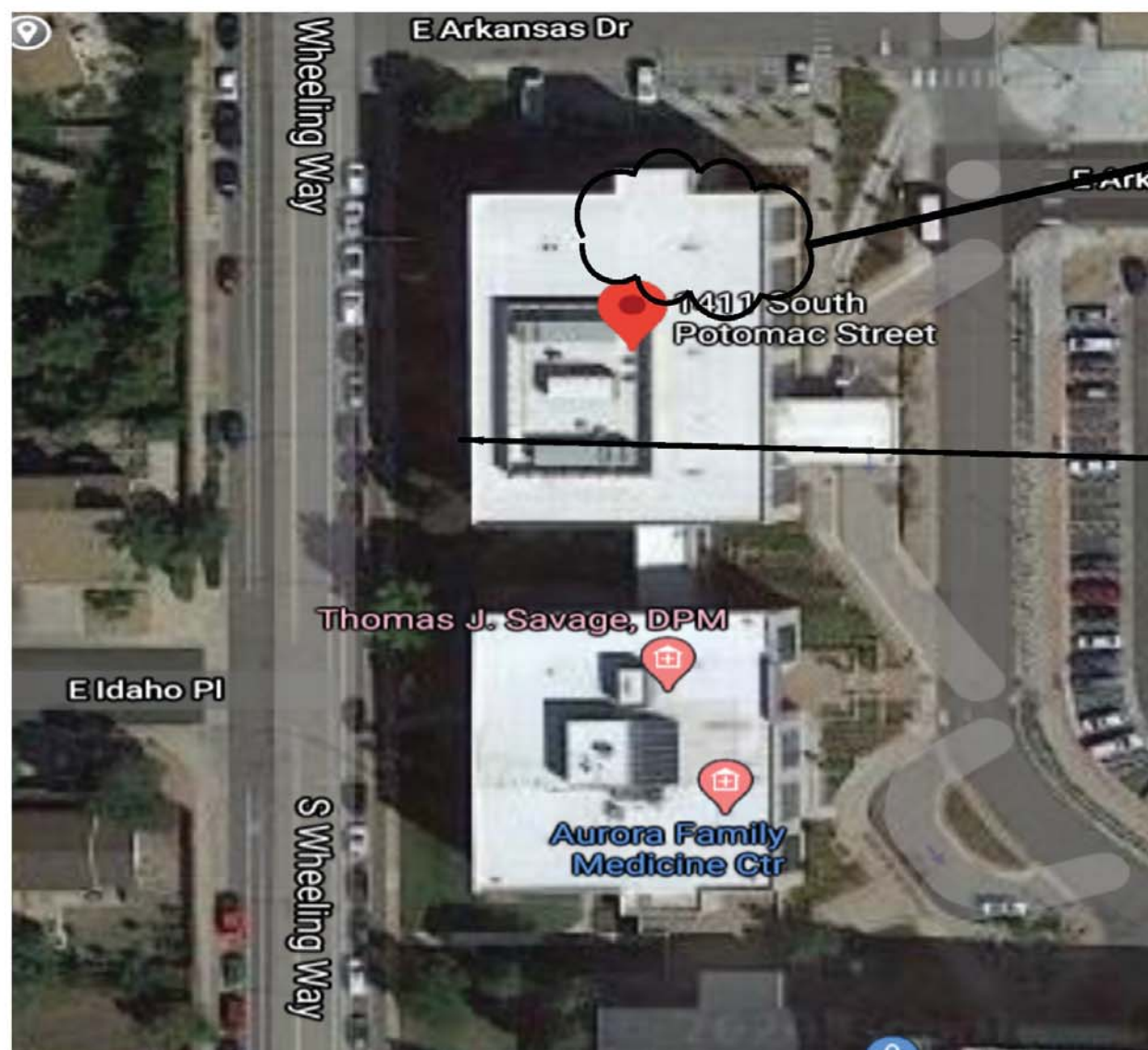


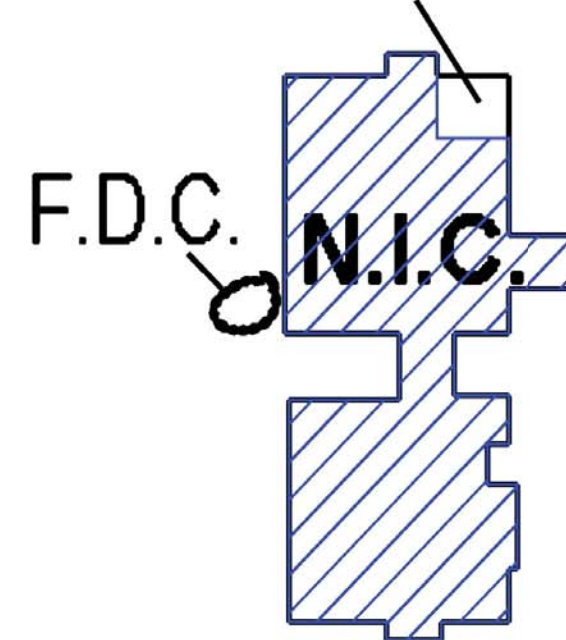
# FIRE PROTECTION REMODEL PLAN

CORRUGATED METAL STRUCTURE: 12'-6" AFF  
PIPE: 11'-0" AFF



## AREA OF WORK

## AREA OF WORK



## SITE MAP



## VICINITY MAP

[illegible]

Voice: (303) 366-4905 Fax: (303) 366-4966  
Email: office@arapahofire.com Colorado State Registration #20-S-00034

## SPEC. SUITE 140

**1411 S. POTOMAC ST. #140  
AURORA, CO 80012**

<b>FIRE SPRINKLER REMODEL PLAN</b>	
CONTRACT NO.	64
DESIGNED BY	EE
SUBMIT REVIEW BY	JS
FAB. REVIEW BY	
SCALE	1/4" = 1'-0"
DATE	07FEB20
REVISED PLOTTER 2/7/20	FP1 OF 1



# MATERIAL SUBMITTAL



**FOR  
SPEC SUITE 140  
@ MCA  
1411 S. POTOMAC ST. #140  
AURORA, CO 80012**

**JOB# 64**

**EMANUEL EVERETT**

# FireLock™ V38, K5.6

## Models V3801, V3802



V3801 and V3802

### 1.0 PRODUCT DESCRIPTION

**Models:** V3801 and V3802

**Style:** Adjustable Concealed, Ordinary Hazard and Light Hazard

**K Factor:** 5.6 Imp./8.1 S.I.<sup>1</sup>

**Nominal Thread Size:** ½" NPT/15 mm BSPT

**Max. Working Pressure:** 175 psi/1207 kPa/12 bar

**Factory Hydrostatic Test:** 100% @ 500 psi/3447 kPa/34 bar

**Min. Operating Pressure:** 7 psi/48 kPa/0.5 bar

**Temperature Rating:** See chart in section 2.0

<sup>1</sup> For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0.

