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Conductors are an essential component of a Lightning Protection System.

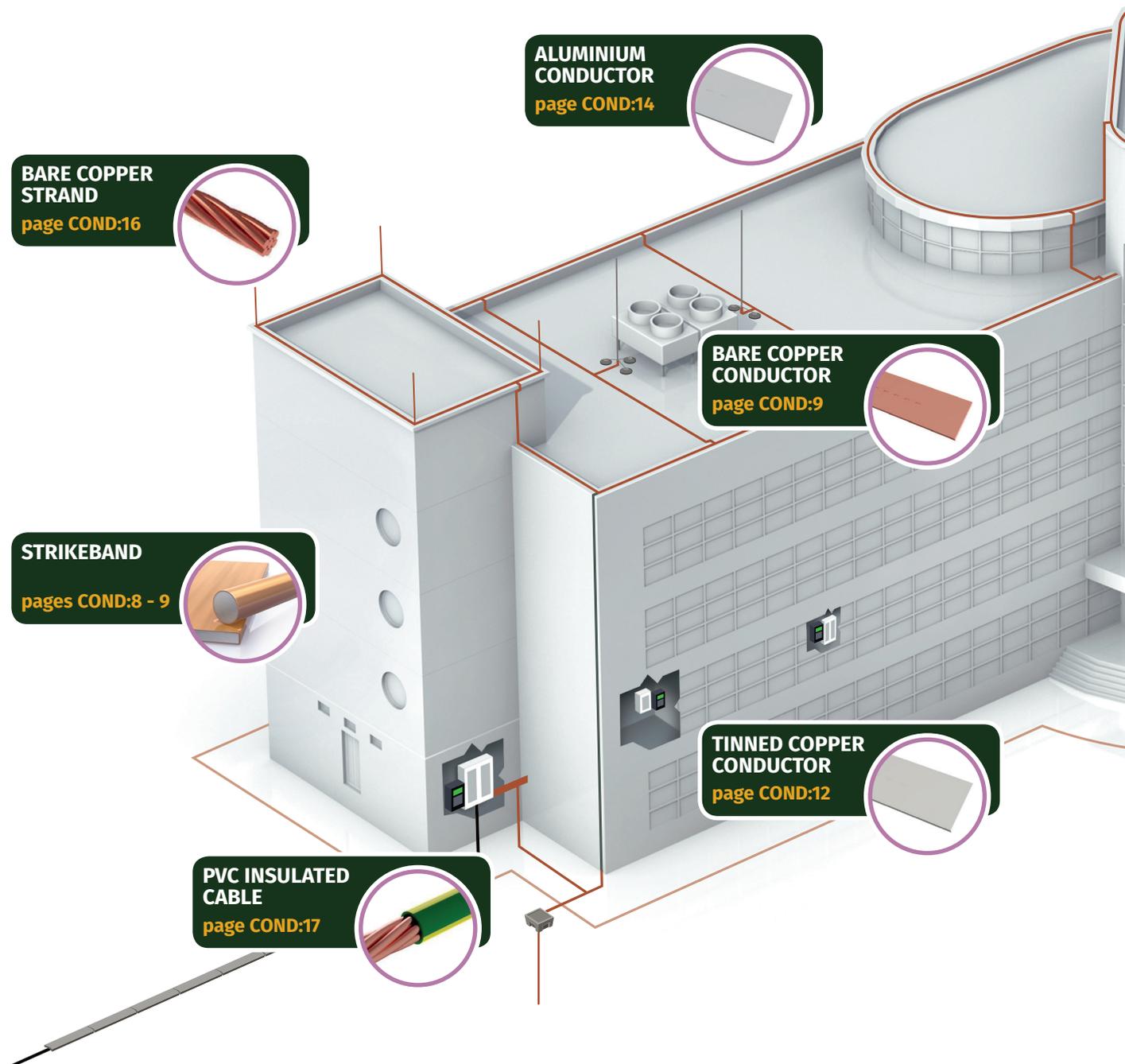
They form part of:

- The Air Termination Network - arresting the lightning strike
- The Down Conductor System - taking the lightning discharge to ground
- The Earth Termination/Network - safely dissipating the lightning discharge into the ground

Conductors are also an integral and important component of an earthing system, whether this be for a power station, sub-station, cell site, solar PV array etc.

