



City of Aurora  
15151 E. Alameda Pkwy  
Aurora, CO 80012  
October 15<sup>th</sup>, 2018

Attn: Plan Review

Subject: Scope of Work Letter

Per the requirements of the Aurora Building Division, *Freedom Fire Protection, LLC* is submitting the following scope of letter for *1411 S. Potomac Street* located in the City of Aurora in order to receive a fire sprinkler permit. The scope of work is as follows:

**Project Name:** Davita Dialysis

**Project Address:** 1411 S. Potomac St, Aurora, CO 80012

**Project Scope:** **Add 2 and relocate 2 standard spray pendent fire sprinklers to the new restroom, wheelchair storage and biomed areas.** Please see attached drawing for location in the building. All new and relocated sprinklers shall be installed in accordance with NFPA 13 2016 for a light hazard occupancy.

**Valuation of Job:** \$834.00

All work will be performed in accordance with the 2016 Edition of NFPA 13 and we will contact the Aurora Building Division for a rough and final inspection. I understand that I must pay for and pick up the issued permit before I call for this inspection. If you have any questions regarding this project please feel free to contact me at (303) 827-2060.

Sincerely,

Andrew Teebken  
NICET IV #106205  
Freedom Fire Protection, LLC



City of Aurora Building Division  
Counter Permit intake by: **JVE**  
Date: **Oct 12, 2018**  
RSN: **1326440**  
Permit: **2018-1537609-CT**

2015 INTERNATIONAL CODES & 2014 NEC Scope of permit to be field verified.



**SEARER, ROBBINS & STEPHENS, INC.**  
ARCHITECTURE INTERIORS  
1700 EAST NORTHERN AVENUE SUITE 124, PHOENIX, ARIZONA 85020 (602) 277-1187 FAX (602) 277-8978

**FLOOR PLAN, DOOR SCHEDULE**

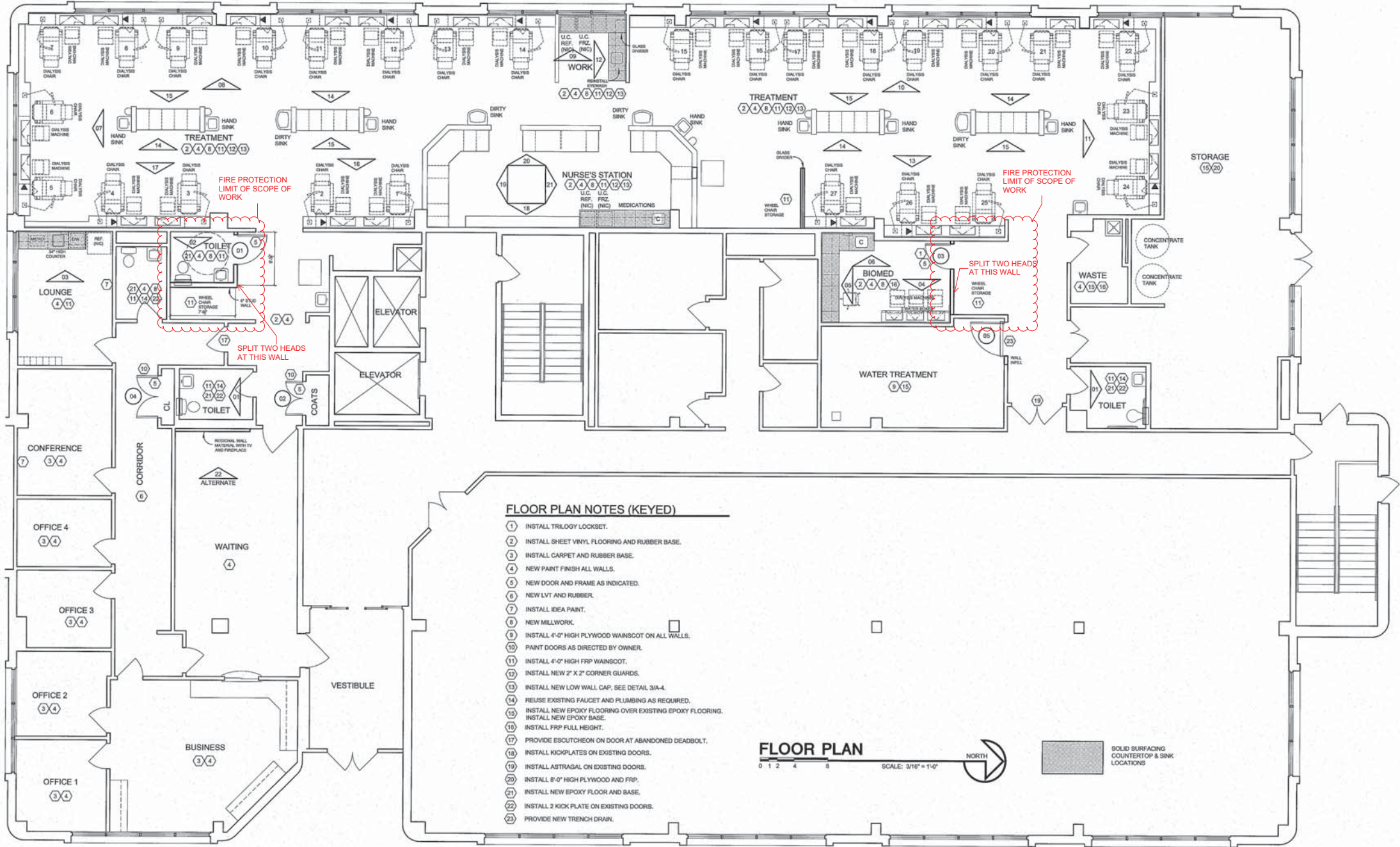
DRAWN \_\_\_\_\_ DBR  
CHECKED \_\_\_\_\_ DBR  
JOB NO. 1820  
DATE AUG. 1, 2018

REVISIONS



**Davita**  
Aurora Dialysis Center Upgrades  
1411 South Polanco Street, Suite 100  
Aurora, Colorado 80012

SHEET NO.  
**A-101**



<div><div>05</div><div></div></div>	<div><div>04</div><div></div></div>	<div><div>03</div><div></div></div>	<div><div>02</div><div></div></div>	<div><div>01</div><div></div></div>																																																																																																																																																																															
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**THE INCH®**  
**QUICK RESPONSE**  
**AUTOMATIC SPRINKLER**  
**GL5606**  
**ONE INCH ADJUSTABLE**  
**FLAT PLATE CONCEALED PENDENT**

### DESCRIPTION AND OPERATION

The Globe Quick Response GL5606 Adjustable Concealed Pendent Sprinkler has a low profile, aesthetically pleasing design. It provides sprinkler operations approximately six times faster than ordinary sprinklers and can be installed wherever standard concealed spray sprinklers are specified when allowed by the applicable standards. This sprinkler offers the additional feature of greatly increased safety to life and should be used advisedly and under the direction of approving authorities having jurisdiction. The sprinkler is available with a nominal 1" of adjustment and a low profile cover plate assembly. All that is seen at the ceiling is a 3 5/16" diameter ceiling plate or an optional 2 3/4" diameter ceiling plate color finished to match the specifier's exact requirements. The Series GL-QR Concealed Sprinkler may be virtually invisible as it does not interrupt the "smooth flow" of the ceiling. Globe's GL5606 Concealed Sprinkler utilizes a 3mm frangible glass ampule which is located above the ceiling and concealed from view by the ceiling plate.

The provided protective cap needs to be removed in order to install the sprinkler with the proper wrench. The protective cap must be replaced on the sprinkler until the time the cover plate is to be installed. The "push on - screw off" designed cover plate is easily installed and with a nominal 1" of adjustment makes it easier to get a proper fit at the ceiling.

Operation of the sprinkler occurs when heat build up causes the solder holding the cover plate to the support shell to melt allowing the cover plate to fall clear. Continued heat build up causes the 3mm glass bulb to burst allowing the deflector to drop down and distribute water in an approved pattern to extinguish or control the fire.

