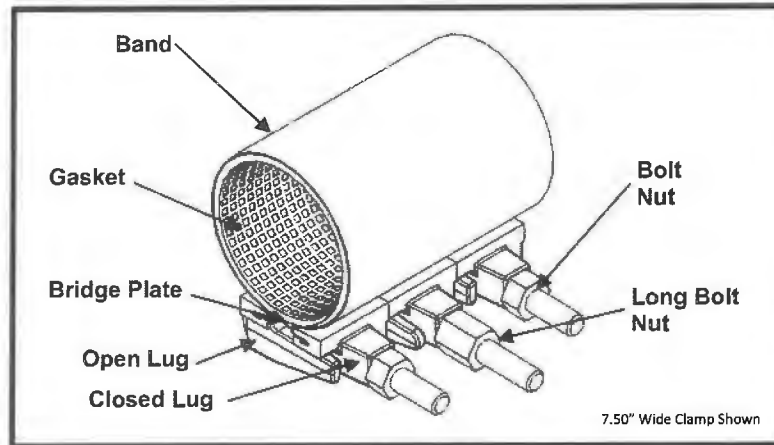
- Dimensions are approximate & in Inches
- Steel
- Conforms to ASTM A36 specifications





Smith-Blair
a xylem brand

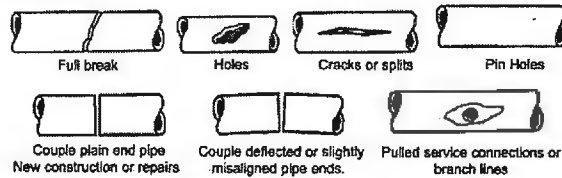
SPECIFICATION FULL CIRCLE® REPAIR CLAMP MODEL 226



APPLICATIONS

Typical Uses

- Repair leaks due to complete breaks, splits, or holes
- Joining pipes of the same diameter
- Examples:



Standard Pipe Sizes

- 2" to 14" nominal

Standard Widths

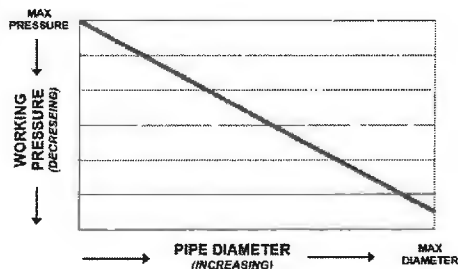
- 7.5", 10.0", 12.5", 15.0", 20.0", 25.0", 30.0"

Type of Pipe

- Carbon Steel, Stainless Steel, Ductile Iron, PVC, HDPE DR17 or thicker (with use of spring washers), Asbestos Cement, Copper, Aluminum

Working Pressure

- Up to 300 psi depending on type of pipe, type of repair, pipe diameter, service conditions and installation workmanship





Smith-Blair
a xylem brand

SPECIFICATION

FULL CIRCLE[®] REPAIR CLAMP

MODEL 226

MATERIALS

- **Band**
 - Type 304 Stainless Steel per ASTM A240
 - Band Thickness: 24 gauge thick for clamps 4.50" diameter and smaller
20 gauge thick for clamps 4.80" diameter and larger
 - Hemmed ends for lug removal in tight applications
- **Lugs**
 - Cast using Ductile Iron 80-55-06 per ASTM A536
 - Flexi-Coat[®] fusion bonded epoxy finish
 - Slot cast in lug to capture band hem
 - Designed for drop in replaceable bolts
 - One open loop lug and one closed loop lug. The bolts do not have to be removed to install clamp, preventing lost hardware
 - Long interlocking fingers allow for up to 0.40 inches of range in clamp
 - Interchangeable lugs allow combining smaller diameter clamps to create larger diameter clamps
 - Mutually supporting sliding fingers assures proper bolt alignment and permits maximum clamping without bending bolts
- **Gasket**
 - Nitrile (Buna-N) per ASTM D2000
 - Gasket Thickness: 0.192" thickness for clamps 4.50" diameter and smaller
0.218" thickness for clamps 4.80" diameter and larger
 - Certified to NSF/ANSI 61-G & 372
 - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
 - Temperature range: -20°F to +180°F
 - Full 360° gridded face gasket provides maximum pipe support, reinforcement, and sealing pressure
 - Tapered ends allow for full circumferential sealing
- **Bridge Plate**
 - Type 304 Stainless Steel quarter-hard per ASTM A240
 - Molded and recessed into gasket
 - Preformed for uniform distribution of gasket pressure over the entire pipe circumference
- **Bolts**
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC x 6.00" long, Track Head Oval Neck
 - Fe/Zn coated per ASTM F1941-10
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
 - Drop in replaceable bolts
- **Long Bolts**
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC x 6.88" long, Track Head Oval Neck
 - Fe/Zn coated per ASTM F1941-10
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
 - Used on clamps 4.50" diameter and smaller to facilitate the initial clamp installation
 - Drop in replaceable bolts
- **Nuts**
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC, Heavy Hex Semi-Finished
 - Fe/Zn coated per ASTM F1941-10



Smith-Blair
a xylem brand

SPECIFICATION

FULL CIRCLE® REPAIR CLAMP

MODEL 226

- **Long Nuts**
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC x 1.00" long, Heavy Hex Semi-Finished
 - Fe/Zn coated per ASTM F1941-10
 - Used to provide hand tightening during initial clamp installation

LISTINGS/STANDARDS

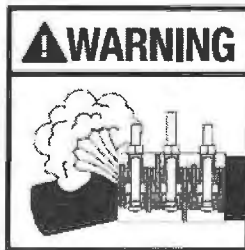
- Certified to NSF/ANSI 61 and NSF/ANSI 372
- Meets applicable portions of AWWA C230
- Flexi-Coat® Fusion-Bonded Epoxy Coating meets requirements of AWWA C213

OPTIONS

- Type 316 Stainless Steel band
- Type 304 Stainless Steel hardware with fluoropolymer coated nuts to prevent galling
- Type 316 Stainless Steel hardware with fluoropolymer coated nuts to prevent galling
- Alternative gasket material (e.g. Viton, EPDM, etc.)
- Spring washers for use of clamp on HDPE pipe
- Offset gaskets to allow for repairing longer cracks using multiple clamps
- Conductivity feature

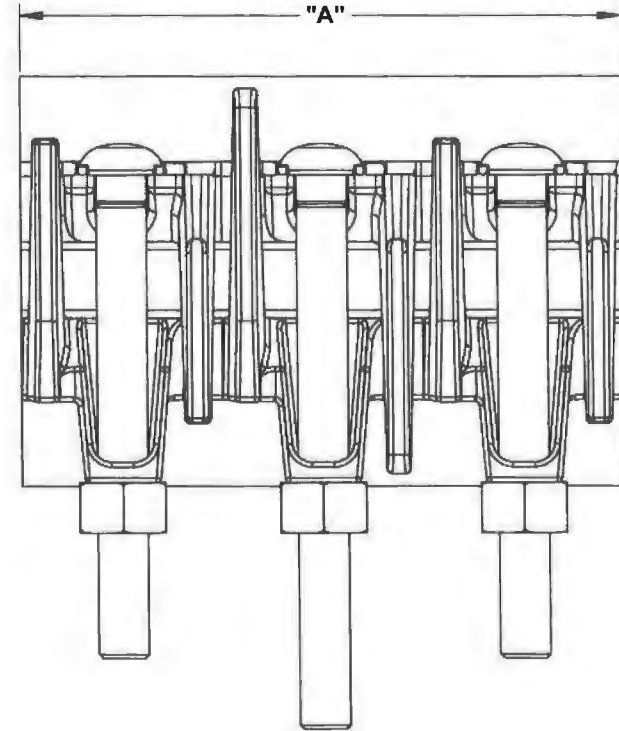
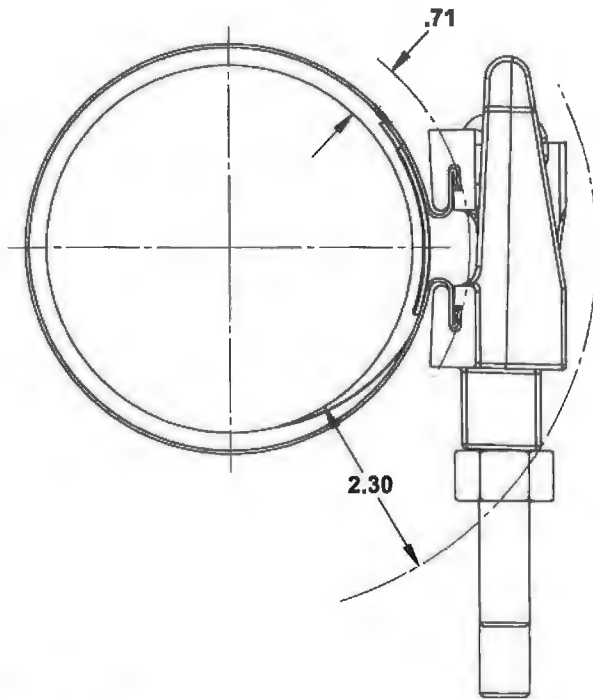
NOTES

- Spring washers **are required** when this product is used on DR17 or thicker HDPE pipe (Not recommended for use on HDPE pipe thinner than DR 17)
- Pipe stiffeners **are required** when this product is used to join HDPE and thin wall PVC pipe
- Full Circle® is a registered trademark of Smith-Blair
- These product specifications were correct at the time of publication and are subject to change without notice
- See the Smith-Blair web site for part numbers and ordering information
- See the Smith-Blair web site for warranty information
- See the Smith-Blair web site for corrosion notice



THIS PRODUCT DOES NOT RESTRAIN PIPE MOVEMENT. Proper anchoring is required to prevent pipe pull out. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, and/or death. Read the product installation instructions prior to installing this product.


30 Globe Ave, Texarkana, AR 71854
Ph: 870-773-5127 • Fax: 870-773-5212
Toll-Free Numbers: Ph: 800-643-9705 • Fax: 800-648-6792



NOTES:

1. LONG OVAL NECK BOLTS ONLY PROVIDED ON CLAMPS 4.50" DIAMETER AND SMALLER
2. SEE SMITH-BLAIR CATALOG FOR AVAILABLE PIPE DIAMETER AND WIDTH COMBINATIONS AS SOME COMBINATIONS ARE NOT AVAILABLE
3. 7.50" WIDE CLAMP SHOWN OTHER SIZES SIMILAR

A	BOLT QUANTITY			LONG NUT QUANTITY	SOCKET SIZE
	SHORT	LONG	TOTAL		
7.50	2	1	3	1	1-1/16"
10.00	2	2	4	2	
12.50	3	2	5	2	
15.00	4	2	6	2	
20.00	8	-	8	3	
25.00	10	-	10	4	
30.00	12	-	12	4	

TOLERANCES U.N.O. XX = ±.03 XXX = ±.015 FRACTIONS = ANGLES = ±1° MACH. FIN = ALL DIMENSIONS ARE IN INCHES.	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALE DWG.	APP'D	DATE
	SCALE: N/A	DRN	CHD
TITLE SPECIFICATION FULL CIRCLE® REPAIR CLAMP MODEL 226			
 Smith-Blair a xylem brand		P/N	N/A
DWG. NO. SPEC_226.DRW		1 OF 1 SHEET	0/29/16 REV.

