

Lawton Coated Tube Data Sheet



Lawton Coated Copper Tube	PE covered straight lengths and PVC coated coils
Applications	Hot and cold water distribution, heating systems up to 95 °C including underfloor heating, domestic gas and liquid fuel distribution
Market Segment	Plumbing, Medical, Engineering
Base tube standard	BS EN 1057:2006+A1:2010, material Cu-DHP (CW024A)
Covering standard	BS EN 13349:2002 (solid plastics covering)
Size and covering colours	Standard offerings: see tables below White, yellow, green, blue, black (see Colour Guide)
Outside use	UV Stabilised covering provided on demand
Guarantee	75 Years (See webpage for full T&Cs)
Protection of the copper tube against external corrosion in aggressive environments (screeds, plasters, cements and soils), with added protection against impact and mechanical loading during transport and installation	
Additional sizes, colours, profiles and specifications available on demand	

Product Families

- Lawton PE Coated - plain PE coated copper tube
- Lawton Castellated - castellated PE with internal channels decoupling the tube from the insulation, accommodating thermal movement of pipework laid in screed
- Lawton PVC - plain PVC coated copper tube
- Lawton PVC Microbore - small bore PVC coil

PE Coated Straight Lengths

Copper tube OD x wall (mm)	Material Condition (EN 1057)	White Plain	White Castellated	Yellow Plain	Green Plain
15 x 0.7	R250	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m
15 x 1.0	R250	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
22 x 0.9	R250	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m
22 x 1.2	R250	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
28 x 0.9	R250	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m	3 m / 5.8 m / 6 m
28 x 1.2	R250	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
35 x 1.0	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
35 x 1.2	R250	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
35 x 1.5	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
42 x 1.0	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
42 x 1.2	R250	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
42 x 1.5	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
54 x 1.2	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
54 x 2.0	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
66.7 x 1.2	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
66.7 x 2.0	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
76.1 x 1.5	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
76.1 x 2.0	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
108 x 1.5	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m
108 x 2.5	R290	3 m / 5.8 m / 6 m	-	-	3 m / 5.8 m / 6 m

PVC Plain Coated Coils

Copper tube OD x wall (mm)	Material Condition (EN 1057)	Colour	Coil lengths
6 x 1.0	R220	Black	30 m
6.35 (1/4") x 0.9	R220	Black	30 m
8 x 0.6	R220	White	25 m
8 x 0.8	R220	Black	25 m
8 x 1.0	R220	Yellow	25 m
8 x 1.0	R220	Black	30 m / 50 m
9.52 (3/8") x 0.7	R220	Black	30 m
9.52 (3/8") x 0.9	R220	Black	30 m
10 x 0.7	R220	White	25 m / 50 m
10 x 0.7	R220	Yellow	25 m
10 x 1.0	R220	Black	30 m
12 x 1.0	R220	Black	30 m
15 x 1.0	R220	Blue	25 m
15 x 1.0	R220	Yellow	25 m
22 x 1.2	R220	Blue	25 m
22 x 1.2	R220	Yellow	25 m
28 x 1.2	R220	Yellow	20 m

Typical Service Colour Guide

Covering colour	Typical service	Identification basis
White (PVC)	Oil and petroleum products	Commercial convention
White (PE)	Exposed internal pipework and pipework chased into walls or laid in screeds; general hot and cold water and heating	Exposed internal pipework and pipework chased into walls or laid in screeds; general hot and cold water and heating
Yellow	Gas installations	BS 1710:2014 basic identification colour for gases is yellow ochre (08 C 35)
Green	Water services	BS 1710:2014 basic identification colour for water is green (12 D 45)
Blue	Cold water from the public supply	BS 1710:2014 auxiliary blue (18 E 53) denotes potable water from the public supply
Black	Heating oil and fuel supply lines (microbore); general buried service protection	Commercial convention

Covering General Properties

Property	Value
Lawton Premium - plain (PLN)	Non-expanded plastics covering of uniform thickness
Lawton Supreme - profiled / castellated (PRF)	Covering profiled on its inner surface to provide channels forming gaps between the plastics and the copper tube, accommodating thermal movement of pipework laid in screed
Plain covering thickness - 6 mm to 28 mm OD	1.0 mm
Plain covering thickness - 32 mm to 54 mm OD	1.5 mm
Plain covering thickness - 66.7 mm to 108 mm OD	2.0 mm
Profiled covering overall thickness - 12 mm to 22 mm OD	2.0 mm
Profiled covering overall thickness - 25 mm to 35 mm OD	2.5 mm
Profiled covering bottom-wall thickness	45 % to 65 % of the nominal overall covering thickness
Elongation of covering as delivered	Greater than 50 % at any temperature above -5°C
Ageing (7 days at 110°C)	Elongation ratio A_t/A_{ref} greater than 0.50
Cold bend (annealed covered tube up to 22 mm OD)	No cracks visible to the unaided eye; 90° bend, radius 3 to 5 times covered OD, at 0°C
Chemical restrictions	Free of nitrite; ammoniacal compounds max 0.2 % (as NH_4^+ ion) preventing induction of stress corrosion cracking

Underlying Material Mechanical Properties

For the mechanical and chemical properties of the underlying copper material see their respective datasheet.