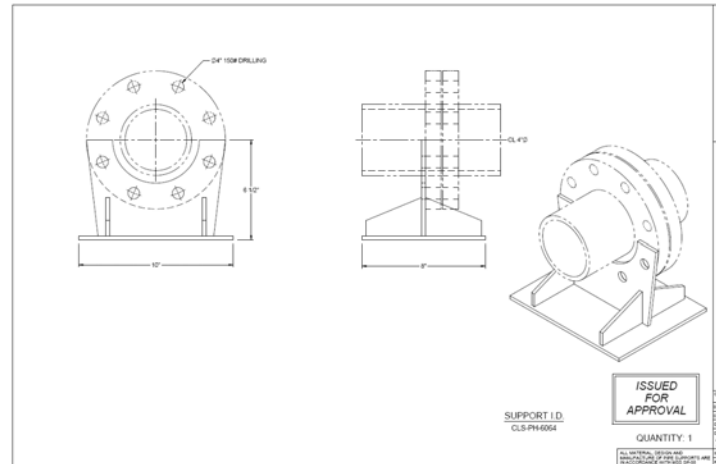




RPS PIPE SUPPORTS CATALOGUE



REINFORCED PLASTIC SYSTEMS INC.

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PIPE SUPPORT GENERAL NOTES

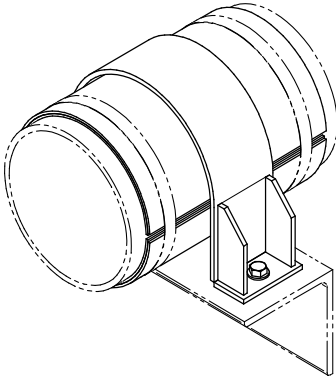
- 1) THE FOLLOWING SUPPORT CONFIGURATIONS ARE DESIGNED FOR THE LISTED ALLOWABLE LOADS. IF REQUIRED LOADS ARE GREATER, CONFIGURATION AND MATERIALS CAN BE ALTERED TO ACCOMMODATE THE LOAD REQUIREMENTS.
- 2) THE DEFINED ALLOWABLE LOADS ARE BASED ON TYPICAL LOAD MANAGERMENTS. WHERE LATERAL LOADS ARE LARGE OR GREATER THAN VERTICAL DEAD WEIGHT LOADS, OVERTURNING OF SUPPORTS SHOULD BE CONSIDERED.
- 3) ALLOWABLE LOADS AND SUPPORT/PIPE BEARING ARE BASED ON TYPICAL 150 PSI PIPE WALL THICKNESS. THE THICKNESS OF THE CORROSION BARRIER IS NOT CONSIDERED IN THE DETERMINATION OF ALLOWABLE LOADS.
- 4) STRUCTURAL AND SUPPLEMENTARY STEEL ARE ASSUMED TO BE NEAR RIGID. WHERE POSSIBLE, SUPPORTS SHOULD BE CENTERED ON STRUCTURAL STEEL. IF SUPPORTS CANNOT BE CENTERED ON STEEL, TORSIONAL LOADS ON THE STEEL SHOULD BE CONSIDERED.
- 5) STRUCTURAL STEEL WIDTHS SHOULD BE CONSIDERED FOR SUPPORT BEARING. WHERE STRUCTURAL OR SUPPLEMENTARY STEEL MAY BE NARROW FOR SUPPORTING OF FRP PIPING, THICKER BASE PLATES OR GUSSET STIFFENERS MAY BE DESIRED.
- 6) SLOTS CAN BE INCORPORATED INTO SUPPORTS TO ACCOMMODATE INSULATION STRAPS.
- 7) WHERE UPLIFT IS A CONCERN, THE UPPER CLAMP BAND MAY EXTEND TO FULL LENGTH OF THE SUPPORT.
- 8) IF BASE PLATES ARE DESIRED FOR A STANDARD SUPPORT WHERE BASE PLATES ARE NOT TYPICALLY INCLUDED, PLEASE SPECIFY WITH PLACEMENT OF ORDER. BASE PLATES ARE REQUIRED AND PROVIDED WHERE SLIDE BEARINGS ARE USED. SEE FIGURE O3 FOR DETAILS.
- 9) SLIDE BEARINGS ARE RECOMMENDED FOR PIPE SUPPORTS WHERE MODERATE TO SEVERE PIPE MOVEMENTS AND LOADS MAY BE ANTICIPATED. MODERATE TO SEVERE PIPE MOVEMENTS AND LOADS MAY BE ANTICIPATED ON SYSTEMS, HAVING LONGER RUNS WITH DESIGN PRESSURES OVER 75 PSI. SLIDE BEARINGS ARE RECOMMENDED FOR ABOVE 10" DIAMETER WHERE TEMPERATURE GRADIENTS FROM AMBIENT ARE GREATER THAN 60°F MAY OCCUR. BASE PLATES ARE REQUIRED WITH THE USE OF SLIDE BEARINGS. SEE FIGURE 02 FOR DETAILS.
- 10) LOOSE GUIDE CLIPS MAY BE FIELD BOLTED OR WELDED TO THE SUPPORTING STRUCTURE. PLEASE SPECIFY THE PREFERRED ATTACHMENT METHOD WITH PLACEMENT OF ORDER. SEE FIGURE 05 FOR OPTIONAL GUIDE CLIP DETAILS.
- 11) THE TYPICAL MATERIAL AND FINISH FOR PIPE SUPPORTS IS CARBON STEEL AND HOT DIPPED GALVANIZE. OTHER MATERIALS SUCH AS ALUMINUM, STAINLESS STEEL OR OTHER ALLOYS ARE AVAILABLE UPON REQUEST. OTHER FINISHES INCLUDE PLAIN OR PAINTED. IF PAINTING IS DESIRED, PLEASE PROVIDE PAINT SPECIFICATION WITH PLACEMENT OF ORDER.
- 12) SUPPORTS ARE DESIGNED FOR INCREASED LOAD DISTRIBUTION TO AVOID POINT LOADING OF THE PIPE AT THE SUPPORT.



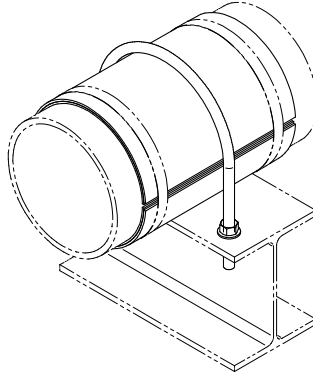
- 13) SUPPORTS ARE DESIGNED WITH CUSHIONING MATERIAL TO ASSURE BEST FIT AND TO MINIMIZE EXTERIOR PIPE WEAR.
- 14) LARGE DIAMETER SUPPORTS ARE DESIGNED FOR EACH SPECIFIC APPLICATION. EXPECTED LOAD AND MOVEMENTS ARE REQUESTED TO OPTIMIZE SUPPORT CONFIGURATION AND DESIGN.
- 15) AS NEEDED TO MEET PROJECT REQUIREMENTS, SUPPORTS MAY BE WELDED OR BOLTED TO STRUCTURE. PLEASE SPECIFY WITH PLACEMENT OF ORDER.
- 16) IF INCREASED SPAN OR LOAD BEARING CAPABILITY IS DESIRABLE, SUPPORT WIDTH, THICKNESS OR REINFORCEMENT MAY BE INCREASED TO MEET DEFINED REQUIREMENTS.
- 17) STANDARD PIPE SUPPORTS ARE AVAILABLE UP TO 144" IN DIAMETER. LARGER SIZES ARE AVAILABLE UPON REQUEST.
- 18) DIMENSIONS PROVIDED ARE FOR STANDARD PIPING. ACTUAL DIMENSIONS MAY VARY DEPENDING ON ACTUAL PIPE O.D. AND LOAD REQUIREMENTS.
- 19) HANGER HARDWARE TO THE SUPPORTING STRUCTURE IS NOT INCLUDED WITH STANDARD SUPPORTS, BUT IS AVAILABLE UPON REQUEST.
- 20) SUPPLEMENTARY STEEL SUPPORTING STRUCTURES ARE NOT INCLUDED WITH STANDARD SUPPORTS, BUT IS AVAILABLE UPON REQUEST.
- 21) ALL FLANGE SUPPORT DRILLING IS PER ANSI B16.5 CLASS 150 DRILLING.
- 22) SHIELD BANDING AND BUCKLES ARE NOT INCLUDED, BUT MAY BE PROVIDED IN BULK UPON REQUEST.
- 23) FOR SUPPORT options see Pg 43.



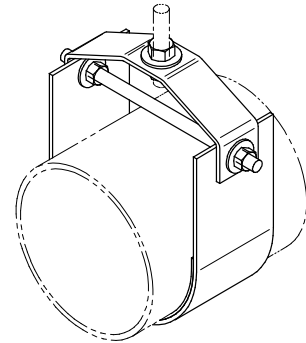
Pictorial Index
Standard Pipe Supports



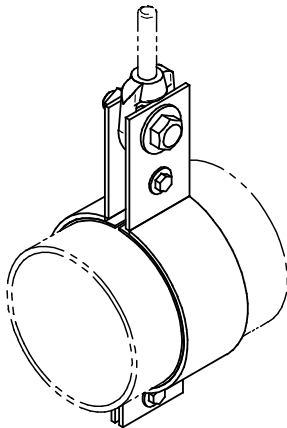
S1
U-Strap



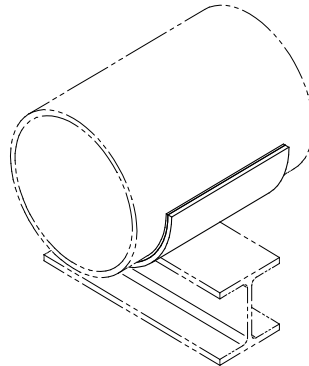
S2
U-Bolt w/ Shield



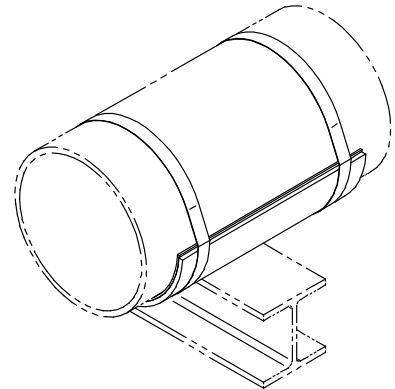
S4
Clevis Hanger w/ Load Shield



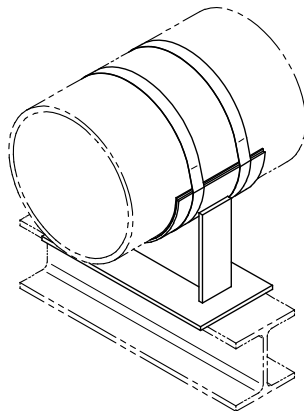
S5
Wide Clamp Hanger



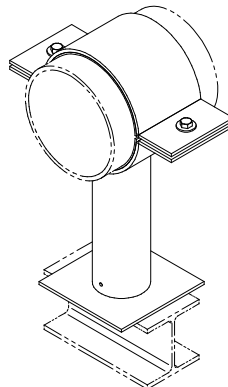
S7
Wear Pad



S8
Slide Shield



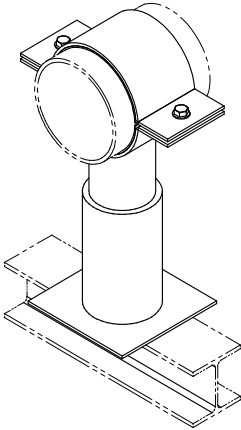
S9
Pipe Cradle



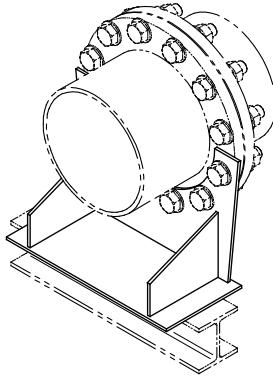
S10
Post Split Clamp Support



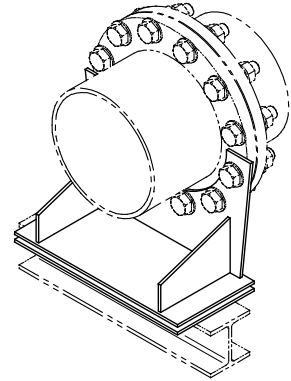
Pictorial Index
Standard Pipe Supports



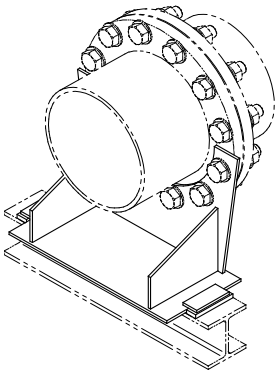
S11
Pipe Stand



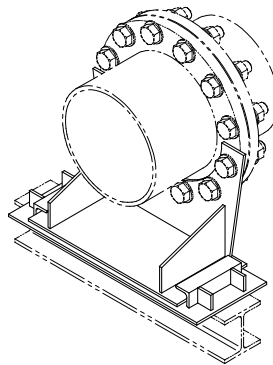
S12
Flange Slide



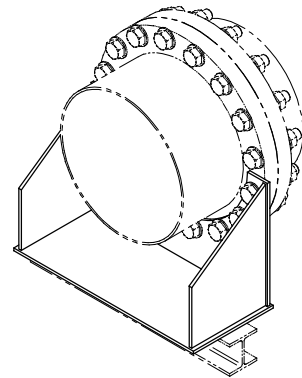
S12B
Flange Slide w/Bearings



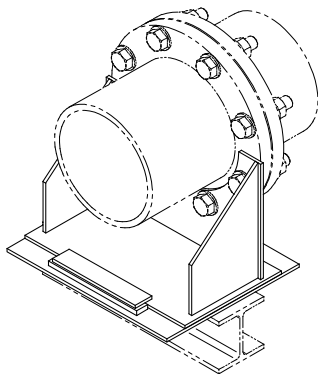
S13
Flange Guide



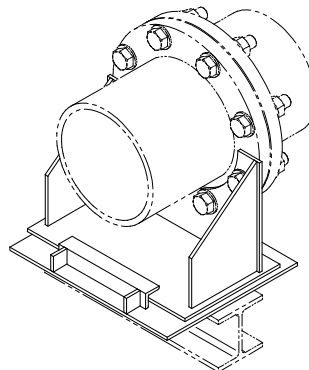
S13B
Flange Guide w/Bearings



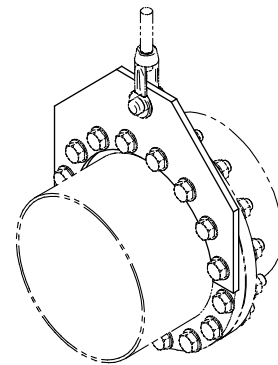
S14
Flange Anchor



S15
Flange Support w/Linestop



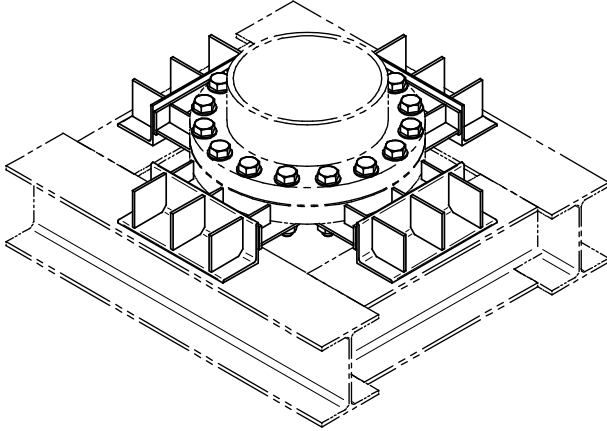
S15B
Flange Support w/Linestop & Bearings