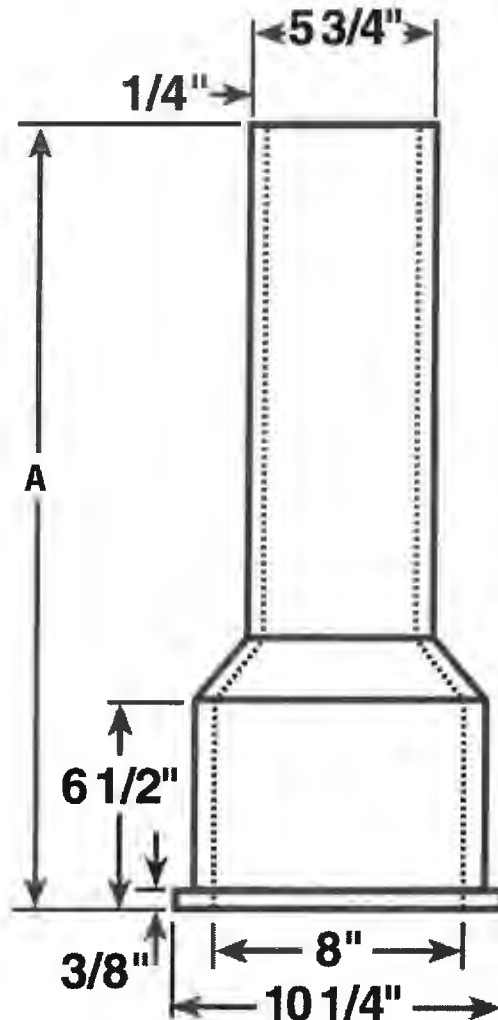
CAST IRON SLIP VALVE BOX - BOTTOM SECTION

Product Features

All valve boxes and related parts shall be coated on all surfaces with an asphaltic varnish of 2mm in thickness. For 4" through 12" valves. 5-1/4" shaft. Slip type

Model Numbers

		A
IVBABS15	15" Slip Valve Box Bottom	15"
IVBABS24	24" Slip Valve Box Bottom	24"
IVBABS30	30" Slip Valve Box Bottom	30"
IVBABS36	36" Slip Valve Box Bottom	36"
IVBABS48	48" Slip Valve Box Bottom	48"
IVBABS60	60" Slip Valve Box Bottom	60"



Codes & Approvals

Valve boxes conform to ASTM A-48, Grade 30B; Asphaltic varnish conforms to AWWA C-104.

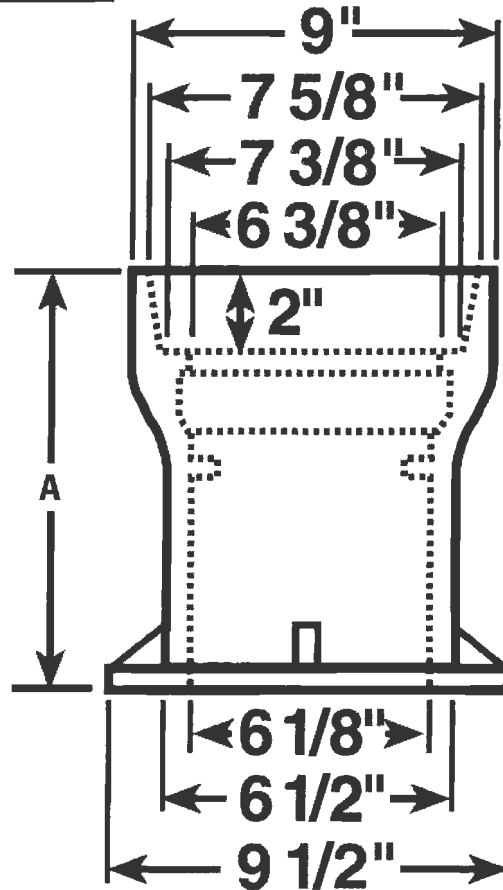
CAST IRON SLIP VALVE BOX - TOP SECTION

Product Features

All valve boxes and related parts shall be coated on all surfaces with an asphaltic varnish of 2mm in thickness. For 4" through 12" valves. 5-1/4" shaft. Slip type.

Model Numbers

		A
IVBATS10	10" Slip Valve Box Top	10"
IVBATS16	16" Slip Valve Box Top	16"
IVBATS26	26" Slip Valve Box Top	26"



Codes & Approvals

Valve boxes conform to ASTM A-48, Grade 30B; Asphaltic varnish conforms to AWWA C-104.

9.6



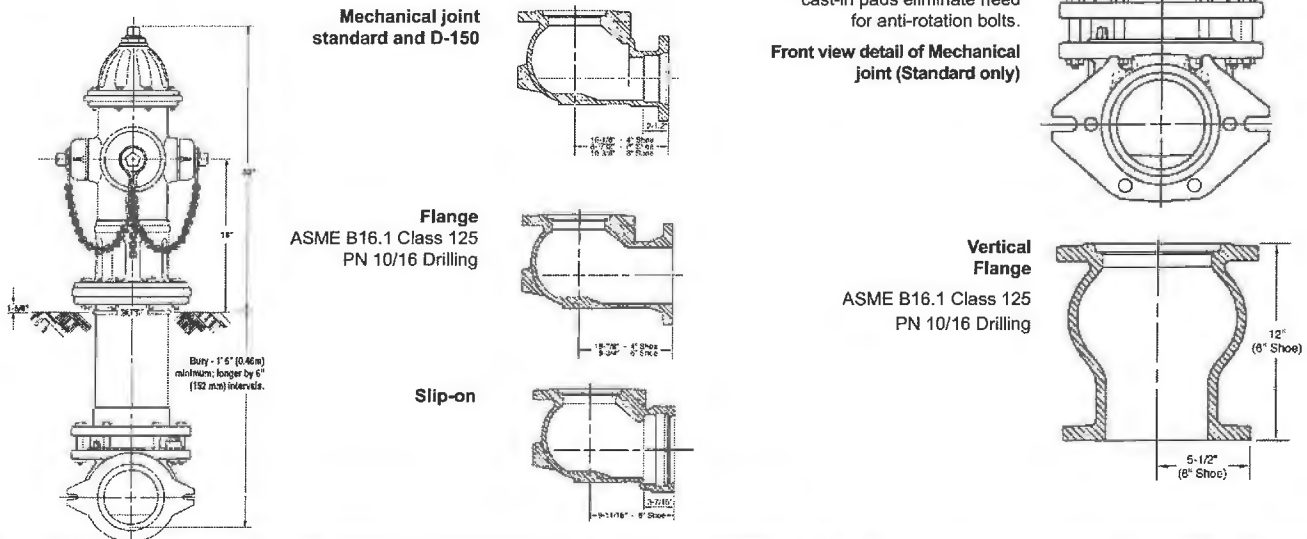
MUELLER® SUPER CENTURION® FIRE HYDRANT

Rev. 4-14 Shaded area indicates changes

- **Super Centurion 250™ catalog numbers**
 - UL 246, FM 1510 ANSI/AWWA C502 250 psi rated
 - A421 4-1/2" main valve opening 3-way (2 hose nozzle / 1 pumper nozzle)
 - A423 5-1/4" main valve opening 3-way (2 hose nozzle / 1 pumper nozzle)
 - A454 5-1/4" main valve opening 3-way (3 hose nozzle) *
 - A455 5-1/4" main valve opening 4-way (4 hose nozzle) *
 - A458 5-1/4" main valve opening 4-way (3 hose nozzle / 1 pumper nozzle) *
 - A459 5-1/4" main valve opening 4-way (2 hose nozzle / 1 pumper nozzle)**
 - * Hose Gate Valves required on FM Approved Models
 - ** A459 is UL Listed and ANSI/AWWA C502
- **Super Centurion 350™ catalog number**
 - UL 246, FM 1510 ANSI/AWWA C502 350 psi rated
 - A423 5-1/4" main valve opening 3-way (2 hose nozzle / 1 pumper nozzle)
- **Super Centurion 200™ catalog numbers**
 - UL 246, FM 1510 ANSI/AWWA C502 200 psi rated
 - A-433 4-1/2" main valve opening 2-way (2 hose nozzle)
 - A-435 5-1/4" main valve opening 2-way (2 hose nozzle)
 - ANSI/AWWA C502 200 psi rated
 - A-420 4-1/2" main valve opening 2-way (2 hose nozzle)
 - A-424 4-1/2" main valve opening 1-way (1 pumper nozzle)
 - A-422 5-1/4" main valve opening 2-way (2 hose nozzle)
 - A-425 5-1/4" main valve opening 2-way (2 hose nozzle)
 - A-423 5-1/4" main valve opening 3-way (2 hose nozzle / 2 pumper nozzle)
- 10 year limited warranty on material and workmanship
- Meets all applicable parts of ANSI/AWWA C502 Standard
- Post type dry barrel design
- Dry top design with O-ring sealed oil reservoir
- Traffic feature with stainless steel safety stem coupling
- Compression-type main valve closes with pressure for positive seal; it is made of rubber and is conveniently reversible providing a spare for long service life
- Operating nut available in wide variety of shapes and sizes-open left or right
- Field replaceable hose and pumper nozzles
- Hose and pumper nozzles have large radius, full flow openings for low friction loss
- Contoured shoe is designed for full flow
- Dual bronze drain valves provide effective barrel drainage
- 350 psig (2400 kPa/24 barg) maximum working pressure, 700 psig (4800 kPa/48 barg) static test pressure; 250 psig (1725 kPa/17 barg) maximum working pressure, 500 psig (3450 kPa/35 barg) static test pressure; 200 psig (1400 kPa/14 barg) maximum working pressure, 400 psig (2800 kPa/28 barg) static test pressure



Dimensions



SEE PAGE 9.28 FOR ORDERING INSTRUCTIONS

Rev. 4-14

- Catalog number—
 - A-2362-20** Mechanical joint ends (with accessories unassembled)
 - A-2362-23** Mechanical joint ends (less accessories)
 - A-2362-25** Mechanical joint ends (with transition gaskets accessories unassembled)
- Sizes – 2", 3", 4", 6", 8", 10", 12"
- Meets or exceeds all applicable requirements of ANSI/AWWA C509 and C515, UL Listed, FM Approved, and certified to ANSI/NSF 61.
- Standard mechanical joint ends comply with ANSI/AWWA C111
- Iron body with nominal 10 mils MUELLER® Pro-Gard® Fusion Epoxy Coated interior and exterior surfaces
- Epoxy coating meets or exceeds all applicable requirements of ANSI/AWWA C550 Standard.
- Iron wedge, symmetrical & fully encapsulated with molded rubber; no exposed iron
- Non-rising stem (NRS)
- Triple O-ring seal stuffing box (2 upper & 1 lower O-rings) with fourth o-ring serving as dirt seal
- 2" square wrench nut (optional handwheel available)—open left or open right
- 250 psig (1725 kPa/17 barg) maximum working pressure, 500 psig (3450 kPa/35 barg) static test pressure
- UL Listed, FM Approved: 200 psig (1300 kPa/13 barg)
- Mueller valves are designed for potable water application