### TECHNICAL DATA

- See reverse side for Approvals and Specifications.
- Temperature Ratings -
  - 135°F (57°C) Sprinkler, 135°F (57°C) Cover Plate
  - 155°F (68°C) Sprinkler, 135°F (57°C) Cover Plate
  - 155°F (68°C) Sprinkler, 155°F (68°C) Cover Plate
  - 175°F (79°C) Sprinkler, 155°F (68°C) Cover Plate
  - 200°F (93°C) Sprinkler, 155°F (68°C) Cover Plate
- Water Working Pressure Rating - 175 psi (12 Bars)
- Factory tested hydrostatically to 500 psi (34 Bars)
- Maximum low temperature glass bulb rating is -67°F (-55°C)
- Frame - bronze • Deflector - brass • Screw - brass
- Lodgement Wire - stainless steel • Bulb seat - copper
- Spring - nickel alloy • Seal - teflon • Drop Pin - stainless steel
- Bulb - glass with alcohol based solution, 3mm size
- Cover Plate - brass • Upper Escutcheon Assembly - steel



**3 5/16" diameter plate**



**2 3/4" diameter plate**  
**SERIES GL-QR/INCH**  
**WHITE FLAT PLATE**  
**CONCEALED PENDENT**

**NOTE: Globe's wrench P/N 332765 must be used to install this sprinkler.**

### • SPRINKLER TEMPERATURE RATING/CLASSIFICATION and COLOR CODING

CLASSIFICATION	AVAILABLE SPRINKLER TEMPERATURES		BULB COLOR	N.F.P.A. MAXIMUM CEILING TEMPERATURE	
ORDINARY INTERMEDIATE	135°F/155°F	57°C/68°C	ORANGE/RED YELLOW/GREEN	100°F	38°C
	175°F/200°F	79°C/93°C		150°F	66°C

# THE INCH® QUICK RESPONSE AUTOMATIC SPRINKLER

## ONE INCH ADJUSTABLE FLAT PLATE CONCEALED PENDENT GL5606

### SPECIFICATIONS

NOMINAL "K" FACTOR	THREAD SIZE	LENGTH	FLAT COVER PLATE FINISHES***
5.6 (80 metric)	1/2"NPT (15mm)	2 1/2" (6.4cm)	Chrome White Painted Other Finishes <sup>1,2</sup>

**NOTE:** METRIC CONVERSIONS ARE APPROXIMATE.

<sup>1</sup>FINISHES AVAILABLE ON SPECIAL ORDER.

<sup>2</sup>FOR PLATES OTHER THAN WHITE, CONTACT GLOBE FOR ORDERING SPECIFICATIONS.

\*\*\*FACTORY PAINTED COVER PLATES MUST NOT BE REPAINTED. NON-FACTORY APPLIED PAINT MAY ADVERSELY DELAY OR PREVENT SPRINKLER OPERATION IN THE EVENT OF A FIRE.

### APPROVALS

STYLE	SIN	HAZARD <sup>1</sup>	135°F (57°C) Flat Cover Plate		155°F (68°C) Flat Cover Plate			cULus	*FM	NYC-DOB MEA 101-92-E
			**135°F (57°C) Sprinkler	155°F (68°C) Sprinkler	**155°F (68°C) Sprinkler	175°F (79°C) Sprinkler	200°F (93°C) Sprinkler			
Adjustable Concealed Pendent	GL5606	LH/OH	X	X	X	X	X	X	X	X

<sup>1</sup>SPRINKLERS SHALL BE LIMITED AS PER THE REQUIREMENTS OF NFPA13 AND ANY OTHER RELATED DOCUMENTS.

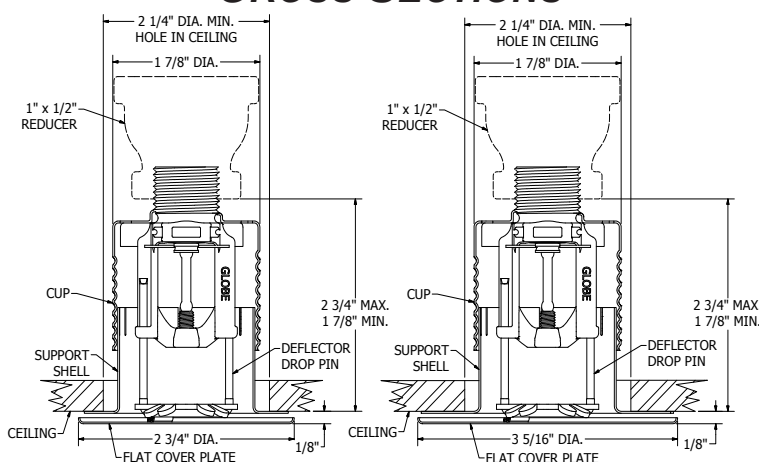
\*FM APPROVED AS STANDARD RESPONSE

\*\*NO FM APPROVALS

OH: ORDINARY HAZARD

LH: LIGHT HAZARD

### CROSS SECTIONS



#### 1" ADJUSTMENT FLAT PLATE CONCEALED PENDENT

FLAT COVER PLATE SIZES	WHITE 135°F (57°C) PART #	WHITE 155°F (68°C) PART #	CHROME 135°F (57°C) PART #	CHROME 155°F (68°C) PART #
2 3/4" DIA.	332726	332731	332724	332729
3 5/16" DIA.	332706	332711	332704	332709

### ORDERING INFORMATION

#### SPECIFY

- Quantity • SIN • Style • Orifice
- Thread Size • Temperature • Finishes desired
- Quantity - Wrenches - P/N 332765
- Quantity - Protective Caps - P/N 332695

### GLOBE® PRODUCT WARRANTY

Globe agrees to repair or replace any of its own manufactured products found to be defective in material or workmanship for a period of one year from date of shipment.

For specific details of our warranty please refer to Price List Terms and Conditions of Sale (Our Price List).



**45° ELBOW****Malleable Iron Screwed Fittings (Class 300)****MATERIAL SPECIFICATIONS**

Dimensional: Fittings: ASME B16.3

Unions: ASME B 16.39

Bushings/Plugs: ASME B 16.14

Material: ASTM A-197

Galvanizing: ASTM A-153 (Hot Dip Galvanizing)

Threading: \* ASME B 1.20.1

Pressure Rating: Fittings: ASME B 16.3

Unions: ASME B 16.39

Bushings/Plugs: ASME B 16.14

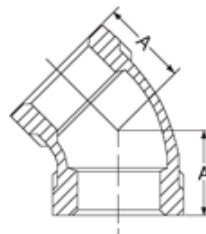
Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.

Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.

**APPROVED**

For Listing/Approval Details  
and Limitations visit our Web Site  
[www.anvilintl.com](http://www.anvilintl.com) or contact  
an Anvil® Representative.

<b>45° ELBOW</b>		
Size	A	Weight
in	in	lbs
1/4	0.81	0.19
1/2	0.88	1.28
3/4	1.00	0.43
1	1.13	0.66
1 1/4	1.31	1.00
1 1/2	1.50	1.70
2	1.69	2.10
2 1/2	2.00	3.40
3	2.25	5.50
4	2.50	8.10
4	2.81	13.00



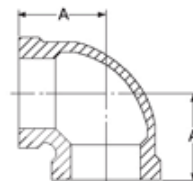
**90° ELBOW****Malleable Iron Screwed Fittings (Class 300)****MATERIAL SPECIFICATIONS**

Dimensional: Fittings: ASME B16.3  
 Unions: ASME B 16.39  
 Bushings/Plugs: ASME B 16.14  
 Material: ASTM A-197  
 Galvanizing: ASTM A-153 (Hot Dip Galvanizing)  
 Threading: \* ASME B 1.20.1  
 Pressure Rating: Fittings: ASME B 16.3  
 Unions: ASME B 16.39  
 Bushings/Plugs: ASME B 16.14  
 Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.  
 Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.

**APPROVED**

For Listing/Approval Details  
 and Limitations visit our Web Site  
[www.anvilintl.com](http://www.anvilintl.com) or contact  
 an Anvil® Representative.