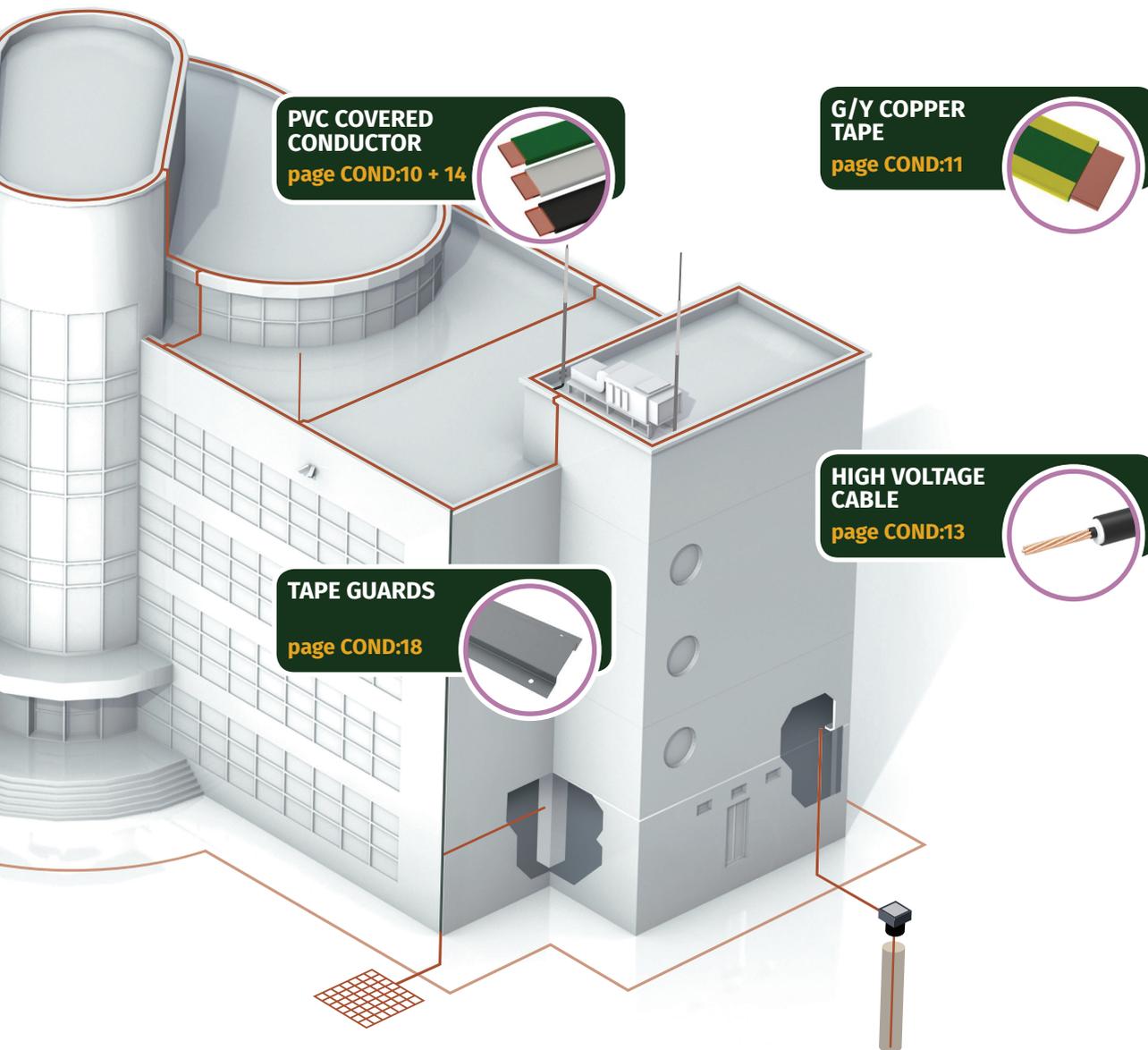
Conductors provide a low impedance path and they must be:

- Correctly sized for fault current
- Sufficiently robust to resist mechanical damage
- Able to resist the effects of corrosion



Kingsmill are proud to offer a comprehensive range of conductors. Thus enabling the Lightning Protection Designer greater freedom to: conceal conductors, aesthetically blend conductors into the building facade, as well as offering lower cost alternatives - Strikeband and aluminium etc.

Our Insulated Lightning Conductor also allows the designer to resolve spacing problems when there is insufficient room to install a “conventional” conductor whilst maintaining the required separation distance between it and the electrically conductive parts of the structure that require protection. The Kingsmill Insulated Lightning Conductor effectively simulates an equivalent separation distance of $\leq 0.75\text{m}$ in air and $\leq 1.5\text{m}$ in solid material.



PVC COVERED CONDUCTOR
page COND:10 + 14

G/Y COPPER TAPE
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TAPE GUARDS
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HIGH VOLTAGE CABLE
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Guide to conductor selection

Conductors are the most important part of a Lightning Protection and Earthing system. They:

- Intercept the lightning current
- Carry and safely dissipate the lightning current/earth fault to earth

It is important, therefore, that they:

- Are corrosion resistant
- Carry the current required
- Are mechanically robust
- Provide a low resistivity path to earth

From BS:EN 62305 . . .