A-2362-20

Options

See page 10.46 for more information on Resilient Wedge Gate Valve options

- Position indicators
- Stainless steel fasteners: Type 316
- Stainless steel stem: Type 304, Type 316
- ASTM B98-C66100/H02 stem
- Handwheel
- EPDM Disc and o-rings

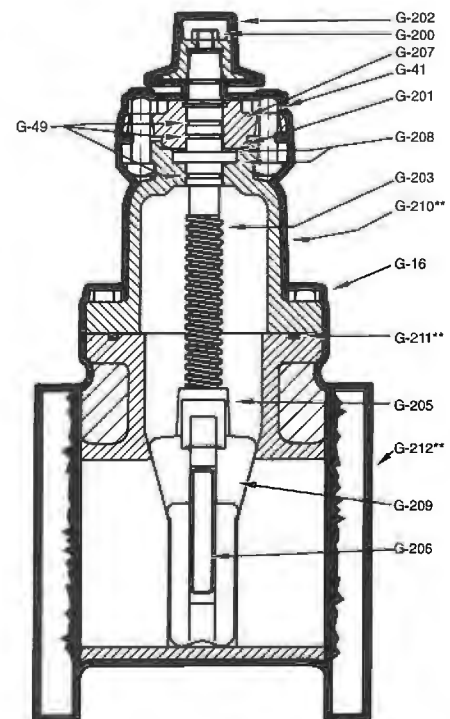
Resilient wedge gate valve parts

Catalog Part No.	Description	Material	Material Standard
G-16	Bonnet Bolts & Nuts	304 Stainless Steel	ASTM F593 (bolt) ASTM F594 (nut)
G-41	Stuffing Box Bolts & Nuts	304 Stainless Steel	ASTM F593 (bolt) ASTM F594 (nut)
G-49	Stem O-rings (3)	Nitrile	ASTM D2000
G-200	Wrench Nut Cap Screw	304 Stainless Steel	ASTM F593
G-201	Stuffing Box O-ring	Nitrile	ASTM D2000
G-202	Wrench Nut	Ductile Iron	ASTM A536 ▼
G-203	Stem	Bronze	ASTM B138
G-204	Hand Wheel (not shown)	Cast Iron	ASTM A126 CL.B
G-205	Stem Nut	Bronze	ASTM B584
G-206	Guide Cap Bearings	Acetal	-
G-207	Stuffing Box with dirt seal**	Ductile Iron Nitrile	ASTM A536 ▼ ASTM D200
G-208	Anti-friction Washers (2)	Acetal	-
G-209	Wedge, Rubber Encapsulation	Ductile Iron* SBR	ASTM A536 ▼ ASTM D2000
G-210**	Bonnet	Ductile Iron	ASTM A536 ▼
G-211**	Bonnet gasket	Nitrile	ASTM D2000
G-212**	Body	Ductile Iron	ASTM A536 ▼

*Fully encapsulated in molded rubber with no iron exposed

**Dirt seal on 4" - 12" valves

▼ Material strength ASTM A536 65-45-12 minimum



ALPHA™ RESTRAINED JOINT EXTENDED RANGE COUPLING

SUBMITTAL INFORMATION



Certified to
NSF/ANSI 61 & 572

USE

Provides a Restrained Joint for multi-purpose use from IPS PVC through Cast iron. The ALPHA can accommodate up to 4 degrees of deflection per end. The XL may have limited deflection at the top of the range (2 degrees max each end).

MATERIALS

CASTINGS

All cast components (end rings, center ring, and bolt guides) are ductile iron, meeting or exceeding the requirements of ASTM A 536, grade 65-45-12.

GRIPPERS

Ductile (nodular) iron, meeting or exceeding ASTM A 536, Grade 65-45-12. Machine sharpened and heat treated. Xylan 1424 coated for superior corrosion resistance.

GASKETS

SBR compounded for water and sewer service per ASTM D2000, classified by UL to meet NSF61 or NBR compounded for water and sewer service per ASTM D2000, NSF61 Certified. Other compounds available upon request.

DRAW HOOKS

Uncoated 304 stainless steel.

RAMP RUNNERS

Nylon 66, Black, 14% Glass filled

BOLTS AND NUTS

5/8-11 bolts with heavy hex nuts. E-coated nuts, 304 stainless steel. Fasteners provided with anti-galling protection. 316 stainless steel available by request.

COATINGS

Center ring is Romacote fusion bonded epoxy, NSF 61 Certified. End rings are Romabond polyester.

PRESSURE

When properly installed, the Romac ALPHA coupling can be used at a working pressures equal to the rating of the installed pipe up to 350 psi.

PIPE MATERIALS

The Romac ALPHA series couplings can be used on DI, Oversized Cast Iron, PVC (IPS, C900, C909), and HDPE size 4"-12" (SDRs 9, 11, 13.5 and 17). Stiffener not required.

SIZES & RANGES

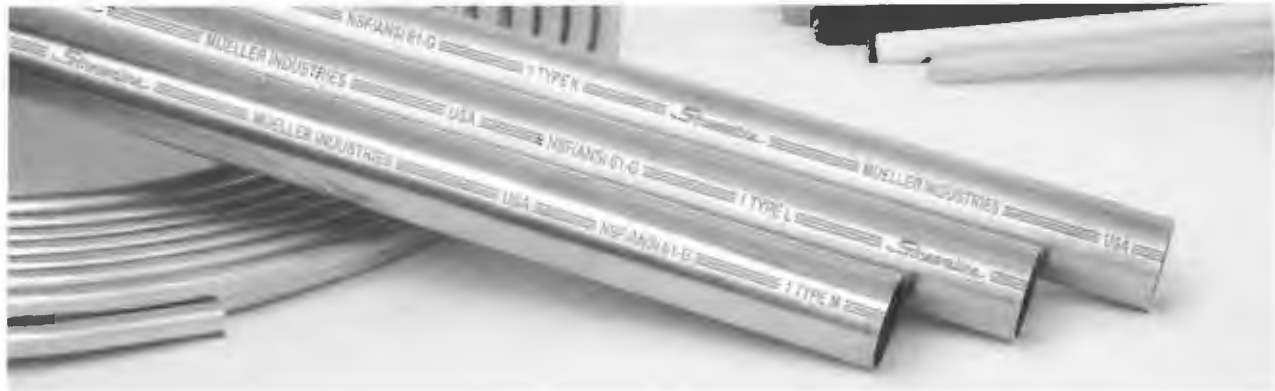
See catalog.

This information is based on the best data available at the date printed above. Please check with Romac for any updates or changes.



www.romac.com
21919 20th Avenue SE • Suite 100 • Bothell, WA 98021
Phone (425) 951-6200 • 1-800-426-9341 • Fax (425) 951-6201

COPPER TUBE • PLUMBING



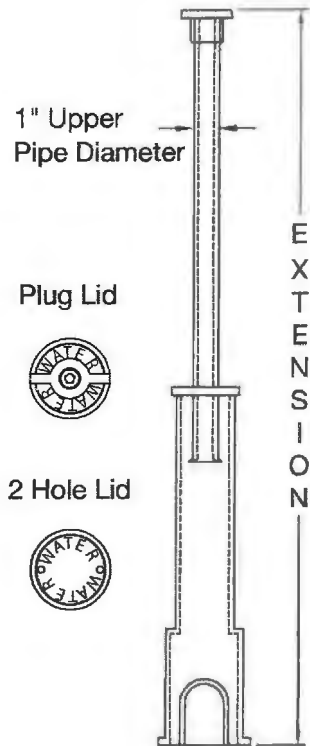
Streamline® Copper Tube sets the standard for quality, consistency and service in the plumbing industries. With a full line of copper tube products to support most all plumbing supply and DWV applications, Streamline® Copper Tube is available in all common types including Type K, Type L, Type M and DWV. Each piece of tube is incised marked and color coded for easy, long lasting identity. Manufactured in accordance with applicable standards, our ongoing commitment to quality continues to make Streamline® Copper Tube the preferred and specified brand of industry professionals.



- Made to applicable ASTM standards B88, B306, B819
- Meets NSF 61G
- Made in the USA

Copper Tube • Plumbing

Nom. Dia.	O.D. Dia.	TYPE K			TYPE L			TYPE M	DWV	MEDICAL GAS	
		Hard Lengths	Soft Coils	Soft Lengths	Hard Lengths	Soft Coils	Soft Lengths	Hard Lengths	Hard Lengths	Nitrogenized* thru 3-1/8" only Type K Hard Lengths Type L Hard Lengths	
1/4"	3/8"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	-	-	10 ft., 20 ft.	10 ft., 20 ft.
3/8"	1/2"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
1/2"	5/8"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
5/8"	3/4"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
3/4"	7/8"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
1"	1-1/8"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
1-1/4"	1-3/8"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.
1-1/2"	1-5/8"	10 ft., 20 ft.	60 ft., 100 ft.	10 ft., 20 ft.	10 ft., 20 ft.	60 ft., 100 ft.	10ft, 20ft	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.
2"	2-1/8"	10 ft., 20 ft.	40 ft., 60 ft.	10 ft., 20 ft.	10 ft., 20 ft.	40 ft., 60 ft.	10ft, 20ft	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.
2-1/2"	2-5/8"	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.	-	10ft, 20ft	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
3"	3-1/8"	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.	-	10ft, 20ft	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.
3-1/2"	3-5/8"	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
4"	4-1/8"	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	-	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.
5"	5-1/8"	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	-	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.	10 ft., 20 ft.
6"	6-1/8"	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.
8"	8-1/8"	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	-	10 ft., 20 ft.	-	10 ft., 20 ft.	10 ft., 20 ft.



PLUG LID	2 HOLE LID	RANGE / BURY
PRODUCT NO.	PRODUCT NO.	EXTENSION
41048	42048	3 - 4
41054	42054	3-1/2 - 4-1/2
41060	42060	4 - 5
41066	42066	4-1/2 - 5-1/2
41072	42072	5 - 6
41078	42078	5-1/2 - 6-1/2
41084	42084	6 - 7
41090	42090	6-1/2 - 7-1/2
41096	42096	7 - 8

NOTES:

- Dimensions are approximate & in inches
- Lid/Base: Gray Iron, Class 30B
- Conforms to ASTM A48 / A48M-03 specifications
 - * Please specify if required in Class 35B or Ductile Iron
- Upper Pipe: Steel
- Conforms to ASTM A36 specifications
- Markings: Sewer, Water
 - * Custom markings / logos available upon request
- 1-1/4" and 1-1/2" pipe also available (please specify)
- Suitable with 1-1/4", 1-1/2" & 2" curb stops





AMERICAN Fastite® Joint Pipe For Water, Sewage or Other Liquids



AMERICAN Fastite Joint Pipe in sizes 4"-64" for water, sewage or other liquids has the proven long-life and high-strength qualities inherent in pipe produced centrifugally in accordance with AWWA C151. In addition, this significant AMERICAN development, a dependable, single gasket, push-on type joint meeting the requirements of AWWA C111, affords the customer lower joint cost and time-saving advantages in installation. It provides exceptional strength and flexibility and has been widely accepted by engineers, contractors and utility officials since the 1950s. For added flexibility during construction, and for possible elimination of bends, a liberal 5° allowable deflection is standard in all sizes through 30", offering 21" offset in a 20' length of pipe. Liberal deflection can also be provided in larger diameter pipe with standard and Special Fastite Deflection Bells.