<b>90° ELBOW</b>		
Size	A	Weight
in	in	lbs
1/4	0.94	0.20
3/8	1.06	0.29
1/2	1.25	0.47
3/4	1.44	0.66
1	1.63	1.20
1 1/4	1.94	1.90
1 1/2	2.13	2.50
2	2.50	4.20
2 1/2	2.94	5.30
3	3.38	9.70
4	4.50	16.00





**90° REDUCING ELBOW****Malleable Iron Screwed Fittings (Class 300)****MATERIAL SPECIFICATIONS**

Dimensional: Fittings: ASME B16.3

Unions: ASME B 16.39

Bushings/Plugs: ASME B 16.14

Material: ASTM A-197

Galvanizing: ASTM A-153 (Hot Dip Galvanizing)

Threading: \* ASME B 1.20.1

Pressure Rating: Fittings: ASME B 16.3

Unions: ASME B 16.39

Bushings/Plugs: ASME B 16.14

Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.

Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.

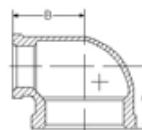


APPROVED

For Listing/Approval Details  
and Limitations visit our Web Site  
[www.anvilintl.com](http://www.anvilintl.com) or contact  
an Anvil® Representative.

**90° REDUCING ELBOW**

Size	A	B	Weight
in	in	in	lbs
1/2 x 3/4	1.19	1.19	0.41
1 x 3/4	1.50	1.56	1.00





## Malleable Iron Screwed Fittings (Class 300)



### MATERIAL SPECIFICATIONS

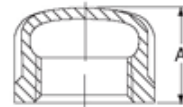
Dimensional: Fittings: ASME B16.3  
Unions: ASME B 16.39  
Bushings/Plugs: ASME B 16.14  
Material: ASTM A-197  
Galvanizing: ASTM A-153 (Hot Dip Galvanizing)  
Threading: \* ASME B 1.20.1  
Pressure Rating: Fittings: ASME B 16.3  
Unions: ASME B 16.39  
Bushings/Plugs: ASME B 16.14  
Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.  
Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.



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and Limitations visit our Web Site  
[www.anvilintl.com](http://www.anvilintl.com) or contact  
an Anvil® Representative.

CAP		
Size	A	Weight
in	in	lbs
1/4	0.78	0.10
3/8	0.81	0.15
1/2	1.00	2.23
3/4	1.06	0.35
1	1.25	0.58
1 1/4	1.38	0.94
1 1/2	1.44	1.20
2	1.69	1.90
2 1/2	2.06	3.30
3	2.19	4.70





**REDUCING COUPLINGS****Malleable Iron Screwed Fittings (Class 300)****MATERIAL SPECIFICATIONS**

Dimensional: Fittings: ASME B16.3  
 Unions: ASME B 16.39  
 Bushings/Plugs: ASME B 16.14

Material: ASTM A-197  
 Galvanizing: ASTM A-153 (Hot Dip Galvanizing)  
 Threading: \* ASME B 1.20.1

Pressure Rating: Fittings: ASME B 16.3  
 Unions: ASME B 16.39  
 Bushings/Plugs: ASME B 16.14

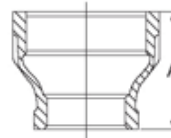
Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.  
 Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.

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 and Limitations visit our Web Site  
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 an Anvil® Representative.

**REDUCING COUPLINGS**

Size	A	Weight
in	in	lbs
1/2 x 1/4	1.44	0.21
1/2 x 3/8	1.69	0.31
1/2 x 1/2	1.69	0.34
3/4 x 1/4	1.75	0.47
3/4 x 1/2	1.75	0.50
1 x 1/4	2.00	0.71
1 x 1/2	2.00	0.79
1 1/4 x 1/4	2.38	1.10
1 1/4 x 1/2	2.38	1.20
1 1/4 x 1	2.38	1.30
1 1/4 x 3/4	2.69	1.50
1 1/2 x 1/4	2.69	1.60
1 1/2 x 1/2	2.69	1.60
1 1/2 x 1	2.69	1.80
2 x 1/4	3.19	2.40
2 x 1/2	3.19	2.40
2 x 1	3.19	2.50
2 x 1 1/4	3.19	2.70
2 x 1 1/2	3.19	2.70
2 1/2 x 1 1/4	3.69	4.10
2 1/2 x 2	3.69	4.30
3 x 2	4.06	5.80
3 x 2 1/2	4.06	6.50
4 x 3	4.38	10.00



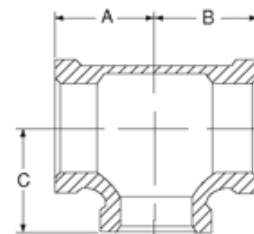
**REDUCING TEE****Malleable Iron Screwed Fittings (Class 300)****MATERIAL SPECIFICATIONS**

Dimensional: Fittings: ASME B16.3  
Unions: ASME B 16.39  
Bushings/Plugs: ASME B 16.14  
Material: ASTM A-197  
Galvanizing: ASTM A-153 (Hot Dip Galvanizing)  
Threading: \* ASME B 1.20.1  
Pressure Rating: Fittings: ASME B 16.3  
Unions: ASME B 16.39  
Bushings/Plugs: ASME B 16.14  
Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.  
Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.

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and Limitations visit our Web Site  
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an Anvil® Representative.

REDUCING TEE						
Size			A	B	C	Weight
in			in	in	in	lbs
3/4	3/4	1/2	1.31	1.31	1.38	0.90
1	1	1/2	1.44	1.44	1.50	1.30
		3/4	1.50	1.50	1.56	1.30
1 1/4	1 1/4	1/2	1.50	1.50	1.69	1.70
		3/4	1.63	1.63	1.75	1.90
		1	1.75	1.75	1.81	2.10
1 1/2	1 1/2	1/2	1.63	1.63	1.81	2.30
		3/4	1.69	1.69	1.88	2.50
		1	1.81	1.81	2.00	2.60
		1 1/4	2.00	2.00	2.06	3.00
2	2	1/2	1.75	1.75	2.06	3.40
		3/4	1.81	1.81	2.13	3.60
		1	2.00	2.00	2.25	4.00
		1 1/4	2.13	2.13	2.31	4.20
		1 1/2	2.25	2.25	2.38	4.60
2 1/2	2 1/2	2	2.69	2.69	2.75	7.60
3	3	2	2.81	2.81	3.13	9.60





**TEE****Malleable Iron Screwed Fittings (Class 300)****MATERIAL SPECIFICATIONS**

Dimensional: Fittings: ASME B16.3

Unions: ASME B 16.39

Bushings/Plugs: ASME B 16.14

Material: ASTM A-197

Galvanizing: ASTM A-153 (Hot Dip Galvanizing)

Threading: \* ASME B 1.20.1

Pressure Rating: Fittings: ASME B 16.3

Unions: ASME B 16.39

Bushings/Plugs: ASME B 16.14

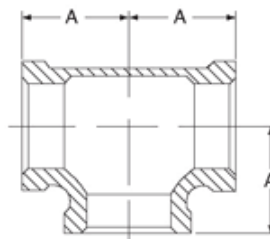
Pressure Testing: All malleable iron fittings are tested for through wall porosity using an air under water process.

Agency Approvals: All malleable iron fittings and unions are UL Listed and FM Approved.

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and Limitations visit our Web Site  
[www.anvilintl.com](http://www.anvilintl.com) or contact  
an Anvil® Representative.

TEE		
Size	A	Weight
in	in	lbs
1/4	1.31	0.27
1/2	1.06	0.42
3/4	1.25	0.65
1	1.44	1.10
1 1/4	1.63	1.60
1 1/2	1.94	2.50
2	2.13	3.40
2 1/2	2.50	5.20
3	2.94	8.00
4	3.38	13.00
6	4.50	24.00



The Gruzlok<sup>®</sup> Clamp-T provides a quick and easy outlet at any location along the pipe. A hole drilled or cut in the pipe to receive the locating collar of the Clamp-T is all that is required. The full, smooth outlet area provides for optimum flow characteristics.

The Clamp-T housing is specially engineered to conform to the pipe O.D. and the Clamp-T gasket providing a leak tight reliable seal in both positive pressure and vacuum conditions. Working pressure ratings shown are for reference only and are based on Schedule 40 pipe. For the latest UL/ULC listed and FM approved pressure ratings versus pipe schedule, see [www.anvilstar.com](http://www.anvilstar.com) or contact your local AnvilStar Representative.