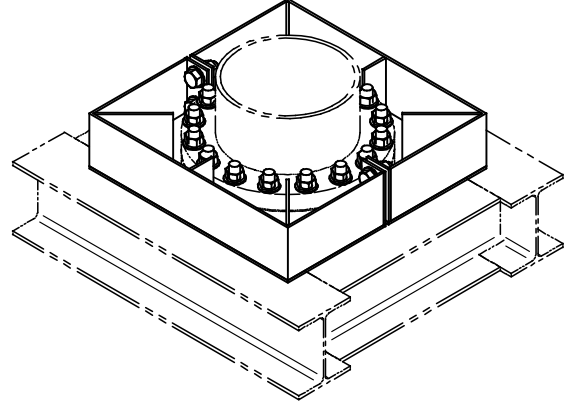
S16
Flange Hanger



Pictorial Index
Standard Pipe Supports



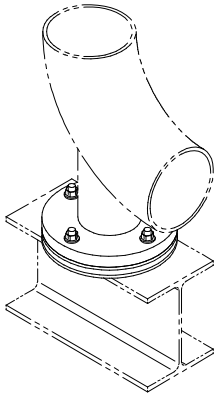
S17
Riser Flange Guide



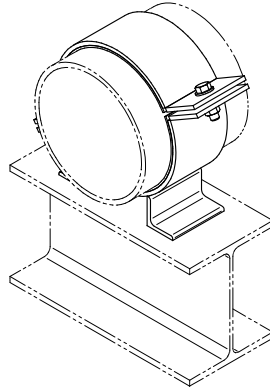
S18
Riser Flange Support



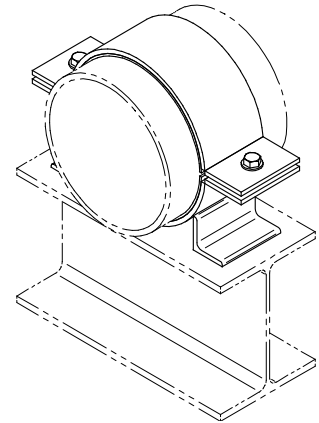
Pictorial Index
Standard Pipe Supports



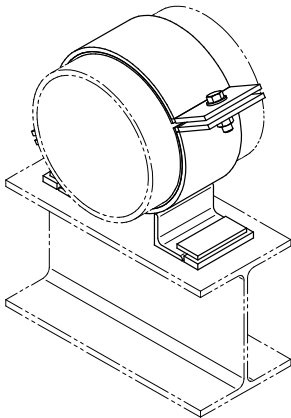
P7
Elbow Support



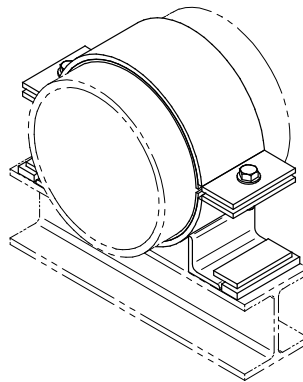
P8
Base Slide



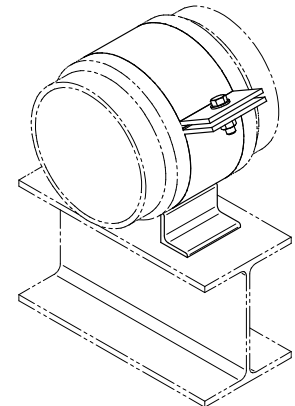
P8L
Low Profile Base Slide



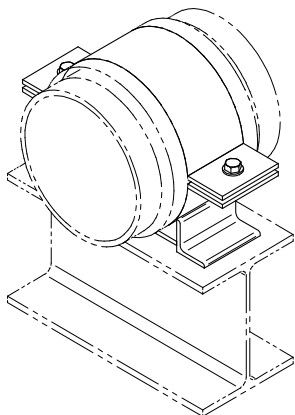
P9
Base Guide



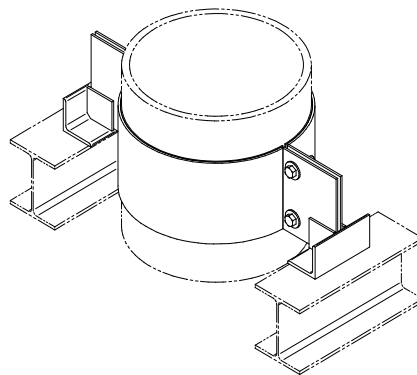
P9L
Low Profile Base Guide



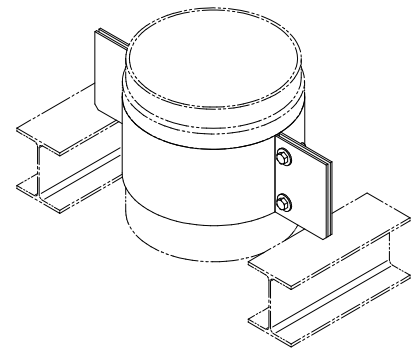
P10
Base Anchor



P10L
Low Profile Base Anchor



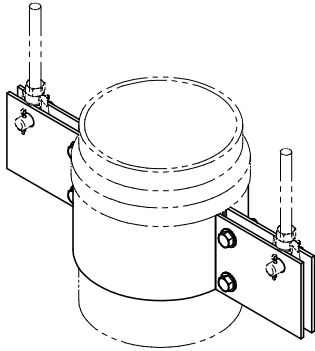
P13
Riser Guide



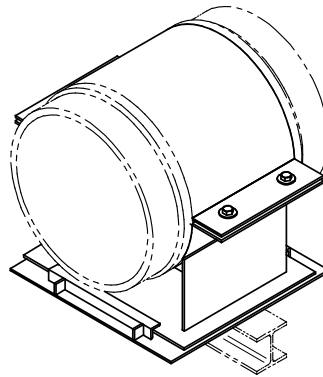
P14
Riser Support



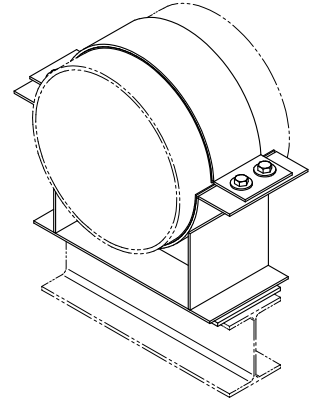
Pictorial Index
Standard Pipe Supports



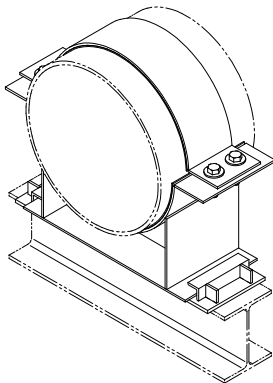
P15
Double Rod Riser Hanger



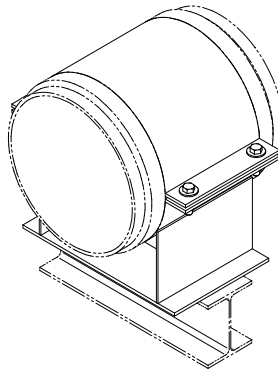
P17
Base Slide With Linestop



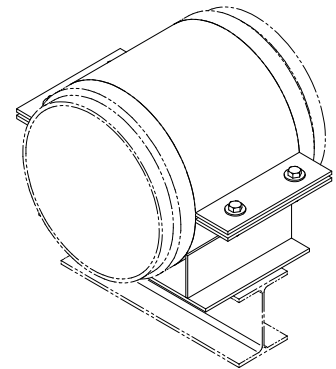
P18
Base Slide



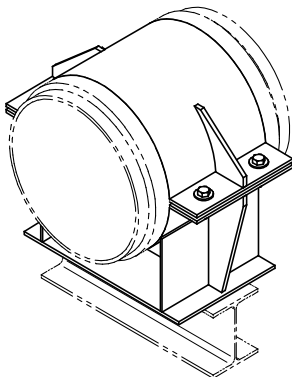
P19
Base Guide



P20
Base Anchor



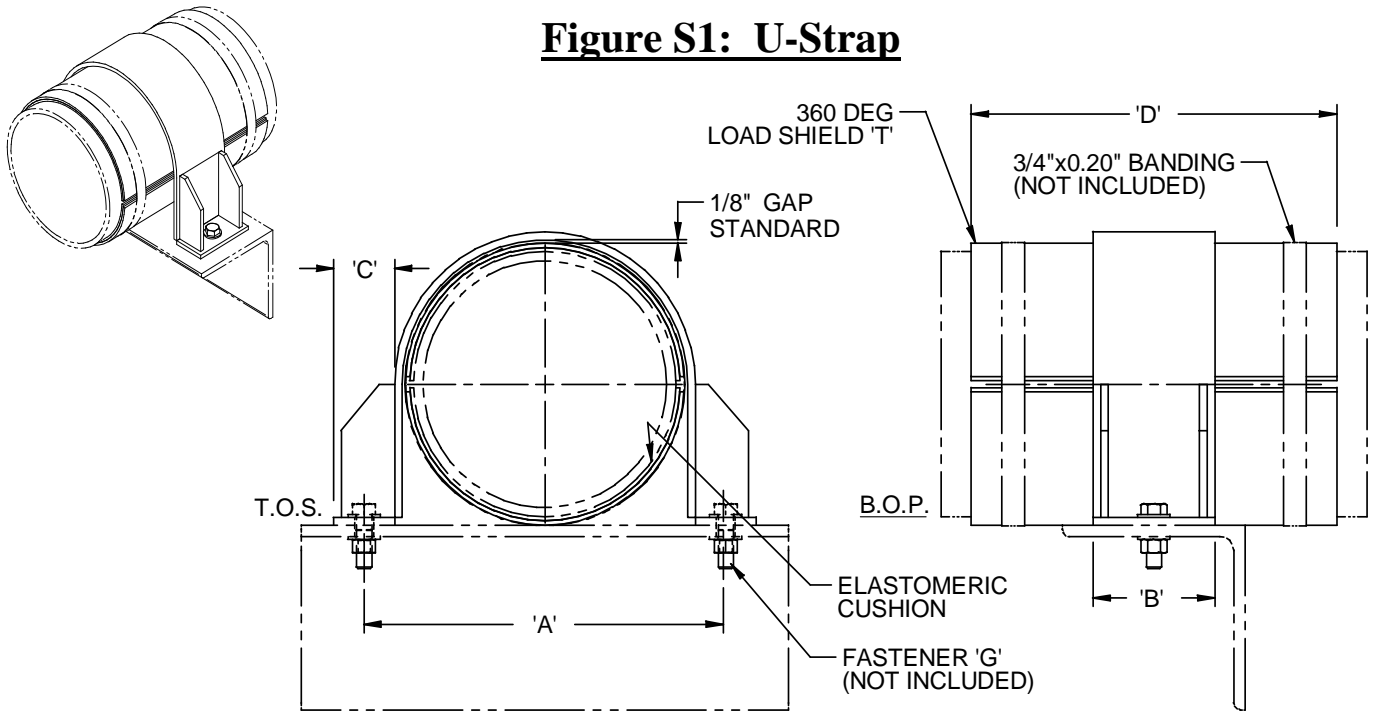
P21
Low Profile Base Anchor



P22
Base Anchor, Heavy



Figure S1: U-Strap



Finish:

Electroplated, hot-dipped galvanized.

Service:

Sliding support with wear protection.

Simple guide support. Pipe rests on steel.

Material:

Carbon steel**

Notes:

Anchor or attachment bolts not included.

Must be fully supported as shown.

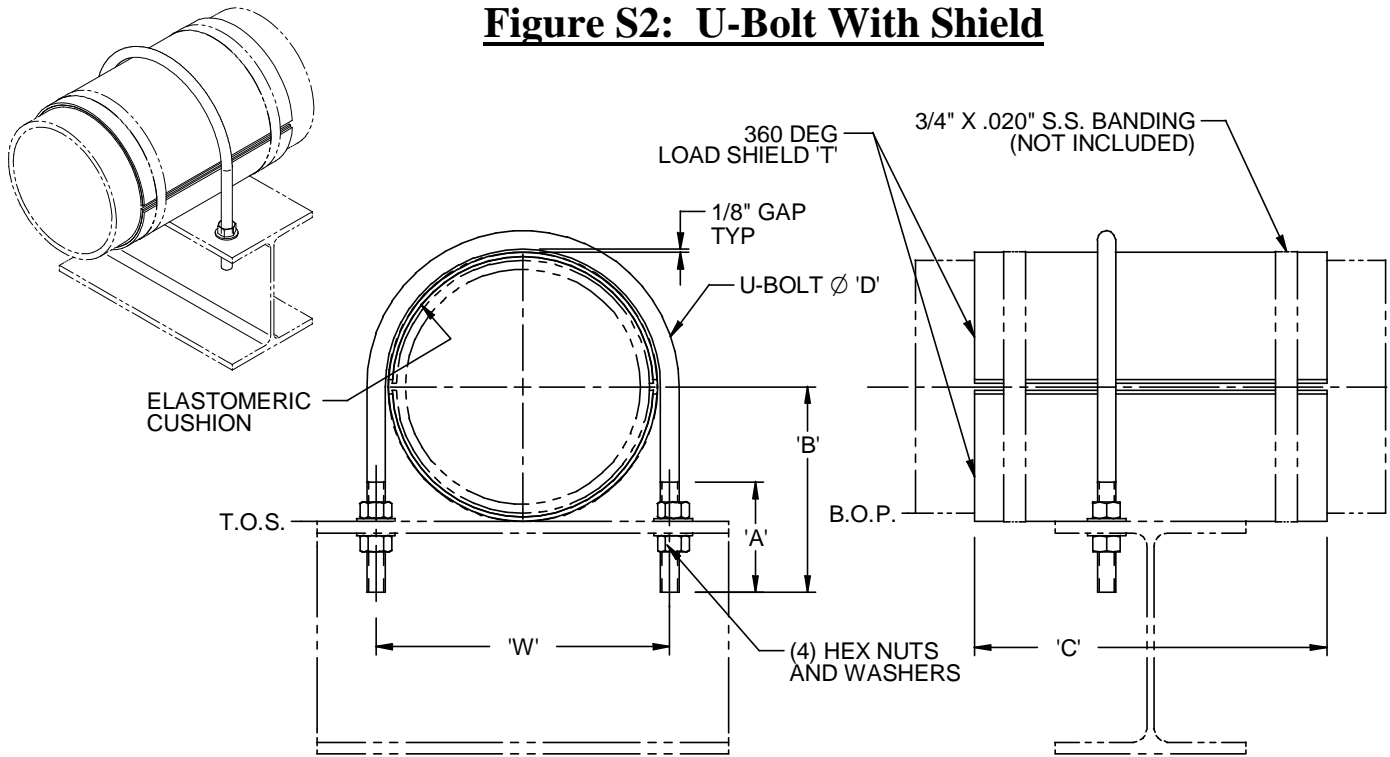
See general notes.

**** Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	T [in]	G [in]	Allowable Loads [lb]	
							Lateral	Vertical
2	5 3/8	4	2	12	16 ga	3/8	100	110
3	6 3/8	4	2	12	16 ga	3/8	200	200
4	7 1/2	4	2	12	12 ga	3/8	300	320
6	9 7/8	4	2	12	12 ga	1/2	600	650
8	11 7/8	4	2	12	10 ga	1/2	700	1100
10	14 1/2	6	2 1/2	12	10 ga	5/8	1300	1600
12	16 3/4	6	2 1/2	12	3/16	5/8	1300	2300



Figure S2: U-Bolt With Shield



Finish:

Electroplated, hot-dipped galvanized.

Service:

Sliding support with wear protection.
Basic restraint of lateral motion.

Material:

Carbon steel**

Notes:

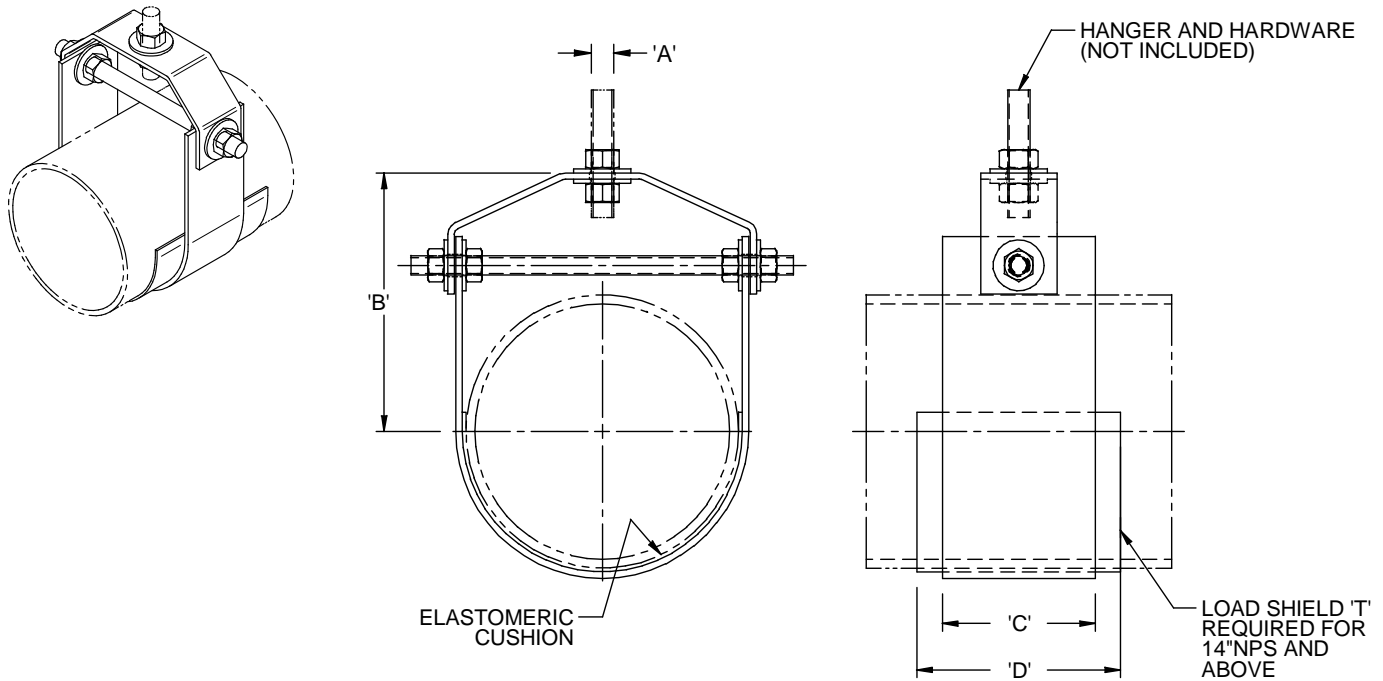
See general notes.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	T [in]	W [in]	Allowable Loads [lb]	
							Lateral	Vertical
2	3	3 1/4	12	3/8	16 ga	3 3/8	20	110
3	3 1/2	4	12	1/2	16 ga	4 1/2	45	200
4	3 1/2	4 1/2	12	1/2	12 ga	5 5/8	70	320
6	3 1/2	6	12	5/8	12 ga	8	150	650
8	3 3/4	7	12	5/8	10 ga	10	170	1100
10	4 1/2	8	12	3/4	10 ga	12 1/4	200	1600
12	4 1/2	9 1/2	12	3/4	3/16	14 1/2	210	2300



Figure S4: Clevis Hanger With Load Shield



Finish:

Hot-dipped galvanized*.

Service:

Load bearing support hung from above.

Material:

Carbon steel**.

Notes:

Hanger hardware is available upon request.
See general notes.

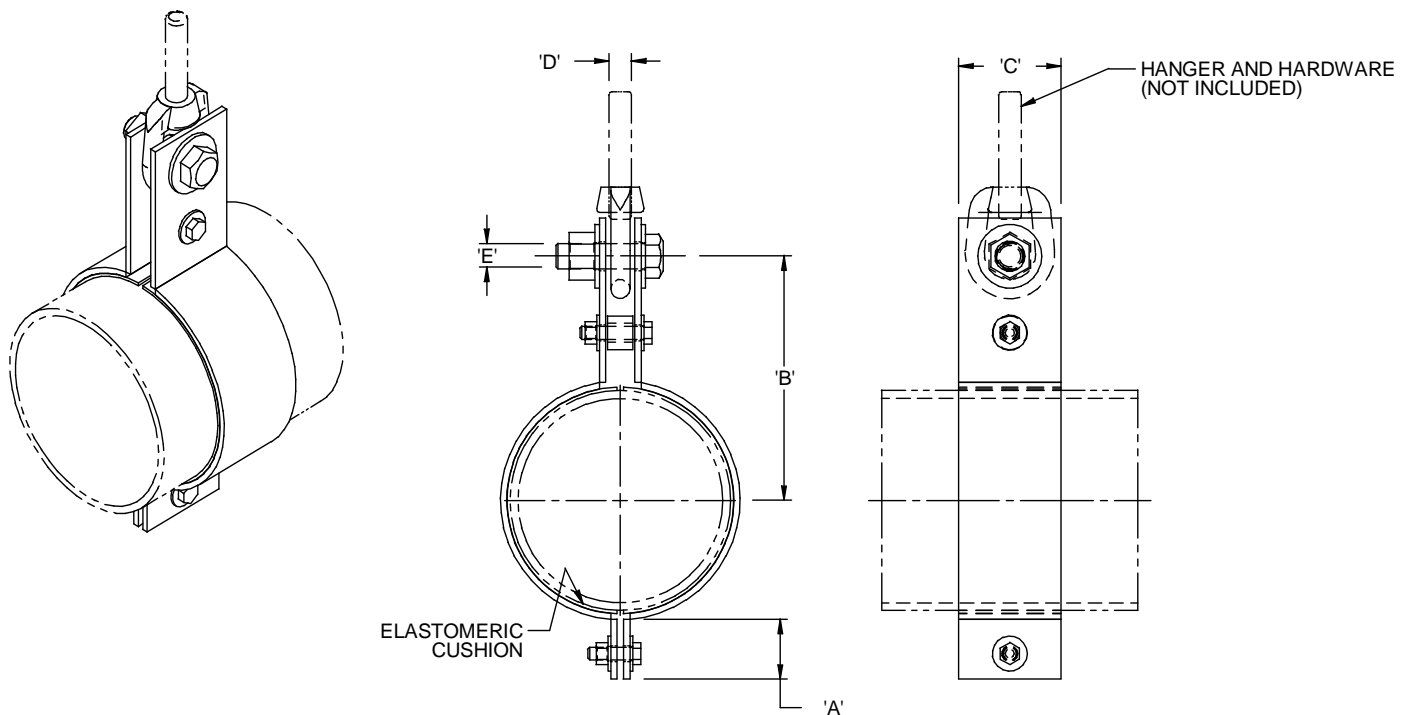
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	T [in]	Allowable Loads
						Vertical [lb]
2	3/8	3 1/4	3	-----	-----	240
3	1/2	4 1/2	3	-----	-----	315
4	5/8	5 1/2	3	-----	-----	420
6	3/4	7	4	-----	-----	840
8	3/4	8 1/2	4	-----	-----	1120
10	7/8	10	6	-----	-----	1800
12	7/8	11 1/2	6	-----	-----	2160
14	1	12 1/2	4	8	3/16	2800
16	1	14	4	8	3/16	3300
18	1	16	4	10	3/16	3500



Figure S5: Wide Clamp Hanger



Finish:

Hot-dipped galvanized*.

Service:

Load bearing support hung from above.

Material:

Carbon steel.**

Notes:

**Hanger hardware is available upon request.
See general notes.**

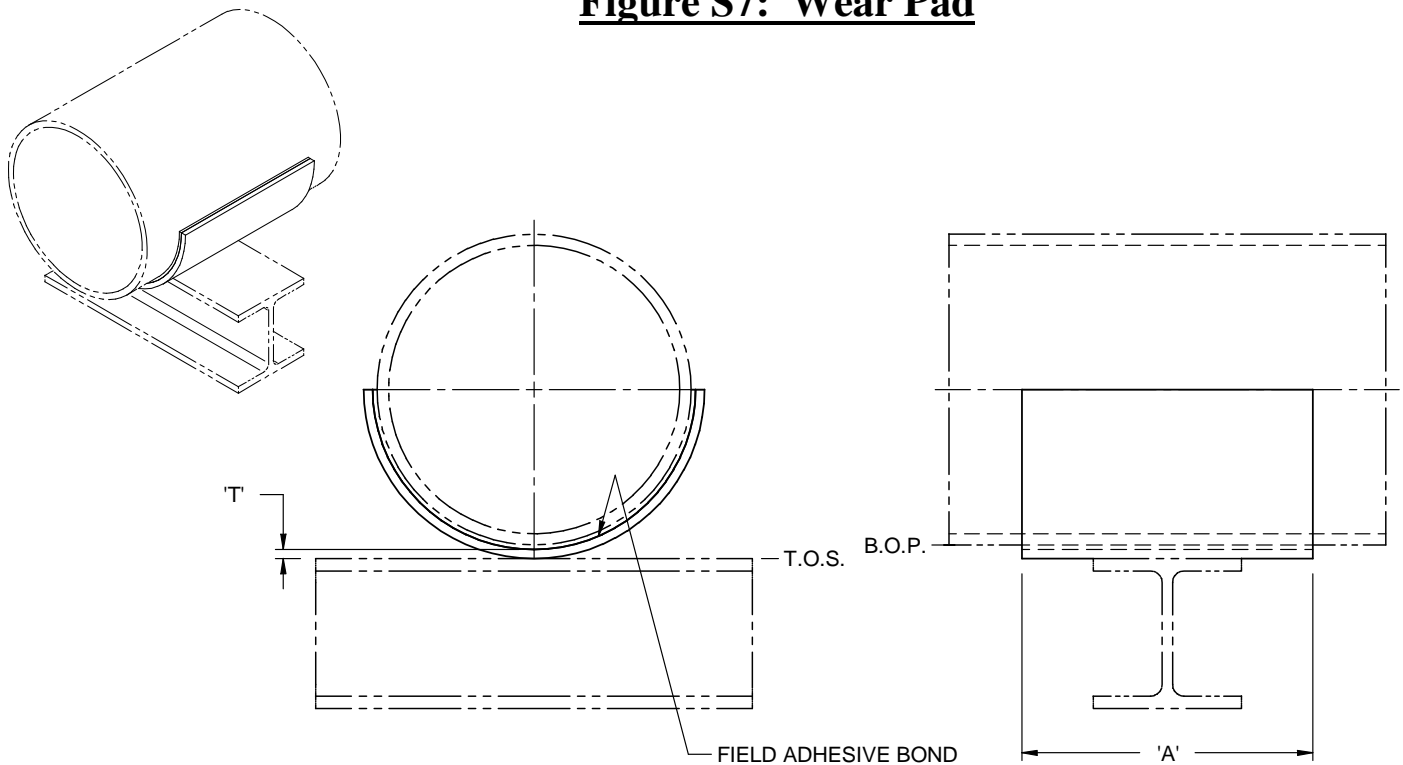
*** Other finishes are available upon request.**

**** Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	Allowable Loads
						Vertical [lb]
2	2	4 9/16	3	3/8	1/2	240
3	2	5 1/16	3	1/2	5/8	315
4	2	5 9/16	3	5/8	3/4	420
6	2	6 3/4	4	3/4	7/8	840
8	2	7 3/4	4	3/4	7/8	1120
10	2 1/2	9 1/16	6	7/8	1	1800
12	2 1/2	10 1/8	6	7/8	1	2160
14	2 1/2	11 1/4	8	1	1 1/8	3360
16	2 1/2	12 7/16	8	1	1 1/8	3840
18	3	13 11/16	10	1	1 1/8	5400



Figure S7: Wear Pad



Finish:

Plain, painted.

Service:

Sliding support with wear protection for FRP or plastic pipe.

Material:

Fiberglass Reinforced Plastic.

