Installation Instructions

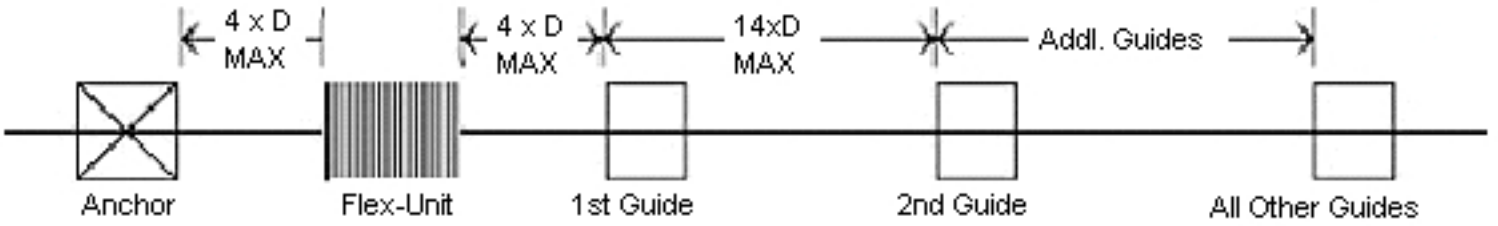
Anchoring and guiding

Proper guiding and anchoring is essential to an installation of expansion joints or pipe loops. They will prevent the pipe from squirming or buckling and are required to ensure the manufacturer's warranty.

Anchors at each end of the pipe run must be stronger than the force needed to compress the joint. Depending upon system pressure, this force may be many thousands of pounds. Guides permit axial movement of the pipe while restraining both lateral and angular movement. The quantity and location of the guides is dependent upon the natural flexibility of the pipe and the pressure rating of the system. Guides should be installed per the following chart.

Proper Alignment of Anchors and Guides
The location of the expansion joint also determines proper location of guides and anchors. The illustration below shows 2 guides on each side of the joint because the joint is installed in the middle of the run.

Concentric Pipe Guide Spacing*



Copper Tube Guide Spacing

Tube Size†	Max distance from bellows to 1st guide/anchor	Approx. distance from 1st to 2nd guide	Maximum Spacing for Intermediate Guides for Copper Tube (Feet) 25 PSI	50 PSI	70 PSI
1/2"	2"	7"	5'	4'	3'
3/4"	3"	10-1/2"	7'	6'	5'
1"	4"	1'2"	9'	8'	6'
1-1/4"	5"	1'5-1/2"	14'	11'	9'
1-1/2"	6"	1'9"	14'	11'	9'
2"	8"	2'4"	19'	14'	12'
2-1/2"	10"	2'11"	23'	17'	15'
3"	1'	3'6"	27'	20'	18'
4"	1'4"	4'8"	31'	23'	21'

†Note: For type "M" tubing.
For type "L" tubing spacing may be increased by 10%.
For type "K" tubing spacing may be increased by 20%
Data Per Expansion Joint Manufacturers Association.