The patented AMERICAN Fastite Joint embodies many advanced design features and is rated for a water working pressure of 350 psi. For specific conditions, ductile iron piping with this joint has been approved for much higher pressure conditions. The socket, which is scientifically designed with two gasket recesses and a dividing buttress, is manufactured to close tolerances so that the gasket is self-centered, securely confined, and firmly compressed for a permanent, tight, trouble-free joint. The Fastite joint seal, bubble-tight under vacuum and external pressure, becomes even tighter with the application of internal pressure due to a specially designed wedging surface in the socket.

Fastite Joint Assembly

The bell opening is slightly tapered to provide easy entry of the pipe end; the flared socket design permits liberal joint deflection.

The plain end of the pipe is tapered or rounded to facilitate entry into the bell and self-centering in the gasket. On pipe cut in the field, the plain end can be easily beveled and smoothed by the use of a portable grinding wheel or other suitable apparatus. Methods of cutting ductile iron pipe are described in Section 3.

A stripe is painted on the plain end of AMERICAN Fastite Joint Pipe to provide a visual means of checking the joint alignment and to assure proper insertion. See page 2-10 for detailed assembly instructions.

Fastite Gasket

The Fastite Joint sealing component—a molded synthetic rubber ring gasket of two hardnesses, shaped to fit the configuration of the gasket socket—is manufactured per all requirements of ANSI/AWWA C111/A21.11 and under AMERICAN's own rigid specifications, assuring closely controlled dimensional and hardness properties. The smaller end of the gasket is of harder rubber, approximately 85 durometer hardness, which provides a strong shoulder for self-centering on the gasket buttress, a permanent seal against cold flow, and protection from deterioration. The larger end of the gasket is of softer rubber, approximately 65 durometer hardness, providing ease of assembly and positive sealing. The design assures effective sealing at low or high pressures and in straight or deflected joint alignment. It also eliminates any concerns of infiltration or root intrusion, and assures positive sealing against negative pressure, thus preventing gasket "pullout" should a vacuum be created in the line.

A taper on the inside of the gasket allows the entering pipe to locate and center on the hard section and reduces friction loads during



subsequent assembly. The snug fit and the hard section of the gasket, in conjunction with the design of the buttress, act to restrain the gasket against dislodgment during assembly. Additional internal pressure results in increased tightness of the seal when pipe is either in straight alignment or deflected.

Gaskets made of SBR (Styrene Butadiene Rubber) are standard. For information on gaskets made of special types of rubber, for applications involving air or liquid temperatures in excess of 150°F, or for chemical, hydrocarbon or other special service applications, and for installations in contaminated soils where permeation through gaskets might be a concern, consult AMERICAN for recommendations. See Table 2-1.

Fastite Lubricant

AMERICAN Fastite Joint Lubricant is a non-toxic water soluble material imparting neither taste nor odor to the conveyed water and is ANSI/NSF 61 approved. The lubricant is suitable for use in hot or cold weather and will adhere to wet or dry pipe. AMERICAN Fastite Joint Pipe

can be assembled when submerged, though for such installation, special AMERICAN underwater joint lubricant is recommended. See Table No. 2-5 for appropriate lubricant quantities.

Fastite Joint Materials

Standard joint materials include Fastite plain rubber gaskets and a sufficient supply of Fastite joint lubricant. Fastite pipes are most often readily joined with available excavating equipment; however, assembly tools can be supplied by AMERICAN on a loan basis with a nominal deposit which is refundable upon return of tools in good condition.

Fittings

AMERICAN Fastite or Flex-Ring fittings and AMERICAN Mechanical Joint Fittings are used with Fastite Joint pipe. See Sections 4 and 5.

Coating and Lining

AMERICAN Fastite Joint Pipe can be furnished asphaltic coated, cement lined, or with special coating or lining where required. See Section 11.

Fastite Gaskets

Table No. 2-1

Common Name or Trade Name*	Chemical Name	Maximum Service Temperature**		Common Uses
		Water & Sewer	Air	
Plain Rubber	Styrene Butadiene Copolymer(SBR)	150°F	150°F	Fresh Water, Salt Water, Sanitary Sewage
Plain Rubber (conductive)	Styrene Butadiene Copolymer(SBR)	150°F	150°F	Electrical continuity for thawing of Service Water and Sewage
EPDM	Ethylene Propylene Diene Monomer	212°F	200°F	Water, Sewage, Ketones, Dilute Acids and Alkalies, Vegetable Oil, Alcohols, Air
Neoprene	Polychloroprene(CR)	200°F	180°F	Fresh Water, Sewage
Nitrile Buna-N	Acrylonitrile Butadiene(NBR)	150°F	150°F	Non-Aromatic Hydrocarbons, Petroleum Oil, Hydraulic Fluids, Fuel Oil, Fats, Oil, Grease†
Fluoroelastomer Fluorel Viton®***	FKM	212°F	300°F	Aromatic Hydrocarbons, Gasoline, Refined Petroleum Products, most Chemicals and Solvents, High Temp., Air (Least permeable of all available Fastite gasket rubbers)

*AMERICAN reserves the right to furnish any Trade or Brand rubber for the chemical formulation specified.

Temperature is in reference to conveyed fluid. **Lubricating oil in air can adversely affect SBR and EPDM performance.

SBR, Nitrile and Neoprene are not recommended for hot air exposure in wastewater treatment systems.

***Viton® is a registered trademark of DuPont Dow Elastomers.

Refer to Section 11 for temperature and service capabilities of pipe linings.

Refer higher temperatures or other special requirements to AMERICAN for recommendations regarding suitable gasket material.

†This gasket rubber is chemically resistant in the non-potable water uses shown but is not as resistant to permeation in potable water applications as FKM.

All Fastite gaskets made from the materials in the above table are suitable for use with water containing normal concentrations of chloramine. Where increased resistance to chloramine is desired, neoprene or fluoroelastomer materials should be considered.



**AMERICAN Fastite® Joint
for Ductile Iron Pipe
ANSI/AWWA C111/A21.11
Standard Dimensions**

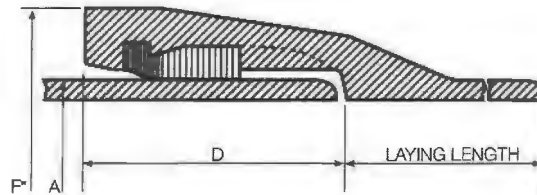


Table No. 2-2

Size in.	Nominal Laying Length ft.	Dimensions in Inches		
		A Outside Diameter	D Depth of Socket	F ² Bell O.D.
4	18	4.80	3.31	6.40
6	20	6.90	3.38	8.60
8	20	9.05	3.75	11.16
10	20	11.10	3.75	13.25
12	20	13.20	3.75	15.22
14	20	15.30	5.23	17.73
16	20	17.40	5.23	19.86
18	20	19.50	5.50	22.16
20	20	21.60	5.50	24.28
24	20	25.80	5.50	28.50
30	20	32.00	6.50	34.95
36	20	38.30	6.50	41.37
42	20	44.50	7.50	48.27
48	20	50.80	8.00	54.71
54	20	57.56	8.50	61.65
60	20	61.61	8.75	65.80
64	20	65.67	9.00	70.04

*Dimensions subject to change at our option. Check AMERICAN if exact dimensions required.
See Section 3 for additional information on ductile iron pipe.
See Sections 4 and 7 for information on Fastite fittings.



AMERICAN Fastite® Joint Pipe
Allowable Joint Deflection



Table No. 2-3

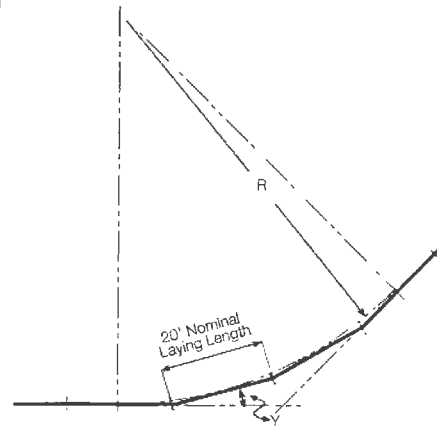
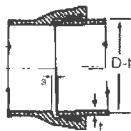
Size in.	Nominal Laying Length ft.	Maximum Recommended Deflection†					
		Standard Bell			Special Deflection Bell		
		X Offset per Nominal Length in.	Y Deflection Angle	Radius of Curve* ft.	X Offset per Nominal Length in.	Y Deflection Angle	Radius of Curve* ft.
4	18	19	5°	206	-	-	-
6	20	21	5°	230	-	-	-
8	20	21	5°	230	-	-	-
10	20	21	5°	230	-	-	-
12	20	21	5°	230	-	-	-
14	20	21	5°	230	-	-	-
16	20	21	5°	230	-	-	-
18	20	21	5°	230	-	-	-
20	20	21	5°	230	-	-	-
24	20	21	5°	230	-	-	-
30	20	21	5°	230	-	-	-
36	20	17	4°	285	21	5°	230
42	20	12	3°	380	21	5°	230
48	20	12	3°	380	17	4°	285
54	20	12	3°	380	17	4°	285
60	20	12	3°	380	17	4°	285
64	20	12	3°	380	17	4°	285

*Approximate radius of curve produced by a succession of nominal lengths of pipe fully deflected.
 †Special Deflection Bells must be specifically ordered and will be marked with white bell face for easy identification.
 For easiest assembly, the joints should be assembled with the pipe in reasonably straight alignment. After joint assembly, the pipe may be deflected up to the maximum shown above. Offset distances are based on 20' lengths.

Maximum Allowable Separation

Table No. 2-4

Size in.	S Separation in.
4	3/8
6	3/8
8	1/2
10	5/8
12	1 1/8
14	1 1/8
16	1 1/2
18	1 5/8
20	1 7/8
24	2 1/4
30	2 3/4
36	2 3/4
42	2 3/4
48	2 3/4
54	2 3/4
60	3 1/4
64	3 3/4



R = Radius of Curve (ft.)

Y = Deflection Angle (degrees)

$$\text{Radius of Curve} = \frac{\text{Nominal Laying Length}}{2 \times \text{Tangent}(Y + 2)}$$

Maximum Allowable Separation, "S", in Standard Bell pipe is approximately equal to the median pipe diameter in inches times the sine of the deflection angle. This is provided for information only and should not be used to determine precise joint deflection.



AMERICAN Fastite® Joint Pipe Assembly Instructions

The AMERICAN Fastite Joint is a push-on type joint meeting all the rigorous requirements of AWWA C111. The ANSI/AWWA C600 Standard covers in detail the installation of ductile iron water mains, including assembly instructions for push-on joint pipe.