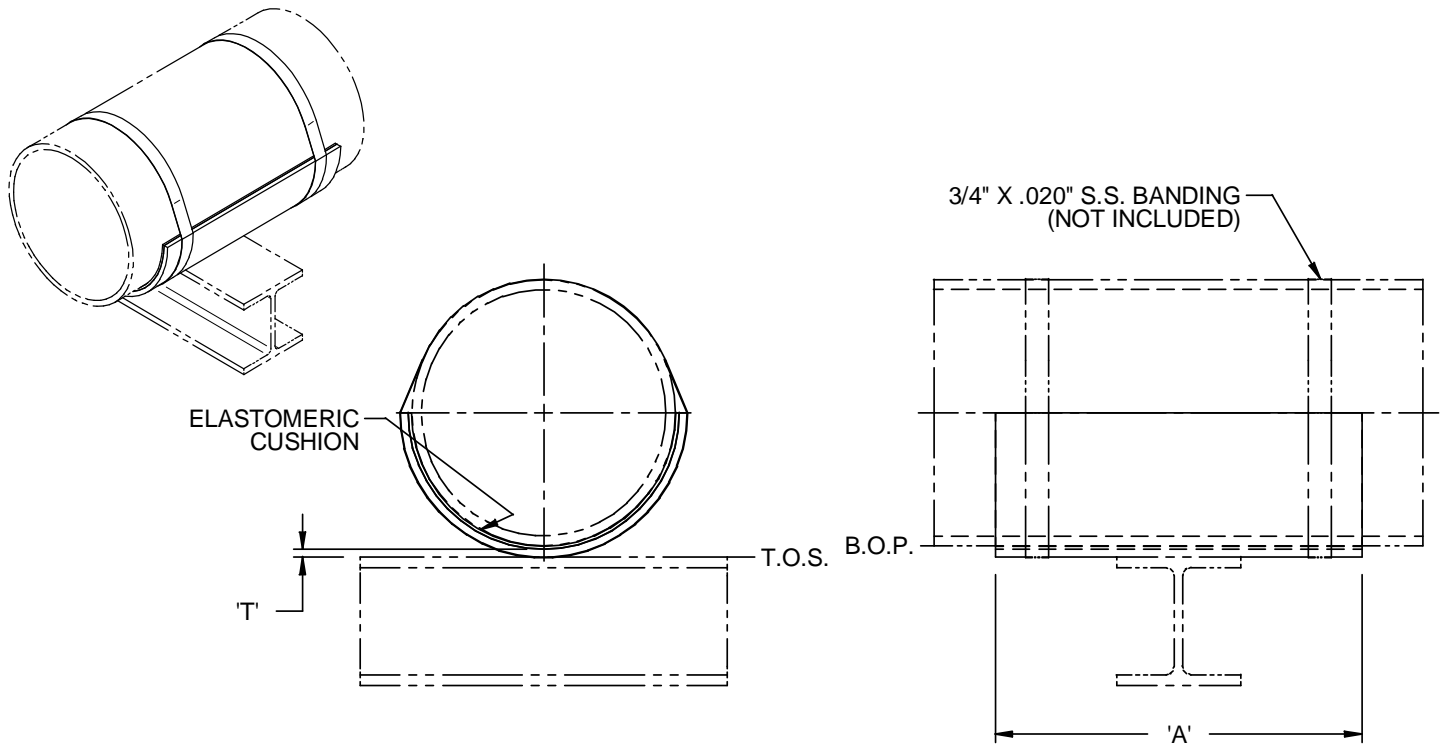
Notes:

Bonded to FRP or plastic pipe.

Pipe Size [in]	A [in]	T [in]	Allow able Loads [lb]
			Vertical
2	4	3/16	75
3	6	3/16	130
4	6	3/16	220
6	8	1/4	430
8	8	1/4	720
10	10	1/4	1100
12	12	1/4	1600



Figure S8: Slide Shield



Finish:

Electroplated, hot dipped galvanized.

Service:

Sliding support with wear protection.

Material:

Carbon steel.**

Notes:

See general notes.

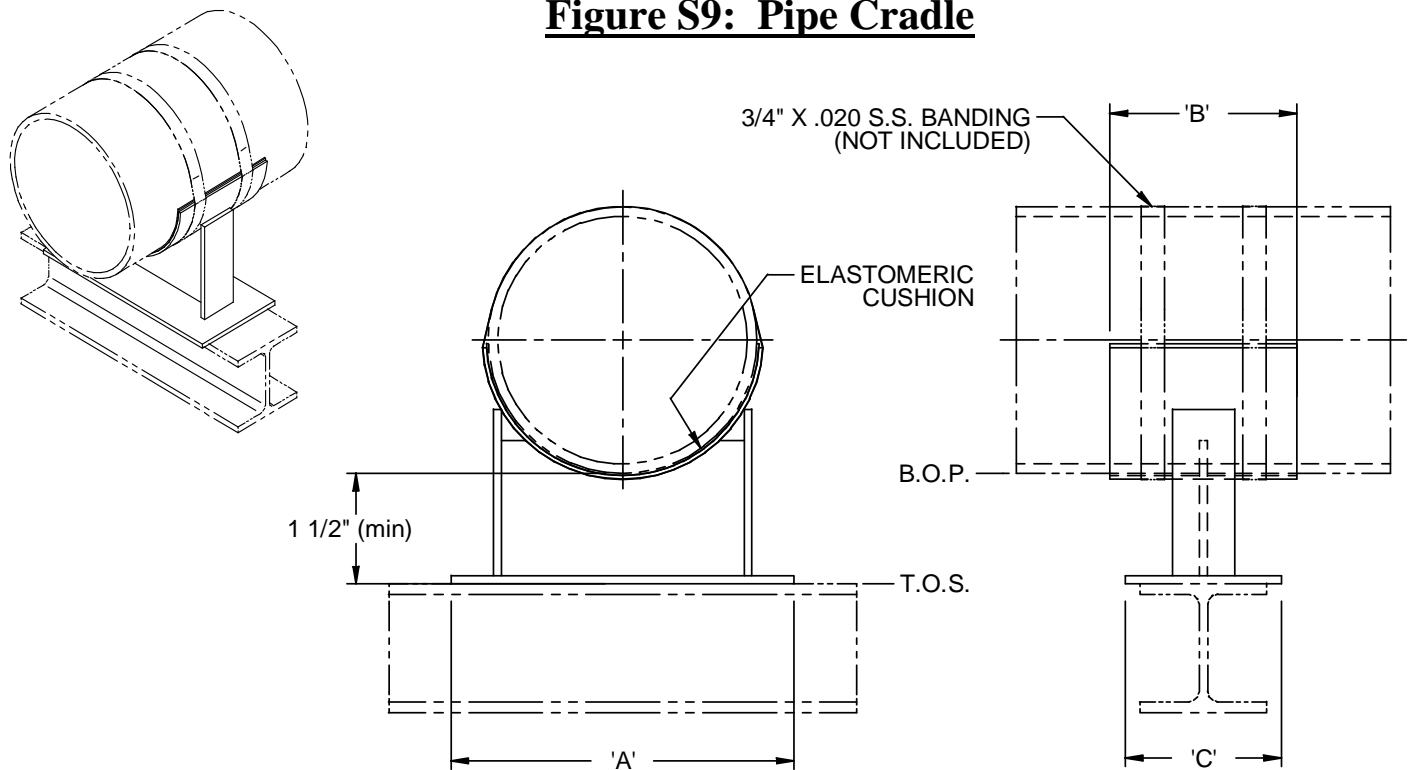
*** Other finishes are available upon request.**

**** Other materials are available upon request.**

Pipe Size [in]	A [in]	T [gauge in]	Allowable Loads
			Vertical [lb]
2	12	16 ga	110
3	12	16 ga	200
4	12	12 ga	320
6	12	12 ga	650
8	12	10 ga	1100
10	12	10 ga	1600
12	12	3/16	2300



Figure S9: Pipe Cradle



Finish:

Hot-dipped galvanized*.

Service:

Simple cradle support to carry pipe weight where movement is not a concern.

Material:

Carbon steel**.

Notes:

Must be fully supported as shown.

See general notes.

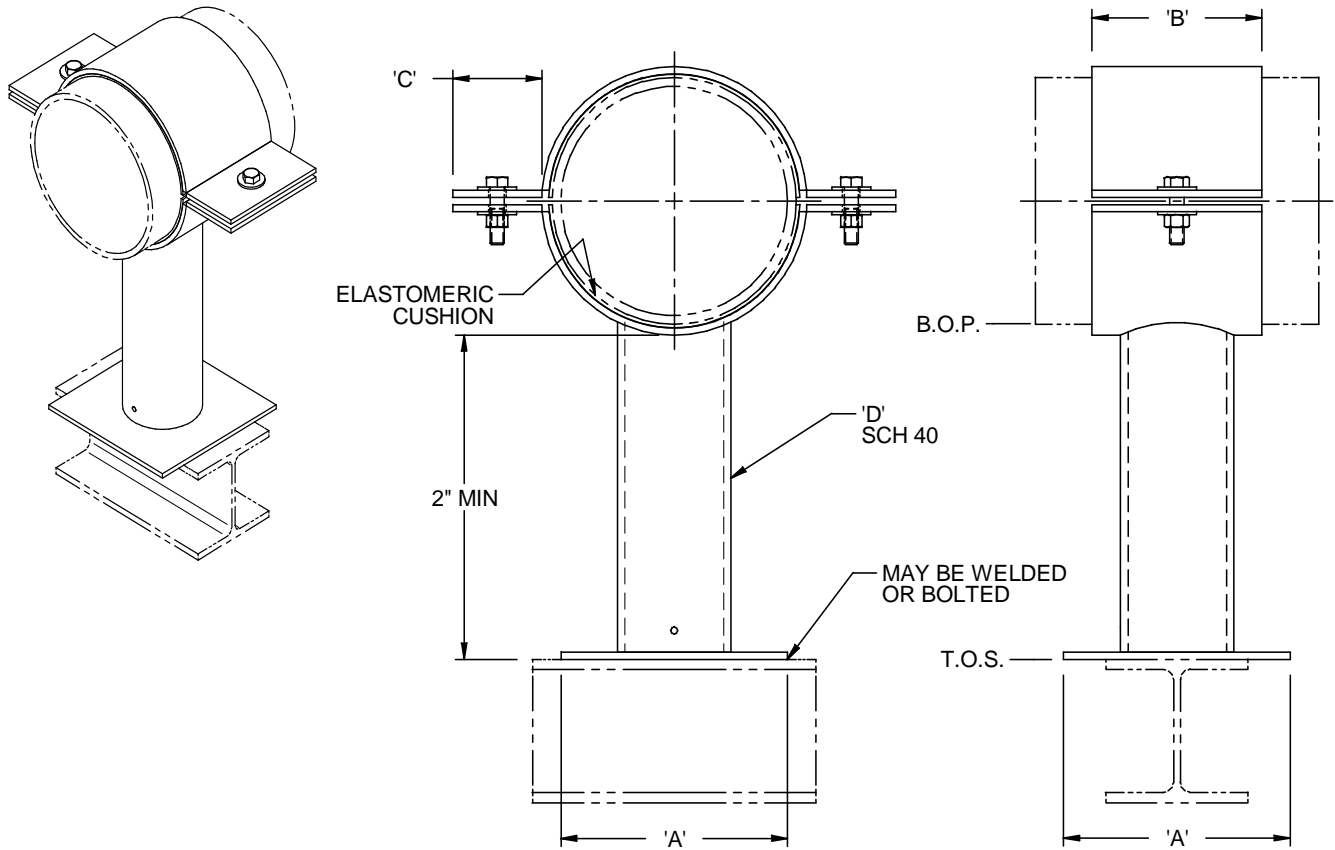
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	Allowable Loads [lb]
				Vertical
2	5	8	6	170
3	5 3/4	8	6	250
4	6 3/4	8	6	320
6	8 7/8	10	8	630
8	10 5/8	10	8	880
10	12 1/2	10	8	1540
12	14	12	10	2100
14	16	12	10	2800
16	18	12	10	3700
18	20	12	10	4600



Figure S10: Post Split Clamp Support



Finish:

Hot-dipped galvanized*.

Service:

Simple support with fixed height.

Material:

Carbon steel.**

Notes:

**Allowable lateral and axial loads depend on height.
Specify desired height upon placement of order.
See general notes.**

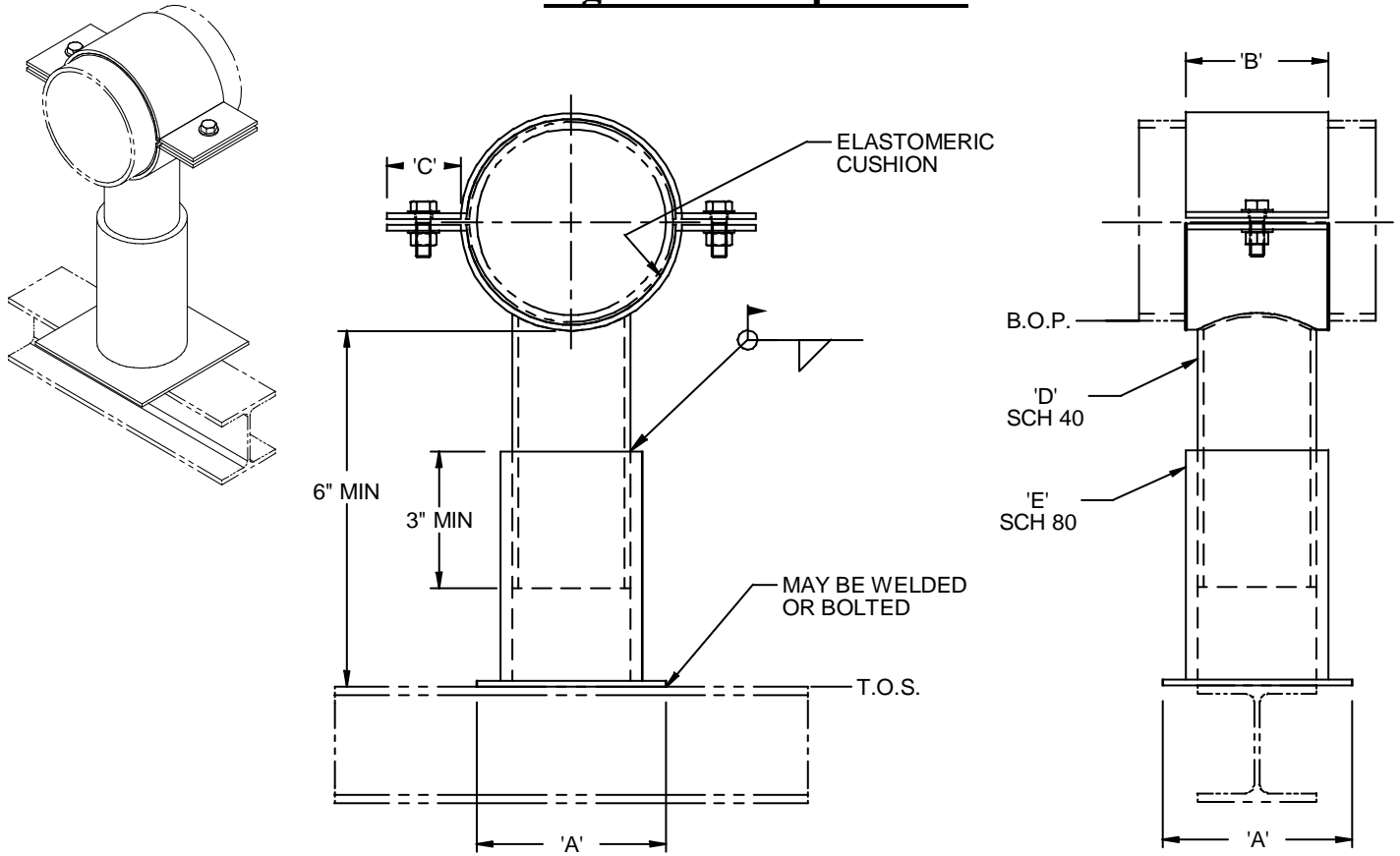
*** Other finishes are available upon request.**

**** Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	D [NPS]	Allowable Loads
					Vertical [lb]
2	6	3	2	2	220
3	6	3	2	2	320
4	6	3	2	2	420
6	8	4	2	3	800
8	8	4	2	3	1050



Figure S11: Pipe Stand



Finish:
Hot-dipped galvanized*.
Service:
Simple support with adjustable height.
Material:
Carbon steel**.

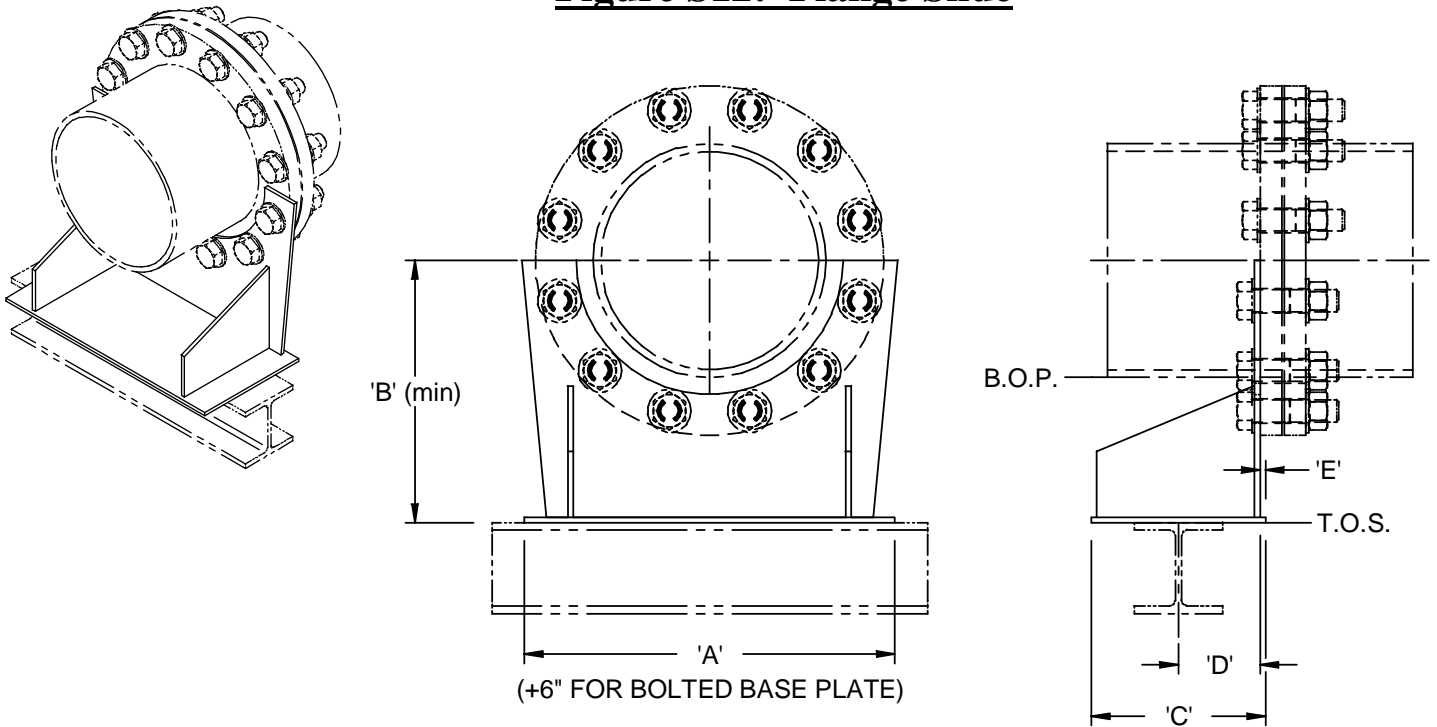
Notes:
Allowable lateral and axial loads depend on height.
Specify desired height upon placement of order.
See general notes.

* Other finishes are available upon request.
** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [NPS]	E [NPS]	Allowable Loads
						Vertical [lb]
2	6	4	2	2 1/2	3	220
3	6	4	2	2 1/2	3	320
4	6	4	2	2 1/2	3	420
6	8	5	2	4	5	800
8	8	5	2	4	5	1050



Figure S12: Flange Slide



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of valves or equipment, while allowing freedom of movement.

Material:

Carbon steel**.

Notes:

See Figure S12B for sizes 12”-24”.

Must be fully supported as shown.

See general notes.

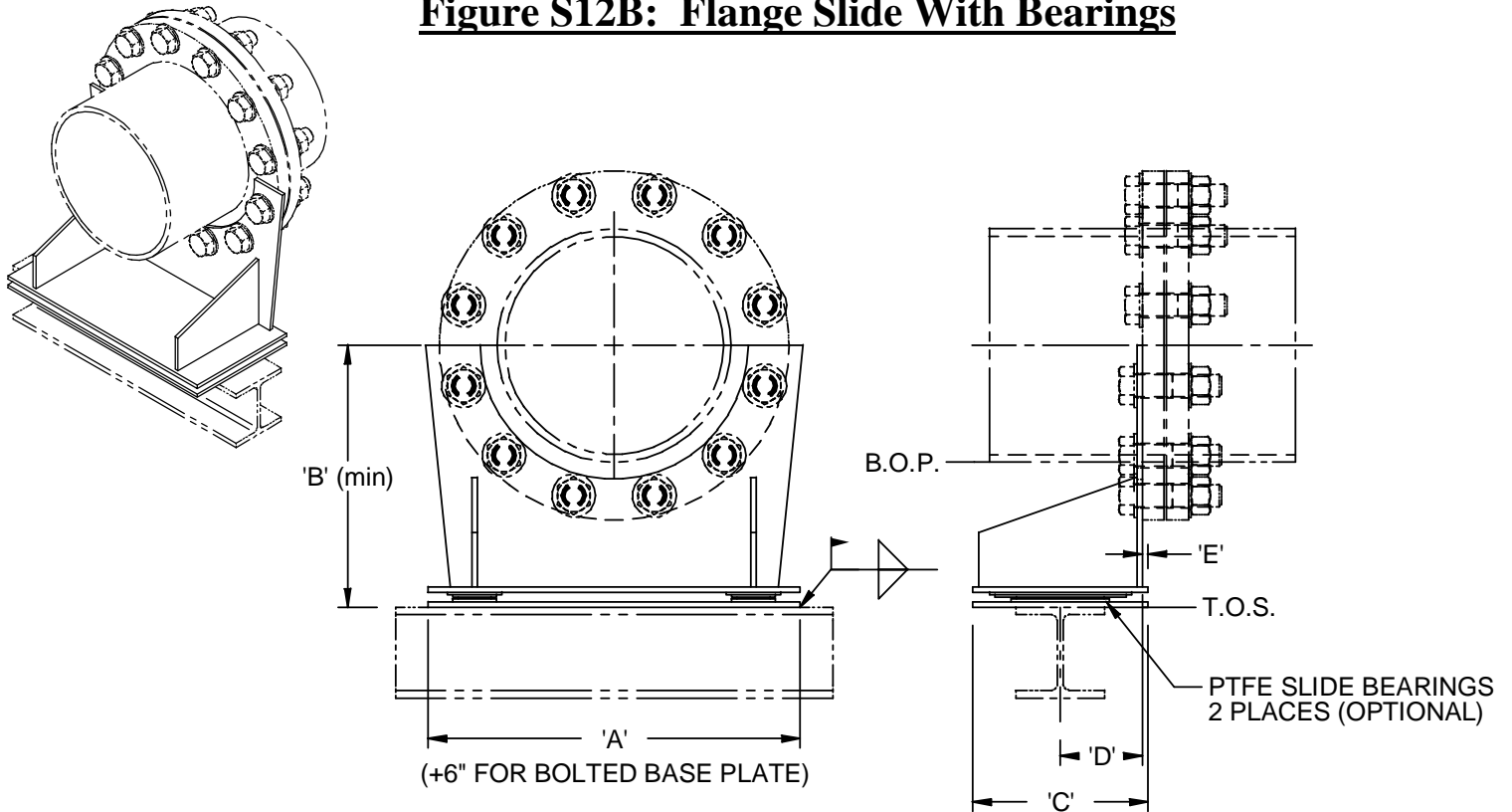
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	Allowable Loads
						Vertical [lb]
2	6	4 5/8	4	1 7/8	1/4	500
3	7 1/2	5 1/4	4	1 7/8	1/4	700
4	10 1/4	6	4	1 7/8	1/4	900
6	12 1/4	7	6	2 7/8	1/4	1500
8	14 1/4	8 1/4	6	2 7/8	1/4	1800
10	17 1/4	9 3/8	8	3 7/8	1/4	2200



Figure S12B: Flange Slide With Bearings



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of valves or equipment, while allowing freedom of movement.