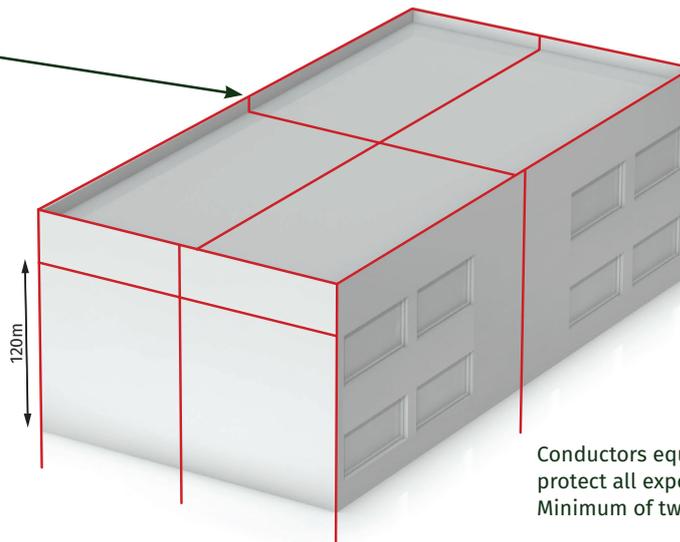
Roof mesh conductor system

LPC	Maximum mesh size (m)
I	5 x 5
II	10 x 10
III	15 x 15
IV	20 x 20

LPC	Down conductor spacing (m)
I	10
II	10
III	15
IV	20

LPC	Lateral conductor spacing (m)*
I + II	10
III	15
IV	20

*Buildings over 120m height



Conductors equally spaced - important to protect all exposed corners of the building. Minimum of two down conductors.

The most common cross-section areas for above ground lightning protection conductors are 8mm dia (50mm² - BS:EN 62305 min) and 25 x 3mm (75mm²) rectangular section.

Selecting the best conductor for the application

SECTION	MATERIAL	COVERING	EARTHING			LIGHTNING PROTECTION				
			Power Earthing	Lightning Protection Earthing	Below ground	Lightning Protection above ground	Above ground	Best for ease of installation	Best for aesthetics	Best for cost above ground
STRIKEBAND	Cu/Al	-	✗	✗	✗	✓	✓	✓	-	✓
Rectangular Tape	Cu	Bare	✓	✓	✓	✓	✓	-	-	-
	Cu	PVC	✓	✓	✗	✓	✓	-	✓	-
	Cu	Tinned	✓	✓	✓	✓	✓	-	-	-
	Cu	Lead	-	-	✓	Chimneys	✓	-	-	-
	Cu	LSOH	✓	✓	✓	Tunnels	✓	-	-	-
	Al	Bare	✗	✗	✗	✓	✓	✓	-	✓
Solid Circular	Al	PVC	✗	✗	✗	✓	✓	✓	✓	✓
	Cu	Bare	✓	✓	✓	✓	✓	-	-	-
	Cu	PVC	✓	✓	✗	✓	✓	-	✓	-
	Cu	Tinned	✓	✓	✓	✓	✓	-	-	-
	Cu	Lead	-	-	✓	Chimneys	✓	-	-	-
	Al	Bare	✗	✗	✗	✓	✓	✓	-	✓
Stranded	Al	PVC	✗	✗	✗	✓	✓	✓	✓	✓
	Cu	Bare	✓	✓	✓	✓	✓	-	-	-
	Cu	PVC	✓	✓	✗	✓	✓	-	-	-
	Cu	Tinned	✓	✓	✓	✓	✓	-	-	-
Insulated Lightning Conductor	Cu	Lead	✓	-	✓	Chimneys	✓	-	-	-
	Cu	Insulated	✗	✗	✗	✓	✓	-	-	-

When choosing the material for “above ground” Lightning Conductors, it is important to take into account the avoidance of any bimetallic corrosion. For example, one should avoid the installation of copper conductors over aluminium or steel cladding.

- Galvanic corrosion - happens when there is a potential difference between dissimilar metals
 - When the materials are in contact in the presence of an electrolyte, corrosion occurs. One metal becomes the anode, the other the cathode. The anode will tend to go into solution and therefore corrode. The electrolyte can be water with impurities from the air.
 - In the instance of water run-off from copper - the water carries fine copper corrosion particles which, when they drip on to aluminium or zinc, may result in corrosion. The direct contact of the dissimilar metals is not required for corrosion to occur in such a case.

