

**Note:** For horizontal pipe runs, we recommend using EJMA (Expansion Joint Manufacturers Association) guidelines to determine guide spacing, see Tables 1 and 2 below. Piping in risers develop loads differently than horizontal pipe. Please review [“Understanding The Dynamic Of Riser Design In Skyscrapers”](#) white paper found on [www.metralflex.com](http://www.metralflex.com), or consult Metraflex if you need assistance determining guide spacing for risers.

## General

1. The Metraflex PTFE Slide Guide features guide base and slide with Teflon pad.
2. The Metraflex PTFE Slide Guide was designed to restrain the lateral loads developed by piping systems to control pipe movement and 2,000 lbs. pipe load.

## Application

1. When the PTFE Slide Guide is used in conjunction with expansion joints other than no thrust load type, we recommend that EJMA (Expansion Joint Manufacturers Association) guidelines for guide spacing is followed. See Tables 1 and 2.
2. For externally pressurized expansion joints such as the Metragator the first pipe guide at 4 pipe diameters is not required by Metraflex and should be considered optional. For internally pressurized joints the guide at 4 pipe diameters is required

Pipe size	Maximum Distance To	Maximum Distance To	Distance Between Additional Pipe guides			
	1st Guide / Anchor	2nd Guide	In Feet			
			At 50 PSI	At 100 PSI	At 150 PSI	At 300 PSI
1"	4"	1' - 4"	21	15	12	10
1.25"	5"	1' - 5"	23	17	13	12
1.5"	6"	1' - 9"	28	20	17	13
2"	8"	2' - 4"	32	23	18	15
2.5"	10"	2' - 11"	35	28	22	19
3"	1' - 0"	3' - 6"	38	28	23	20
4"	1' - 4"	4' - 8"	52	38	31	22
5"	1' - 8"	5' - 8"	63	45	38	25
6"	2' - 0"	7' - 0"	68	48	40	28
8"	2' - 8"	9' - 4"	87	62	45	38
10"	3' - 4"	11' - 8"	107	75	60	48
12"	4' - 0"	14' - 0"	118	85	70	50
14"	4' - 8"	16' - 4"	122	88	72	55
16"	5' - 4"	18' - 8"	137	96	80	60
18"	6' - 0"	21' - 0"	145	105	85	65
20"	6' - 8"	23' - 4"	160	118	90	70
24"	8' - 0"	28' - 0"	181	125	105	75

Table 1. Guide spacing for Standard Weight (Sch 40) Carbon Steel Pipe.

Size	Max distance to 1st guide / anchor	Distance from 1st guide to 2nd guide	Additional Guide distance in Feet		
				Pressure	
			25	50	70
.5"	2"	7"	5	4	3
.75"	3"	10.5"	7	6	5
1"	4"	1' - 2"	9	8	6
1.25"	5"	1' - 5.5"	14	11	9
1.5"	6"	1' - 9"	14	11	9
2"	8"	2" - 4"	19	14	12
2.5"	10"	2' - 11"	23	17	15
3"	1' - 0"	3' - 6"	27	20	18
4"	1' - 4"	4' - 8"	31	23	21

Table 2. Guide Spacing for Copper Pipe.

### Installation

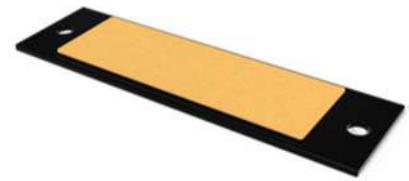
1. Guide bases for lateral movement limiting can be provided for weld down or bolt down to structure. A slide base that only provides support is also available. Consult structural engineer before attaching to structure.



**Weld Down Base**



**Bolt Down Base**



**Slide Base**

2. The style of slide varies on pipe size. Pipe shall be attached to slide with 1" stitch welds. For Copper pipe systems clamp on attachments with dielectric inserts may be obtained from Metraflex.



**.5" through 4"**



**5" through 8"**



**10" through 24"**

3. Install the spider so that the leading edge of the spider is installed halfway into the housing, see Figure 1. Ensure that the pipe growth will push the spider into the housing.

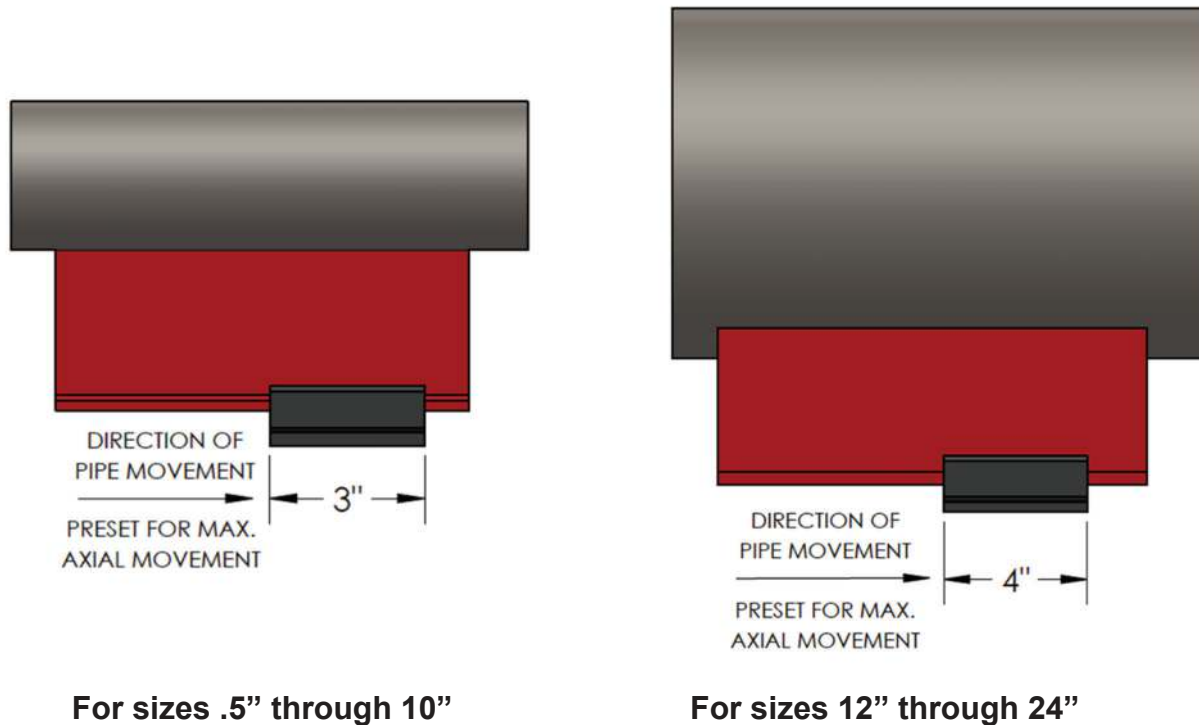


Figure 1. Guide Installation

4. For copper pipe / tubing applications install the dielectric felt supplied with the guide between the spider and copper tube / pipe.

## Precautions

1. For curved pipe, consult Metraflex.
2. Periodically inspect guide to insure proper operation.
3. For copper applications, periodically inspect dielectric insert to ensure that it is intact and in place.

**Maintenance:** Metraflex PTFE pipe guides have no serviceable parts and does not require maintenance.

Contact Metraflex or your local Metraflex Representative with any questions.