Material:

Carbon steel.**

Notes:

PTFE slide bearings are recommended for pipe sizes above 10" NPS. See Figure S12 for sizes 2"-10".

Must be fully supported as shown.

See general notes.

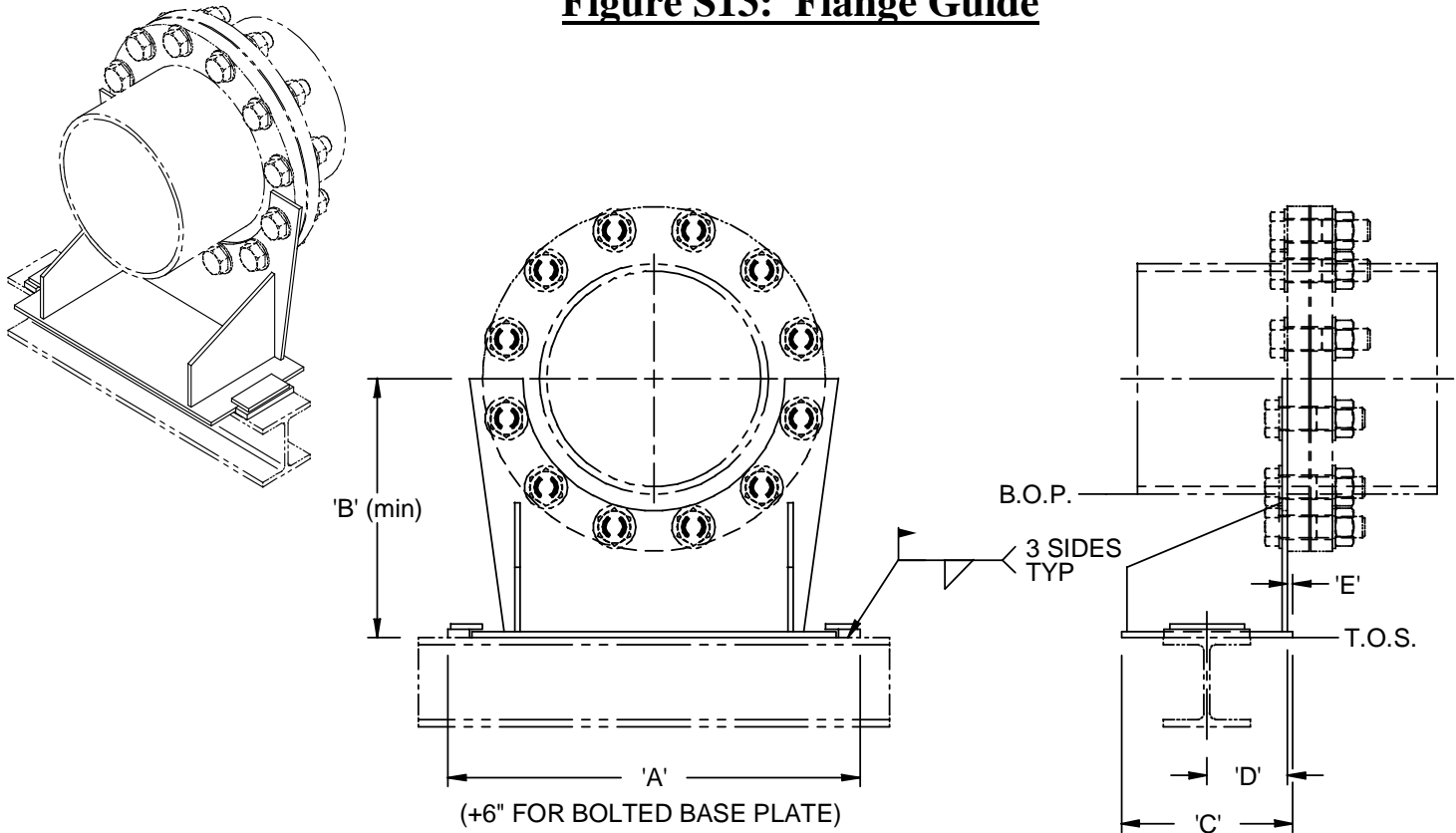
*** Other finishes are available upon request.**

**** Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	Allowable Loads
						Vertical [lb]
12	20	12	8	3 7/8	1/4	2800
14	21 1/2	12 7/8	8	3 7/8	1/4	3200
16	24 1/2	14 1/8	8	3 7/8	1/4	4200
18	26	15 3/8	8	3 7/8	1/4	5300
20	29 1/8	17 1/2	10	4 13/16	3/8	6500
24	34	19 3/4	10	4 13/16	3/8	8900



Figure S13: Flange Guide



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of valves or equipment, while allowing freedom of axial movement.

Material:

Carbon steel**.

Notes:

See Figure S13B for sizes 12"-24".

Guide clips may be welded or bolted to the structure.

Can also be used as a Flange Riser Guide.

Must be fully supported as shown.

See general notes.

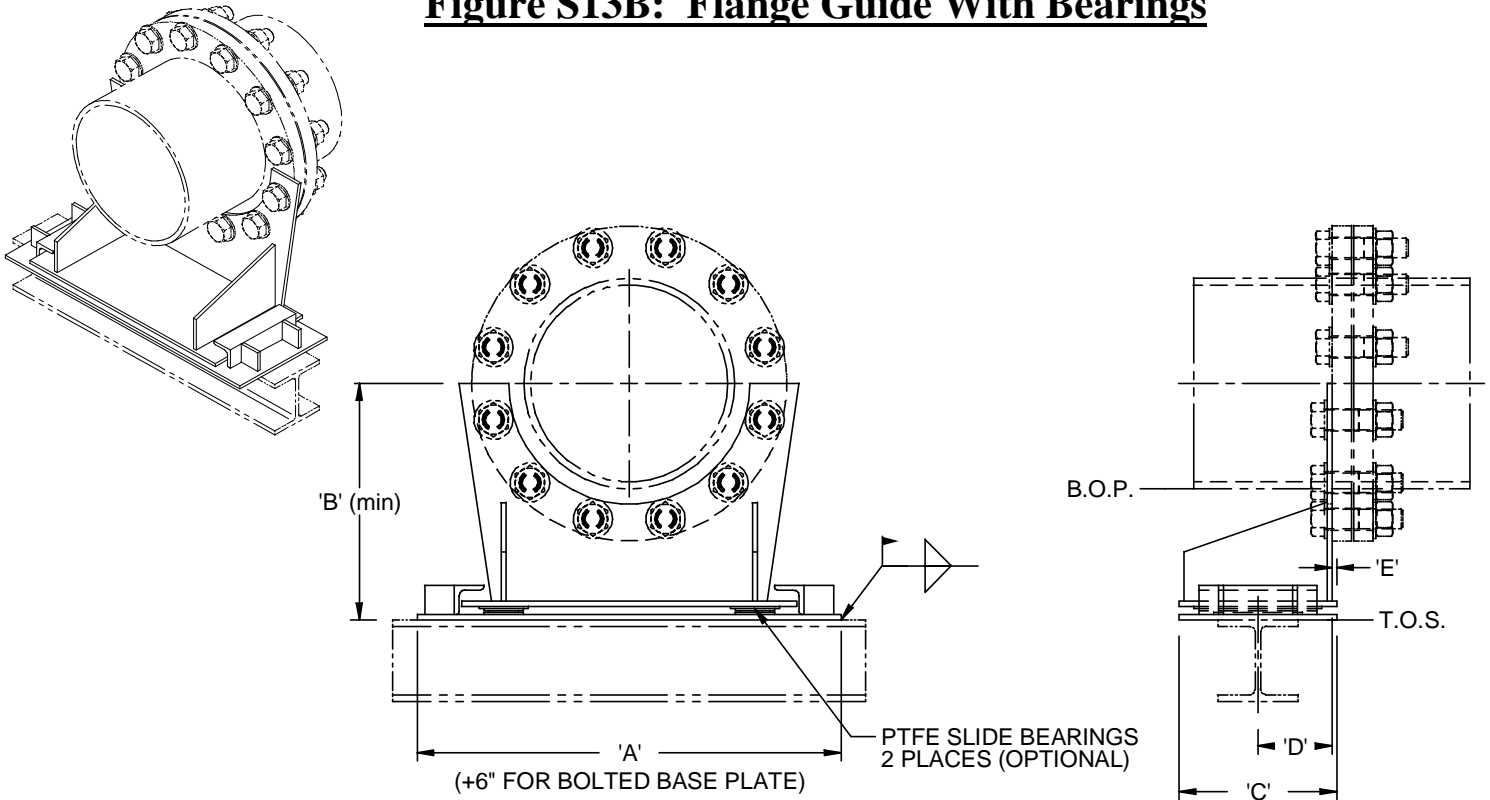
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	Allowable Loads [lb]	
						Lateral	Vertical
2	8 1/4	4 5/8	4	1 7/8	1/4	200	500
3	9 3/4	5 1/4	4	1 7/8	1/4	280	700
4	12 1/2	6	4	1 7/8	1/4	360	900
6	14 1/2	7	6	2 7/8	1/4	600	1500
8	16 1/2	8 1/4	6	2 7/8	1/4	720	1800
10	19 1/2	9 3/8	8	3 7/8	1/4	880	2200



Figure S13B: Flange Guide With Bearings



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of valves or equipment, while allowing freedom of axial movement.

Material:

Carbon steel**.

Notes:

PTFE slide bearings are recommended for pipe sizes above 10" NPS. See Figure S13 for sizes 2"-10".

Support may be welded or bolted to the structure. Can also be used as a Flange Riser Guide. Must be fully supported as shown. See general notes.

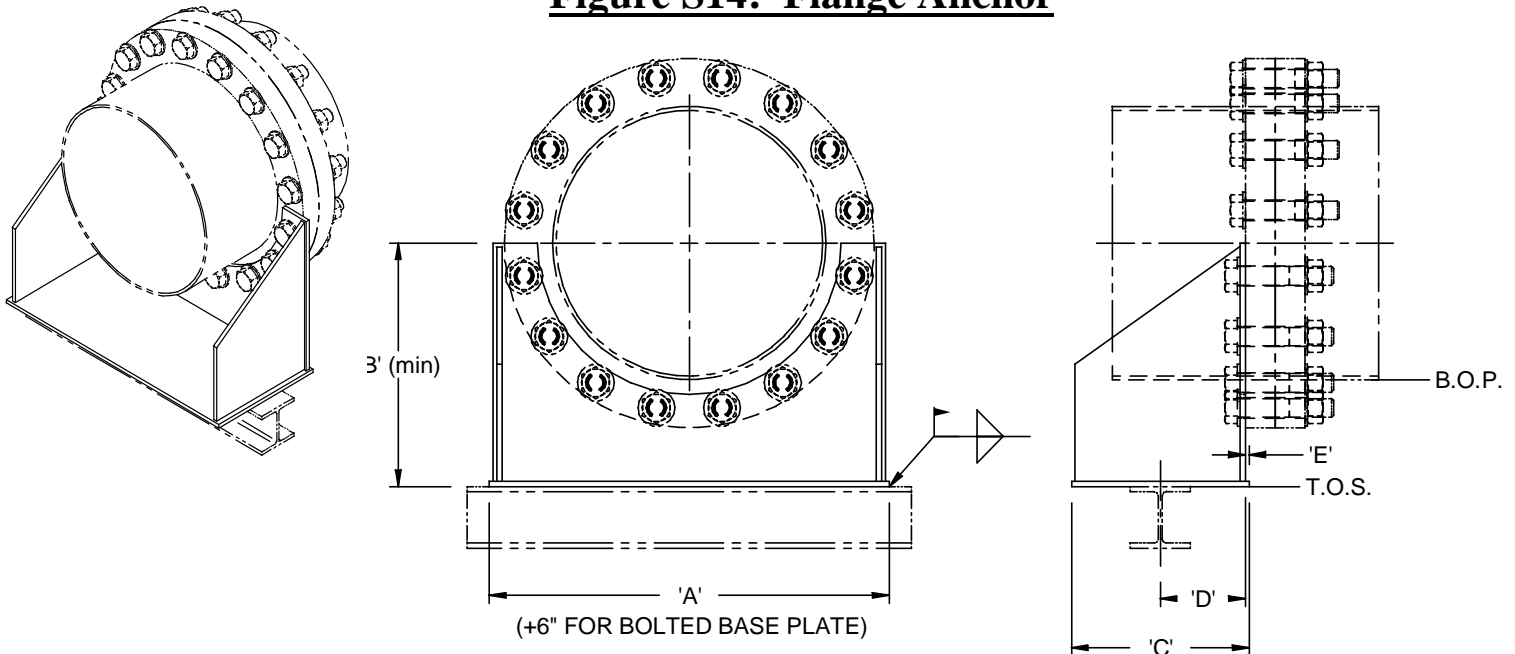
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	Allowable Loads [lb]	
						Lateral	Vertical
12	24 1/2	12	8	3 7/8	1/4	1120	2800
14	26	12 7/8	8	3 7/8	1/4	1280	3200
16	28	14 1/8	8	3 7/8	1/4	1680	4200
18	30 1/2	15 3/8	8	3 7/8	1/4	2100	5300
20	33 5/8	17 1/2	10	4 13/16	3/8	2600	6500
24	38 1/2	19 3/4	10	4 13/16	3/8	3600	8900



Figure S14: Flange Anchor



Finish:

Hot-dipped galvanized*.

Service:

Valves or equipment anchor to secure and restrict freedom of movement.

Material:

Carbon steel**.

Notes:

- Specify directional loads with placement of order.
- Support may be welded or bolted to the structure.
- Can also be used as a Flange Riser Anchor.
- Must be fully supported as shown.
- See general notes.

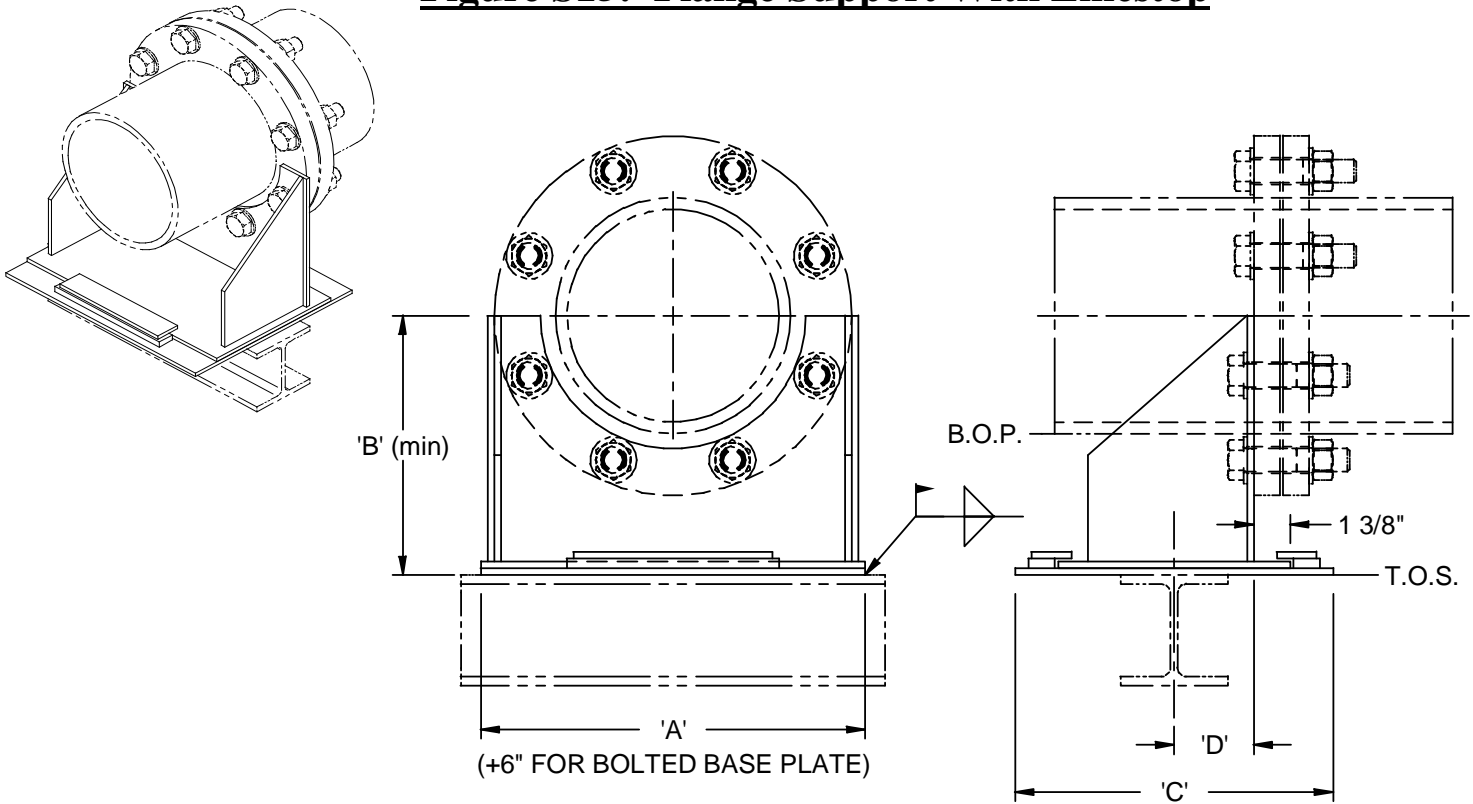
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	Allowable Loads [lb]		
						Lateral	Vertical	Axial
2	7 1/2	4 5/8	6	2 7/8	1/4	200	500	350
3	9	5 1/4	6	2 7/8	1/4	280	700	490
4	10 1/2	6	6	2 7/8	1/4	360	900	630
6	12 1/2	7	8	3 7/8	1/4	600	1500	1260
8	15	8 1/4	8	3 7/8	1/4	720	1800	1800
10	17 1/2	9 3/8	10	4 7/8	1/4	880	2200	2100
12	20 1/2	12	10	4 7/8	1/4	1120	2800	2400
14	22 1/2	12 7/8	10	4 7/8	1/4	1280	3200	3000
16	25	14 1/8	12	5 7/8	1/4	1680	4200	4200
18	26 1/2	15 3/8	12	5 7/8	1/4	2100	5300	5300
20	29 1/2	17 1/2	12	5 13/16	3/8	2600	6500	6500
24	34	19 3/4	12	5 13/16	3/8	3600	8900	8000



Figure S15: Flange Support With Linestop



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of valves or equipment, while allowing freedom of lateral movement.

Material:

Carbon steel**.

Notes:

See figure S15B for sizes 12"-24".

Specify directional loads with placement of order.

Support may be welded or bolted to the structure.

Must be fully supported as shown.

See general notes.

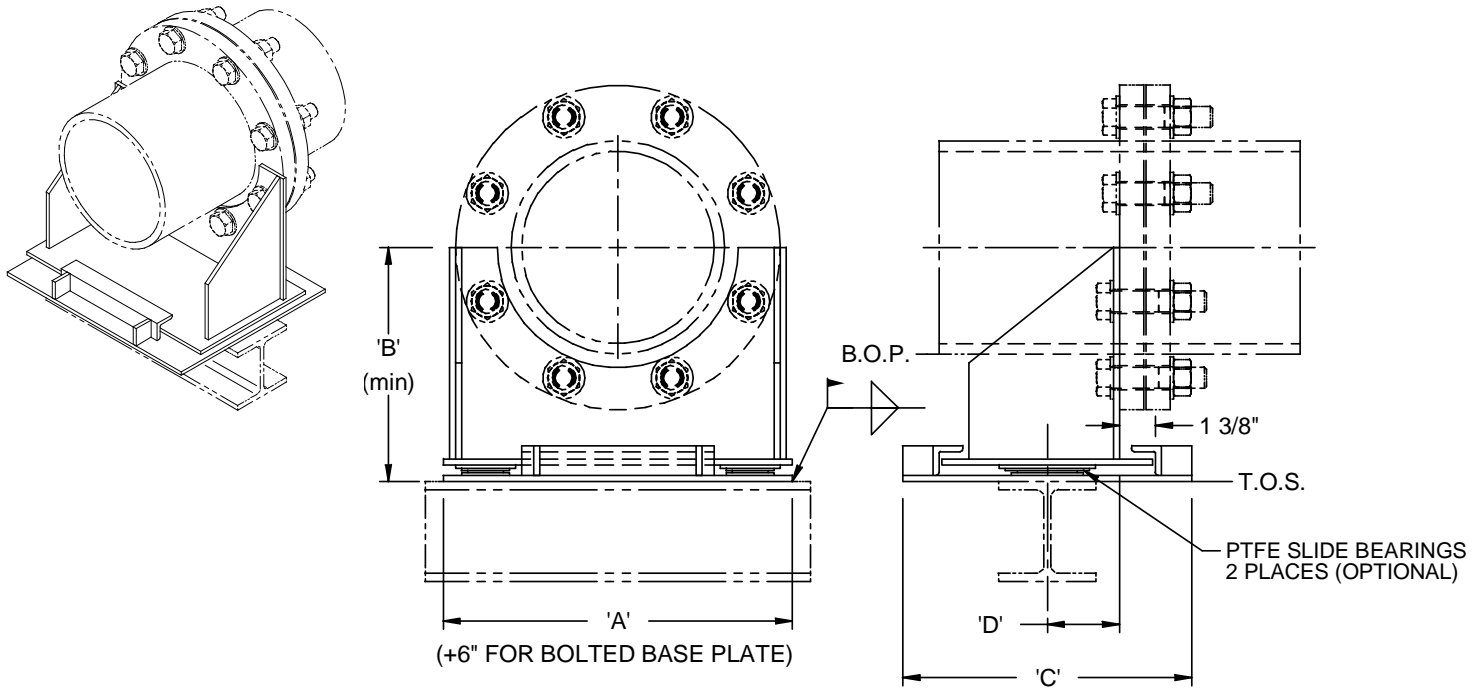
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	Allowable Loads [lb]		
					Lateral	Vertical	Axial
2	7 1/2	4 5/8	12	2 7/8	200	500	350
3	9	5 1/4	12	2 7/8	280	700	490
4	10 1/2	6	12	2 7/8	360	900	630
6	12 1/2	7	14	3 7/8	600	1500	1260
8	15	8 1/4	14	3 7/8	720	1800	1800
10	17 1/2	9 3/8	16	4 7/8	880	2200	2100



Figure S15B: Flange Support With Linestop & Bearings



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of valves or equipment, while allowing freedom of lateral movement.

