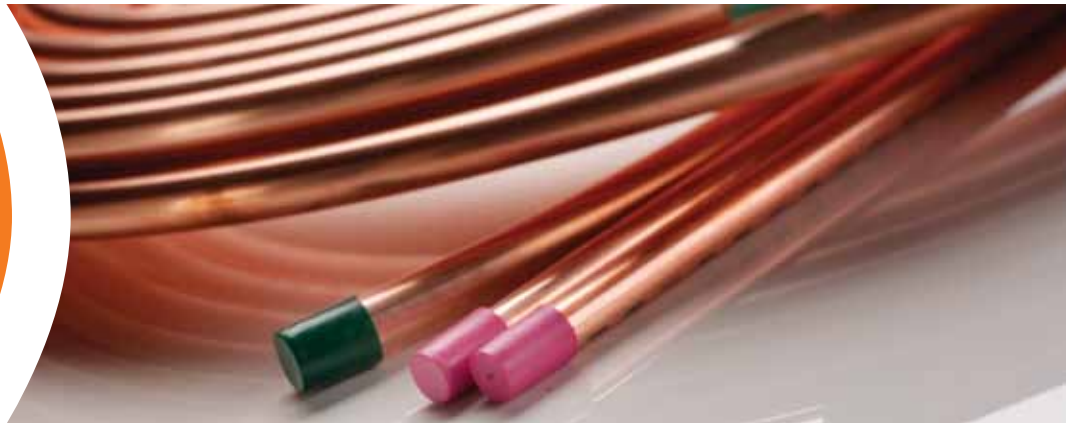


# Copper Tube TO AS/NZS 1571

REFRIGERATION  
& MEDICAL GAS  
COPPER TUBE



## USAGE

### High and low-pressure applications including:

- Medical Gases
- Air Conditioning
- Refrigeration
- Mechanical Services

### BENEFITS

- Backed by MM Kembla's reputation for quality, service and customer care for nearly 100 years.
- Manufactured to Australia/New Zealand standard AS/NZS 1571.
- MM Kembla have a range of tubes and fittings suitable for the new R410A and R32 refrigerants.
- Supported by a comprehensive range of copper refrigeration fittings.

### FEATURES

- Seamless copper tube in sizes from 1/4" to 3 1/8".
- The internal cleanliness of air conditioning, refrigeration and medical gas tube is critical in order to prevent contamination to the components in the piping system. MM Kembla has a unique manufacturing process and certified laboratory to confirm that the total residue does not exceed 0.038g/m<sup>2</sup> as specified in AS/NZS 1571. All MM Kembla refrigeration tubes are cleaned and capped.
- Pink capped tube has been specifically designed to meet the requirements of R410a and R32 air conditioning and refrigeration applications. Also identifiable by a continuous ink mark "KEMBLA AUSTRALIA AS/NZS 1571 (diameter X (wall thickness) HIGH PRESSURE REFRIGERATION TUBE"
- Pink capped tube can also be installed for use with R22, R134a and other lower pressure refrigerants.
- Half hard tube can be bent using bending tools without applying additional heat.

### INSTALLATION

- Copper tubes and fittings can be successfully joined by silver brazing or flaring.
- Silver brazing shall be carried out by professional tradespersons using brazing principles and safety procedures.
- The use of 15% silver solder is recommended when brazing tube or fittings for use with R410a and R32 refrigerants. A proprietary silver brazing flux shall be used.
- R410a and R32 has a 60% higher operating pressure than R22, thus requiring a thicker wall copper tube and significantly stronger (R410a and R32) copper fittings. The minimum allowable tube wall thickness shall be 0.81mm. See table overleaf.

### MEDICAL GAS TUBE INSTALLATION

Per the Medical Gas Systems installation code AS2896;

- During storage and handling of medical gas tube and fittings, particular attention must be given to keeping them clean and dry.
- All brazing alloys shall comply with B4 alloy designation as specified in AS11671.
- When brazing joints, commercial-grade carbon dioxide shall be used as an internal inert gas shield. Extreme care must be taken to ensure adequate ventilation, as high levels of CO<sub>2</sub> are toxic and can cause suffocation.
- Tools used for cutting or reaming shall be kept free from oil or grease.
- Pipelines and fittings sizes shall be selected to provide the required design flow of the entire health care facility.
- Pressure and contaminant testing should be performed on installed tubing before final approval and use of system.