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	

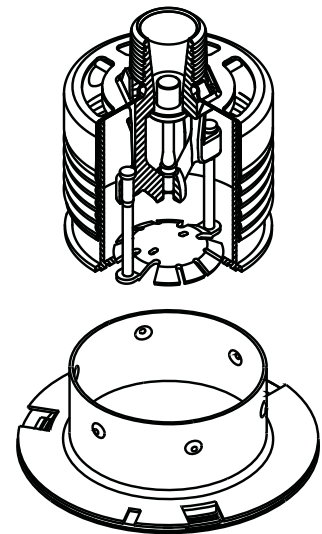
**2.0 CERTIFICATION/LISTINGS****Approvals/Listings**

Approvals/Listings	Model	
	V3801	V3802
Orifice Size (inches)	½"	½"
Orifice Size (mm)	13	13
Nominal K Factor Imperial	5.6	5.6
Nominal K Factor Metric S.I. <sup>2</sup>	8.1	8.1
Response	Standard 5 mm bulb	Quick <sup>3</sup> 3 mm bulb
Deflector Type	Concealed Pendent	Concealed Pendent
Adjustment	½"/13 mm	½"/13 mm

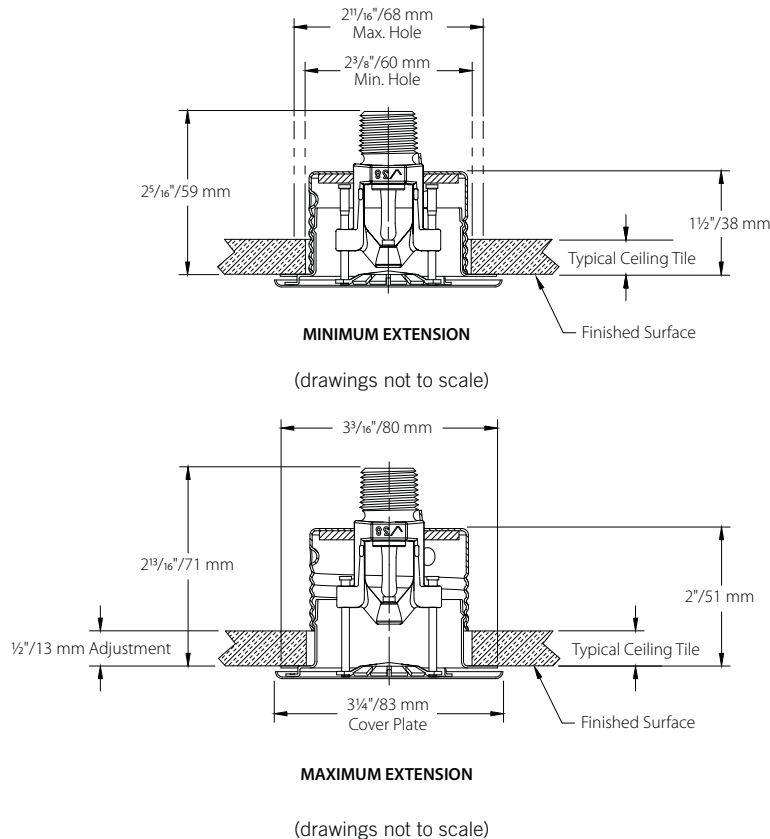
Approved Temperature Ratings	F°/C°	
cULus	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C
FM <sup>3</sup>	NONE	155°F/68°C 175°F/79°C 200°F/93°C
NYC/MEA <sup>3</sup> #62-99-E	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C
CSFM <sup>3</sup> #7690-0531:112	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C
LPCB	155°F/68°C Sprinkler/138°F/59°C Cover 175°F/79°C Sprinkler/165°F/74°C Cover 200°F/93°C Sprinkler/165°F/74°C Cover	155°F/68°C Sprinkler/138°F/59°C Cover 175°F/79°C Sprinkler/165°F/74°C Cover 200°F/93°C Sprinkler/165°F/74°C Cover
VNIPO	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C
CCC	ZSTDY 155°F/68°C	K ZSTDY 155°F/68°C 200°F/93°C

<sup>2</sup> For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0.<sup>3</sup> Recognized by FM as standard response only.**NOTE**

- Listings and approvals as of printing. All are approved open.

**3.0 SPECIFICATIONS – MATERIAL****Deflector:** Bronze**Cover Plate:** Fusible solder**Bulb:** Glass with glycerin solution**Bulb Nominal Diameter:**☐ Standard: 5,0 mm☐ Quick Response: 3,0 mm**Load Screw:** Bronze**Pip Cap:** Bronze**Spring:** Beryllium Nickel**Seal:** Teflon<sup>4</sup> tape**Frame:** Brass**Pins:** Stainless steel**Cup:** Cold rolled steel, zinc chrome plated**Cover/Escutcheon:** Brass**Lodgement Spring:** Stainless steel**Protective Cap:** Polyethylene**Installation Wrench:**☐ Concealed: V38-4 or V38-5**Sprinkler Finishes:**☐ Plain Brass (only)**Cover Finishes:**☐ Chrome Plated☐ White painted<sup>5</sup>☐ Flat Black Painted<sup>5</sup>☐ Custom Painted<sup>5</sup><sup>4</sup> Teflon is a registered trademark of Dupont Co.<sup>5</sup> UL Listed for corrosion resistance.

## 4.0 DIMENSIONS



## 5.0 PERFORMANCE

Sprinkler is to be installed and designed as per NFPA, FM Datasheets, or any local standards.