Material:

Carbon steel**.

Notes:

PTFE slide bearings are recommended for pipe sizes above 10" NPS. See Figure S15 for sizes 2"-10".

Specify directional loads with placement of order.

Support may be welded or bolted to the structure.

Must be fully supported as shown.

See general notes.

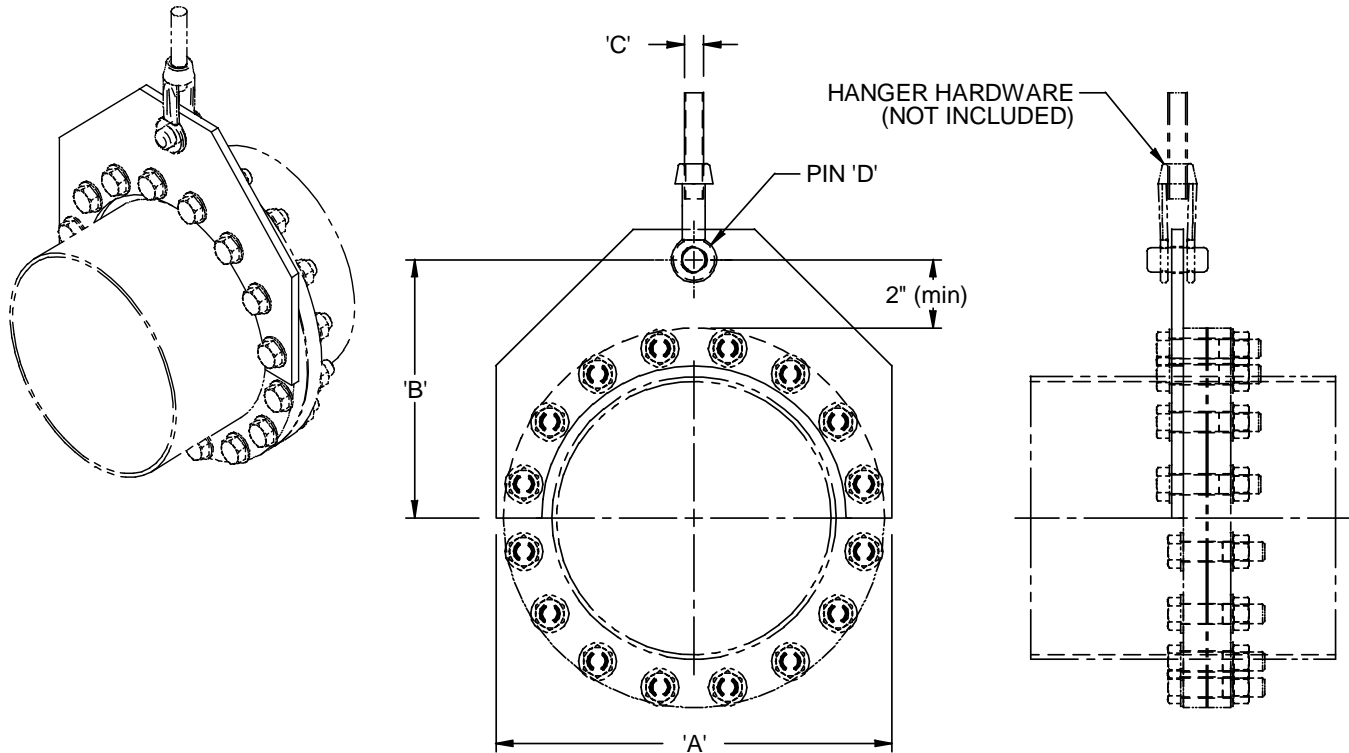
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	Allowable Loads [lb]		
					Lateral	Vertical	Axial
12	20 1/2	12	16	4 7/8	1120	2800	2400
14	22 1/2	12 7/8	16	4 7/8	1280	3200	3000
16	25	14 1/8	18	5 7/8	1680	4200	4200
18	26 1/2	15 3/8	18	5 7/8	2100	5300	5300
20	29 1/2	17 1/2	18	5 13/16	2600	6500	6500
24	34	19 3/4	18	5 13/16	3600	8900	8000



Figure S16: Flange Hanger



Finish:

Hot-dipped galvanized*.

Service:

To carry weight of piping and equipment, while allowing freedom of movement.

Material:

Carbon steel**.

Notes:

Hanger hardware is available upon request. See general notes.

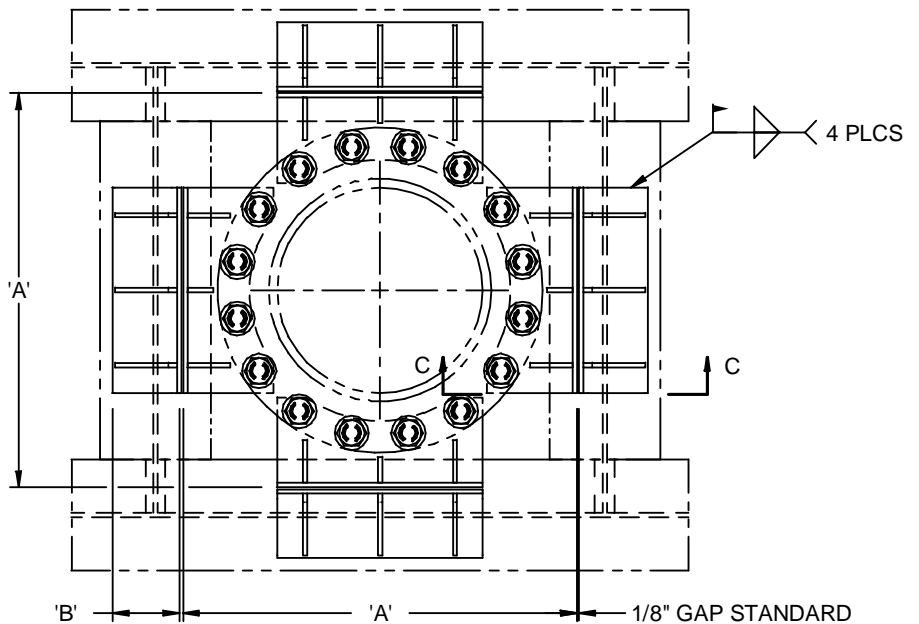
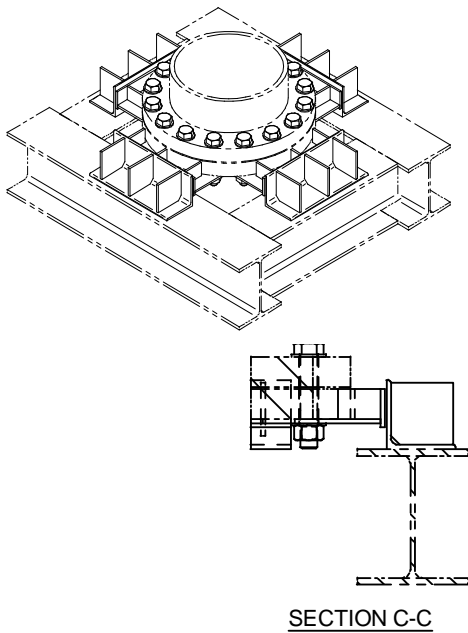
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	Allowable Loads [lb]
					Vertical
2	6	5	3/8	1/2	600
3	7 1/2	6	1/2	5/8	1100
4	9	6 1/2	5/8	3/4	1600
6	11	7 1/2	3/4	7/8	2200
8	14	9	3/4	7/8	2800
10	16	10	7/8	1	3200
12	19	12	7/8	1	3600
14	21	13	1	1 1/8	4000
16	24	14 1/2	1	1 1/8	4500
18	25	15	1	1 1/8	5300



Figure S17: Flange Riser Guide



Finish:
Hot-dipped galvanized*.
Service:
Two-Directional lateral guide for riser piping.
Material:
Carbon steel**.

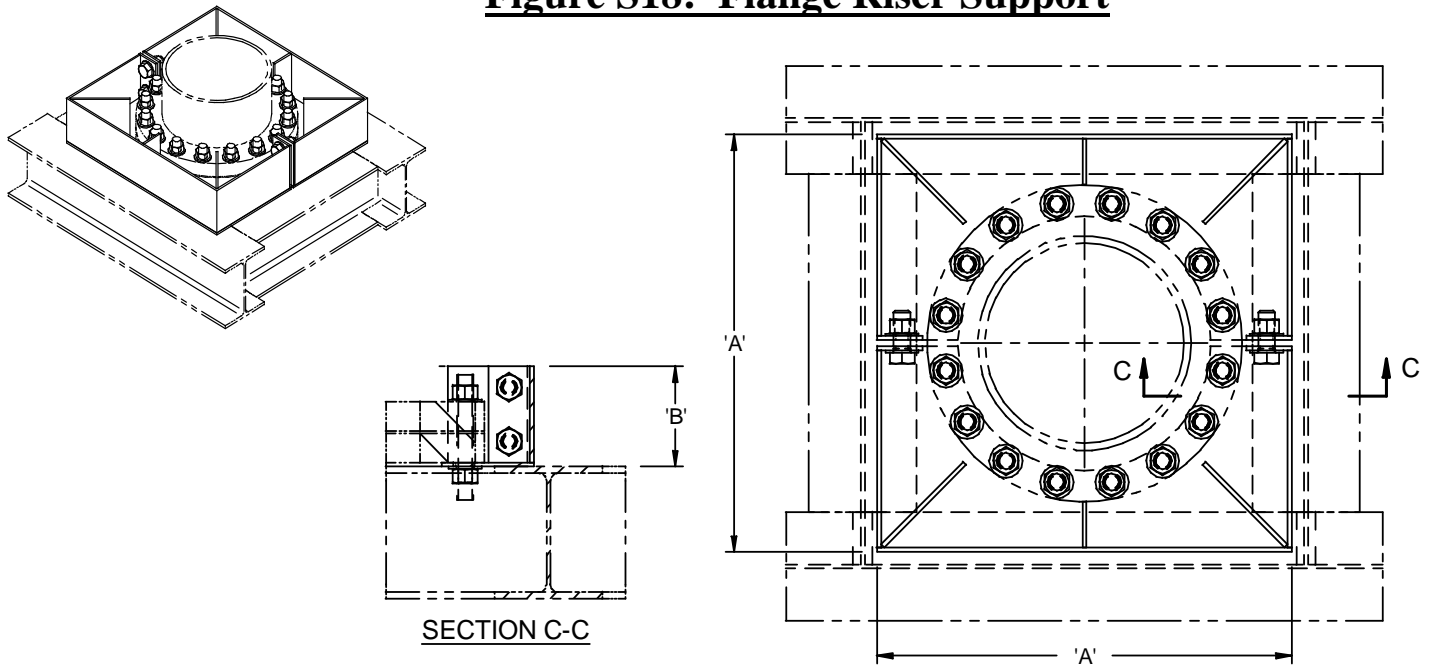
Notes:
Not designed for vertical loading.
Configuration can be adjusted to provide vertical support.
Specify type and distance to surrounding structure with placement of order.
See general notes.

* Other finishes are available upon request.
** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	Allowable Loads [lb]
			Lateral
12	23	4	3300
14	24	4	3600
16	27 1/2	4	4000
18	29	4	4400
20	31 1/2	4	6800
24	36	4	8200



Figure S18: Flange Riser Support



Finish:

Hot-dipped galvanized*.

Service:

To carry dead weight of a riser pipe from nearby structure.

Material:

Carbon steel**.

Notes:

Configuration can be adjusted for use as a riser guide or a riser anchor type support.

May be welded or bolted to structure.

Specify type and distance to surrounding structure with placement of order.

See general notes.

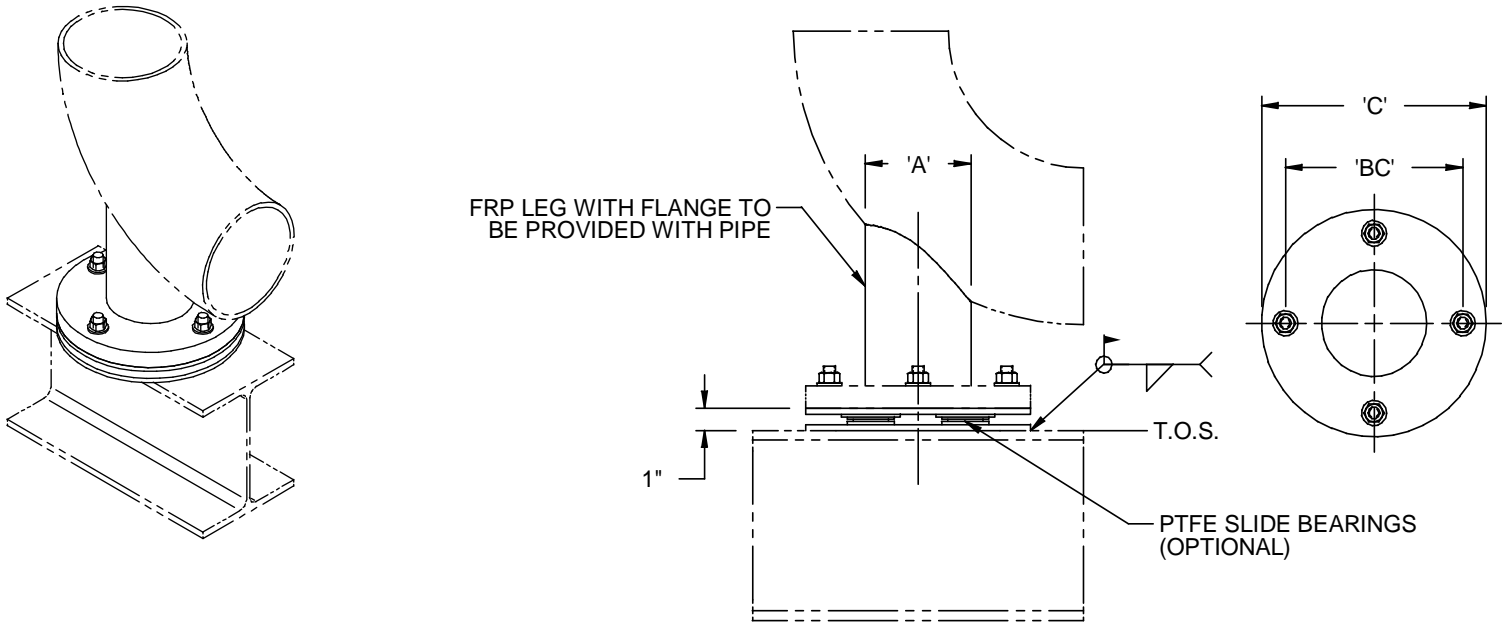
* Other finishes are available upon request.

** Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	Allowable Loads [lb]	
			Lateral	Vertical
12	25	6	3300	5800
14	27	6	3600	6300
16	29 1/2	6	4000	6900
18	31	6	4400	7600
20	33 1/2	6	6800	12000
24	38	6	8200	15000



Figure P7: Elbow Support



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of movement for FRP piping.

Material:

Carbon steel.**

Notes:

PTFE slide bearings are recommended for pipe above 10" NPS.

See general notes.

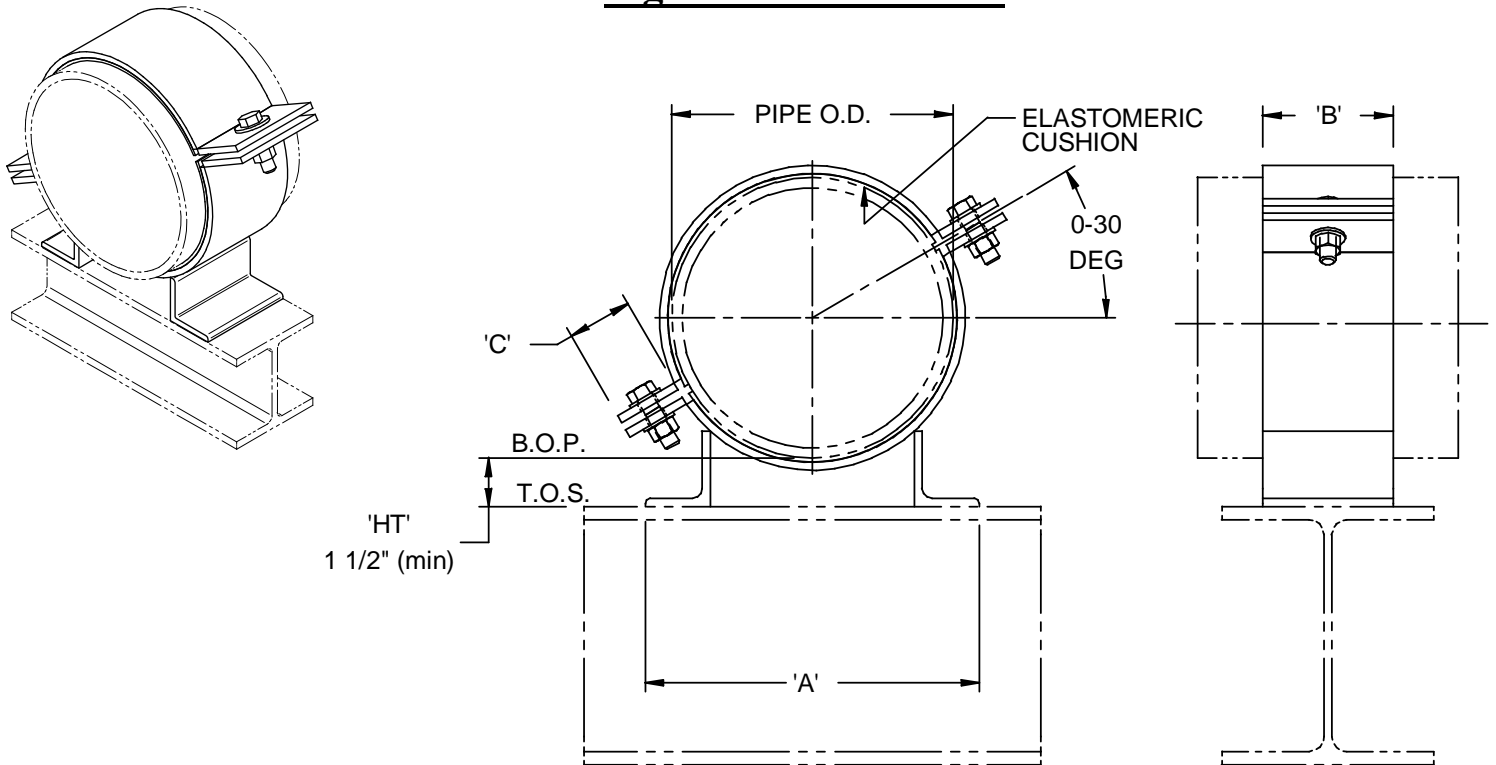
***Other finishes are available upon request.**

****Other materials are available upon request.**

Pipe Size [in]	A [in]	BC [in]	C [in]
2	2	4 3/4	6
3	3	6	7 1/2
4	3	6	9
6	4	7 1/2	11
8	6	9 1/2	13 1/2
10	6	9 1/2	16
12	8	11 3/4	19
14	10	14 1/4	21
16	10	14 1/4	23 1/2
18	12	17	25
20	14	18 3/4	27 1/2
24	16	21 3/4	32



Figure P8: Base Slide



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of movement.

Material:

Carbon steel**.

Notes:

Must be fully supported as shown.

See general notes.