Field-cutting of AMERICAN Ductile Iron Pipe can be easily performed, thus eliminating the necessity for factory-made special lengths of Fastite pipe. The plain end of Fastite pipe cut in the field requires little or no preparation for assembly into the socket of a mechanical joint fitting. Where a cut pipe is to be assembled into a Fastite socket, the required beveling or rounding of the plain end can be easily accomplished by the use of a portable grinding wheel or other suitable apparatus. Methods of cutting ductile iron pipe are described in Section 3.

The AMERICAN Fastite Joint requires only one joint component, the rubber gasket*, which when properly installed, fits snugly in the gasket recess in the bell socket. A special lubricant supplied with the pipe is applied to the plain end and the inside surface of the gasket before assembly. The pipe end is tapered or rounded to provide self-centering of the plain end in the gasket and ease of assembly. A circumferential stripe on the plain end provides a visual indication for checking the proper insertion of the joint. The stripe, shown in the photographs illustrating assembly methods, passes fully into the bell when the plain end is fully inserted into the socket

with the two lengths of pipe in straight alignment. Joints can then be safely deflected up to the extent shown in Table No. 2-3. In deflected joints, the stripe will typically be visible to some extent after assembly.

Easier assembly is effected if the pipe is suspended an inch or so off the bottom of the trench during the jointing operation.

The following instructions should be followed in order to properly assemble the joints and to fully realize the maximum speed and ease of assembly of the Fastite Joint:

1. Clean socket and plain end thoroughly, **removing mud, gravel, or any other matter that might cause the front of the gasket to protrude into the path of the entering spigot.**

2. Insert gasket fully into the gasket recess of the socket, large end of the gasket entering first. Gasket may be installed with one or two V-shaped folds as shown (Photo 1). After the gasket is in place at the bottom, the top of the gasket is positioned fully into the gasket recess. Gaskets and lubricant to be installed in very cold weather should be warmed first (as by storage in a heated equipment cab or pick-up, etc.) for optimum assembly.

3. Apply a thin film of regular AMERICAN Fastite Joint Lubricant to the rounded or tapered spigot end of the pipe, the immediate outside pipe surface between the stripe and the nose of the pipe (Photo 2), and also to the inside surface of the gasket. **Special AMERICAN Fastite Joint Lubricant intended specifically for underwater or very wet installations can be supplied when requested.**



Photo 1



Photo 2

*Gaskets not used immediately should be stored in a cool location, out of direct sunlight.



Caution: If a spigot end contacts the ground or trench side after lubrication, any adhering dirt or rocks should be cleaned off and the area re-lubricated prior to assembly.

4. Insert the plain end in the socket. For optimum assembly it is preferable that the entering pipe be in reasonably straight alignment; however, the Fastite Joint may be assembled if necessary with the pipe deflected within its rated deflection. (Exception: If Fast-Grip gaskets are being used, straight alignment must be maintained.) Push the plain end into the socket using any of the applicable assembly methods described hereinafter. If the joint cannot be assembled with a moderate force, remove the pipe and check for the cause of the difficulty, such as improper positioning of gasket, insufficient or wrong type lubricant, dirt under or behind the gasket, dirt adhering to the pipe, or any other cause which would result in obstruction or increased friction between pipe end

and gasket surface. **For assurance of proper assembly, a thin automotive, blade-type feeler gauge can also be used if desired for quick and easy probe confirmation of correctly installed axial gasket position around the joint.**

5. "Backwards" installation. AMERICAN does not recommend "backward laying" (bells assembled over spigots, rather than spigots inserted into bells as pictured in this literature) of large-diameter ductile iron pipe in buried installations. AMERICAN can furnish bell and plain end fittings to minimize the need for backward pipe laying. Other devices such as sleeves and couplings may also be employed for this reason. However, if this condition cannot be avoided, we strongly recommend that installers contact AMERICAN for instructions on how to reduce the potential for problems that could occur when assembling pipe in this manner.

AMERICAN Pipe Assembly Mechanisms

In general, Fastite joints or other Fastite gasketed pipes may be readily pushed or pulled together without the need for complicated tools or substantial manpower. This is most often accomplished with the procedures discussed on page 2-14. In general, the joints of AMERICAN push-on pipes are purposefully "tight," and most joints require an assembly force of about 100 to 200 pounds or more of assembly force per inch of pipe diameter (i.e. a 12" joint might require about 12 x 100 or 1,200 pounds of assembly force).

In pulling operations, simply wrap a sound wire rope choker cable or nylon sling around the barrel of the entering pipe. Secure the thimble eye or other end loop of the choker to a suitably anchored pulling device (e.g. backhoe, come-along, etc.). Use the mechanism to pull the cable taut in

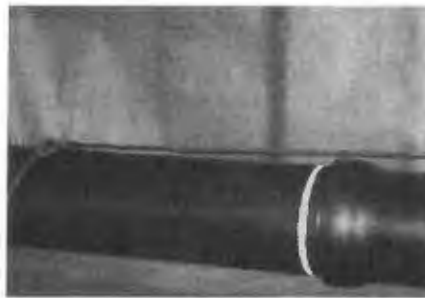


Photo 3

the assembly direction (Photo 3). Continue pulling the cable in a smooth, continuous motion until the joint is in the fully assembled position. If desired for special conditions, AMERICAN can furnish suitable, simple come-alongs and choker cables for man-

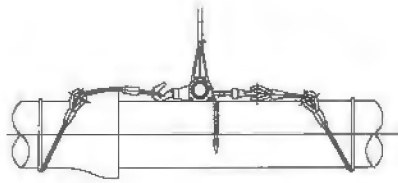


Figure 1

power assembly of most 4"-24" pipes (See Figure 1 and specify pipe sizes involved).

The joints may normally be disassembled in a similar manner, reversing the direction of the pull with the choker cable (Photo 4). It is also sometimes helpful to use rebating or wiggling deflection to aid in the disassembly of push-on joint pipes, particularly when pipes have been installed for some time prior to removal.

30"-64" Pipe



Photo 4

Large pipes are most often readily pushed or pulled together with heavy excavating/earthmoving equipment available on-site (see page 2-14). In cases where assembly of pipes by manpower is desired, AMERICAN can provide special assembly tools and rigging which can be used for assembling most pipes of all sizes (Photo 5). These tools consist of a heavy-duty roller chain hoist, a steel pipe-end hook and snatch block, and associated wire

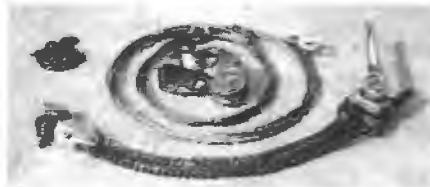


Photo 5

rope and chain tackle (Photo 5) to attach all the rigging together to effect "double line" assembly from the top of the pipe (Photo 6). The snatch block pulley and twin line rigging approximately doubles the assembly force



Photo 6

from the strong come-along, making possible the assembly of up to 64" full-length pipe joints from the top of the pipe (Photo 7).

Fittings and Short Pipes

Push-on fitting or



Photo 7

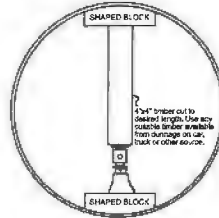
short pipe joint assembly is basically the same as that of standard length pipe, though special rigging may be necessary to hold these short items reasonably stable for assembly. See also Push-On Fittings Assembly Instructions in Section 4.

Field Rounding

Occasionally, field rounding of pipe ends may be necessary to accomplish assembly, particularly when large-diameter pipes are cut to be assembled into mechanical joints or couplings. Need for rounding in assembly of mechanical or stuffing-box-type joints can be predetermined by a difficulty in sliding the gland or end ring over the end of the pipe. Rounding may be accomplished in the following manner using a mechanical jack and shaped blocks. (Note: This procedure may also be used with the assemblies involving push-on joint pipe, fittings, valves, etc.; however, rounding is less frequently necessary for assembly of push-on joints.)



1. Measure/determine the minimum (minor) diameter of the ends to be rounded.
2. Place the jack and the shaped blocks in line with the minor diameter as shown in the attached sketch using a sound 4"x4" spacer timber cut square to the required length to take up the space.
3. Apply a load carefully with the jack only until the "minimum diameter equals the maximum diameter," or until the gland will easily slip over the end. No more jacking should be attempted or necessary - **DO NOT ATTEMPT TO PERMANENTLY ROUND END.**
4. After the joint is completely assembled and the bolts (if involved) are uniformly tightened to the required torque, carefully relax and remove the jack and timbers from the pipe.



Note: Field rounding operations should be conducted without backfill on any part of large-diameter pipes and prior to encasing any part of pipe in concrete. If the inside of the pipe cannot be accessed to remove jacking materials, pipe ends can alternatively be rounded using external clamping means.

AMERICAN Fastite® Joint Lubricant Requirement by Size of Pipe

Table No. 2-5



64" AMERICAN Fastite Joint pipe being installed in a wastewater application.

Pipe Size in.	Approx. Pounds of Lubricant per Joint	Approx. No. of Joints per Pound of Lubricant
4	.03	33
6	.045	22
8	.06	17
10	.07	14
12	.08	12
14	.09	11
16	.11	9
18	.12	8
20	.14	7
24	.17	6
30	.30	3
36	.36	3
42	.44	2
48	.50	2
54	.59	2
60	.66	1
64	.71	1

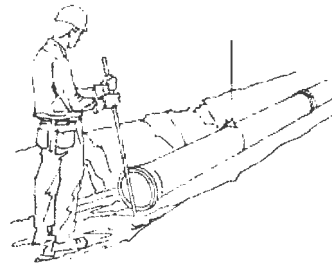


AMERICAN Fastite® Joint Common Assembly Methods

In seeking ways to take even greater advantage of the cost-reducing features of the Fastite Joint, utility contractors have developed other methods of assembling this joint without special tools. The following methods are described for the information of the user, who may elect to use them at his discretion, keeping in mind that these methods may not be effective for all installations and under all field conditions.

Spade or Crowbar Method

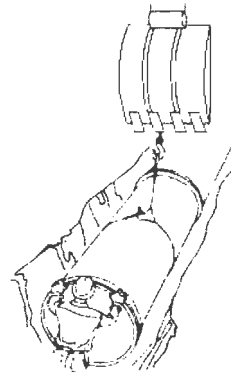
This is applicable to the smaller sizes of AMERICAN Fastite Joint Pipe, and consists of centering the lubricated end of the entering pipe in the gasket and then pushing against the bell face of the entering pipe with a spade or crowbar driven into the ground in front of the bell face. This method requires the trench bottom to be fairly firm soil. The method may not be effective in a rocky trench or with a trench that is soft, muddy or sandy. A wooden block between the bell face and the pry bar may increase the leverage. Easier assembly is effected if the pipe is suspended an inch or so off the bottom of the trench.