## 6.0 NOTIFICATIONS

⚠ WARNING	
	<ul style="list-style-type: none"> <li>Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.</li> </ul>
	<ul style="list-style-type: none"> <li>Always wear safety glasses and foot protection.</li> </ul>
	<ul style="list-style-type: none"> <li>Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.</li> <li>Installation rules, especially those governing obstruction, must be strictly followed.</li> <li>Painting, plating, or any re-coating of sprinklers (other than that supplied by Victaulic) is not allowed.</li> </ul> <p>Failure to follow these instructions could result in serious personal injury and/or property damage.</p> <p>The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to the current National Fire Protection Association pamphlet that describes care and maintenance of sprinkler systems. In addition, the authority having jurisdiction may have additional maintenance, testing, and inspection requirements that must be followed.</p> <p>If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic World Headquarters: P.O. Box 31, Easton, Pennsylvania 18044-0031 USA, Telephone: 001-610-559-3300.</p>

**7.0 REFERENCE MATERIALS****Ratings:**

All glass bulbs are rated for temperatures from –67°F (–55°C) up to those shown in table below.

Sprinkler  Temperature Classification	Sprinkler – V3801, V3802				Cover – V38		
	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color	Victaulic Part Identification	Temperature – °F/°C	
		Nominal Temperature Rating	Maximum Ambient Temperature Allowed			Nominal Temperature Rating	Maximum Ambient Temperature Allowed
Ordinary	A	135°F/57°C	100°F/38°C	Orange	A <sup>6</sup>	135°F/57°C	100°F/38°C
Ordinary	C	155°F/68°C	100°F/38°C	Red	D <sup>7</sup>	165°F/74°C	150°F/65°C
Intermediate	E	175°F/79°C	150°F/65°C	Yellow			
Intermediate	F	200°F/93°C	150°F/65°C	Green			
High	J	286°F/141°C	225°F/107°C	Blue			
Extra High <sup>8</sup>	K	360°F/182°C	300°F/149°C	Purple			
–	M	Open	–	No Bulb			

<sup>6</sup> A For use with Standard or Quick Response Concealed Sprinkler 135°F/57°C or 155°F/68°C.

<sup>7</sup> D For use with Standard or Quick Response Concealed Sprinkler 175°F/79°C or 200°F/93°C.

<sup>8</sup> 138°F/59°C per LPCB

**NOTE**

- Custom Finish – Customer to provide paint specification, allow 4 – 6 weeks for samples.

**Available Wrenches:**

Sprinkler Type	Recessed
Concealed Pendent – V3801, V3802	V38-4 or V38-5

[29.01: Victaulic® Terms and Conditions of Sale](#)

[I-40: Victaulic® FireLock™ Automatic Sprinklers](#)

**User Responsibility for Product Selection and Suitability**

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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No statement contained herein concerning a possible or suggested use of any material, product, service, or design is intended, or should be constructed, to grant any license under any patent or other intellectual property right of Victaulic or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service, or design in the infringement of any patent or other intellectual property right. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries.

**Note**

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

**Installation**

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

**Warranty**

Refer to the Warranty section of the current Price List or contact Victaulic for details.

**Trademarks**

*Victaulic* and all other Victaulic marks are the trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries.

# Eddythread 40

## A Lightweight Schedule 40 Replacement Pipe That Has a Corrosion Resistance Ratio of 1.0

Bull Moose Tube Company has been making pipe for a long time and is recognized as a producer of quality pipe products. Eddythread 40 is designed with the same thoroughness as our other fine pipe products and now our customers have an option to buy a carefully designed replacement for Schedule 40 that:

- Has a Corrosion Resistance Ratio of 1.0
- Has a Pressure Rating of 300 psi
- Is Lighter Weight Than Schedule 40
- Is Approved by Factory Mutual and Listed by Underwriters Laboratories
- Is Produced in Accordance to ASTM A-135 and A-795
- Can be Used With Standard Schedule 40 Threaded Fittings, Couplings and Valves
- Is Produced From Steel With Excellent Properties of Strength and Threadability
- Can be Used in Wet, Dry, Preaction, and Deluge Type Sprinkler Systems\*
- Offers Lower Freight Costs

### EDDYTHREAD 40 SPECIFICATIONS

NOMINAL PIPE SIZE (in)	WEIGHT (lbs/ft)	I.D. (in)	BUNDLE SIZE
1	1.461	1.083	70
1 1/4	2.070	1.418	51
1 1/2	2.547	1.654	44
2	3.308	2.123	30

### CORROSION RESISTANCE RATIOS

NOMINAL PIPE SIZE (in)	SCHEDULE 40	EDDYTHREAD 40
1	1.00	1.00
1 1/4	1.00	1.00
1 1/2	1.00	1.00
2	1.00	1.00

\* Eddythread 40 can be hot dipped galvanized to meet FM's requirement for dry systems



**BULL MOOSE TUBE COMPANY**

A **CAPARO** company

1819 Clarkson Road  
Chesterfield, MO 63017  
(800) 325-4467  
FAX: (636) 537-2645

[www.bullmoosetube.com](http://www.bullmoosetube.com)

e-mail: [sales@bullmoosetube.com](mailto:sales@bullmoosetube.com)

For additional information,  
contact your salesperson today at  
(800) 325-4467 or (636) 537-2600  
in the USA, or from Canada  
call (800) 882-4666





# Eddy Flow

## The Cost Effective Replacement for Schedule 10

Realizing the growing need of fire protection systems in commercial and residential construction, Bull Moose Tube has added Eddy Flow to its comprehensive line of sprinkler pipe products.

Eddy Flow is a specially engineered replacement for schedule 10, offering better flow characteristics while providing design flexibility. This product is FM approved, as well as UL listed (for U.S. and Canada) for roll grooving and welding for use in fire protection

systems with a working pressure of 300 psi or less. Please check with appropriate sources for up-to-date listings and approval information.

As an added benefit, it is more economical to use than schedule 10 due to reduced delivery costs and ease of handling. Furthermore, Eddy Flow's larger ID provides an opportunity for downsizing and further cost savings.