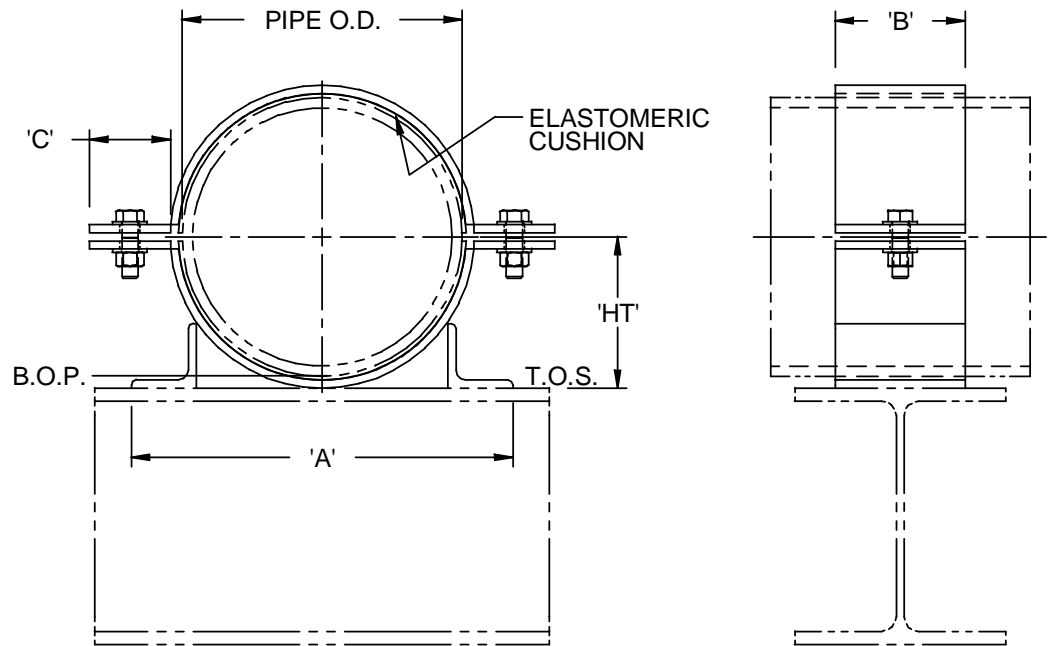
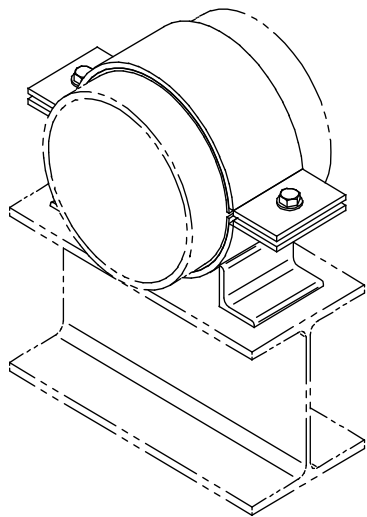
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	Allowable Loads [lb]
				Vertical
2	4 5/8	3	2	300
3	5	3	2	430
4	5 1/2	3	2	550
6	8 3/4	4	2	1090
8	10 1/4	4	2	1440
10	13 3/4	6	2 1/2	2680



Figure P8L: Low Profile Base Slide



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of movement.

Material:

Carbon steel.**

Notes:

Must be fully supported as shown.

See general notes.

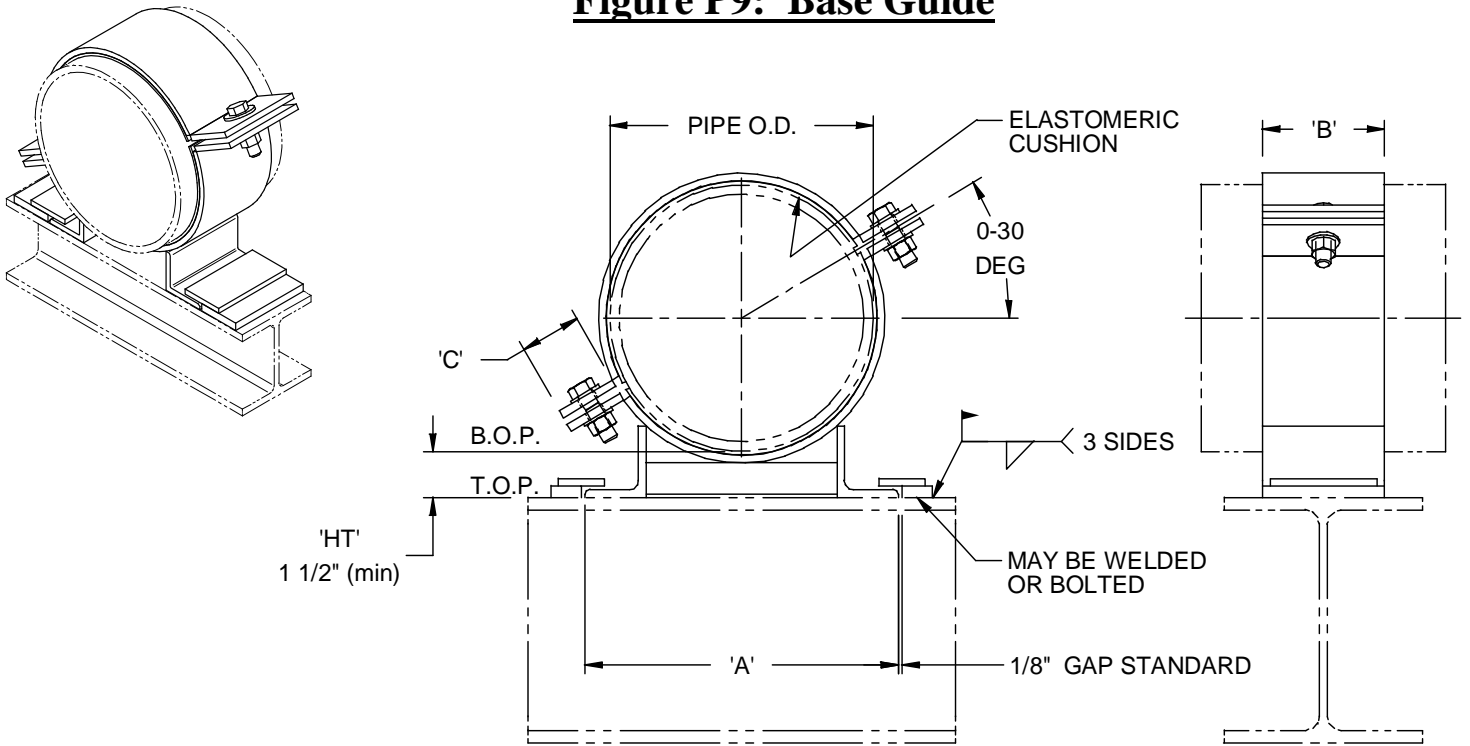
***Other finishes are available upon request.**

****Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	HT [in]	Allowable Loads [lb]
					Vertical
2	5 3/8	3	2	1 1/2	300
3	6 1/2	3	2	2	430
4	7 5/8	3	2	2 1/2	530
6	10 5/8	4	2	3 11/16	1090
8	11 3/4	4	2	4 11/16	1440
10	16 1/8	6	2 1/2	5 3/4	2680



Figure P9: Base Guide



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of axial movement.

Material:

Carbon steel**.

Notes:

Must be fully supported as shown.

See general notes.

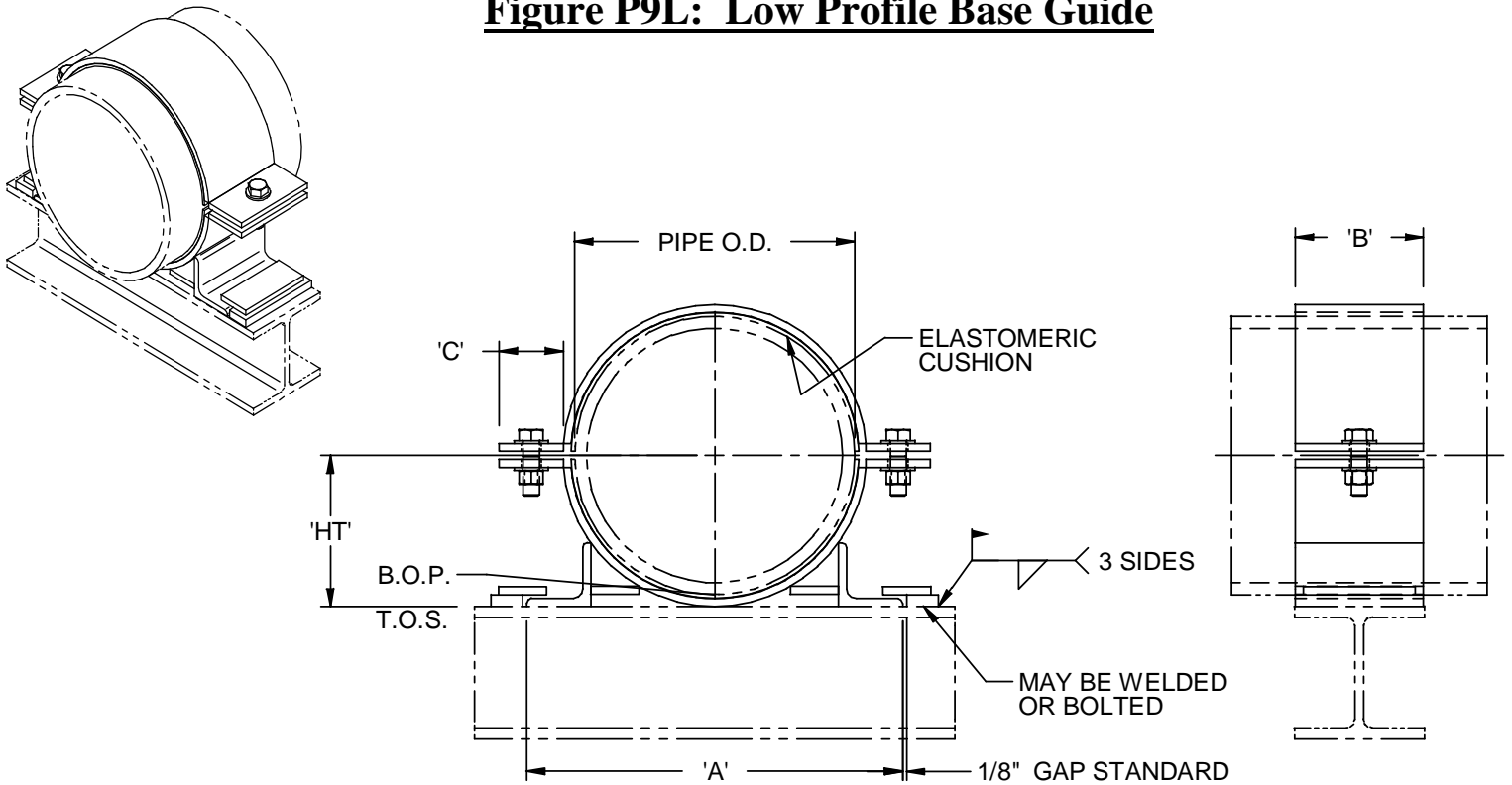
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	Allowable Loads [lb]	
				Lateral	Vertical
2	4 5/8	3	2	130	270
3	5	3	2	190	380
4	5 1/2	3	2	240	500
6	8 3/4	4	2	480	980
8	10 1/4	4	2	650	1280
10	13 3/4	6	2 1/2	1000	2400



Figure P9L: Low Profile Base Guide



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of axial movement.

Material:

Carbon steel.**

Notes:

**Must be fully supported as shown.
See general notes.**

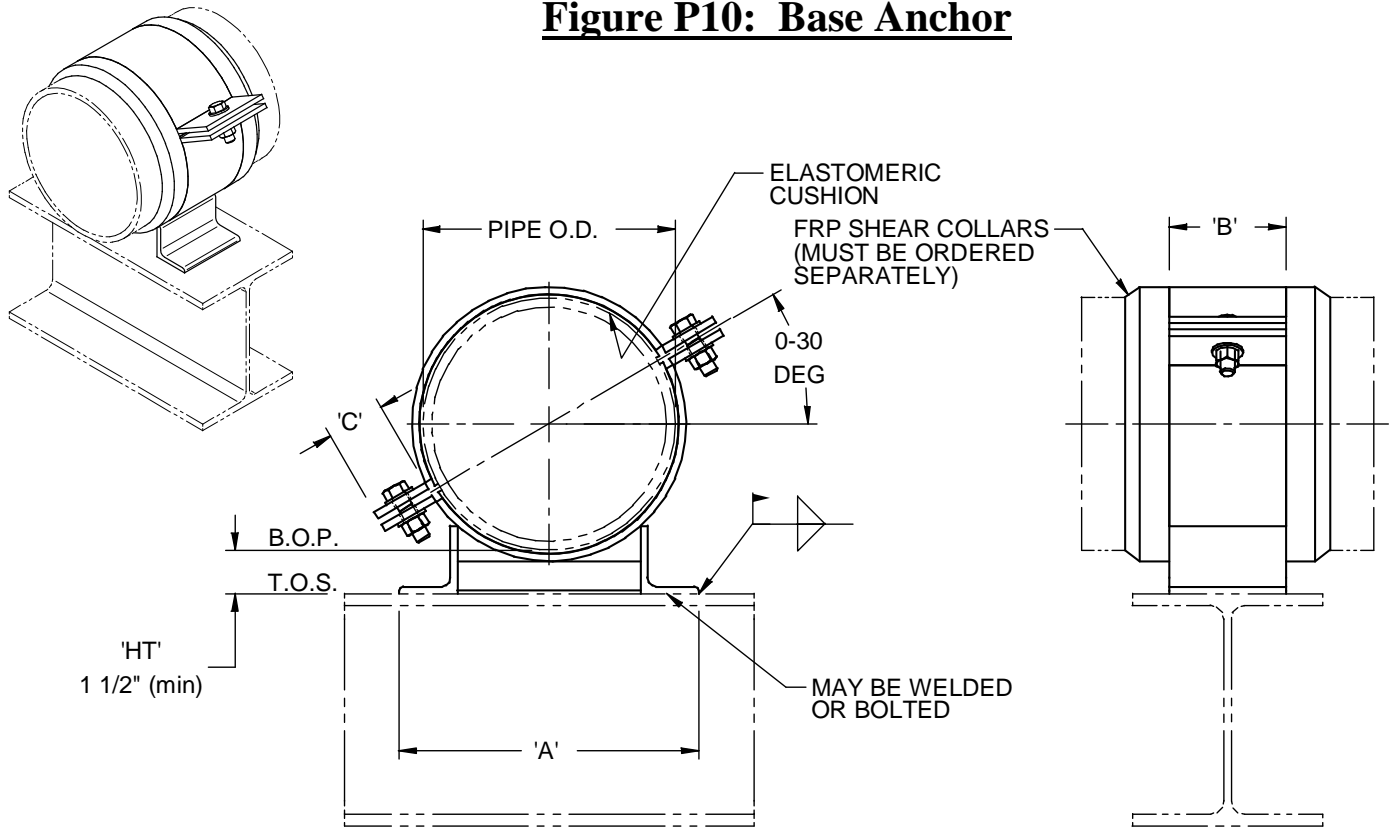
***Other finishes are available upon request.**

****Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	HT [in]	Allowable Loads [lb]	
					Lateral	Vertical
2	5 3/8	3	2	5	130	270
3	6 1/2	3	2	2	190	380
4	7 5/8	3	2	2 1/2	240	500
6	10 5/8	4	2	3 11/16	480	980
8	11 3/4	4	2	4 11/16	650	1280
10	16 1/8	6	2 1/2	5 3/4	1000	2400



Figure P10: Base Anchor



Finish:

Hot-dipped galvanized*.

Service:

Piping anchor to secure and restrict freedom of movement.

Material:

Carbon steel**.

Notes:

Must be fully supported as shown.

See general notes.

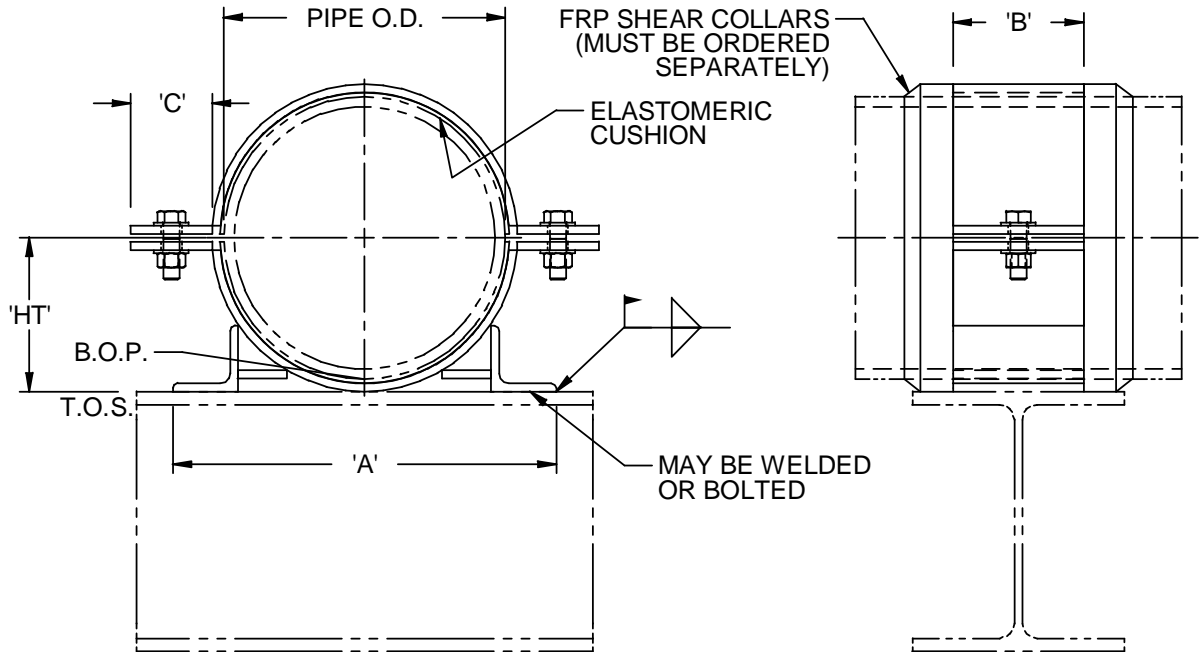
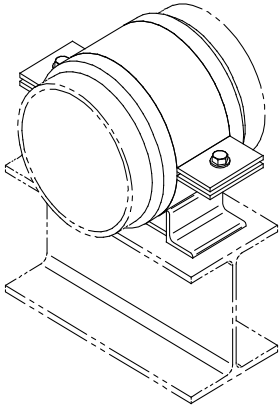
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	Allowable Loads [lb]		
				Lateral	Vertical	Axial
2	4 5/8	3	2	130	270	650
3	5	3	2	190	380	800
4	5 1/2	4	2	340	660	1200
6	8 3/4	6	2	800	1400	2700
8	10 1/4	8	2	1100	2600	4200
10	13 3/4	8	2 1/2	1200	3300	5000



Figure P10L: Low Profile Base Anchor



Finish:

Hot-dipped galvanized*.

Service:

Piping anchor to secure and restrict freedom of movement.

Material:

Carbon steel.**

Notes:

Must be fully supported as shown.

See general notes.

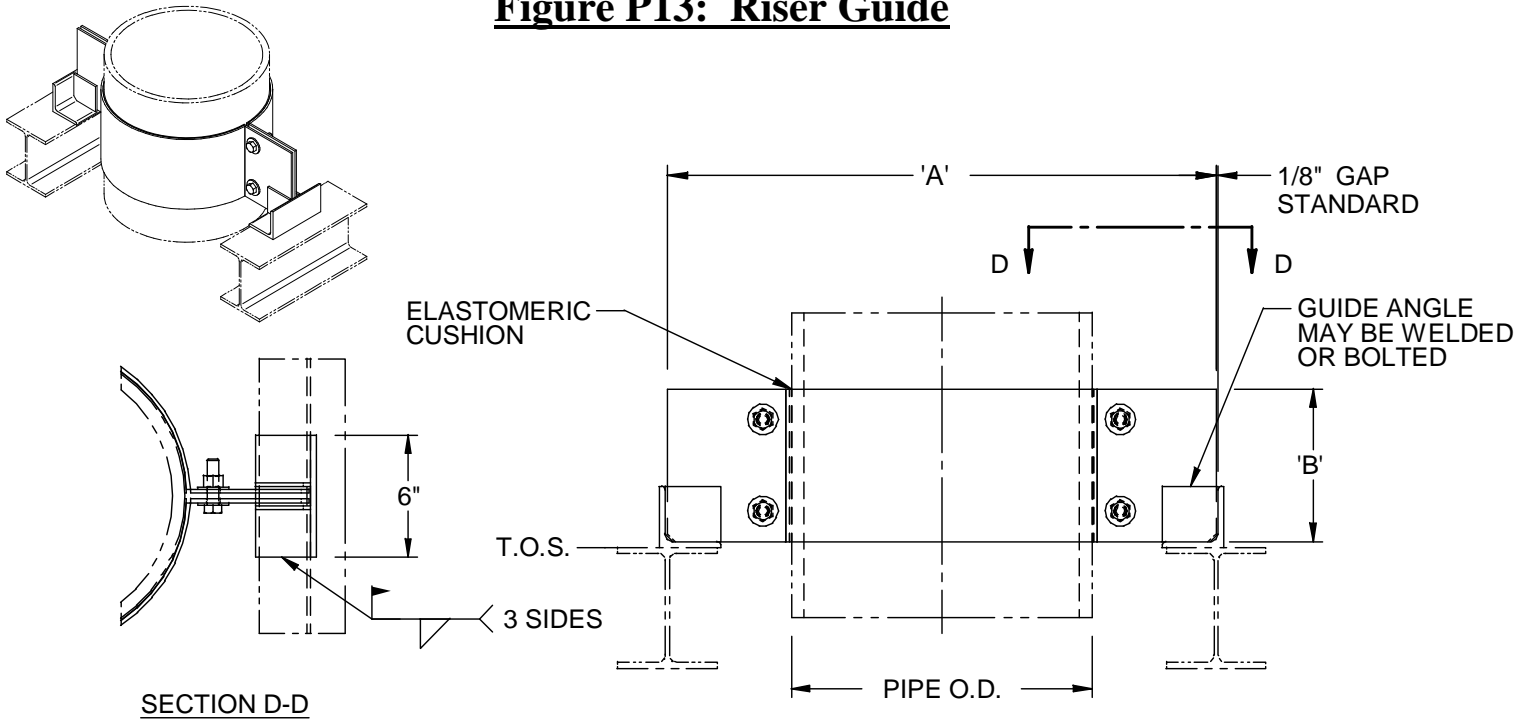
***Other finishes are available upon request.**

****Other materials are available upon request.**

Pipe Size [in]	A [in]	B [in]	C [in]	HT [in]	Allowable Loads [lb]		
					Lateral	Vertical	Axial
2	5 3/8	3	2	1 1/2	130	270	650
3	6 1/2	3	2	2	190	380	800
4	7 5/8	4	2	2 1/2	340	660	1200
6	10 5/8	6	2	3 11/16	800	1400	2700
8	11 3/4	8	2	4 11/16	1100	2600	4200
10	16 1/8	8	2 1/2	5 3/4	1200	3300	5000



Figure P13: Riser Guide



Finish:

Hot-dipped galvanized*.

