



Working Pressures and Solder

The table of maximum working pressures below must be understood to reflect what is generally considered as good engineering practice under reasonably constant and favorable conditions; i.e., pressures which are fairly steady, absence of particularly corrosive media, etc. Unusual conditions require increased safety factors and therefore, lower working pressures should be used.

Rated Internal Working Pressures of Piping System Made of Copper Water Tube and Soldered Fittings

Solder Used in joints	Service Temp. °F	POUNDS PER SQUARE INCH Water (a) Copper Water Tube-Nominal Sizes			
		1/8" to 1"	1¼" to 2"	2½" to 4"	5" to 8"
		Incl.	Incl.	Incl.	Incl.
* 50-50 Tin-Lead (b)	100	200	175	150	135
	150	150	125	100	90
	200	100	90	75	70
	250	85	75	50	45
95-5 Tin-Antimony (c) (d)	100	500	400	300	270
	150	400	350	275	250
	200	300	250	200	180
	250	200	175	150	135
Brazing Alloys Melting at or above 1000° F	Temperature and pressure ratings consistent with the materials and procedures employed.				

*The data given for 50% tin-50% lead applies also for the 40% tin-60% lead alloy.

- (a) Including other noncorrosive liquids and gases
- (b) ASTM B32, Alloy Grade Sn 50
- (c) ASTM B32, Alloy Grade Sb 5
- (d) The Safe Drinking Water Act Amendment of 1986 prohibits the use in potable water systems of any solder having a lead content in excess of 2%.

The values in this table are based on data in "Building Materials and Structures Reports BMS 58 and BMS 83".

NOTE: This table is from data published by the Copper and Brass Research Association