### COMPARISON

Nominal Pipe Size (in)	O.D. (in)	INSIDE DIAMETER			C.R.R.*	
		Eddy Flow (in)	Schedule 10 (in)	Schedule 40 (in)	Eddy Flow	Schedule 40
1 1/4	1.660	1.530	1.442	1.380	1.98	1.00
1 1/2	1.900	1.728	1.682	1.610	3.44	1.00
2	2.375	2.203	2.157	2.067	2.78	1.00
2 1/2	2.875	2.705	2.635	2.469	1.66	1.00
3	3.500	3.334	3.260	3.068	1.00	1.00
4	4.500	4.310	4.260	4.026	1.00	1.00

\* Corrosion Resistance Ratio

### BENEFITS

- **Dual Certified to ASTM A135 and A795.**
- **FM Approved for roll grooved, and welded, and plain-end application in wet systems.**
- **UL Listed (for U.S. and Canada) for joining by welding or by listed rubber gasketed fittings for use in wet, dry, preaction, and deluge type sprinkler systems.**
- **UL Listed (for US and Canada) and FM Approved for use with Victaulic® FIT® Fittings in plain end applications.**
- **Lightweight - saves shipping costs, and offers easier handling.**
- **Can be used with roll grooved couplings or welded outlets for pressures up to 300 psi.**
- **Floor stock available in various lengths produced in Casa Grande (AZ), Gerald (MO), and Masury (OH). Also can be ordered in custom lengths..**
- **Can be used for wet and dry\* systems.**

\* Eddy Flow can be hot dipped galvanized to meet FM's requirement for dry systems.

### PIPE PREPARATION

For proper operation, all pipe surfaces should be cleaned prior to installation. In order to provide a leak-tight seat for the gasket, pipe surfaces should be free from indentations and projections from the end of the pipe to the groove. All loose paint, scale, dirt, chips, grease, and rust must be removed prior to installation. Failure to take these important steps may result in improper coupling assembly, causing leakage. Also, check the manufacturer's instructions for the specific fitting used.



A CAPARO company

1819 Clarkson Road  
Chesterfield, MO 63017  
(800) 325-4467  
FAX: (636) 537-2645

[www.bullmoosetube.com](http://www.bullmoosetube.com)

e-mail: [sales@bullmoosetube.com](mailto:sales@bullmoosetube.com)

For additional information,  
contact your salesperson today at  
(800) 325-4467 or (636) 537-2600  
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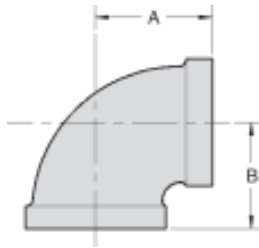


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For fire protection services request submittal GRS 1.3

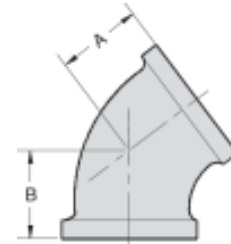
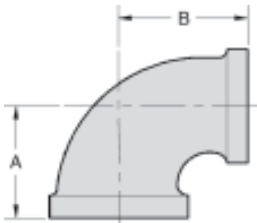


DUCTILE IRON THREADED FITTINGS ARE UL, ULC LISTED AND FACTORY MUTUAL APPROVED FOR 500 PSI SERVICE. DUCTILE IRON PER ASTM A 536 GRADE 65-45-12. DIMENSIONS CONFORM TO ANSI B16.3 CLASS 150. THREADS ARE NPT PER ANSI/ASME B1.20.1

**NOTICE:** DUCTILE IRON FITTINGS HAVE HIGHER TENSILE STRENGTH THEN THAT OF STEEL PIPE. THEREFORE, OVER TIGHTENING CAN CAUSE DAMAGE TO PIPE THREADS WHICH MAY CAUSE LEAKAGE. DUCTILE IRON FITTINGS SHOULD BE TIGHTENED THREE TURNS BEYOND HAND TIGHT, BUT NO MORE THAN FOUR TURNS.

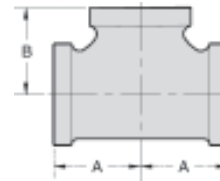
## DUCTILE IRON 90 DEG. ELBOW

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSIONS		WEIGHT EACH PIECE
			A	B	
1	DB90033	500	1.50	1.50	0.62
1 1/4	DB90044	500	1.75	1.75	0.90
1 1/2	DB90055	500	1.94	1.94	1.20
2	DB90066	500	2.25	2.25	1.85



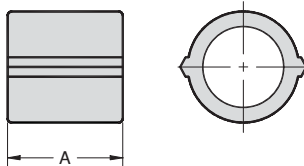
## DUCTILE IRON 45 DEG. ELBOW

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSIONS		WEIGHT EACH PIECE
			A	B	
1	DB45033	500	1.12	1.12	0.46
1 1/4	DB45044	500	1.29	1.29	0.73
1 1/2	DB45055	500	1.43	1.43	0.92
2	DB45066	500	1.68	1.68	1.50



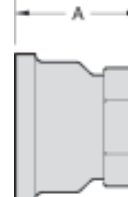
## DUCTILE IRON RED.90 DEG. ELBOW

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSIONS		WEIGHT EACH PIECE
			A	B	
1X1/2	DB90031	500	1.26	1.36	0.44
1X3/4	DB90032	500	1.37	1.45	0.52
1 1/4X1/2	DB90041	500	1.34	1.53	0.64
1 1/4X3/4	DB90042	500	1.45	1.62	0.72
1 1/4X1	DB90043	500	1.58	1.67	0.75
1 1/2X1	DB90053	500	1.65	1.80	0.92
1 1/2X1 1/4	DB90054	500	1.82	1.88	1.08
2X1/2	DB90061	500	1.49	1.88	1.08
2X3/4	DB90062	500	1.60	1.97	1.24
2X1	DB90063	500	1.73	2.02	1.40
2X1 1/4	DB90064	500	1.90	2.10	1.52
2X1 1/2	DB90065	500	2.02	2.16	1.65



## DUCTILE IRON STRAIGHT TEE

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSIONS		WEIGHT EACH PIECE
			A	B	
1	DT333	500	1.50	1.50	0.85
1 1/4	DT444	500	1.75	1.75	1.22
1 1/2	DT555	500	1.94	1.94	1.55
2	DT666	500	2.25	2.25	2.45