The Gruzlok Clamp-T provides for a branch or cross connection in light wall or standard wall steel pipe.

The Fig. 7045 Clamp-T female pipe thread branch is available with NPT or ISO 7/1 connection and the Fig. 7046 Clamp-T has grooved-end branch connection.

Clamp-T cross connections are available in various sizes allowing greater versatility in piping design.

**NOTE:** Variable End Configurations are Possible —  
Thd x Thd and Gr. x Thd. Sizes — 2" x 1/2" through 8" x 4"

CLAMP-T FLOW DATA (FRICTIONAL RESISTANCE)		
Branch Size In./DN(mm)	Fig. 7045 Threaded Branch	
	C.V. Value	Equiv. Pipe Length Ft./m
1/2 15	22 -	1.0 0.3
3/4 20	25 -	2.0 0.6
1 25	44 -	2.0 0.6
1 1/4 32	76 -	2.5 0.8
1 1/2 40	89 -	4.0 1.2
2 50	164 -	3.5 1.1
2 1/2 65	152 -	12.5 3.8
3 80	318 -	8.5 2.6
4 100	536 -	8.0 2.4



— Available galvanized.

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an Anvil<sup>®</sup>/AnvilStar<sup>™</sup> Sales Representative.

## MATERIAL SPECIFICATIONS

### HOUSING:

Ductile Iron conforming to ASTM A-536, Grade 65-45-12 or  
Malleable Iron conforming to ASTM A-47, Grade 32510

### ANSI BOLTS & HEAVY HEX NUTS:

Heat treated, oval neck track head bolts conforming to ASTM A-183 Grade 2 with a minimum tensile strength of 110,000 psi and heavy hex nuts of carbon steel conforming to ASTM A-563 Grade A or Grade B, or J995 Grade 2. Bolts and nuts are provided zinc electroplated as standard.

### U-BOLT:

Cold drawn steel and zinc plated.

### COATINGS:

Rust inhibiting paint Color: ORANGE (standard)  
Hot Dipped Zinc Galvanized (optional)  
Other available options: Example: RAL3000 or RAL9000 Series  
For other coating requirements contact an AnvilStar Representative.

### LUBRICATION:

Standard Gruzlok  
Gruzlok Xtreme<sup>™</sup> required for dry pipe systems and freezer applications.

### 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, oil-free air and many chemical services.

NOT FOR USE IN PETROLEUM APPLICATIONS.

## PROJECT INFORMATION

## APPROVAL STAMP

Project:	<input type="checkbox"/> Approved
Address:	<input type="checkbox"/> Approved as noted
Contractor:	<input type="checkbox"/> Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	



# FIG. 7045 Clamp-T®, FPT Branch

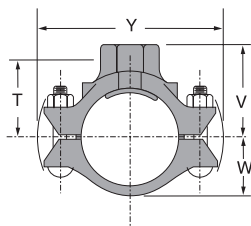


Fig. 7045

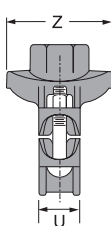
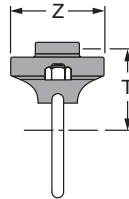
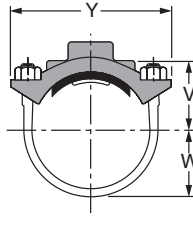


Fig. 7045 (U-Bolt)



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

**FIGURE 7045 FPT BRANCH (TABLE CONTINUES TO NEXT PAGE)**

Nominal Size	O.D.	Hole Dimensions		▼ Max. Working Pressure	Clamp-T Dimensions						Bolt Size	Specified Torque §		Approx. Wt. Ea.
		Min. Diameter	Max. Diameter		T	U	V Threaded	W	Y	Z		Min.	Max.	
In./DN(mm)	In./mm	In./mm	In./mm	PSI/bar	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	Ft.-Lbs./N-m	Lbs./Kg	
2 x 1/2 50 x 15	2.375 x 0.840 60.3 x 21.3	1 1/2 38	1 3/8 41	500 34.5	2 3/16 56	1 1/8 14	2 1/2 67	1 1/2 12	5 1/2 140	3 76	1/2 U-Bolt -	30 -	40 -	2.3 1.0
2 x 3/4 50 x 20	2.375 x 1.050 60.3 x 26.7	1 1/2 38	1 3/8 41	500 34.5	2 3/16 52	1 1/8 14	2 1/2 67	1 1/2 38	5 1/2 140	3 76	1/2 U-Bolt -	30 -	40 -	2.3 1.0
2 x 1 50 x 25	2.375 x 1.315 60.3 x 33.7	1 1/2 38	1 3/8 41	500 34.5	1 15/16 51	1 1/8 14	2 1/2 67	1 1/2 38	5 1/2 140	3 76	1/2 U-Bolt -	30 -	40 -	2.6 1.2
2 x 1 1/4 50 x 32	2.375 x 1.660 60.3 x 42.4	2 51	2 1/8 54	500 34.5	2 3/16 55	1 1/8 14	2 1/2 73	1 1/2 38	5 1/2 140	3 1/2 89	1/2 U-Bolt -	30 -	40 -	2.7 1.2
2 x 1 1/2 50 x 40	2.375 x 1.900 60.3 x 48.3	2 51	2 1/8 54	500 34.5	2 3/16 55	1 1/8 14	2 1/2 73	1 1/2 38	7 178	3 1/2 89	1/2 U-Bolt -	30 -	40 -	2.5 1.1
2 1/2 x 1/2 65 x 15	2.875 x 0.840 73.0 x 21.3	1 1/2 38	1 3/8 41	500 34.5	2 1/2 62	1 1/8 14	2 1/2 73	1 3/4 44	5 1/2 140	3 76	1/2 U-Bolt -	30 -	40 -	3.0 1.4
2 1/2 x 3/4 65 x 20	2.875 x 1.050 73.0 x 26.7	1 1/2 38	1 3/8 41	500 34.5	2 1/2 59	1 1/8 14	2 1/2 73	1 3/4 44	5 1/2 140	3 76	1/2 U-Bolt -	30 -	40 -	2.9 1.3
2 1/2 x 1 65 x 25	2.875 x 1.315 73.0 x 33.7	1 1/2 38	1 3/8 41	500 34.5	2 1/2 55	1 1/8 14	2 1/2 73	1 3/4 44	6 1/2 156	3 76	1/2 U-Bolt -	30 -	40 -	2.9 1.3
2 1/2 x 1 1/4 65 x 32	2.875 x 1.660 73.0 x 42.4	2 51	2 1/8 54	500 34.5	2 1/2 62	1 1/8 14	3 1/2 79	1 3/4 44	6 1/2 156	3 1/2 86	1/2 U-Bolt -	30 -	40 -	3.4 1.5
2 1/2 x 1 1/2 65 x 40	2.875 x 1.900 73.0 x 48.3	2 51	2 1/8 54	500 34.5	2 1/2 62	1 1/8 14	3 1/2 79	1 3/4 44	6 1/2 156	3 1/2 86	1/2 U-Bolt -	30 -	40 -	3.4 1.5
3 x 1/2 80 x 15	3.500 x 0.840 88.9 x 21.3	1 1/2 38	1 3/8 41	500 34.5	2 1/2 65	1 1/8 14	3 76	2 1/2 54	7 178	3 3/4 95	1/2 U-Bolt -	30 -	40 -	2.8 1.2
3 x 3/4 80 x 20	3.500 x 1.050 88.9 x 26.7	1 1/2 38	1 3/8 41	500 34.5	2 1/2 62	1 1/8 14	3 76	2 1/2 54	7 178	3 3/4 95	1/2 U-Bolt -	30 -	40 -	2.7 1.2
3 x 1 80 x 25	3.500 x 1.315 88.9 x 33.7	1 1/2 38	1 3/8 41	500 34.5	2 1/2 59	1 1/8 14	3 76	2 1/2 54	7 178	3 3/4 95	1/2 U-Bolt -	30 -	40 -	2.7 1.2
3 x 1 1/4 80 x 32	3.500 x 1.660 88.9 x 42.4	2 51	2 1/8 54	500 34.5	2 1 1/16 68	1 1/2 38	3 3/8 86	2 1/2 54	6 1/2 175	3 3/4 95	1/2 x 2 3/4 -	80 -	100 -	3.4 1.5
3 x 1 1/2 80 x 40	3.500 x 1.900 88.9 x 48.3	2 51	2 1/8 54	500 34.5	2 1 1/16 68	1 1/2 38	3 3/8 86	2 1/2 54	6 1/2 175	3 3/4 95	1/2 x 2 3/4 -	80 -	100 -	4.4 2.0
3 x 2 80 x 50	3.500 x 2.375 88.9 x 60.3	2 1/2 64	2 3/8 67	500 34.5	2 1 1/16 68	1 1/2 38	3 3/8 86	2 1/2 54	6 1/2 175	4 1/2 105	1/2 x 2 3/4 -	80 -	100 -	4.6 2.1
4 x 1/2 100 x 15	4.500 x 0.840 114.3 x 21.3	1 1/2 38	1 3/8 41	500 34.5	3 1/4 76	1 1/8 14	3 1/2 89	2 3/8 67	7 1/4 197	3 3/4 95	1/2 U-Bolt -	30 -	40 -	2.9 1.3
4 x 3/4 100 x 20	4.500 x 1.050 114.3 x 26.7	1 1/2 38	1 3/8 41	500 34.5	3 1/4 78	1 1/8 14	3 1/2 89	2 3/8 67	7 1/4 197	3 3/4 95	1/2 U-Bolt -	30 -	40 -	2.8 1.3
4 x 1 100 x 25	4.500 x 1.315 114.3 x 33.7	1 1/2 38	1 3/8 41	500 34.5	2 13/16 73	1 1/8 14	3 1/2 89	2 3/8 67	7 1/4 197	3 3/4 95	1/2 U-Bolt -	30 -	40 -	2.7 1.2
4 x 1 1/4 100 x 32	4.500 x 1.660 114.3 x 42.4	2 51	2 1/8 54	500 34.5	3 1/4 81	1 1/8 48	3 1/2 98	2 3/8 67	7 1/2 191	3 3/4 95	1/2 x 2 3/4 -	80 -	100 -	4.5 2.0
4 x 1 1/2 100 x 40	4.500 x 1.900 114.3 x 48.3	2 51	2 1/8 54	500 34.5	3 1/4 81	1 1/8 48	3 1/2 98	2 3/8 67	7 1/2 191	3 3/4 95	1/2 x 2 3/4 -	80 -	100 -	4.6 2.1
4 x 2 100 x 50	4.500 x 2.375 114.3 x 60.3	2 1/2 64	2 3/8 67	500 34.5	3 1/4 84	1 1/8 48	4 102	2 3/8 67	7 1/2 191	4 1/2 105	1/2 x 2 3/4 -	80 -	100 -	7.7 3.5
4 x 2 1/2 100 x 65	4.500 x 2.875 114.3 x 73.0	2 3/4 70	2 3/8 73	500 34.5	3 1 1/16 78	1 1/8 48	4 102	2 3/8 67	7 1/2 191	4 1/2 111	1/2 x 2 3/4 -	80 -	100 -	5.2 2.4
4 x 3 O.D. 100 x 80	4.500 x 2.996 114.3 x 76.1	2 3/4 70	2 3/8 73	500 34.5	3 76	1 1/8 48	4 102	2 3/8 67	7 1/2 191	4 1/2 111	1/2 x 2 3/4 -	80 -	100 -	5.2 2.4
4 x 3 100 x 80	4.500 x 3.500 114.3 x 88.9	3 1/2 89	3 3/8 92	500 34.5	3 1/4 83	1 1/8 48	4 1/4 108	2 3/8 67	7 1/2 191	5 1/4 133	1/2 x 3 1/2 -	80 -	100 -	6.5 2.9