Service:

Two-directional lateral guide for riser piping.

Material:

Carbon steel**.

Notes:

Specify required width at placement of order.
See general notes.

*Other finishes are available upon request.

**Other materials are available upon request.

Lateral X is perpendicular to clamp ears

Lateral Z is parallel to clamp ears

Pipe Size [in]	A [in]	B [in]	Allowable Loads [lb]	
			Lateral X	Lateral Z
2	11 1/4	3	100	280
3	12 1/4	3	170	390
4	13 1/4	3	200	500
6	15 3/4	4	400	1000
8	17 3/4	4	400	1200
10	20 3/4	6	600	1600
12	24 3/4	6	1300	2400
14	27	8	1600	3200
16	29 1/2	8	1700	3300
18	31 1/2	10	2000	4000
20	34	10	2000	4000
24	38	12	2700	5500

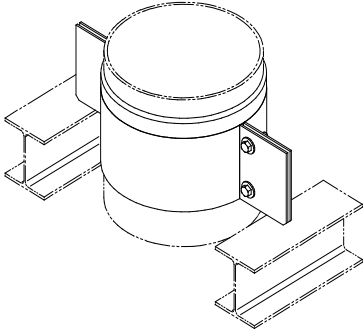
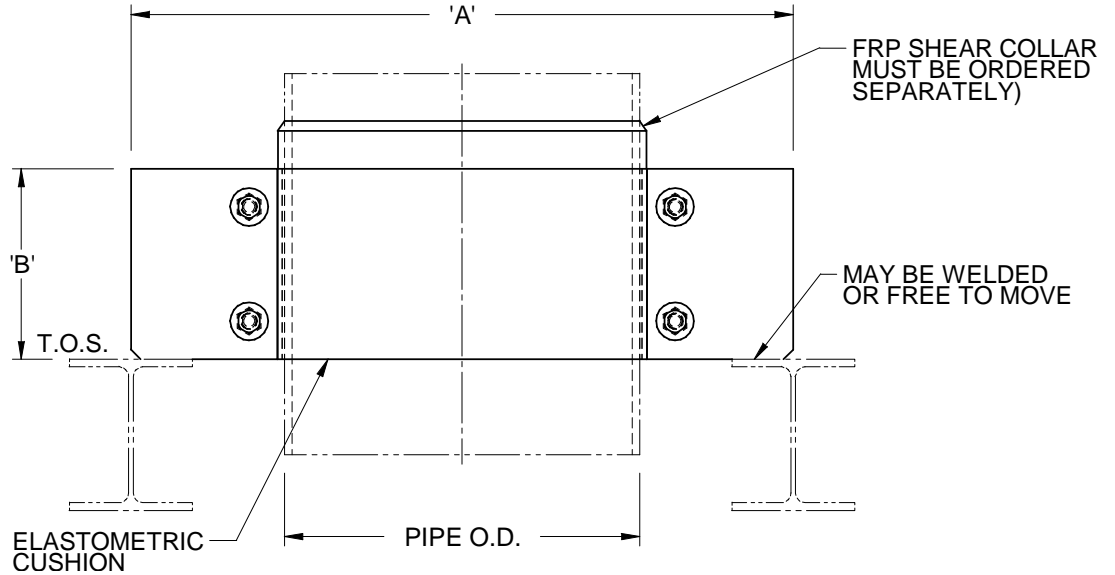


Figure P14: Riser Support



Finish:

Hot-dipped galvanized*.

Service:

To carry dead weight of a riser from nearby structure.

Material:

Carbon steel**.

Notes:

Specify required width at placement of order. See general notes.

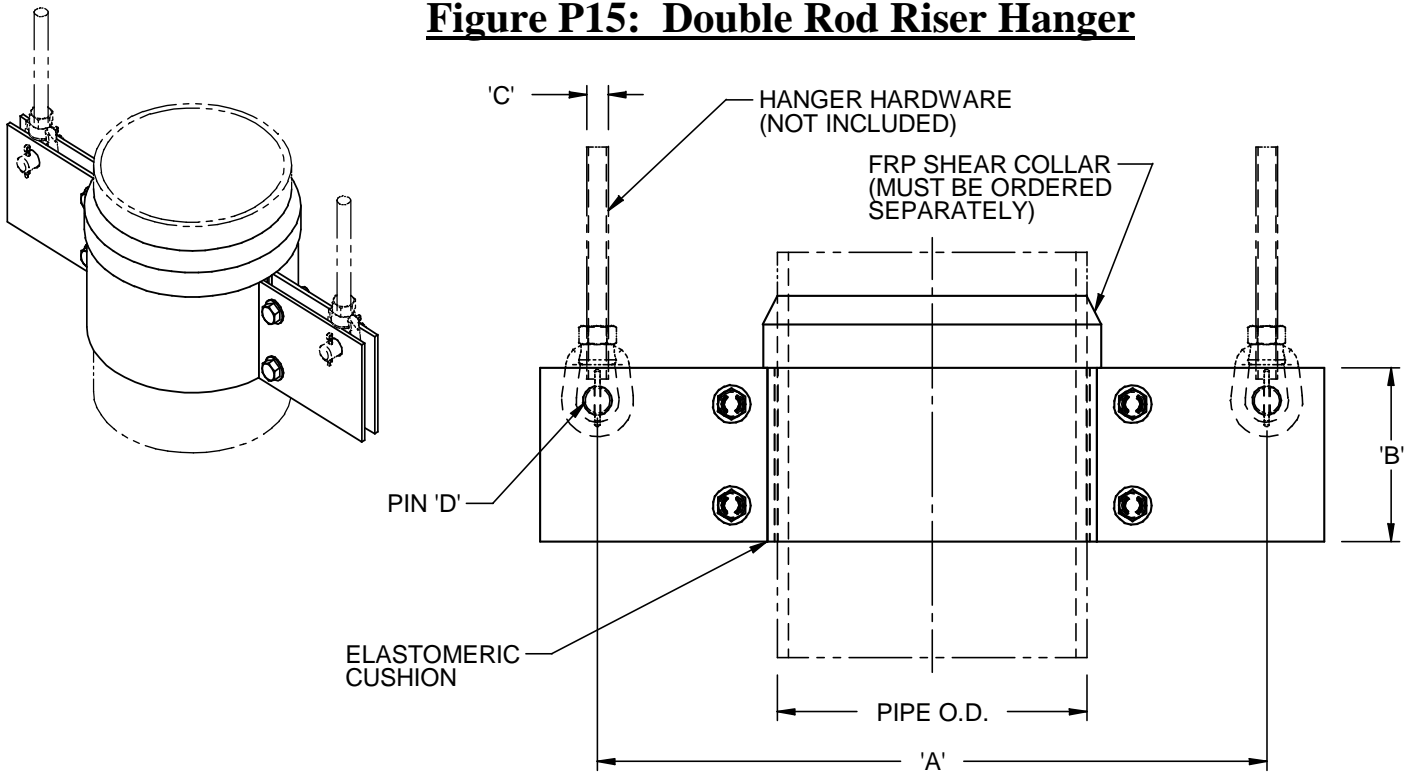
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	Allowable Loads [lb]
			Vertical
2	11 1/4	3	1100
3	12 1/4	3	1400
4	13 1/4	3	1800
6	15 3/4	4	2000
8	17 3/4	4	2400
10	20 3/4	6	4500
12	24 3/4	6	5500
14	27	8	7000
16	29 1/2	8	8000
18	31 1/2	10	8500
20	34	10	12000
24	38	12	16000



Figure P15: Double Rod Riser Hanger



Finish:

Hot-dipped galvanized*.

Service:

To carry dead weight of a riser while immediate structure is not nearby.

Material:

Carbon steel**.

Notes:

Hanger hardware is available upon request. See general notes.

*Other finishes are available upon request.

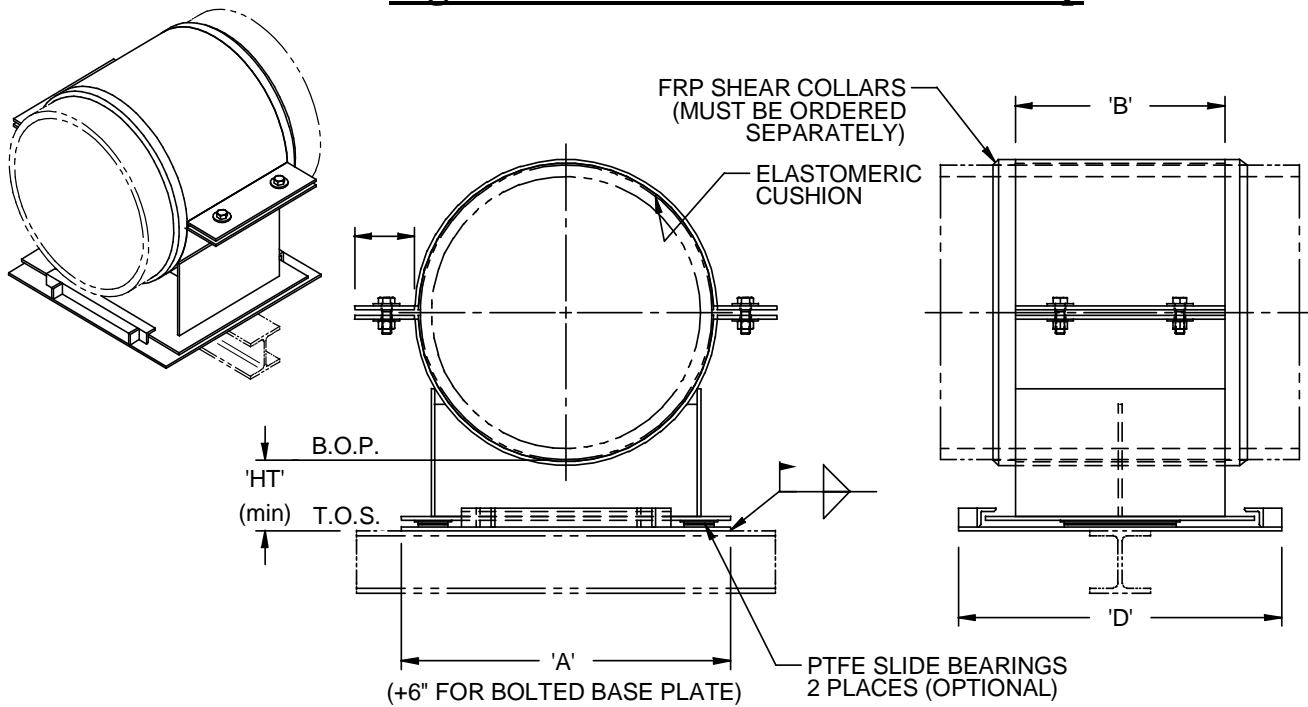
**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	Allowable Loads [lb]
					Vertical
2	10 1/2	3	3/8	1/2	1100
3	11 1/2	3	1/2	5/8	1400
4	12 1/2	3	5/8	3/4	1800
6	15	4	3/4	7/8	2000
8	17	4	3/4	7/8	2400
10	20	6	7/8	1	4500
12	22	6	7/8	1	5500
14	24 1/2	8	1	1 1/8	6000
16	26 3/4	8	1	1 1/8	8000
18	28 3/4	10	1	1 1/8	8500
20	32 1/2	10	1 1/4	1 3/8	12000
24	36 1/2	12	1 1/4	1 3/8	16000

10 Sep 09



Figure P17: Base Slide With Linestop



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight.
Limits axial movement while allowing freedom of lateral movement.

Material:

Carbon steel**.

Notes:

PTFE slide bearings are recommended for pipe sizes above 10" NPS. If bearings are not required, exclude bearing base plate.

Must be fully supported as shown.

See general notes.

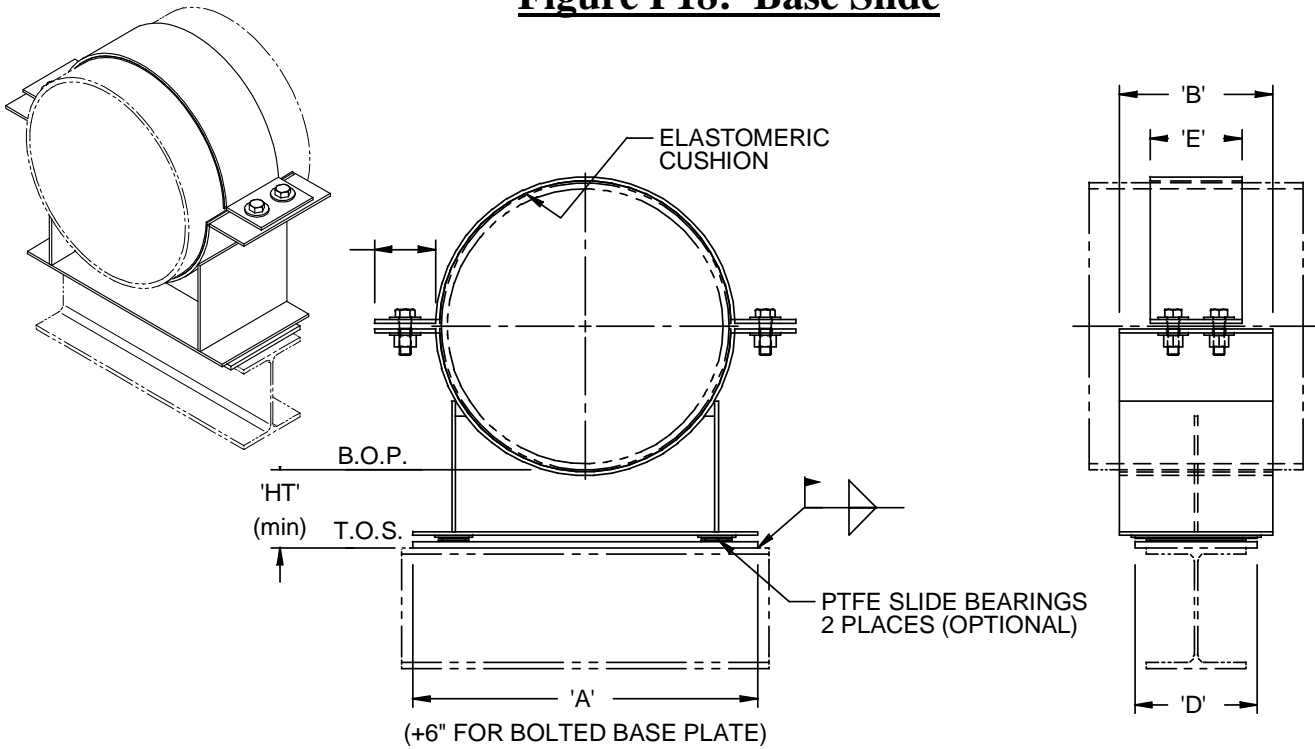
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	HT [in]	Allowable Loads [lb]	
						Vertical	Axial
12	16	8	2 1/2	15 1/2	3	4200	3200
14	18	10	2 1/2	17 1/2	3	6100	4000
16	20	12	2 1/2	19 1/2	3	8500	6500
18	21 3/4	14	3	21 1/2	3	11000	8000
20	24	14	3	21 1/2	3 1/4	12500	12000
24	27 3/8	18	3	25 1/2	3 1/4	18500	16000



Figure P18: Base Slide



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of movement.

Material:

Carbon steel**.

Notes:

PTFE slide bearings are recommended for pipe sizes above 10" NPS. If bearings are not required, exclude bearing base plate. Must be fully supported as shown. See general notes.

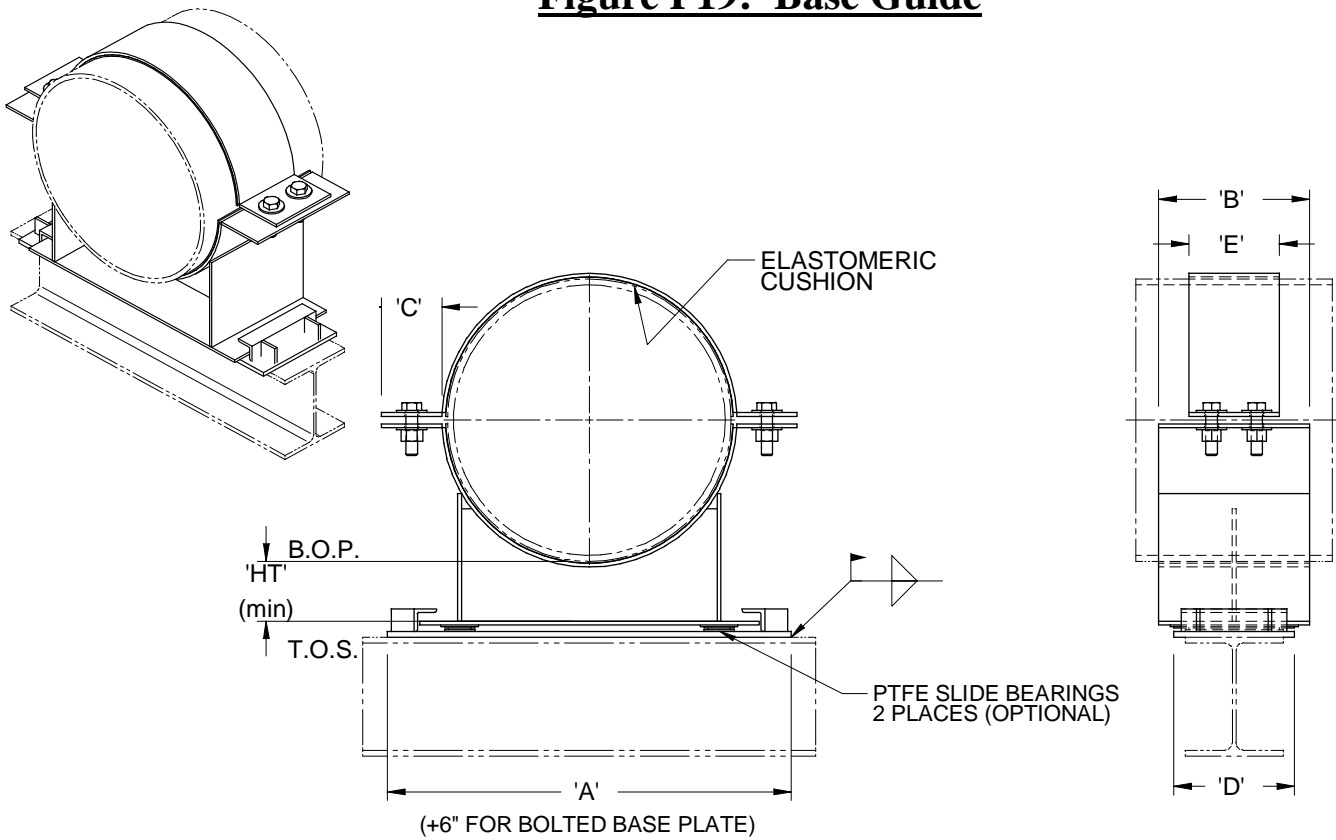
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	HT [in]	Allowable Loads [lb]
							Vertical
12	16	6	2 1/2	6	4	3	3200
14	18	8	2 1/2	8	6	3	4950
16	20	8	2 1/2	8	6	3	5700
18	21 3/4	10	3	8	6	3	8000
20	24	10	3	8	6	3 1/4	8900
24	27 3/8	12	3	10	8	3 1/4	12600



Figure P19: Base Guide



Finish:

Hot-dipped galvanized*.

Service:

Slide support to carry pipe weight while allowing freedom of axial movement.

Material:

Carbon steel**.

Notes:

PTFE slide bearings are recommended for pipe sizes above 10" NPS. If bearings are not required, exclude bearing base plate.

Must be fully supported as shown.

See general notes.

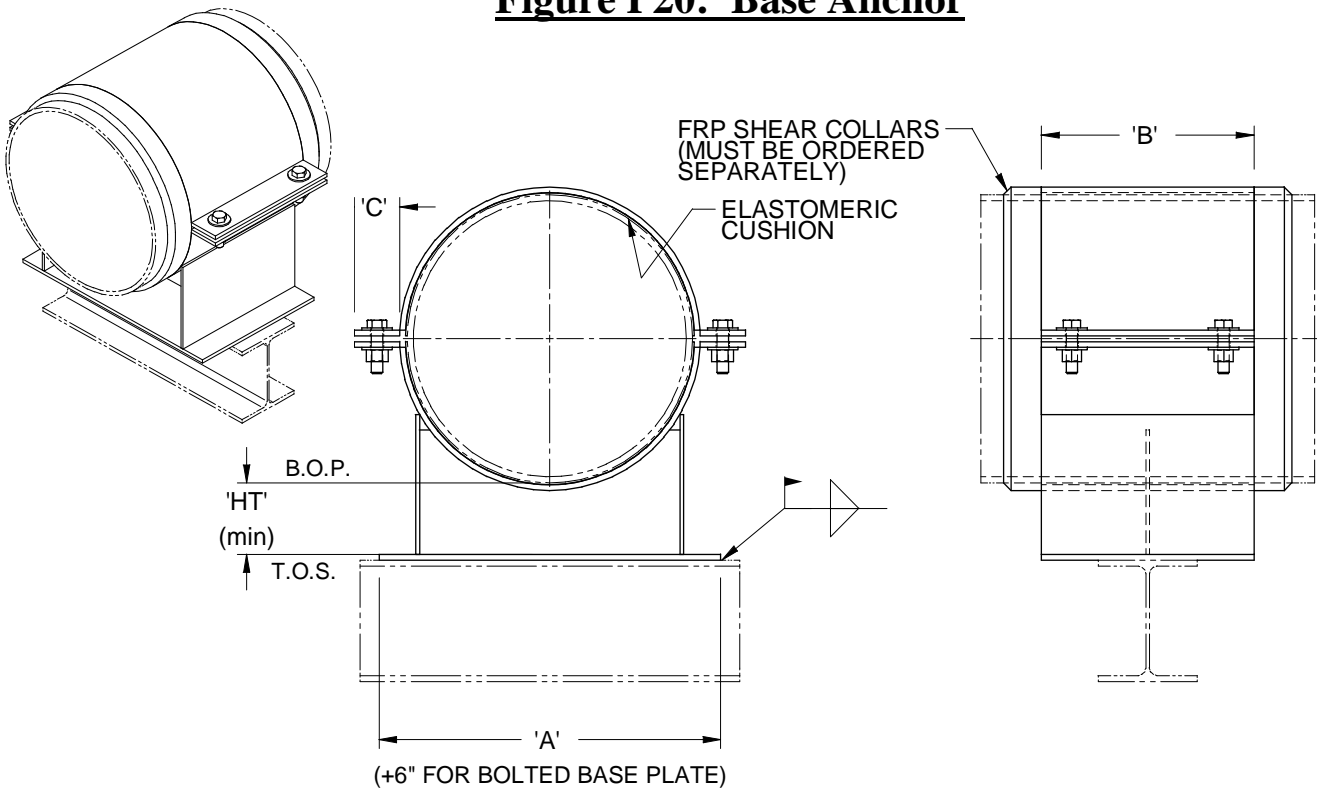
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	D [in]	E [in]	HT [in]	Allowable Loads [lb]	
							Lateral	Vertical
12	19 3/4	6	2 1/2	6	4	3	900	3000
14	21 3/4	8	2 1/2	8	6	3	1500	4600
16	23 3/4	8	2 1/2	8	6	3	1700	5400
18	25 1/2	10	3	8	6	3	2300	7500
20	27 3/4	10	3	8	6	3 1/4	2700	8200
24	31 1/8	12	3	10	8	3 1/4	5200	11000



Figure P20: Base Anchor



Finish:
Hot-dipped galvanized*.
Service:
Piping anchor to secure and restrict
freedom of movement.
Material:
Carbon steel**.