## DUCTILE IRON COUPLING

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSION	WEIGHT EACH PIECE
			A	
1	DCL033	500	1.67	0.40
1 1/4	DCL044	500	1.93	0.57
1 1/2	DCL055	500	2.15	0.75
2	DCL066	500	2.53	1.15

## DUCTILE IRON RED. COUPLING

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSION	WEIGHT EACH PIECE
			A	
1X1/2	DRC031	500	1.69	0.39
1X3/4	DRC032	500	1.69	0.53





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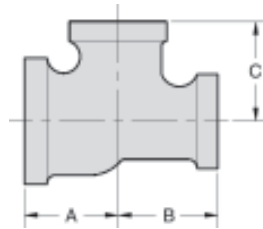


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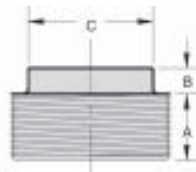


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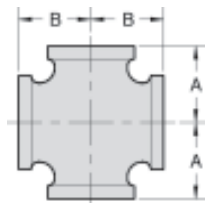
OUTSIDE HEAD



INSIDE HEAD

### DUCTILE IRON BUSHINGS

NOMINAL SIZE (INCH)	ITEM CODE #	DIMENSIONS			STYLE	WT. EACH
		A	B	C		
1x1/2	DBUSH31	0.75	0.25	1.42	OUT	0.22
1x3/4	DBUSH32	0.75	0.25	1.42	OUT	0.17
1 1/4x1	DBUSH43	0.80	0.28	1.76	OUT	0.28
1 1/2x1	DBUSH53	0.83	0.31	2.00	OUT	0.44
1 1/2x1 1/4	DBUSH54	0.83	0.31	2.00	OUT	0.30
2x1	DBUSH63	0.88	0.41	1.95	IN	0.66
2x1 1/4	DBUSH64	0.88	0.34	2.48	OUT	0.72
2x1 1/2	DBUSH65	0.88	0.34	2.48	OUT	0.61



### DUCTILE IRON CROSS

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I	DIMENSIONS		WEIGHT EACH PIECE
			A	B	
1	DX033	500	1.50	1.50	0.98
1 1/4	DX044	500	1.75	1.75	1.50
1 1/2	DX055	500	1.94	1.94	1.90
2	DX066	500	2.25	2.25	2.95
1 1/4x1	DX043	500	1.58	1.67	1.27
1 1/2x1	DX053	500	1.65	1.80	1.48
2x1	DX063	500	1.73	2.02	2.10

### DUCTILE IRON REDUCING TEE

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSIONS			WEIGHT EACH PIECE
			A	B	C	
1X1X1/2	DT331	500	1.26	1.26	1.36	0.64
1X1X3/4	DT332	500	1.37	1.37	1.45	0.73
1X1/2X1	DT313	500	1.50	1.36	1.50	0.71
1X3/4X1	DT323	500	1.50	1.45	1.50	0.76
1X1X1 1/4	DT334	500	1.67	1.67	1.58	0.98
1X1X1 1/2	DT335	500	1.80	1.80	1.65	1.16
1 1/4X1X1/2	DT431	500	1.34	1.26	1.53	0.82
1 1/4X1X3/4	DT432	500	1.45	1.37	1.62	0.90
1 1/4X1X1	DT433	500	1.58	1.50	1.67	1.00
1 1/4X1X1 1/4	DT434	500	1.75	1.67	1.75	1.08
1 1/4X1X1 1/2	DT435	500	1.88	1.80	1.82	1.42
1 1/4X1 1/4X1/2	DT441	500	1.34	1.34	1.53	0.86
1 1/4X1 1/4X3/4	DT442	500	1.45	1.45	1.62	0.92
1 1/4X1 1/4X1	DT443	500	1.58	1.58	1.67	0.95
1 1/4X1 1/4X1 1/2	DT445	500	1.88	1.88	1.82	1.45
1 1/4X1 1/4X2	DT446	500	2.10	2.10	1.90	1.75
1 1/2X1X1/2	DT531	500	1.41	1.34	1.66	0.95
1 1/2X1X3/4	DT532	500	1.52	1.37	1.75	1.14
1 1/2X1X1	DT533	500	1.65	1.50	1.80	1.17
1 1/2X1X1 1/4	DT534	500	1.82	1.67	1.88	1.34
1 1/2X1X1 1/2	DT535	500	1.94	1.80	1.94	1.45
1 1/2X1 1/4X1/2	DT541	500	1.41	1.34	1.66	1.05
1 1/2X1 1/4X3/4	DT542	500	1.52	1.45	1.75	1.15
1 1/2X1 1/4X1	DT543	500	1.65	1.58	1.80	1.25
1 1/2X1 1/4X2	DT546	500	2.16	2.10	2.02	1.90
1 1/2X1 1/2X1/2	DT551	500	1.41	1.41	1.16	1.15
1 1/2X1 1/2X3/4	DT552	500	1.52	1.52	1.75	1.24
1 1/2X1 1/2X1	DT553	500	1.65	1.65	1.80	1.30
1 1/2X1 1/2X1 1/4	DT554	500	1.82	1.82	1.88	1.48
1 1/2X1 1/2X2	DT556	500	2.16	2.16	2.02	1.98
2X1X2	DT636	500	2.25	2.02	2.25	2.15
2X1 1/4X2	DT646	500	2.25	2.10	2.25	2.30
2X1 1/2X1/2	DT651	500	1.49	1.41	1.88	1.50
2X1 1/2X3/4	DT652	500	1.60	1.52	1.97	1.62
2X1 1/2X1	DT653	500	1.73	1.65	2.02	1.64
2X1 1/2X1 1/4	DT654	500	1.90	1.82	2.10	1.80
2X1 1/2X1 1/2	DT655	500	2.02	1.94	2.16	2.00
2X1 1/2X2	DT656	500	2.25	2.16	2.25	2.35
2X2X1/2	DT661	500	1.49	1.49	1.88	1.60
2X2X3/4	DT662	500	1.60	1.60	1.97	1.68
2X2X1	DT663	500	1.73	1.73	2.02	1.85
2X2X1 1/4	DT664	500	1.90	1.90	2.10	2.04
2X2X1 1/2	DT665	500	2.02	2.02	2.16	2.18
2X2X2 1/2	DT667	500	2.60	2.60	2.39	3.61
2 1/2X2X3/4	DT762	500	1.74	1.60	2.32	2.28



### DUCTILE IRON CAP

NOMINAL SIZE (INCH)	ITEM CODE #	MAX. WORKING P.S.I.	DIMENSION	WEIGHT EACH PIECE
			A	
1	DCP003	500	1.16	0.32
1 1/4	DCP004	500	1.28	0.43
1 1/2	DCP005	500	1.33	0.60
2	DCP006	500	1.45	0.91

**FIG. MT-30** Threaded Mechanical Branch Tee**Submittal Sheet**

Model MT-30 mechanical tee serves the same function as MT-1 & MT-8 but uses a steel electro-plated U-Bolt to save space and for easier installation in tight places. It is ideal for direct connections with sprinkler heads and drop nipples.