**NOTE:** 2 1/2", 5" and 6" Nominal size run pipe may be used on 3" O.D., 5 1/2" O.D. and 6 1/2" O.D. pipe.

▼ Based on use with standard wall pipe.

Not for use in copper systems.

§ - For additional Bolt Torque information, see Technical Data Section.  
(Additional larger sizes on next page)

# FIG. 7045 Clamp-T®, FPT Branch

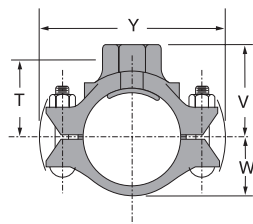


Fig. 7045

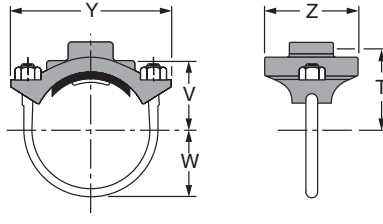


Fig. 7045 (U-Bolt)



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

## FIGURE 7045 FPT BRANCH (CONTINUED FROM PREVIOUS PAGE)

Nominal Size	O.D.	Hole Dimensions		▼ Max. Working Pressure	Clamp-T Dimensions						Bolt Size	Specified Torque §		Approx. Wt. Ea.
		Min. Diameter	Max. Diameter		T	U	V Threaded	W	Y	Z		Min.	Max.	
In./DN(mm)	In./mm	In./mm	In./mm	PSI/bar	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	Ft.-Lbs./N-m		Lbs./Kg
5 x 1¼ 125 x 32	5.563 x 1.660 141.3 x 42.4	2 51	2½ 54	500 34.5	3⅛ 94	1⅞ 48	4⅞ 111	3¼ 83	9⅞ 232	3¼ 95	⅝ x 3¼ -	100	130	5.4 2.4
5 x 1½ 125 x 40	5.563 x 1.900 141.3 x 48.3	2 51	2½ 54	500 34.5	3⅛ 94	1⅞ 48	4⅞ 111	3¼ 83	9⅞ 232	3¼ 95	⅝ x 3¼ -	100	130	5.5 2.5
5 x 2 125 x 50	5.563 x 2.375 141.3 x 60.3	2½ 64	2⅞ 67	500 34.5	3⅜ 97	1⅞ 48	4½ 114	3¼ 83	9⅞ 232	4⅞ 105	⅝ x 3¼ -	100	130	5.7 2.6
5 x 2½ 125 x 65	5.563 x 2.875 141.3 x 73.0	2¾ 70	2⅞ 73	500 34.5	3⅜ 97	1⅞ 48	4¾ 121	3¼ 83	9⅞ 232	4⅞ 111	⅝ x 3¼ -	100	130	7.0 3.2
5 x 3 O.D. 125 x 80	5.563 x 2.996 141.3 x 76.1	2¾ 70	2⅞ 73	500 34.5	3¾ 95	1⅞ 48	4¾ 121	3¼ 83	9⅞ 232	4⅞ 111	¾ x 4½ -	130	180	7.0 3.2
5 x 3 125 x 80	5.563 x 3.500 141.3 x 88.9	3½ 89	3⅞ 92	500 34.5	4 102	1⅞ 48	5 127	3¼ 83	9⅞ 232	5¼ 133	⅝ x 3¼ -	100	130	8.7 3.9
6 x 1¼ 150 x 32	6.625 x 1.660 168.3 x 42.4	2 51	2½ 54	500 34.5	4⅞ 106	2 51	4⅞ 124	3⅞ 98	10⅞ 257	3¾ 95	⅝ x 4¼ -	100	130	7.8 3.5
6 x 1½ 150 x 40	6.625 x 1.900 168.3 x 48.3	2 51	2½ 54	500 34.5	4⅞ 106	2 51	4⅞ 124	3⅞ 98	10⅞ 257	3¾ 95	⅝ x 4¼ -	100	130	7.8 3.5
6 x 2 150 x 50	6.625 x 2.375 168.3 x 60.3	2½ 64	2⅞ 67	500 34.5	4⅞ 106	2 51	4⅞ 124	3⅞ 98	10⅞ 257	4⅞ 105	⅝ x 4¼ -	100	130	7.8 3.5
6 x 2½ 150 x 65	6.625 x 2.875 168.3 x 73.0	2¾ 70	2⅞ 73	500 34.5	4⅞ 106	2 51	5⅞ 130	3⅞ 98	10⅞ 257	4⅞ 111	⅝ x 4¼ -	100	130	8.4 3.8
6 x 3 O.D. 150 x 80	6.625 x 2.996 168.3 x 76.1	2¾ 70	2⅞ 73	500 34.5	4⅞ 105	2 51	5⅞ 130	3⅞ 98	10⅞ 257	4⅞ 111	⅝ x 4¼ -	100	130	8.4 3.8
6 x 3 150 x 80	6.625 x 3.500 168.3 x 88.9	3½ 89	3⅞ 92	500 34.5	4⅞ 111	2 51	5⅞ 137	3⅞ 98	10⅞ 257	5¼ 133	⅝ x 4¼ -	100	130	9.6 4.4
6 x 4 150 x 100	6.625 x 4.500 168.3 x 114.3	4½ 114	4⅞ 117	500 34.5	4⅞ 111	2 51	5½ 140	3⅞ 98	10⅞ 257	6½ 165	⅝ x 4¼ -	100	130	10.5 4.8
8 x 2 200 x 50	8.625 x 2.750 219.1 x 70.0	2½ 64	2⅞ 67	500 34.5	5⅞ 132	2¼ 57	5⅞ 149	5 127	12¾ 324	4⅞ 105	¾ x 4¼ -	130	180	11.3 5.1
8 x 2½ 200 x 65	8.625 x 2.875 219.1 x 73.0	2¾ 70	2⅞ 73	500 34.5	5⅞ 134	2¼ 57	6¼ 159	5 127	12¾ 324	4⅞ 111	¾ x 4½ -	130	180	11.1 5.0
8 x 3 O.D. 200 x 80	8.625 x 2.996 219.1 x 76.1	2¾ 70	2⅞ 73	500 34.5	5¼ 133	2¼ 57	6¼ 159	5 127	12¾ 324	4⅞ 111	¾ x 4½ -	130	180	11.1 5.0
8 x 3 200 x 80	8.625 x 3.500 219.1 x 88.9	3½ 89	3⅞ 92	500 34.5	5⅞ 137	2¼ 57	6⅞ 162	5 127	12¾ 324	5¼ 133	¾ x 4½ -	130	180	13.0 5.9
8 x 4 200 x 100	8.625 x 4.500 219.1 x 114.3	4½ 114	4⅞ 117	500 34.5	5⅞ 137	2¼ 57	6⅞ 165	5 127	12¾ 324	6½ 165	¾ x 4½ -	130	180	16.2 7.3

