

Dimensions of copper tubes according [ASTM B¹¹¹](#) STANDARD SPECIFICATION FOR SEAMLESS COPPER WATER TUBE can be found in the table below:

Type K							
Nominal Size (inches)	Actual Outside Diameter (inches)		Tolerance on Outside Diameter (inches)		Wall Thickness (inches)		Weight (lb/ft)
			Annealed ¹⁾	Drawn ²⁾	Nominal	Tolerance	
1/4	3/8	0,370	0,002	0,001	0,030	0,0030	0,133
3/8	1/2	0,500	0,0020	0,001	0,049	0,0005	0,269
1/2	5/8	0,620	0,0020	0,001	0,049	0,0005	0,344
5/8	3/4	0,750	0,0020	0,001	0,049	0,0005	0,418
3/4	7/8	0,870	0,003	0,001	0,060	0,0006	0,641
1	1 1/8	1,120	0,0030	0,0010	0,060	0,0006	0,837
1 1/4	1 3/8	1,370	0,004	0,0010	0,060	0,0006	1,04
1 1/2	1 5/8	1,620	0,0040	0,002	0,072	0,0007	1,36
2	2 1/8	2,120	0,005	0,002	0,083	0,0008	2,06
2 1/2	2 5/8	2,620	0,005	0,002	0,090	0,0010	2,92
3	3 1/8	3,120	0,005	0,002	0,109	0,0011	4,00
3 1/2	3 5/8	3,620	0,005	0,002	0,120	0,0012	5,12
4	4 1/8	4,120	0,005	0,002	0,134	0,0013	6,01
5	5 1/8	5,120	0,005	0,002	0,160	0,0016	9,67
6	6 1/8	6,120	0,005	0,002	0,192	0,0019	13,87

Copper tubes of type K are thick walled, much thicker than type L and M and are used for domestic water-, service and distribution-, fire protection-, solar-, fuel and oil-, HVAC-, compressed air-, oxygen-, LPG gas-, snow melting-, steam- and vacuum-systems.

Be careful with copper tubes and natural gas. Due to odor additives, moisture content and type of solders used the tubes may crack. Copper tubes is not allowed by code in the US for natural gas distribution.

Copper tubes of type K can be used sweat, flared and compression fittings. Available in hard and soft types.

Type L							
Nominal Size (inches)	Actual Outside Diameter (inches)		Tolerance on Outside Diameter (inches)		Wall Thickness (inches)		Weight (lb/ft)
			Annealed ¹⁾	Drawn ²⁾	Nominal	Tolerance	
1/4	3/8	0,370	0,002	0,001	0,030	0,0003	0,126
3/8	1/2	0,500	0,0020	0,001	0,030	0,0004	0,198
1/2	5/8	0,620	0,0020	0,001	0,040	0,0004	0,280

5/8	3/4	0,700	0,0020	0,001	0,042	0,004	0,362
3/4	7/8	0,875	0,003	0,001	0,040	0,004	0,400
1	1 1/8	1,125	0,0030	0,0010	0,050	0,005	0,600
1 1/4	1 3/8	1,375	0,004	0,0010	0,050	0,006	0,884
1 1/2	1 5/8	1,625	0,0040	0,002	0,060	0,006	1,14
2	2 1/8	2,125	0,005	0,002	0,070	0,007	1,70
2 1/2	2 5/8	2,625	0,005	0,002	0,080	0,008	2,48
3	3 1/8	3,125	0,005	0,002	0,090	0,009	3,33
3 1/2	3 5/8	3,625	0,005	0,002	0,100	0,010	4,29
4	4 1/8	4,125	0,005	0,002	0,114	0,011	5,38
5	5 1/8	5,125	0,005	0,002	0,120	0,012	7,71
6	6 1/8	6,125	0,005	0,002	0,140	0,014	10,20

Standard copper tubes of type L are used for interior above ground plumbing - domestic water-, service and distribution-, fire protection-, solar-, fuel and oil-, HVAC-, compressed air-, LPG gas-, snow melting- and vacuum-systems.

Copper tubes of type L can be used with sweat, compression and flare fittings. Only seat and flare fittings are legal for gas lines. Available in hard and soft types.

Type M							
Nominal Size (inches)	Actual Outside Diameter (inches)		Tolerance on Outside Diameter (inches)		Wall Thickness (inches)		Weight (lb/ft)
			Annealed ¹⁾	Drawn ¹⁾	Nominal	Tolerance	
1/4	3/8	0,375	0,002	0,001			0,106
3/8	1/2	0,500	0,0020	0,001	0,020	0,002	0,144
1/2	5/8	0,625	0,0020	0,001	0,028	0,003	0,203
5/8	3/4	0,750	0,0020	0,001			0,263
3/4	7/8	0,875	0,003	0,001	0,032	0,003	0,328
1	1 1/8	1,125	0,0030	0,0010	0,030	0,004	0,464
1 1/4	1 3/8	1,375	0,004	0,0010	0,042	0,004	0,681
1 1/2	1 5/8	1,625	0,0040	0,002	0,049	0,005	0,94
2	2 1/8	2,125	0,005	0,002	0,058	0,006	1,46
2 1/2	2 5/8	2,625	0,005	0,002	0,060	0,006	2,03
3	3 1/8	3,125	0,005	0,002	0,072	0,007	2,78
3 1/2	3 5/8	3,625	0,005	0,002	0,083	0,008	3,08
4	4 1/8	4,125	0,005	0,002	0,090	0,010	4,77
5	5 1/8	5,125	0,005	0,002	0,109	0,011	7,77
6	6 1/8	6,125	0,005	0,002	0,122	0,012	8,91

Copper tubes of type M are used for interior domestic water-, service and distribution-, fire protection-, solar-, fuel and oil-, HVAC-, snow melting- and vacuum-systems. Wall thickness less than type K and L.

Copper tubes type M are normally used with flare fittings. Available in soft and hard types.

- 1 in (inch) = 25,4 mm

) Annealed tube is suitable for use with flared or compression fittings, and with solder-type fittings, provided rounding and sizing of the tube ends is performed where needed.

) Drawn temper tube is suitable for use with solder-type fittings. Types A and B tube, in the drawn temper, are suitable for use with certain types and sizes of compression fittings. The standard length for drawn tubes are 20 ft (6,097 m).

The B specification covers seamless copper water tube suitable for general plumbing, similar applications for the conveyance of fluids, and commonly used with solder, flared, or compression-type fittings. The type of copper water tube suitable for any particular application is determined by the internal or external fluid pressure, by the installation and service conditions, and by local requirements. Means of joining or bending are also factors that affect the selection of the type of tube to be used.

This specification is the imperial companion of Specification [B 36M](#).