**APPROVED**  
 For Listing / Approval  
 details contact your  
 AnvilStar™ Representative.

**WARNING**

For dry pipe systems and freezer applications  
 lubrication of the gasket is required, Gruvlok®  
 Xtreme™ Lubricant is recommended.

**MATERIAL SPECIFICATIONS****HOUSING:**

Ductile Iron conforming to ASTM A-536, Grade 65-45-12.

**U-BOLT & NUTS:**

U-bolt is carbon steel SAE Grade 2, Zinc Plated with plated hex nuts carbon steel ASTM A-194, Zinc Plated.

**THREADS:**

MT-30 NPT per ANSI/ASME B1.20.1

**COATINGS:**

- ☐ Zinc Electroplated  
☐ Other (Specify): \_\_\_\_\_ Example: RAL3000 or RAL9000 Series  
 For other Coating requirements contact an AnvilStar Representative.

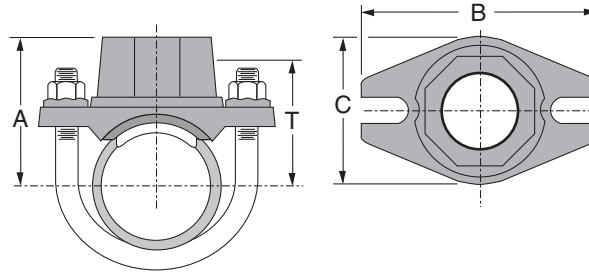
**GASKETS:** Materials

Properties as designated in accordance with ASTM D-2000.

- ☐ **Grade "E" EPDM** (Green color code)  
 -40°F to 230°F (Service Temperature Range) (-40°C to 110°C)  
 Recommended for water service, diluted acids, alkalies solutions, salts, oil-free air  
 and many chemical services not involving hydrocarbons, oils or gases.  
 NOT FOR USE WITH HYDROCARBONS.
- ☐ Other \_\_\_\_\_

**PROJECT INFORMATION:****APPROVAL STAMP:****Project:****Date:****Phone:****Architect / Engineer:****Contractor:****Address:****Notes 1:****Notes 2:**



**FIG. MT-30****Threaded Mechanical Branch Tee****Submittal Sheet****MT-30 MECHANICAL TEES**

Nominal Size	O.D.	Hole Diameter		Max. Wk. Pressure	Dimensions				Approx. Wt. Ea.
		Min. Diameter	Max. Diameter		A	B	C	T Take-Out	
In./DN(mm)	In./mm	In./mm	In./mm	PSI/bar	In./mm	In./mm	In./mm	In./mm	Lbs./kg
1¼ x ½	1.660 x 0.840	1⅜	1⅝	300	2⅞	3½	2¼	1⅝	0.8
32 x 12	42.4 x 21.3	30	33	20.7	54	89	57.2	42	0.4
1¼ x ¾	1.660 x 1.050	1⅜	1⅝	300	2⅞	3½	2¼	1⅝	0.8
32 x 19	42.4 x 26.7	30	33	20.7	54	89	57.2	42	0.4
1¼ x 1	1.660 x 1.315	1⅜	1⅝	300	2¼	3½	2¼	1⅝	1.1
32 x 25	42.4 x 33.7	30	33	20.7	58	89	57.2	41	0.5
1½ x ½	1.900 x 0.840	1⅜	1⅝	300	2¼	3½	2¼	1¾	0.8
40 x 12	48.3 x 21.3	30	33	20.7	57	89	57.2	48	0.4
1½ x ¾	1.900 x 1.050	1⅜	1⅝	300	2¼	3½	2¼	1¾	0.9
40 x 19	48.3 x 26.7	30	33	20.7	57	89	57.2	48	0.4
1½ x 1	1.900 x 1.315	1⅜	1⅝	300	2⅜	3½	2¼	1¾	1.1
40 x 25	48.3 x 33.7	30	33	20.7	61	89	57.2	44	0.5
2 x ½	2.375 x 0.840	1⅜	1⅝	300	2½	3¾	2¼	2	0.9
50 x 12	60.3 x 21.3	30	33	20.7	64	95	57.2	51	0.4
2 x ¾	2.375 x 1.050	1⅜	1⅝	300	2½	3¾	2¼	2	0.9
50 x 19	60.3 x 26.7	30	33	20.7	64	95	57.2	51	0.4
2 x 1	2.375 x 1.315	1⅜	1⅝	300	2⅝	3¾	2¼	2	1.1
50 x 25	60.3 x 33.7	30	33	20.7	67	95	57.2	50	0.5
2½ x ½	2.875 x 0.840	1⅜	1⅝	300	2¾	4¼	2¼	2¼	0.9
65 x 12	73.0 x 21.3	30	33	20.7	70	108	57.2	57	0.4
2½ x ¾	2.875 x 1.050	1⅜	1⅝	300	2¾	4¼	2¼	2¼	0.9
65 x 19	73.0 x 26.7	30	33	20.7	70	108	57.2	57	0.4
2½ x 1	2.875 x 1.315	1⅜	1⅝	300	2⅞	4¼	2¼	2¼	1.1
65 x 25	73.0 x 33.7	30	33	20.7	73	108	57.2	56	0.5

BSP equivalent is available as a MT-90.

**NOTE:** Tighten nuts alternatively to a recommended torque of 18 - 22 ft-lbs (25 - 30 N-m) on pipe wall less than schedule 10 or 23 - 27 ft-lbs (31 - 37 N-m) on pipe walls schedule 10 and above.