**NOTE:** 2½", 5" and 6" Nominal size run pipe may be used on 3" O.D., 5½" O.D. and 6½" O.D. pipe.

▼ Based on use with standard wall pipe.

Not for use in copper systems.

§ - For additional Bolt Torque information, see Technical Data Section.  
(Additional larger sizes on next page)



# SPRINKLER PIPE

**Trust Bull Moose when it comes to protecting your most valuable assets.**

As the leading manufacturer of steel sprinkler pipe, we understand that there are no second chances in fire suppression. You need products of enduring quality and exceptional strength—plus reliable service. You need Bull Moose.

## BULL MOOSE ADVANTAGES:

- UL listed (US & Canada) and FM approved
- ASTM A135 and A795 Type E, Grade A Certified
- Complies with NFPA-13, 13R and 14
- Industry-leading hydraulic characteristics.
- CRR of 1.0 and greater
- All pipe NDT weld tested

**Exclusive maker of Reddi-Pipe®  
red painted pipe.**

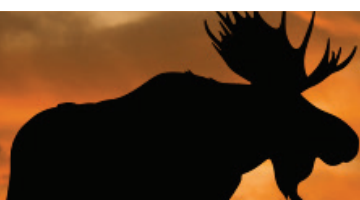
## OTHER BENEFITS/SERVICES:

- We have the most stocking locations in industry, for best delivery and availability
- Plain end or roll groove
- Eddy Guard II® bacterial-resistant internal coating
- Custom length options
- Hot dipped galvanization
- Reddi-Pipe® red pipe to eliminate field painting
- Compatible for use in wet, dry, preaction and deluge sprinkler systems

cULus LISTED



APPROVED

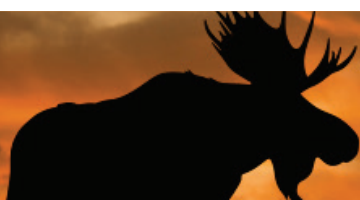


**BULL MOOSE**  
TUBE

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sales@bullmooseindustries.com  
**BullMooseTube.com**

# Bull Moose Fire Sprinkler Pipe Product Information

Nominal Pipe Size (Inches)		1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
EDDY FLOW	O.D. (in)		1.660	1.900	2.375	2.875	3.500	4.500		
	I.D. (in)		1.530	1.728	2.203	2.705	3.334	4.310		
	Empty Weight (lb/ft)		1.222	1.844	2.330	2.809	3.361	4.968		
	Water Filled Weight (lb/ft)		2.019	2.860	3.982	5.299	7.144	11.290		
	C.R.R.		1.98	3.44	2.78	1.66	1.00	1.00		
	Pieces per Lift		61	61	37	30	19	19		
	Lift Weight (lbs) 21' lengths		1,565	2,362	1,810	1,770	1,341	1,982		
	Lift Weight (lbs) 24' lengths		1,789	2,700	2,069	2,022	1,533	2,265		
	Lift Weight (lbs) 25' lengths		1,864	2,812	2,155	2,107	1,596	2,360		
SCHEDULE 10	O.D. (in)	1.315	1.660	1.900	2.375	2.875	3.500	4.500	6.625	8.625
	I.D. (in)	1.097	1.442	1.682	2.157	2.635	3.260	4.260	6.357	8.249
	Empty Weight (lb/ft)	1.410	1.810	2.090	2.640	3.530	4.340	5.620	9.290	16.940
	Water Filled Weight (lb/ft)	1.820	2.518	3.053	4.223	5.893	7.957	11.796	23.038	40.086
	C.R.R.	15.27	9.91	7.76	6.27	4.92	3.54	2.50	1.158	1.805
	Pieces per Lift	91	61	61	37	30	19	19	10	7
	Lift Weight (lbs) 21' lengths	2,695	2,319	2,677	2,051	2,224	1,732	2,242	1,951	2,490
	Lift Weight (lbs) 24' lengths	3,079	2,650	3,060	2,344	2,542	1,979	2,563	2,230	2,848
	Lift Weight (lbs) 25' lengths	3,208	2,760	3,187	2,442	2,648	2,062	2,670		
EDDYTHREAD 40	O.D. (in)	1.295	1.650	1.900	2.375					
	I.D. (in)	1.083	1.418	1.645	2.123					
	Empty Weight (lb/ft)	1.461	2.070	2.547	3.308					
	Water Filled Weight (lb/ft)	1.860	2.754	3.468	4.842					
	C.R.R.	1.00	1.00	1.00	1.00					
	Pieces per Lift	70	51	44	30					
	Lift Weight (lbs) 21' lengths	2,148	2,217	2,353	2,084					
	Lift Weight (lbs) 24' lengths	2,454	2,534	2,690	2,382					
	Lift Weight (lbs) 25' lengths	2,557	2,639	2,802	2,481					
SCHEDULE 40	O.D. (in)	1.315	1.660	1.900	2.375	2.875	3.500	4.500		
	I.D. (in)	1.049	1.380	1.610	2.067	2.469	3.068	4.026		
	Empty Weight (lb/ft)	1.680	2.270	2.720	3.660	5.800	7.580	10.800		
	Water Filled Weight (lb/ft)	2.055	2.918	3.602	5.114	7.875	10.783	16.316		
	C.R.R.	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
	Pieces per Lift	70	51	44	30	30	19	19		
	Lift Weight (lbs) 21' lengths	2,470	2,431	2,513	2,306	3,654	3,024	4,309		
	Lift Weight (lbs) 24' lengths	2,822	2,778	2,872	2,635	4,176	3,456	4,925		
	Lift Weight (lbs) 25' lengths	2,940	2,894	2,992	2,745	4,350	3,601	5,130		