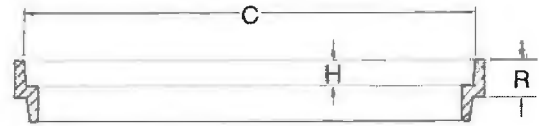
Spade or Crowbar Method

Backhoe and Heavy Equipment Methods

These methods are usually applicable to the intermediate and larger sizes of AMERICAN Fastite Joint Pipe where the bar method might not be effective. It consists of centering the end of the entering pipe in the gasket as the pipe to be assembled is suspended from the backhoe. Then it can be pulled into the adjoining socket with the pipe sling by moving the backhoe arm toward the previously assembled pipe. In other instances, the pipe may be assembled by placing the backhoe or other earth mover bucket or blade against the bell face of the entering pipe and pushing it into the socket. When pushing against the bell face, care should be taken to avoid very small contact areas and possible damage to the pipe bells or spigots. Wood cushions between the backhoe bucket and the pipe are particularly effective in preventing damage.



Backhoe and Heavy Equipment Methods



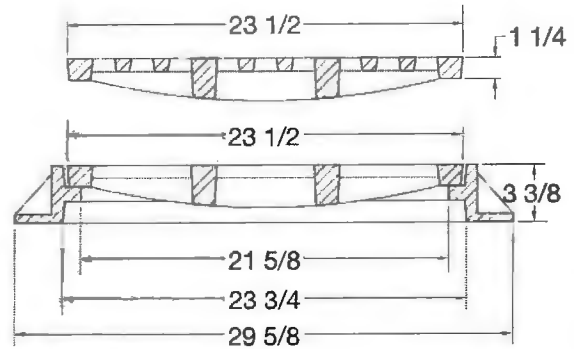
PRODUCT NO.	COVER DIAMETER C	COVER THICKNESS H	COVER RAISE R	SUITABLE FOR PRODUCT NO.
11615	16-1/4	7/8	1-1/2	11671
12321	23-3/4	1-1/2	2	12373
12312	23-3/4	1	1-1/4	12341, 12371, 12372
12315	23-3/4	1	1-1/2	
12317	23-3/4	1	1-3/4	
12320	23-3/4	1	2	
12325	23-3/4	1	2-1/2	
12330	23-3/4	1	3	
12340	23-3/4	1	4	
12360	23-3/4	1	6	
12215	24	1-1/4	1-1/2	12361
12322	24	1-1/4	2	
12230	24	1-1/4	3	
12240	24	1-1/4	4	
12260	24	1-1/4	6	
12415	24-1/4	1-3/8	1-1/2	12441, 12461, 12471, 12481, 12442, 12462, 12472, 12482
12420	24-1/4	1-3/8	2	
12525	25-5/8	2	2-1/2	12583, 12580
12615	26	1-3/8	1-1/2	12641, 12643, 12661, 12681, 12642, 12662, 12673, 12682, 12683, 12684, 12688
12620	26	1-3/8	2	
12616	26-1/4	1-1/8	1-1/2	12645, 12665, 12685, 12644, 12664, 12684
12621	26-1/4	1-1/8	2	
12720	27	1-1/2	2	12741, 12781, 12782
13220	31-7/8	1-3/4	2	13251, 13261, 13281, 13252, 13262, 13282

NOTES:

- Dimensions are approximate & in inches
- Gray Iron, Class 30B
- Conforms to ASTM A48 / A48M-03 specifications
- * Please specify if required in Class 35B or Ductile Iron



Heavy Duty, Reversible Type Frame, Slotted Grate



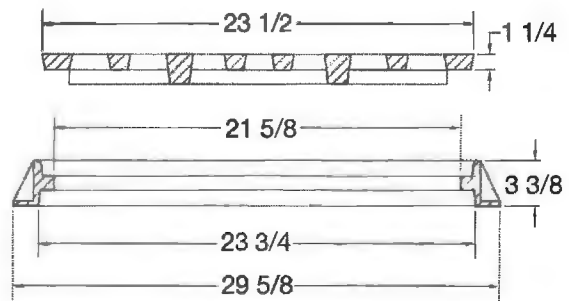
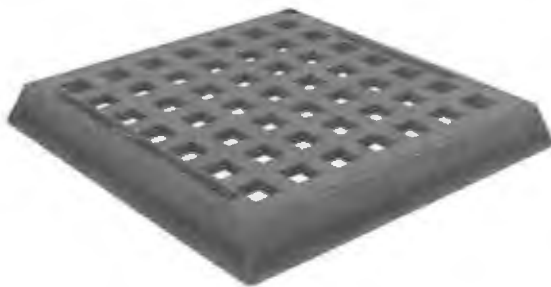
NOTES:

- Dimensions are approximate & in inches
- Gray Iron, Class 30B
- Conforms to ASTM A48 / A48M-03 specifications
- * Please specify if required in Class 35B or Ductile Iron

PRODUCT NO.

22433

Heavy Duty, Reversible Type Frame, Square Hole Grate



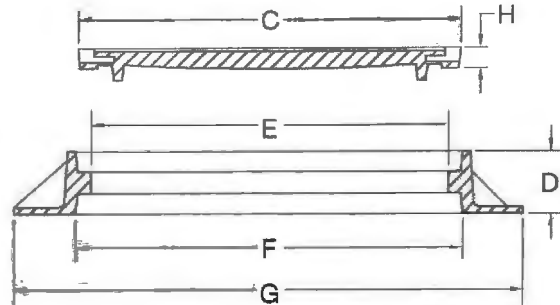
NOTES:

- Dimensions are approximate & in inches
- Gray Iron, Class 30B
- Conforms to ASTM A48 / A48M-03 specifications
- * Please specify if required in Class 35B or Ductile Iron

PRODUCT NO.

22434



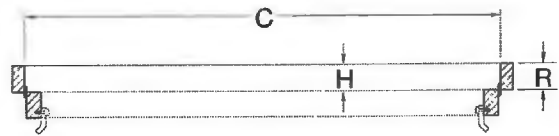


PRODUCT NO.	COVER DIAMETER C	FRAME HEIGHT D	CLEAR OPENING E	FLANGE ID F	FLANGE CD G	COVER THICKNESS H
11861	17-7/8	6	16-1/2	18-1/4	26	1
12061	20	6	18-1/2	20-3/8	28	1-1/4
12441	24	4	22-3/8	24-1/4	32	1-3/8
12461	24	6	22-3/8	24	34	1-3/8
12471	24	7	22-1/2	24-7/16	34	1-3/8
12481	24	8	22-3/8	24-5/8	34	1-3/8
12641	25-3/4	4	24	26	34	1-3/8
12661	25-3/4	6	24	26-5/8	34	1-3/8
12681	25-3/4	8	24	27	34-1/2	1-3/8
12640	26	4	24-1/4	26-1/2	34-1/4	1-1/8
12660	26	6	24-1/4	26-1/2	34-1/4	1-1/8
12680	26	8-1/8	24-1/4	26-1/2	34-1/4	1-1/8
12741	26-3/4	4	24	27	39	1-1/2
12782	26-3/4	8	24	27	39	1-1/2
13251	31-5/8	4	30	32-1/2	39	1-3/4
13261	31-5/8	6	30	32-1/2	39	1-3/4
13281	31-5/8	8	30	32-1/2	39	1-3/4
13241	32	4	30-1/4	32 1/4	36	1-1/2
13271	32	6-1/2	30	32	43	1-1/2
13641	37-3/4	4	36	38	48	1-1/2
13661	37-3/4	6	36	38	48	1-1/2
13681	37-3/4	8	36	38	48	1-1/2

NOTES:

- Dimensions are approximate & in inches
- Gray Iron, Class 30B
- Conforms to ASTM A48 / A48M-03 specifications
 - * Please specify if required in Class 35B or Ductile Iron
- Markings: Plain, Communication, Drain, Electric, Sanitary Sewer, Sewer, Storm, Storm Drain, Storm Sewer, Telephone, Water
 - * Custom markings / logos available upon request





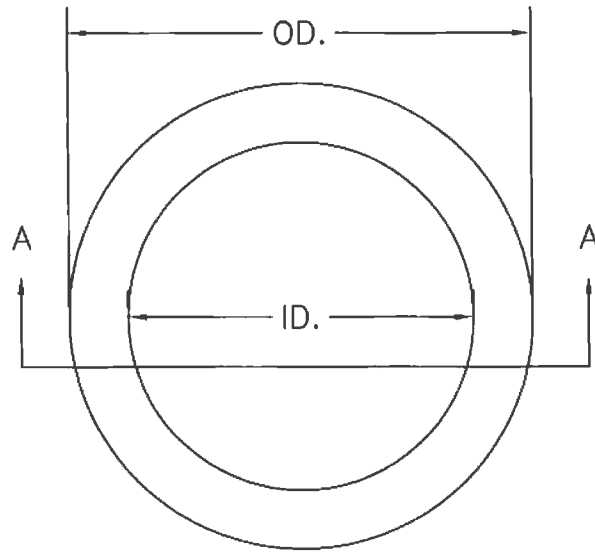
PRODUCT NO.	COVER DIAMETER	COVER THICKNESS	COVER RAISE	SUITABLE FOR PRODUCT NO.
	C	H	R	
SAR2410	24 to 24-1/2	1-3/8	1	12441, 12461, 12471, 12481, 12442, 12462, 12472, 12482, 12448
SAR2415	24 to 24-1/2	1-3/8	1-1/2	
SAR2420	24 to 24-1/2	1-3/8	2	
SAR2611	26 to 26-1/2	1-1/8	1	12645, 12665, 12685, 12644, 12664, 12684
SAR2616	26 to 26-1/2	1-1/8	1-1/2	
SAR2621	26 to 26-1/2	1-1/8	2	
SAR3210	31-5/8 to 32-1/8	1-3/4	1	13251, 13261, 13281, 13252, 13262, 13282
SAR3215	31-5/8 to 32-1/8	1-3/4	1-1/2	
SAR3220	31-5/8 to 32-1/8	1-3/4	2	
SAR3209	32 to 32-1/2	1-1/2	1	13241, 13242, 13271, 13272
SAR3214	32 to 32-1/2	1-1/2	1-1/2	
SAR3219	32 to 32-1/2	1-1/2	2	

NOTES:

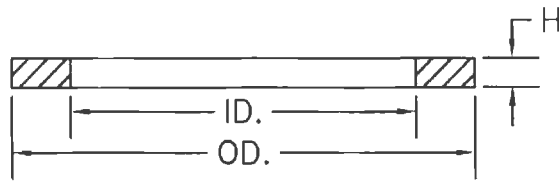
- Dimensions are approximate & in inches
- Steel
- Conforms to ASTM A36 specifications



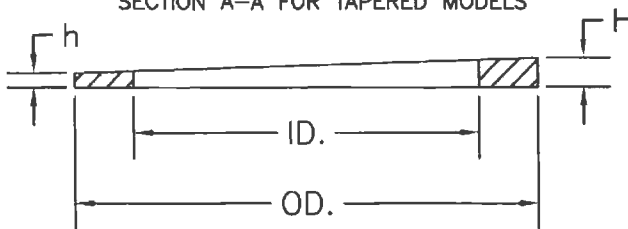
Infra-Riser - Circular



SECTION A-A FOR FLAT MODELS



SECTION A-A FOR TAPERED MODELS



AVAILABLE SIZES:

DIAMETERS:	ID.	OD.
	24.25(616MM)	31.75(806MM)
	24.00(610MM)	34.00(864MM)
	24.00(610MM)	36.00(914MM)
	26.00(660MM)	36.00(914MM)
	28.25(718MM)	41.00(1041MM)
	30.25(768MM)	40.00(1016MM)
	38.00(965MM)	46.00(1168MM)
	38.00(965MM)	49.00(1244MM)