## Fig. 200 - "Trimline" Adjustable Band Hanger

**Size Range** — 1/2" thru 8" pipe

**Material** — Carbon Steel, Mil. Galvanized to G90 specifications

**Function** — For fire sprinkler and other general piping purposes. Knurled swivel nut design permits hanger adjustment after installation.

**Features** —

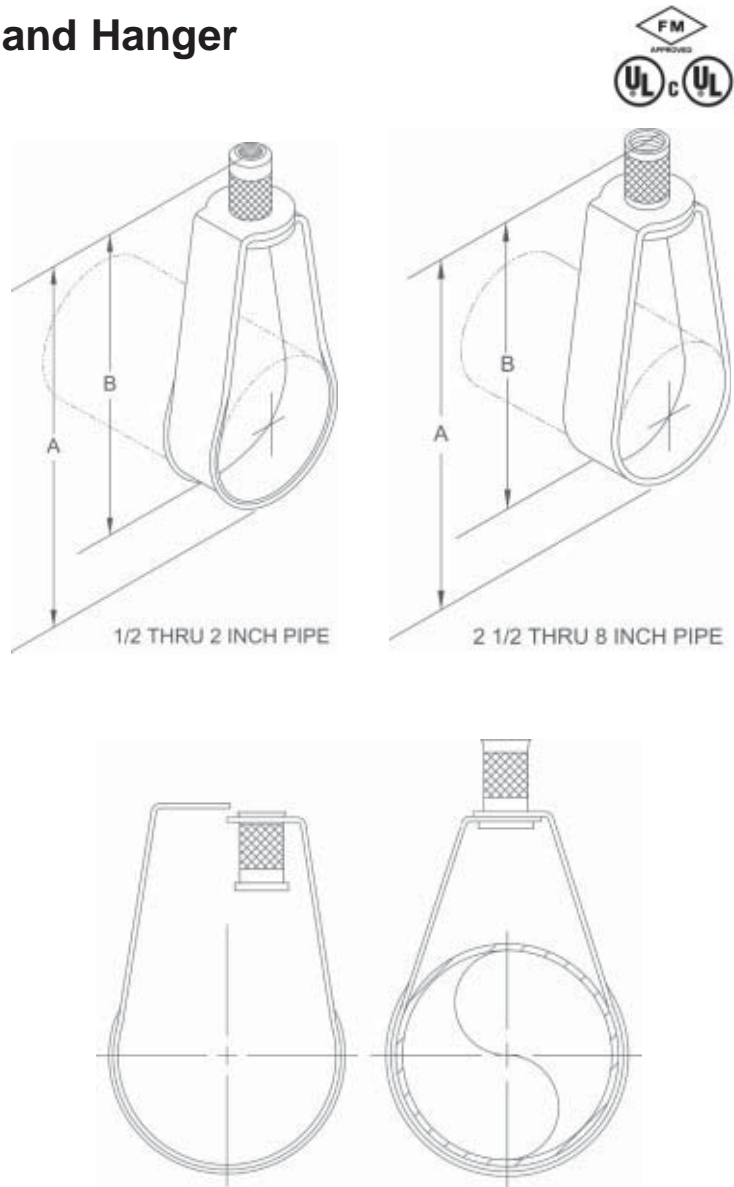
- (1/2" thru 2") Flared edges ease installation for all pipe types and protect CPVC plastic pipe from abrasion. Captured design keeps adjusting nut from separating with hanger. Hanger is easily installed around pipe.
- (2 1/2" thru 8" Spring tension on nut holds it securely in hanger before installation. Adjusting nut is easily removed.

**Approvals** — Underwriters' Laboratories listed (1/2" thru 8") in the USA (**UL**) and Canada (**cUL**) for steel and CPVC plastic pipe and Factory Mutual Engineering Approved (3/4" thru 8"). Conforms to Federal Specifications WW-H-171E, Type 10 and Manufacturers Standardization Society SP-69, Type 10.

**Maximum Temperature** — 650°F

**Finish** — Mil. Galvanized. For Stainless Steel materials, order TOLCO™ Fig. 200WON.

**Order By** — Figure number and pipe size



Dimensions • Weights						
Pipe Size	Rod Size		A	B	Max. Rec. Load Lbs.	Approx. Length
Inch	Metric					
1/2	3/8	8mm or 10mm	3 1/8	2 5/8	400	11
3/4	3/8	8mm or 10mm	3 1/8	2 1/2	400	11
1	3/8	8mm or 10mm	3 3/8	2 5/8	400	12
1 1/4	3/8	8mm or 10mm	3 3/4	2 7/8	400	13
1 1/2	3/8	8mm or 10mm	3 7/8	2 7/8	400	14
2	3/8	8mm or 10mm	4 1/2	3	400	15
2 1/2	3/8	10mm	5 5/8	4 1/8	600	27
3	3/8	10mm	5 7/8	4	600	29
3 1/2	3/8	10mm	7 3/8	5 1/4	600	34
4	3/8	10mm	7 3/8	5	1000	35
5	1/2	12mm	9 1/8	6 1/4	1250	66
6	1/2	12mm	10 1/8	6 3/4	1250	73
8	1/2	12mm	13 1/8	8 3/4	1250	136



## Fig. 65 and Fig. 66 Reversible C-Type Beam Clamps 3/4" and 1 1/4" Throat Openings

**Size Range** — (Fig. 65 and Fig. 66) 3/8", 1/2" and 5/8" rod

**Material** — Carbon Steel with hardened cup point set screw and jam nut

**Function** — Recommended for hanging from steel beam where flange thickness does not exceed 3/4" (Fig. 65) or 1 1/4" (Fig. 66).

**Features** — All steel construction eliminates structural deficiencies associated with casting type beam clamps. May be used on top or bottom flange of the beam. (Beveled lip allows hanging from top flange where clearance is limited.) May be installed with set screw in up or down position. Offset design permits unlimited rod adjustment by allowing the rod to be threaded completely through the clamp. Open design permits inspection of thread engagement.