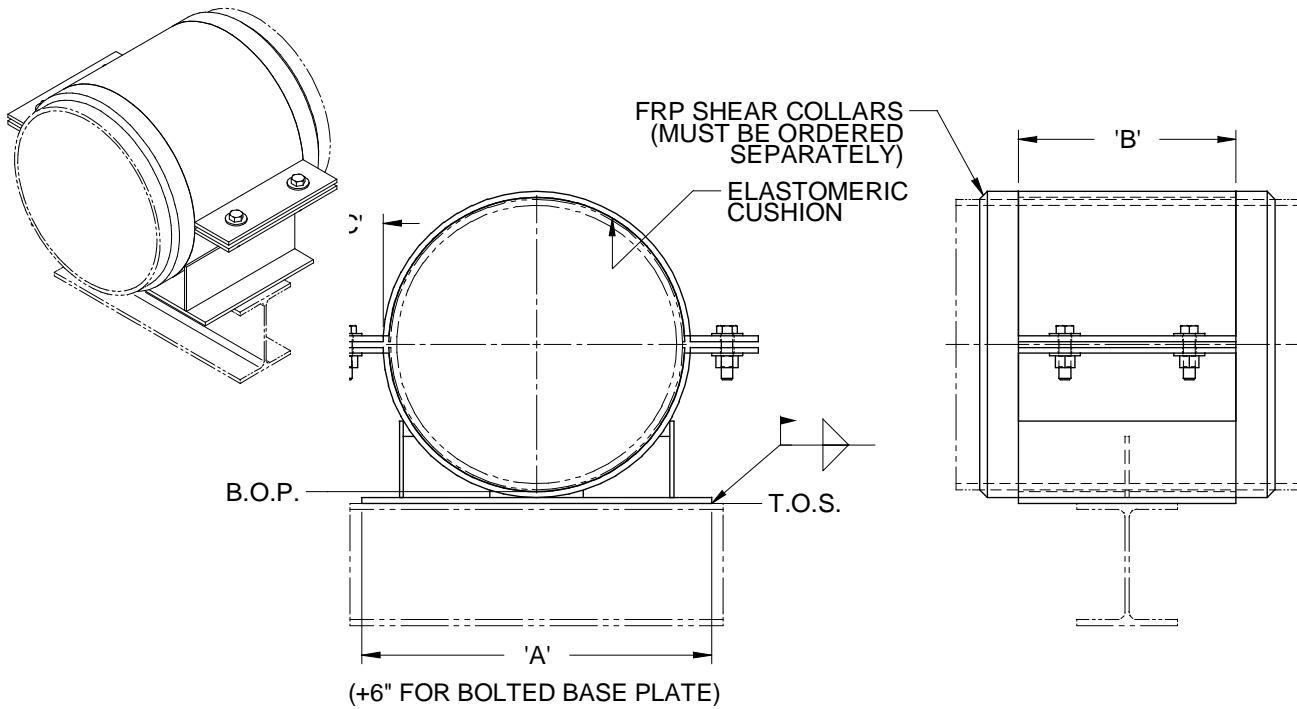
Notes:
Must be fully supported as shown.
See general notes.

*Other finishes are available upon request.
**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	HT [in]	Allowable Loads [lb]		
					Lateral	Vertical	Axial
12	16	8	2 1/2	3	1600	3900	3500
14	18	10	2 1/2	3	2300	5700	4000
16	20	12	2 1/2	3	3500	7500	6000
18	21 3/4	14	3	3	4500	10000	7000
20	24	14	3	3 1/4	5500	11000	11000
24	27 3/8	18	3	3 1/4	8000	16000	15000



Figure P21: Low Profile Base Anchor



Finish:

Hot-dipped galvanized*.

Service:

Piping anchor to secure and restrict freedom of movement.

Material:

Carbon steel**.

Notes:

Must be fully supported as shown.

See general notes.

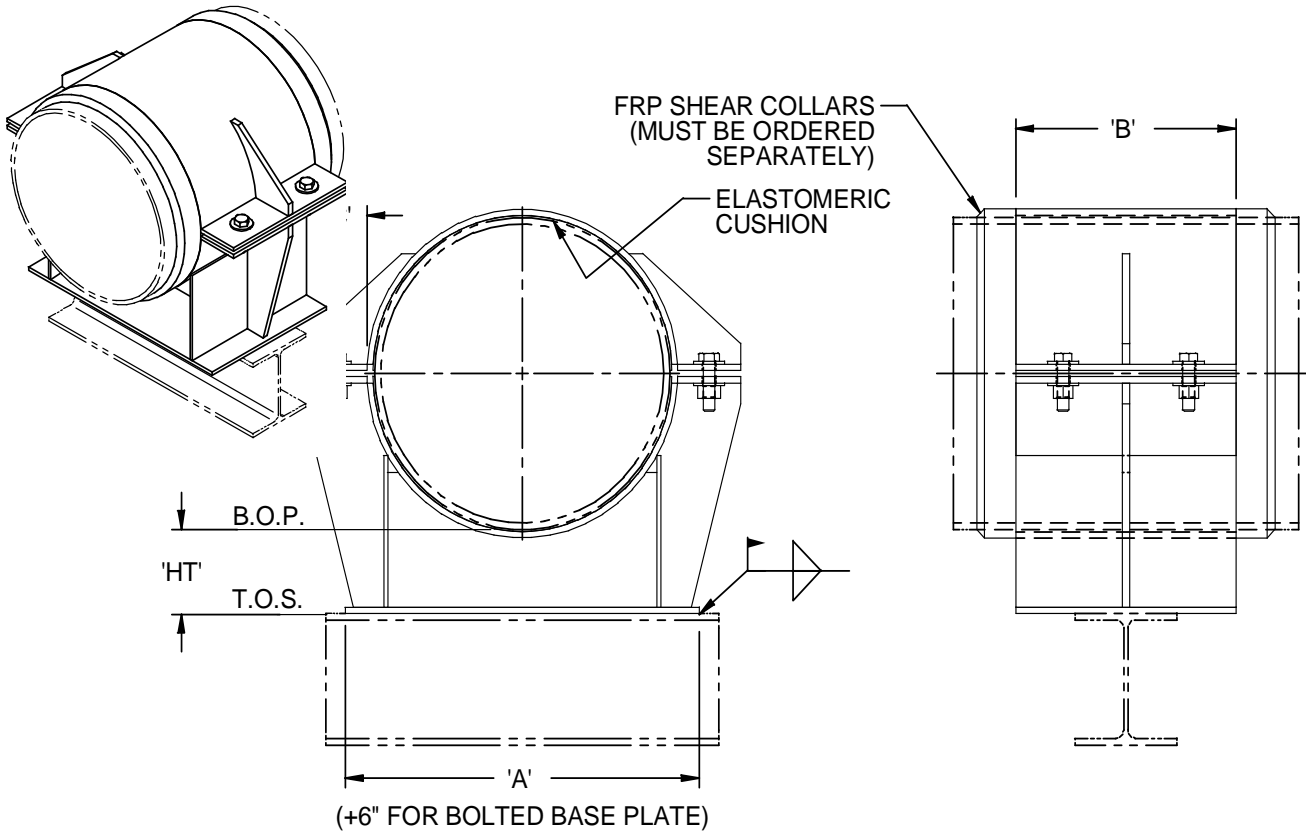
*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	Allowable Loads [lb]		
				Lateral	Vertical	Axial
12	16	8	2 1/2	1600	3900	5200
14	18	10	2 1/2	2300	5700	5800
16	20	12	2 1/2	2800	6300	6000
18	21 3/4	14	3	4500	10000	9000
20	24	14	3	5500	11000	14500
24	27 3/8	18	3	8000	16000	18000



Figure P22: Base Anchor, Heavy



Finish:

Hot-dipped galvanized*.

Service:

Piping anchor to secure and restrict freedom of movement.

Material:

Carbon steel**.

Notes:

Must be fully supported as shown.

See general notes.

*Other finishes are available upon request.

**Other materials are available upon request.

Pipe Size [in]	A [in]	B [in]	C [in]	HT [in]	Allowable Loads [lb]		
					Lateral	Vertical	Axial
12	16	12	2 1/2	2	3000	5500	5000
14	18	12	2 1/2	2	3800	6200	6000
16	20	14	2 1/2	2	5500	8200	6800
18	21 3/4	16	3	2	6800	10000	8000
20	24	16	3	2 1/2	7500	12000	12500
24	27 3/8	20	3	3	11000	17000	16000

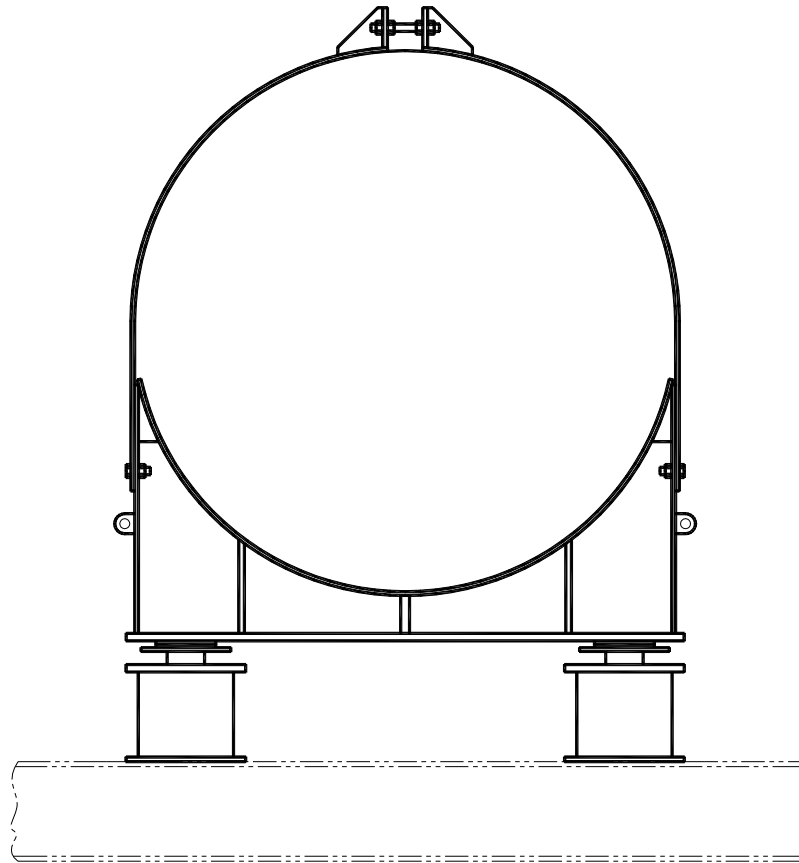


Support Options



Figure O1: Spring Supports

If the desired pipe support style is not depicted, pipe supports can be designed to meet project needs.



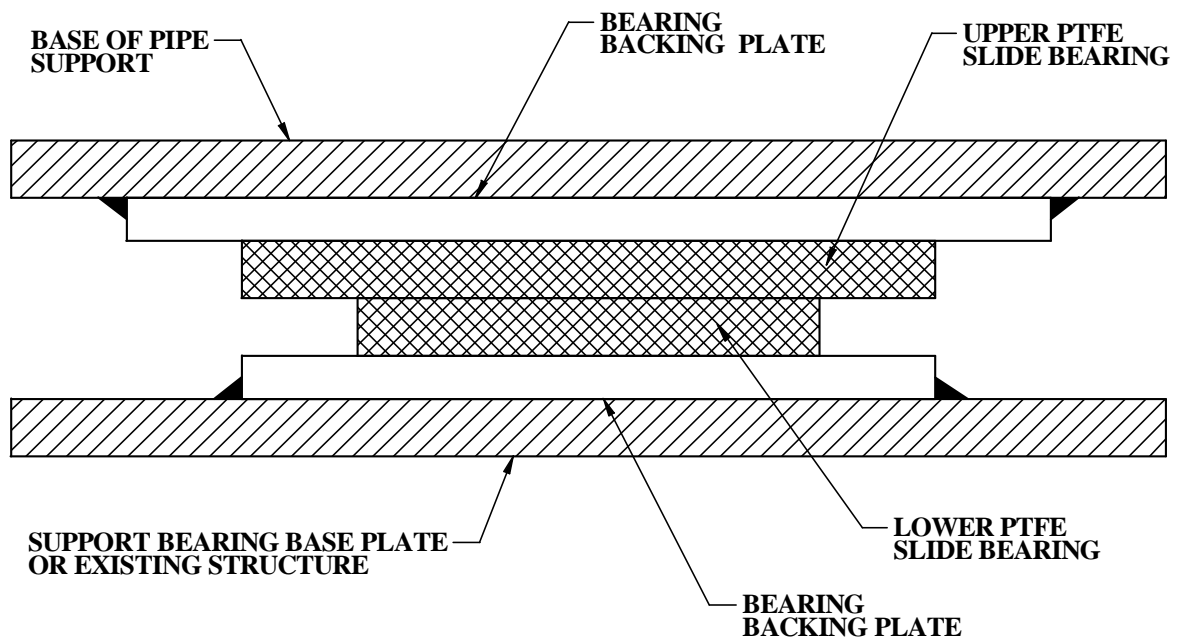
BASE MOUNTED DOUBLE CAN

This illustration depicts a large diameter base pipe support with spring cans. Spring cans are designed to allow for piping movements from system influences such as thermal expansion and contraction. This is just one example of the possible pipe support configurations available.



Figure O2: Slide Bearings

Slide bearings minimize the frictional resistance of pipe supports, reducing the chance of the pipe supports binding and creating localized stresses in the pipe. Slide bearings are recommended for piping having large temperature gradients and movements.



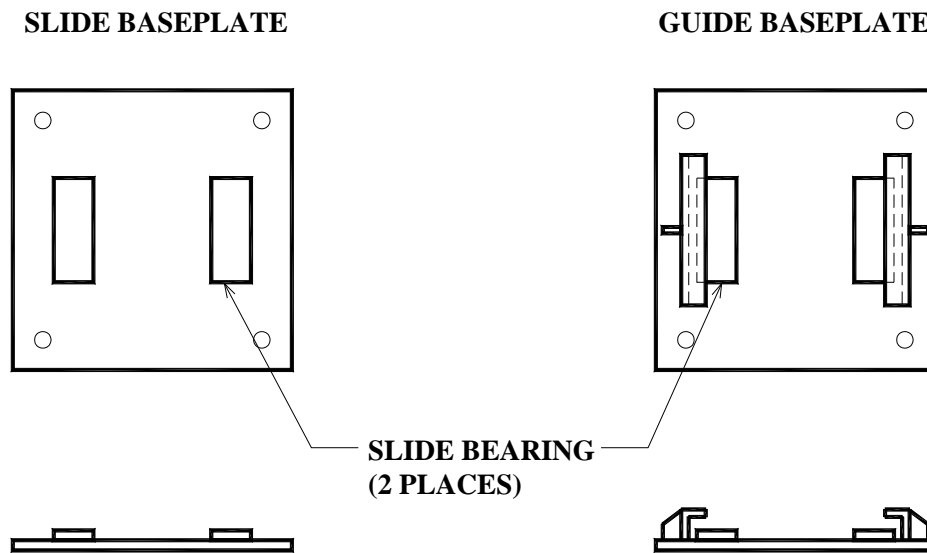
PTFE slide bearings are adhered to backing plates, which are welded to the existing structure or the bearing base plate of the pipe support.

Slide bearings may reduce friction forces as much as 40%. As pipe size and dead weight increase, slide bearings become more critical with increased frictional loads.



Figure O3: Base Plates

If base plates are desired to accompany pipe supports, base plates may be supplied as part of a total assembly. Base plates are available in standard dimensions or to customer specifications. Where base plates are desired for concrete base plates will be sized 6” greater than the support base width and length.



Finish:
Hot-dipped galvanized*

Service:
Pipe support foundation

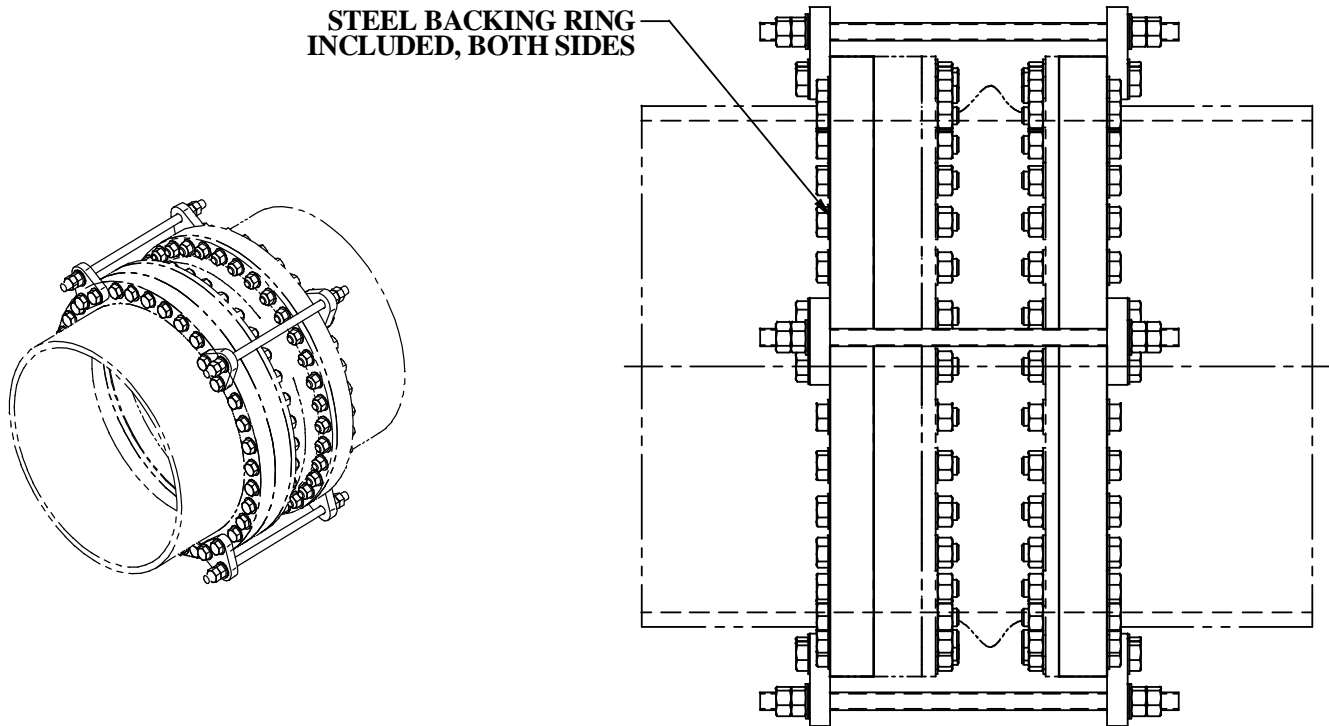
Material:
Carbon steel**

Notes:
See page O2 for description of slide bearings.
See general notes.

*Other finishes are available upon request.
**Other materials are available upon request.



Figure O4: Tie Rod Assembly



Finish:

Hot-dipped galvanized*.

Service:

To limit expansion of flexible joint.

Material:

Carbon steel**.

Notes:

To determine material thickness and rod size, specify type, length, allowable deflection and loads of flexible joint with placement of order. See general notes.

*Other finishes are available upon request.

**Other materials are available upon request.

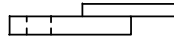
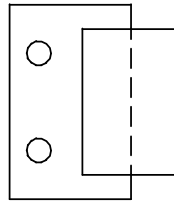


Figure O5: Guide Clips

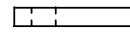
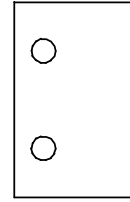
Guide clips are used to direct and control pipe displacement. Type FB1, FB2 and FB3 are available for standard supports without slide bearings or base plates. Types GC1, GC2, GC3 and GC4 are used with supports having slide bearings.



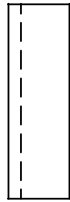
TYPE FB1



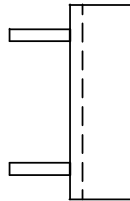
TYPE FB2



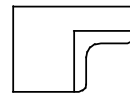
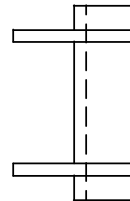
TYPE FB3



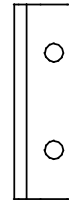
TYPE GC1



TYPE GC2



TYPE GC3



TYPE GC4

Type FB1 restricts uplift, requires field welding and is provided with standard supports.

Type FB2 restricts uplift and allows for bolted installations (bolting material not included but is available upon request).

Type FB3 does not restricts uplift and can be either bolted or welded.

Types GC1, GC2 and GC3 restrict uplift and require welding. Type used is dependent on load requirements.

Type GC4 does not restricts uplift and can be either bolted or welded.