FLAT: THICKNESS

H= .25(6MM)
H= .50(12MM)
H= 1.00(25MM)
H= 1.50(38MM)
H= 2.00(51MM)
H= 2.50(64MM)
H= 3.00(76MM)

TAPERED: THICKNESS

H= .50(12MM)	h= 1.00(25MM)
H= 1.00(25MM)	h= 1.50(38MM)
H= 1.50(38MM)	h= 2.00(51MM)
H= 2.00(51MM)	h= 2.50(64MM)
H= 2.50(64MM)	h= 3.00(76MM)

PRODUCT SPECIFICATIONS:

1. MATERIAL COMPOSITE OF RECYCLED RUBBER, NYLON FIBER AND POLYURETHANE PREPOLYMER
2. COLOR: BLACK
3. SHORE HARDNESS 75A +/- 7 POINTS
4. TENSILE STRENGTH MINIMUM 1.0 MPa
5. INITIAL COMPRESSION DEFORMATION 2.9%
6. COMPRESSION SET 1.5%
7. BRITTLENESS AT LOW TEMPERATURE -40 C
8. COEFFICIENT OF THERMAL EXPANSION 12.95 X 10⁻⁵

Product Number

IR-C

Design Features

- Materials See Notes
- Design Load Traffic
- Open Area N/A
- Coating None
- ✓ Designates Machined Surface

Certification

- Material Certification
- Product Certification
- Additional Certification
- Country of Origin: USA

Drawing Revision

03/16/2012 Designer: BDD
XX/XX/XXX Revised By: Designer

Disclaimer

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ Group, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know-how that is the property of EJ Group, Inc. Copyright © 2011 EJ Group, Inc. All rights reserved.

Contact

800 626 4653
ejco.com

2043 .EFMWFE	EF MACH RNTL WK	-2
2043 MJSTLA12U	12X6 MJ C153 SWVL TEE L/A	-1
2043 M7475368EF	LF 5/8 COUP XXS LD COMP X 3/4 MIP	-10
2043 M747582267FE	LF 3/4X5/8 CTS X XS LEAD COUP	-10
2043 M74758U3	LF 3/4 CAMB COUP 0.735 - 1.135	-1
2043 R202090561	8X1-1/2 CC DBL STRP SDL 8.63-9.05	-1
2043 MUL067486	6X4 PVC HW SWR GXG RED COUP	-1
2043 MUL040955	8 PVC SWR SPGT X FPT CO ADPT	-1

Whse	PID	ALT.1	DESCRIPTION	LOCATION	ALT LOC	StagingLocs	ON HAND	AVAIL	ON.PO	ON.ORD	DEMAND	ST
2043	1948928	.EFMWFE	EF MACH RNTL WK				-2	-2		0		SP
2043	965156	A0832AA	8 COR HDPE SNAP END CAP				2	2	0	0		0 T
2043	689232	A2467AA	24 COR HDPE SPLT END CAP	WH06			1	1	0	0		0 T
2043	9295615	ACFDB5504X06	4X6 FT 8OZ DIRTBAG W/ 6 NECK	ACF			8	8	0	0		1
2043	9323660	ACFDB5510X15	10X15 FT 8OZ DIRTBAG W/ 6 NECK	ACF			5	5	0	0		0
2043	9295637	ACFDB5515X15	15X15 FT 8OZ DIRTBAG W/ 6 NECK	ACF			5	5	0	0		0
2043	9604623	ACFECORASTE40	ECORASTER E40 PERMEABLE GRND REINF	ACF			660	660	0	0		0
2043	9579381	ACFECORASTE50	13X13X2 E50 PERM PVR	ACF			516	516	0	0		0
2043	9295781	ACFFTB185050	5X50 FT TY 1 DOT TURBIDITY BARR	ACF			2	2	0	0		0
2043	9323797	ACFGEOSNDBG1	*EXC 14X26 WHIT SAND BAG 100 / BNDL	ACF			100	100	0	0	200	T
2043	10079969	ACFSSH2X2Y	2X2 FT SILTSACK HF YELL	ACF			30	30	0	0		0
2043	7199120	AFT52P12ZN	12 CL52 CL DI Z/PLT FASTITE PIPE				40	0	0	0		SP
2043	2171760	C273888	ECON-O STL BARL TEST PUMP W/ GA	XCTR04			2	2	0	0		0
2043	10049074	C3155D3G14AG0DU9	T/O GLENNVILLE 5-6 BURY SPEC EDDY *X	GLENNVILLE HYD			5	0		5		0
2043	4831516	C3155DDE54FJ004	5-1/4 VO HYD 5"6 OR SCOTIA NY	SCOTIA HYD			1	1		0		0
2043	1206361	CI0800097	SQ OPERATING NUT 8 GATE VLV				1	1	0	0		6 T
2043	2400817	DBFP	DOM 4 DI C110 125# BLND FLG	WH20			1	1	0	0		0 T
2043	2402767	DF9PCX	DOM 8 FLG 90 C110 BEND PC				2	2	0	0		0 T
2043	89930	DI52SJP10	10 CL52 DI SJ PIPE	YARDASDIP			18	18	0	0		0 T
2043	89916	DI52SJPP	4 CL52 DI SJ PIPE	YARDASDIP			216	0	0	216		3.6 T
2043	2401228	DMJTLAUM	DOM 6X3 MJ C153 TEE L/A	WH21			1	1		0		0
2043	2401095	DTAPBFPCPK	4X2 DI C110 TAP BLND FLG PCDOM	WH20			1	1	0	0		0 T
2043	3041421	F105633RC	3 CI PVC X 3 CI PVC COUP RC	WH32			2	2	0	0		0
2043	1292254	F2PCX	8 FLG 22-1/2 C110 BEND PC				2	0	0	0		0 T
2043	1292251	F4PCX	8 FLG 45 C110 BEND PC	FLANGE FTG			4	4	0	0		0 T
2043	1292243	F9PC12	12 FLG 90 C110 BEND PC	FLANGE FTG			1	1	0	0		0 T
2043	7109896	FEIBUCKET	5G BCKT FERGUSON LOGO GRAD	XCTR11			6	6	0	0		T
2043	7849599	FNW340NAEG	1 PVC EPDM T/U BV				1	1	0	0		0.2
2043	7781674	FNW751X	8 DI 150# FLG UL FM OS&Y GATE VLV				1	0	0	1		0.5 T
2043	1292216	FTPC10X	10X8 FLG C110 TEE PC	FLANGE FTG			1	1	0	0		SP
2043	1446423	G36701W	2-1/2 INNER SERV BX REP WTR LID	WH45			6	6	0	0		1 T
2043	7484532	G43714	PACI BLUE ULTRA GENTLE FOAM SOAP				1	0	0	1		
2043	3924733	HMPVU	6 MJ PLUG VLV				1	0		1		SP
2043	1855153	J230121060	12 SS INS F/ HDPE DIPS SDR11				2	0		2		SP
2043	8133879	KKCJXH30	SAF KLEVER XCHANGE REP HD				1	1	0	0		0
2043	8133878	KPLS300XC30	SAF KLEVER XCHANGE WIDE CUT				1	1	0	0		0
2043	4834316	M194932	OIL PLUG	WH33			6	6	0	0		SP
2043	8460999	M2004HZL	C I II III D 1 SPOT/ FLD HDLP	XCTR07			2	2	0	0		0
2043	9415472	M2010R	RECHRG 250L PENLGH T W/ LASER	XCTR07			2	2	0	0		0
2043	7740354	M211321	USB PVT FLSHLT	XCTR07			2	2	0	0		0
2043	7740393	M211421	USB ROVER PVT FLOOD LGHT	XCTR07			2	2	0	0		0
2043	8051626	M211621	USB RECHRG BEACON HARD HAD LGHT	XCTR07			2	2	0	0		0
2043	9200339	M216021	USB RECHRG 800L COMP FLSHLT	XCTR07			4	4	0	0		0
2043	9200343	M216121	USB RECHRG 1100L TWST FOCUS FLSHLT	XCTR07			2	2	0	0		0
2043	9929661	M276722R	M18 FUEL HTIW W/ FRICTION RING KIT	XCTR03			2	2	0	0		0.3

OHB and no Loc

Whse	PID	ALT.1	DESCRIPTION	LOCATION	ALT LOC	StagingLocs	ON HAND
2043	932061	A1810NP	18 COR N12 HDPE FLR END SECT				2
2043	7199120	AFT52P12ZN	12 CL52 CL DI Z/PLT FASTITE PIPE				40
2043	1068144	CF6100LA12OR	12 MJ RW OR GATE VLV L/A				1
2043	143588	CF6100LAXOR	8 MJ RW OR GATE VLV L/A				1
2043	1206361	CI0800097	SQ OPERATING NUT 8 GATE VLV				1
2043	2402767	DF9PCX	DOM 8 FLG 90 C110 BEND PC				2
2043	1292254	F2PCX	8 FLG 22-1/2 C110 BEND PC				2
2043	7849599	FNW340NAEG	1 PVC EPDM T/U BV				1
2043	7484532	G43714	PACI BLUE ULTRA GENTLE FOAM SOAP				1
2043	3924733	HMPVU	6 MJ PLUG VLV				1
2043	1855153	J230121060	12 SS INS F/ HDPE DIPS SDR11				2
2043	8133879	KKCJXH30	SAF KLEVER XCHANGE REP HD				1
2043	8133878	KPLS300XC30	SAF KLEVER XCHANGE WIDE CUT				1
2043	310777	MUL040955	8 PVC SWR SPGT X FPT CO ADPT				-1
2043	8702367	MUL340945	8 PVC SWR HUB FEM CO ADPT				1
2043	1915197	R202090561	8X1-1/2 CC DBL STRP SDL 8.63-9.05				-1
2043	SP144161	SP-M747582268DF	LF 1/2X3/4 CTS X XXS LEAD COUP				5



Village of Saranac Lake

39 Main Street, Suite 9
Saranac Lake, NY 12983
Phone (518) 891-4150
Fax (518) 891-5928
www.saranaclakeny.gov

INVITATION TO BID

SEALED BIDS ARE HEREBY SOLICITED UNDER SECTION 103 OF THE GENERAL MUNICIPAL LAW BY THE VILLAGE BOARD OF THE VILLAGE OF SARANAC LAKE

FOR THE FOLLOWING: "STOCK PARTS".