**Approvals** — Underwriters' Laboratories Listed in the USA (UL) and Canada (cUL). Factory Mutual Engineering approved. Conforms to Federal Specification WW-H-171E, Type 23 and Manufacturers Standardization Society SP-69, Type 19. Exceeds requirements of the National Fire Protection Association (NFPA), Pamphlet 13, 3/8" rod will support 1/2" thru 4" pipe, 1/2" rod will support 1/2" thru 8" pipe. Included in our Seismic Restraints Catalog approved by the State of California Office of Statewide Health Planning and Development (OSHPD). For additional load, spacing and placement relating to OSHPD projects, please refer to the TOLCO Seismic Restraint Systems Guidelines.

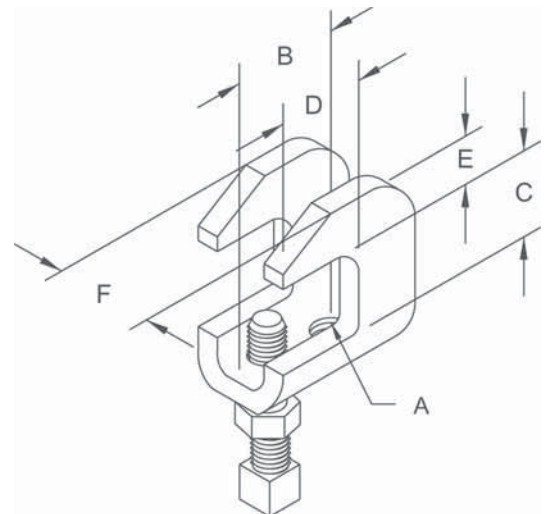
**Finish** — Plain

**Note** — Available in Electro-Galvanized and HDG finish.

**Order By** — Figure number, rod size and finish

Fig. 65 Patent #4,570,885

Component of State of  
California OSHPD Approved  
Seismic Restraints System



**Fig. 65**

### Dimensions • Weights

Rod Size A	B	C	D	E	F	Max. Rec. Load Lbs.*	Approx. Wt./100
3/8	1 3/16	3/4	1	7/16	1	610	28
1/2	1 1/2	3/4	1	9/16	1 1/4	1130	55
5/8	1 1/2	3/4	1	9/16	1 1/4	1130	55

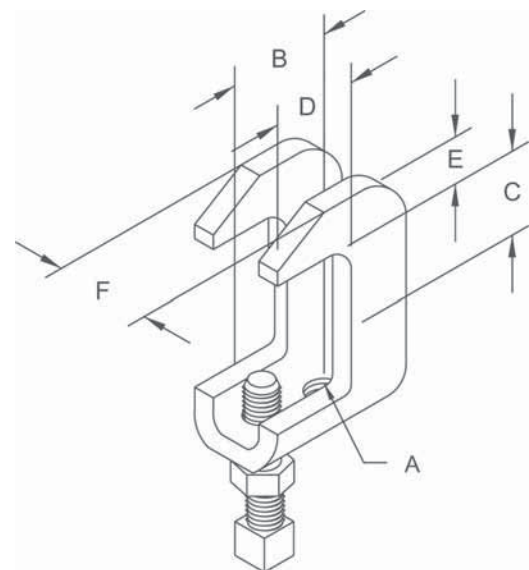
\* Max. loads for clamp with set screw in up or down position.

**Fig. 66**

### Dimensions • Weights

Rod Size A	B	C	D	E	F	Max. Rec. Load Lbs.*	Approx. Wt./100
3/8	1 3/16	1 1/4	1	7/16	1	610	28
1/2	1 1/2	1 1/4	1	9/16	1 1/4	1130	55
5/8	1 1/2	1 1/4	1	9/16	1 1/4	1130	55

\* Max. loads for clamp with set screw in up or down position.



# SAMMY X

## ITW Buildex PRESS®

XP 200 for 1/4" and  
XP 20 & XP 35 for 3/8" Rod

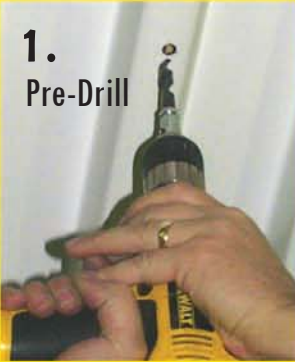
Expands to provide direct  
vertical attachment in:

- Metal Deck (22-16 gauge)
- Purlin (18-16 gauge)

U.S. Patent No.  
6,935,821

- Installs in seconds, saves time & installation costs.
- Use in applications where easy access to the back of the installed fastener is prohibited.
- No retaining nut required.

1.  
Pre-Drill



2.  
Attach  
Sleeve



3. Insert X-Press  
Anchor



4.  
Install



\*Tool Includes: Sleeve, Bit  
Receiver, Hex Wrench and  
25/64" Drill Bit.

Ask your supplier or call us  
at 800-BUILDEX.

SSS05

Pipe Hanger

Approvals	Min Steel Ga.	Part #	Model	Screw Description	Rod Size	Pipe Size	Test Load
UL 9R21	12 ga	8150922	XP 20	Sammy X-Press 20	3/8 - 16"	3/4 - 4"	1475 Lbs.
	12 ga	8153922	XP 35	Sammy X-Press 35	3/8 - 16"	3/4 - 4"	1475 Lbs.
	22 ga	8150922	XP 20	Sammy X-Press 20	3/8 - 16"	3/4 - 2"	750 Lbs.
	18 ga	8153922	XP 35	Sammy X-Press 35	3/8 - 16"	3/4 - 3-1/2"	1250 Lbs.

Luminaire Fitting

Approvals	Min Steel Ga.	Part #	Model	Screw Description	Rod Size	Load Rating	
UL 25ES	22 ga	8150922	XP 20	Sammy X-Press 20	3/8 - 16"	185 Lbs.	
		8153922	XP 35	Sammy X-Press 35	3/8 - 16"	185 Lbs.	
		8181922	XP 200	Sammy X-Press 200	1/4 - 20"	185 Lbs.	
	16 ga	8150922	XP 20	Sammy X-Press 20	3/8 - 16"	250 Lbs.	
		8153922	XP 35	Sammy X-Press 35	3/8 - 16"	250 Lbs.	
		8181922	XP 200	Sammy X-Press 200	1/4 - 20"	250 Lbs.	
				8151910	Sammy X-Press It® Installation Tool		
				8152910	25/64" Drill Bit		