

# Mr PEX® Tubing Properties

## Bending Radii

▶ The minimum acceptable bending radius in accordance with ASTM F 877 is 6 times the tubing outside diameter. Due to the unique flexibility of Mr PEX® Tubing, as compared to conventional PEX tubing, we allow a bending radius of 4 times the outside diameter.

The outside diameter is equal to the nominal size plus 1/8". Below table is a comparison of minimum bending radii of PEX in accordance with ASTM and bending radii of Mr PEX® Tubing. There is also a listing of the corresponding center distances when exiting the bend. Note that the actual center distances of the tubing in a radiant floor heating layout can be made somewhat narrower by allowing a so called "pear shaped" bend.

Nominal Size	Actual Size	Bending Radii ASTM F 877	Bend c/c ASTM F 877	Bending Radii Mr PEX®	Bending c/c Mr PEX®
3/8"	1/2"	3"	6"	2"	4"
1/2"	5/8"	3.75"	7.5"	2.5"	5"
5/8"	3/4"	4.5"	9"	3"	6"
3/4"	7/8"	5.25"	10.5"	3.5"	7"
1"	1.125"	6.75"	13.5"	4.5"	9"

*Note that above c/c measures applies to the center line of the tubing.*

## Thermal Conductivity

▶ The thermal conductivity of Mr. PEX® Tubing does not measurably differ from that of other PEX tubing. It is 0.22 Btu/(h\*°F).

## Measurements

▶ Mr. PEX® Tubing is manufactured in accordance with ASTM F 876. See details of the specification, below. Our control of measurements is second to none. Measurements are supervised by NSF International 4 times per year.

Nominal Size	Actual Size	Tolerance Allowed	Wall Thickness	Tolerance Allowed
3/8"	1/2"	± 0.003	0.070	± 0.010
1/2"	5/8"	± 0.004	0.070	± 0.010
5/8"	3/4"	± 0.004	0.083	± 0.010
3/4"	7/8"	± 0.004	0.097	± 0.010
1"	1.125"	± 0.005	0.125	± 0.013

*All measurements are in inches.*

## Ratings

▶ Mr PEX® Tubing carries following ratings as issued by Plastic Pipe Institute:

**73°F: 160 psi – 180°F: 100 psi – 200°F: 80 psi**