- 1 - Bids are to be addressed to the Village Clerk and the SEALED ENVELOPE SHOULD BE PLAINLY MARKED WITH THE NAME OF THE ITEM TO BE BID AND THE DATE OF THE BID OPENING.
- 2 - Bids must be detailed categorically in the same order as specification to facilitate reading and study.
- 3 - The bidder must be a duly authorized representative of the company he represents for a period of at least one year.
- 4 - If the bidder proposes to modify a product or service as to make it conform to the requirements of the Invitation for Bids, he shall (a) include in his bid a clear description of such proposed modifications, and (b) clearly mark any descriptive material to show the proposed modifications.
- 5 - Modifications proposed after bid opening to make a product or service conform to the specifications will not be considered.
- 6 - A non-collusion statement must accompany the bid(s).
- 7 - The Village reserves the right to reject, in its sole discretion, any apparent low bid on the ground that the bidder is not a responsible bidder, based on objective criteria, including but not limited to proper capabilities, experience, equipment, qualifications and other factors.
- 8 - The Village reserves the right to reject any and all bids if, in its' opinion, such action is in the best interest of The Village.
- 9 - All items in the following specifications shall be deemed to include the words "or approved equal". The bidder must submit with bid, detailed specifications, circulars, and all necessary data on supplies, and services he proposes to furnish. If supplies or services offered differ from the provisions contained in this specification, such differences must be explained in detail, and bid will receive careful consideration that such deviations do not depart from the

intent of these specifications and are to the best interests of the Village Board. Distributors MUST be a certified Mueller dealer. **Anyone who bids this project MUST be an authorized Mueller Distributer.**

All federal and state taxes will be excluded. Tax exemption certificates will be furnished to the successful bidder.

Description of the Items is as follows:

Item #1 is for the price per each for a **Mueller 4” Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #2 is for the price per each for a **Mueller 6” Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #3 is for the price per each for a **Mueller 8” Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #4 is for the price per each for a **Mueller 10” Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #5 is for the price per each for a **Mueller 12” Ductile Iron Gate Valve Open Left** delivered to our facility in Saranac Lake.

Item #6 is for the price per each for a **2 Piece Telescopic Valve box with cover** delivered to our facility in Saranac Lake.

Item #7 is for the price per each for a **4” Alpha Romac Coupling** deliver to our facility in Saranac Lake

Item #8 is for the price per each for a **8” Alpha Romac Coupling** delivered to our facility in Saranac Lake.

Item #9 is for the price per each for a **10” Alpha Romac Coupling** delivered to our facility in Saranac Lake.

Item #10 is for the price per each for a **12” Alpha Romac Coupling** delivered to our facility in Saranac lake.

Item #11 is for the price per each for a **12” Stainless Steel Full Circle Repair Clamp 12” in length** delivered to our facility in Saranac Lake.

Item #12 is for the price per each for **1” Type K Copper (100’ Rolls)** delivered to our facility in Saranac Lake.

Item #13 is for the price per each for a **5-6 foot Telescopic Curb Box w/Rod (erie box)** delivered to our facility in Saranac Lake.

Item #14 is for the price per each for a **Mueller Centurion Fire Hydrant, 5'-6" bury depth and left hand open** delivered to our facility in Saranac Lake.

Item #15 is for the price per each for a **12" Mueller Centurion Hydrant Riser with hardware** delivered to our facility in Saranac Lake.

Item #16 is for the price per each for a **6" Mueller Centurion Hydrant Riser with hardware** delivered to our facility in Saranac Lake.

Item #17 is for the price per linear foot of **8" Class 52 Ductile Iron Pipe** delivered to our facility in Saranac Lake.

Item #18 is for the price per linear foot of **6" SDR 26/35 PVC PIPE** delivered to our facility in Saranac Lake.

Item #19 is for the price per linear foot of **12" SDR 26/35 PVC Pipe** delivered to our facility in Saranac Lake.

Item #20 is for the price per each for a **32"x4" Manhole Frame and Cover** delivered to our facility in Saranac Lake.

Item #21 is for the price per each for a **26'x4' Manhole Frame and Cover** delivered to our facility in Saranac Lake.

Item #22 is for the price per each for a **32"x1" Manhole Riser** delivered to our facility in Saranac Lake.

Item #23 is for the price per each for a **32"x1.5" Manhole Riser** delivered to our facility in Saranac Lake.

Item #24 is for the price per each for a **32"x2" Manhole Riser** delivered to our facility in Saranac Lake

Item #25 is for the price per each for a **26"x1" Manhole Riser** delivered to our facility in Saranac Lake

Item #26 is for the price per each for a **26"x1.5" Manhole Riser** delivered to our facility in Saranac Lake

Item # 27 is for the price per each for a **26"x2" Manhole Riser** delivered to our facility in Saranac Lake

Item #28 is for the price per each for a **32"x2" HDPE Manhole Grade Ring** Delivered to our facility in Saranac Lake.

Item #29 is for the price per each for a **32"x4" HDPE Manhole Grade Ring** Delivered to our facility in Saranac Lake.

Item #30 is for the price per each for a **32"x6" HDPE Manhole Grade Ring** Delivered to our facility in Saranac Lake.

Item #31 is for the price per each for a **24"x24"x4" Storm Water Frame and Grate** Delivered to our Facility in Saranac Lake.

Item #32 is for the price per each for a **36"x36"x2" HDPE Catch Basin Grade Ring** Delivered to our Facility in Saranac Lake.

Item #33 is for the price per each for a **36"x36"x4" HDPE Catch Basin Grade Ring** Delivered to our Facility in Saranac Lake.

Item #34 is for the price per each for a **36"x36"x6" HDPE Catch Basin Grade Ring** Delivered to our Facility in Saranac Lake.

ITEM NUMBER	ESTIMATED QUANTITY	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE	AMOUNT BID
1	4	4" MUELLER GATE VALVE PER E.A	\$ 887 ⁰⁰	\$ 3548 ⁰⁰
2	4	6" MUELLER GATE VALVE PER E.A	\$ 1130 ⁰⁰	\$ 4520 ⁰⁰
3	10	8" Mueller Gate Valve PER E.A	\$ 1802 ⁰⁰	\$ 18020 ⁰⁰
4	8	10" MUELLER GATE VAVLE PER E.A	\$ 2809 ⁰⁰	\$ 22,472 ⁰⁰
5	8	12" MUELLER GATE VAVLE PER E.A	\$ 3553 ⁰⁰	\$ 28,440 ⁰⁰
6	20	TELESCOPIC Valve Box with cover PER E.A	\$ 169 ⁰⁰	\$ 3,380 ⁰⁰
7	4	4" ALPHA ROMAC COUPLING PER E.A	\$ 459 ⁰⁰	\$ 1836 ⁰⁰
8	4	8" ALPHAA ROMAC COUPLING PER E.A	\$ 809 ⁰⁰	\$ 3236 ⁰⁰
9	4	10" ALPHA ROMAC COUPLING PER E.A	\$ 1009 ⁰⁰	\$ 4036 ⁰⁰
10	2	12" ALPHA ROMAC COUPLING PER E.A	\$ 1189 ⁰⁰	\$ 2378 ⁰⁰
11	2	12" STAINLESS STEEL REPAIR CLAMP PER E.A	\$ 479 ⁰⁰	\$ 958 ⁰⁰
12	4	1" TYPE K COPPER 100' ROLLS PER E.A	\$ 809 ⁰⁰	\$ 3236 ⁰⁰

13	20	TELESCOPIC CURB BOX W/ROD PER E.A.	* 67 ⁰⁰	* 1340 ⁰⁰
14	7	5'-6" BURY MUELLER HYDRANT PER E.A.	* 3939 ⁰⁰	* 27,573 ⁰⁰
15	4	12" MUELLER HYDRANT RISER PER E.A.	* 929 ⁰⁰	* 3,716 ⁰⁰
16	4	6" MUELLER HYDRANT RISER PER E.A.	* 789 ⁰⁰	* 3,156 ⁰⁰
17	1596	8" CLASS 52 DUCTILE IRON PIPE PER L.F.	* 40.16	* 64,095.36
18	140	6" SDR 26/32 PVC PIPE PER L.F.	* 8.32	* 1,164.80
19	84	12" SDR 26/32 PVC PIPE PER L.F.	* 33.66	* 2,827.44
20	10	32"x4" MANHOLE FRAME AND COVER PER E.A.	* 419 ⁰⁰	* 4,190 ⁰⁰
21	10	26"x4" MANHOLE FRAME AND COVER PER E.A.	* 309 ⁰⁰	* 3,090 ⁰⁰
22	25	32"x1" Manhole Riser. PER E.A.	* 169 ⁰⁰	* 4,225 ⁰⁰
23	25	32"x1.5" Manhole Riser PER E.A.	* 129 ⁰⁰	* 4,475 ⁰⁰
24	25	32"x2" Manhole Riser PER E.A.	* 192 ⁰⁰	* 4,800 ⁰⁰
25	25	26"x1" Manhole Riser Per E.A.	* 125 ⁰⁰	* 3,125 ⁰⁰
26	25	26"x1.5" Manhole Riser PER E.A.	* 79 ⁰⁰	* 1,975 ⁰⁰
27	25	26"x2" Manhole Riser PER E.A.	* 85 ⁰⁰	* 2,125 ⁰⁰
28	25	32"x2" Grade Ring PER E.A.		
29	25	32"x4" Grade Ring PER E.A.		
30	25	32"x6" Grade Ring PER E.A.		
31	8	24"x24"x4" Frame and Grate PER E.A.		
32	25	36"x36"x2" Grade Ring		
33	25	36"x36"x4" Grade Ring		
34	25	36"x36"x6" Grade Ring		
		Total Bid Amount		* 229,853.60

Alternate #1 is for the price per each for a Kennedy Guardian K81-D Fire Hydrant Delivered to our facility in Saranac Lake.

ITEM NUMBER	ESTIMATED QUANTITY	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT BID PRICE	AMOUNT BID
1	7	Kennedy K81-D Fire Hydrant PER E.A	\$ 3,909 ⁰⁰	\$ 27,363 ⁰⁰
		Total bid Amount		27,363.00

THE VILLAGE OF SARANAC LAKE RESERVES THE RIGHT TO INCREASE OR DECREASE THE QUANTITY AS DEEMED NECESSARY WITHOUT AN INCREASE TO THE UNIT BID PRICE.

SEALED BIDS TO BE OPENED AT 2:30 PM ON WEDNESDAY JUNE 21st, 2023 IN THE BOARD ROOM OF THE VILLAGE OFFICE AT 39 MAIN STREET, 2ND FLOOR SUITE 9, SARANAC LAKE, NY 12983

Published: 6/12/23

Name of bidder: Core - Main LP

Address: 14 Arch Street

Watkins, N.Y. 12189

Trishy Butler

Trishy Butler
Ops Manager

TO THE BOARD OF TRUSTEES, VILLAGE OF SARANAC LAKE, NEW YORK

NON-COLLUSIVE BIDDING CERTIFICATION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party hereto certifies as to its own organization under penalty of perjury, that to the best of his knowledge and belief:

- 1 - The prices in this bid have been arrived at independently without collusion, consultation, communications, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other bidder or competitor.
- 2 - Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
- 3 - No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

WE, THE UNDERSIGNED, PROPOSE TO FURNISH ALL MATERIALS CALLED FOR IN FULL ACCORDANCE WITH THE SPECIFICATIONS AND INSTRUCTIONS IN THE ATTACHED BID, OR PROPOSAL, AND AGREE TO ALL CONDITIONS THEREIN.

FIRM: Core + Main LP

ADDRESS: 64 Arch Street
Watervliet, NY
12189

PHONE NUMBER: 518-273-6300

SIGNED BY: Timothy Butler

TITLE Timothy Butler
Ops Manager