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## HARDWARE ANCHORS HMZ

RSN: **1326440**

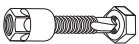
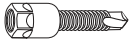
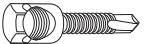


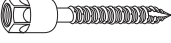


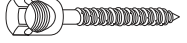
Permit #: **2018-1537609-CT**


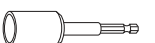
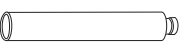

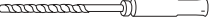
### HangerMate® Anchors

- Used for supporting/anchoring threaded rod in wood, steel or concrete structural members

**NOTE:** For use on horizontal and vertical surfaces

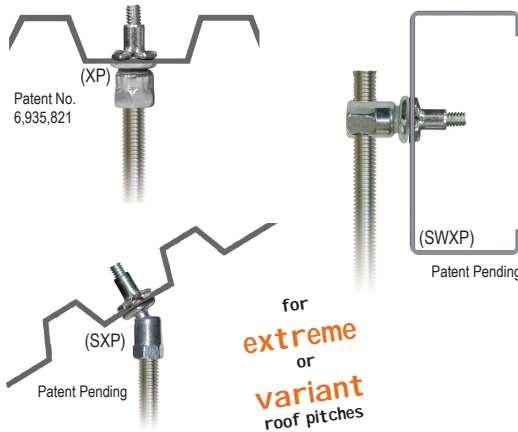


	Part Number	RS	Description
Steel Applications – Vertical Mount (End-drilled Head)			
	HMZG471	3/8-16	3/8" rod anchor for steel and purlin
	HMZG550	3/8-16	Self drilling anchor for steel 16 ga. - 1/4"
Steel Applications – Horizontal Mount (Cross-drilled Head)			
	HMZH455	3/8-16	3/8" rod anchor for sidewall (.125" max)
	HMZH475	3/8-16	3/8" rod anchor for steel (.25" max)
	HMZH476	3/8-16	3/8" rod anchor sidewall, steel and purlin
Wood Applications – Vertical Mount (End-drilled Head)			
	HMZG660	3/8-16	Self drilling 3/8" rod anchor for wood
Wood Applications – Horizontal Mount (Cross-drilled Head)			
	HMZH665	3/8-16	3/8" rod anchor for sidewall/wood
Concrete Applications – Vertical Mount (End-drilled Head)			
	HMZG730	3/8-16	3/8" rod anchor for concrete
Concrete Applications – Horizontal Mount (Cross-drilled Head)			
	HMZG735	3/8-16	5/16" x 2-1/4" HangerMate Anchor

	Part Number	Description
Installation Tools		
	HMZE200	Recessed drive socket for metal and wood side-mount applications
	HMZE215	Vertical recessed drive socket for metal and wood vertical-mount applications
	HMZE220	Concrete recessed drive socket sleeve
	HMZE230	Carbide countersink tool – use with HMZG730 for concrete/masonry applications
	HMZE380	SDS Hex Shank Drill Bit














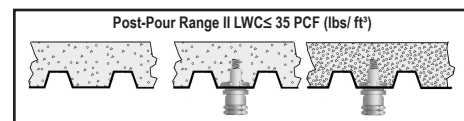
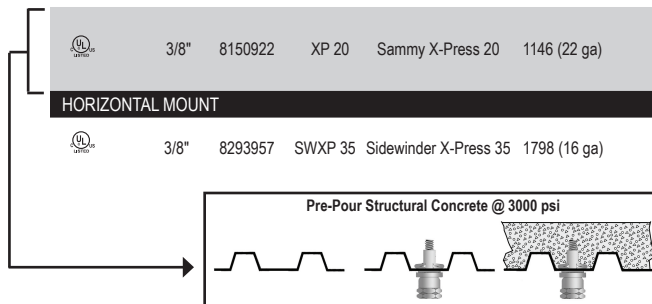
## Sammy X-Press® Installs into Metal Deck, Purlin, or Tubular Steel



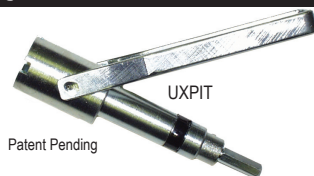
### Product Features

- The **Sammy X-Press** expands to provide direct vertical attachment in:
    - Metal Deck (22-16 gauge)
    - Z-Purlin (18-16 gauge)
  - The **Sammy X-Press Swivel** allows you to hang plumb in extreme roof pitches:
    - 89° in Z-Purlin
    - 45° in metal deck for 12/12 pitch
  - The **Sammy X-Press Sidewinder** expands to provide horizontal attachment in:
    - 16 ga - 3/16" steel - purlin, tubular steel.
- Installs in seconds, saving time & installation costs.
  - Use in applications where access to the back of the installed fastener is prohibited. ie. metal roof deck, tubular steel, or vapor barrier fabric.
  - Less jobsite material needed.
  - No retaining nut required.
  - Provides design flexibility.

Approvals	Rod Size	Part Number	Model	Description	Ultimate Pullout (lbs)	UL Test Load (lbs)	FM Test Load (lbs)	Min Thick	Max Thick	Box Qty	Case Qty	Application	
VERTICAL MOUNT													
	1/4"	8181922	XP 200	X-Press 200	1146 (22 ga)	185 (Luminaire) 250 (Luminaire)		.027" .056"	.125"	25	125	Metal Deck	
 	3/8"	8150922	XP 20	X-Press 20	1146 (22 ga)	850 (2½" Pipe) 185 (Luminaire) 250 (Luminaire) 283 (Conduit & Cable)	940 (2" Pipe) 1475 (4" Pipe)	.027" .027" .056"	.125"	25	125	Metal Deck	
 	3/8"	8153922	XP 35	X-Press 35	1783 (16 ga)	1500 (4" Pipe) 85 (Luminaire) 250 (Luminaire) 416 (Conduit & Cable)	940 (2" Pipe) 1475 (4" Pipe)	.060" .105" .027" .056"	.125"	25	125	Purlin	
 	3/8"	8294922	SXP 20	Swivel X-Press 20	1061 (22 ga Vertical) 829 (45° Off Vertical)	750 (2" Pipe) 170 vertical (Luminaire) 80 @ 45° (Luminaire) 283 vertical (Conduit & Cable) 233 @ 45° (Conduit & Cable)	635 (2" Pipe)	.027"	.125"	25	125	Metal Deck	
 	3/8"	8295922	SXP 35	Swivel X-Press 35	1675 (16 ga Vertical) 1558 (89° Off Vertical)	1500 (4" Pipe) 250 vertical (Luminaire) 80 @ 90° (Luminaire) 500 vertical (Conduit & Cable) 333 @ 89° (Conduit & Cable)	635 (2" Pipe)	.060"	.125"	25	125	Purlin	
	3/8"	8150922	XP 20	Sammy X-Press 20	1146 (22 ga)	850 (2½ Pipe)	Pre-Pour Structural Concrete@ 3000 psi Post-Pour Range II LWC≤ 35 PCF (lbs/ft³)				25	125	Metal Deck (Pre-Pour) Metal Deck (Post-Pour)
HORIZONTAL MOUNT													
	3/8"	8293957	SWXP 35	Sidewinder X-Press 35	1798 (16 ga)	1250 (3½" Pipe) 80 (Luminaire) 416 (Conduit & Cable)		.060"	.125"	25	125	Purlin	

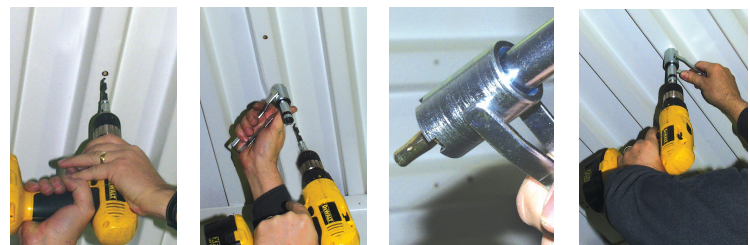


## Sammy X-Press It® INSTALLATION TOOL



Part Number	Model	Description	Each Qty
8194910	UXPIT*	Universal X-Press It Tool	1
8195910	RXPIT	Retro Socket for 8151910	1
8152910	XPDB	25/64" Drill Bit	1