# Copper Tube TO AS/NZS 1571

## REFRIGERATION COPPER TUBE

OD		Wall	Length (meters)	Code	Nominal Tube mass (kg/6m)	Safe Working Pressures (kPa)					
Inch	Metric					50°C	55°C	60°C	65°C	70°C	75°C
1/4"	6.35	0.81	5.8	030201	0.76	10635	10270	9910	9545	9180	8820
3/8"	9.52	0.81	5.8	030202	1.19	6800	6570	6335	6105	5870	5640
1/2"	12.70	0.81	5.8	030203*	1.62	4995	4825	4655	4480	4310	4140
5/8"	15.88	0.91	5.8	030205*	2.3	4460	4310	4155	4000	3850	3700
5/8"	15.88	1.02	5.8	030206*	2.56	5030	4860	4690	4515	4345	4170
3/4"	19.05	0.91	5.8	030207*	2.78	3600	3475	3355	3230	3110	2985
3/4"	19.05	1.14	5.8	030209*	3.44	4670	4510	4350	4190	4030	3870
7/8"	22.22	0.91	5.8	030210*	3.27	3140	3030	2925	2815	2710	2600
7/8"	22.22	1.40	5.8	030212	4.91	4930	4760	4595	4425	4255	4090
1"	25.40	0.91	5.8	030213	3.76	2730	2640	2545	2450	2360	2265
1"	25.40	1.63	5.8	030215	6.53	5025	4855	4685	4510	4340	4170
1 1/8"	28.58	1.22	5.8	030217	5.63	3275	3165	3050	2940	2830	2715
1 1/8"	28.58	1.83	5.8	030218	8.25	5015	4845	4670	4500	4330	4160
1 3/8"	34.92	1.22	5.8	030221	6.93	2660	2570	2480	2390	2300	2210
1 3/8"	34.92	2.03	5.8	030224	11.26	4525	4370	4220	4065	3910	3755
1 5/8"	41.28	1.22	5.8	030227	8.24	2240	2165	2090	2010	1935	1860
1 5/8"	41.28	2.41	5.8	030228	15.79	4550	4390	4235	4080	3925	3770
2 1/8"	53.98	1.78	5.8	030231	15.67	2508	2422	2337	2251	2165	2080
2 5/8"	66.68	2.03	5.8	030235	22.13	2310	2230	2150	2075	1995	1915
3 1/8"	79.38	2.29	5.8	030236	29.77	2186	2111	2037	1962	1887	1813

## REFRIGERATION COPPER COILS

OD		Wall	Length (meters)	Code	Nominal Tube mass (kg/6m)	Safe Working Pressures (kPa)					
Inch	Metric					50°C	55°C	60°C	65°C	70°C	75°C
3/16"	4.76	0.71	30	030101	0.48	12715	12280	11845	11410	10980	10545
1/4"	6.35	0.71	15	030102	0.68	9175	8860	8550	8235	7920	7610
1/4"	6.35	0.81	30	030103	0.76	10635	10270	9910	9545	9180	8820
3/8"	9.52	0.81	18	030108	1.19	6800	6570	6335	6105	5870	5640
1/2"	12.70	0.71	15	030110	1.44	4345	4195	4050	3900	3750	3605
1/2"	12.70	0.81	18	030111	1.62	4995	4825	4655	4480	4310	4140
5/8"	15.88	0.81	15	030113	2.06	3945	3810	3675	3540	3405	3270
5/8"	15.88	1.02	18	030115	2.56	5030	4860	4690	4515	4345	4170
3/4"	19.05	0.91	18	030117	2.78	3600	3475	3355	3230	3110	2985

Other sizes available on request

■ Suitable for R410a and R32 refrigerants

\* Straight lengths supplied in half hard temper, otherwise hard drawn

Also available on request

  
**PairCoil**

Pre-Insulated Annealed  
Copper PairCoil

  
**PairCoilMAX™**

Premium Pre- Insulated Annealed  
Fire Retardant Copper Pair Coil

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