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



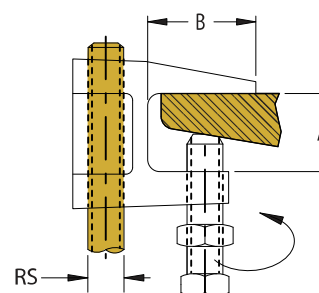
To watch a video demonstration of the Sammy X-Press, visit <http://www.sammysuperscrew.com/sammyxpress.htm>

## BEAM CLAMP 300

RSN: **1326440**  
Permit #: **2018-1537609-CT**

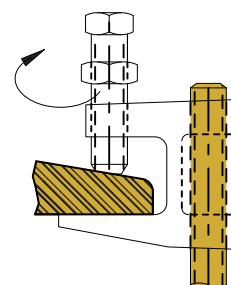
### Universal Ductile Iron Beam Clamp

- Size Range: 3/8", 1/2", 5/8", 3/4" and 7/8" rod sizes
- Surface Finish: Black, Electro-zinc plated
- Structural attachment to top or bottom of metal beams, purlins, channel, or angle iron
- Setscrew made of hardened steel
- For retainer straps see Models 300C and 035RS
- Available with a HD finish by special order
- Conforms with Federal Specification WW-H-171 (Type 23), Manufacturers Standardization Society ANSI/MSS-SP-58 (Type 19 & 23), install in accordance with ANSI/MSS-SP-69
- Setscrew must be tightened and torqued onto the sloped side of the I-beam



**TOP**

May be mounted  
in either position



**BOTTOM**

Part Number	RS	A	B	Set Screw	Max. Rec. Load (lbs)	
Plain Finish					Top	Bottom
3000037PL *	3/8	3/4"	1-1/8"	3/8"	500	250
3000050PL *	1/2	3/4"	1-1/8"	7/16"	950	760
3000062PL	5/8	3/4"	1-1/8"	3/8"	950	760
3000075PL	3/4	3/4"	1-1/8"	3/8"	950	760
3000087PL	7/8	3/4"	1-1/8"	3/8"	950	760
Electro-zinc Plated Finish						
3000037EG *	3/8	3/4"	1-1/8"	3/8"	500	250
3000050EG *	1/2	3/4"	1-1/8"	7/16"	950	760
3000062EG	5/8	3/4"	1-1/8"	3/8"	950	760
3000075EG	3/4	3/4"	1-1/8"	3/8"	950	760
3000087EG	7/8	3/4"	1-1/8"	3/8"	950	760

\*Theses sizes are FM approved

Recommended Torque\*\* (for setscrews):

Setscrew Size	1/4-20	3/8-16	7/16-14	1/2-13	5/8-11	3/4-10
Foot-lbs	4	5	8	11	21	34
Nm	(5)	(7)	(11)	(15)	(28)	(46)

\*\*Recognizing that torque wrenches are generally not used or available on many job sites, the setscrew should be tightened so it contacts the I-beam and then an additional 1/4 to 1/2 turn added.



## HARDWARE THREADED STUD 51

### Threaded Studs

RSN: **1326440**

Permit #: **2018-1537609-CT**

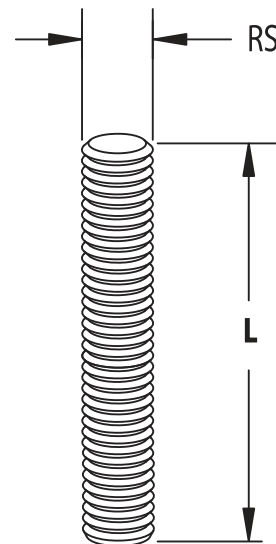
- Size Range: 3/8" and 1/2" rod sizes
- Surface Finish: Plain
- Attaches hangers to structural attachments without threading or cutting the rod, UNC Thread Form

**NOTE:** Low carbon: tensile: 58,000 psi; yield: 36,000 psi



Part Number	RS	L	Max. Rec. Load (lbs)*
0513702PL	3/8"	2"	610
0513703PL	3/8"	3"	610
0513704PL	3/8"	4"	610
0513705PL	3/8"	5"	610
0513706PL	3/8"	6"	610
0515004PL	1/2"	4"	1130
0515005PL	1/2"	5"	1130
0515006PL	1/2"	6"	1130
0515010PL	1/2"	10"	1130
0515012PL	1/2"	12"	1130

\*Load based on Max. 650 F



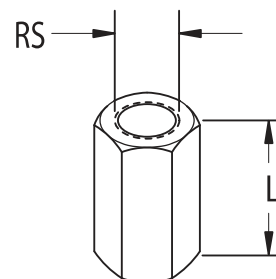
## HARDWARE ROD COUPLING 25

### Steel Rod Coupling

- Size Range: 1/4" thru 7/8" rod sizes
- Surface Finish: Electro-zinc Plated
- Intermediate accessory designed to join two lengths of similar UNC threaded rod



Part Number	RS	L	Max. Rec. Load (lbs)
0250025EG	1/4"	7/8"	240
0250037EG	3/8"	1-3/4"	610
0250050EG	1/2"	1-3/4"	1130
0250062EG	5/8"	2-1/8"	1810
0250075EG	3/4"	2-1/4"	2710
0250087EG	7/8"	2-1/2"	3770





## SWIVEL LOOP HANGER 100

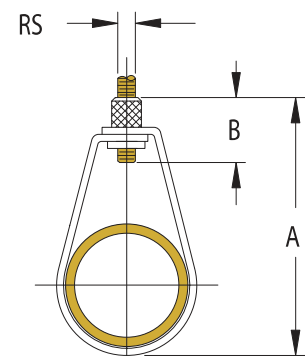
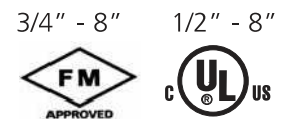
### Heavy Duty Adjustable Band Hanger

- Size Range: 1/2" through 8"
- Surface Finish: Electro-zinc plated
- Recommended for the suspension of stationary non-insulated pipe lines
- Features a retained insert nut to ensure that the loop hanger and insert nut stay together
- Conforms with Federal Specification WW-H-171 (Type 10), Manufacturers Standardization Society (MSS) SP-58 and SP-69 (Type 10)

RSN: **1326440**  
Permit #: **2018-1537609-CT**



Part Number	Nominal Pipe Size	RS	A	B	Max. Rec. Load (lbs)
1000050EG	1/2"	3/8"	2-3/4"	1"	300
1000075EG	3/4"	3/8"	3-1/16"	1"	300
1000100EG	1"	3/8"	3-5/16"	1"	300
1000125EG	1-1/4"	3/8"	3-9/16"	1"	300
1000150EG	1-1/2"	3/8"	3-13/16"	1"	300
1000200EG	2"	3/8"	4-1/4"	1"	300
1000250EG	2-1/2"	1/2"	5-5/8"	1-1/4"	1000
1000300EG	3"	1/2"	6-9/16"	1-1/4"	1000
1000350EG	3-1/2"	1/2"	7"	1-1/4"	1000
1000400EG	4"	5/8"	7-3/4"	1-5/16"	1100
1000500EG	5"	5/8"	9-1/8"	1-5/16"	1100
1000600EG	6"	3/4"	10-5/8"	1-9/16"	1250
1000800EG	8"	7/8"	13-1/8"	1-5/8"	1250



## LOOP HANGER SURGE RESTRAINT LHSR6

### Heavy Duty Adjustable Band Hanger

- Size Range: fits 1/2" through 2" model 100 loop hangers
- Surface Finish: CADDY® COAT Black
- Restricts the upward surge movement of activated fire sprinkler systems
- Meets NFPA® 13 requirements
- One size fits 1/2" thru 2" sizes of the model 100 loop hanger
- Grips the loop hanger – not the nut – allowing fine tuning for height adjustment
- Installs without tools