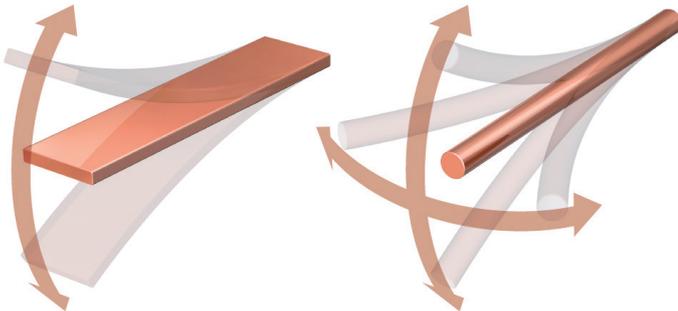
Whilst there are cautions with respect to the use of aluminium, these can generally be overcome with the use of PVC covered aluminium conductor, in an above ground Lightning Conductor setting.

Conductor section options

STRIKEBAND and aluminium conductors combine the benefits to the installer of light weight and easy installation (such materials exhibit little “spring back” and so are easier to dress to the contours and shapes of the structure).

Solid circular section conductors are the easiest to install since they can be bent through any plane (360°) whereas tape can only be bent in two directions.

360° overcomes problems that are presented by complex geometry buildings.



PVC covered conductor

PVC covering is often used as a decorative cover when blending in external conductors to building aesthetics. Thought must be given however, to using such conductors in areas of high UV, due to colour bleaching and the life of modern UV stabilisation compounds.



Conductor colour chart

The decision to be made on the colour of PVC covered conductor is governed by the aesthetics of the building to be protected.

To reduce the impact of an external system, Kingsmill offer a range of colours designed to match the colours of common building materials.

COLOUR	STANDARDS	COLOUR
Black	18B29*	
Green	BS 6746C	
Grey	00A07*	
Stone	08B23*	
White	10B15*	
Brown	06C39*	
Green/Yellow	N/A	

OTHER COLOURS ARE AVAILABLE UPON REQUEST - PLEASE SPEAK TO A MEMBER OF THE SALES OFFICE.

***PVC colours to BS 5252, green to BS 6746C**

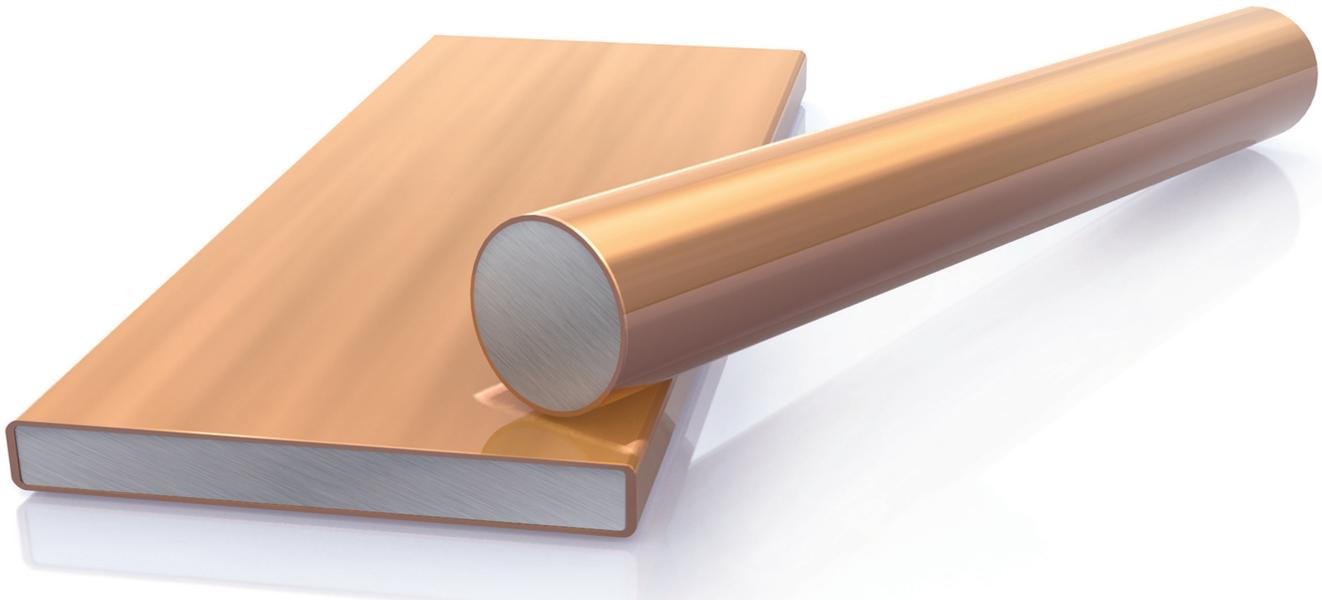
Conductor sizing

Earth conductors are sized according to the maximum fault that they are to carry. When carrying out this calculation, it is important to take into account the type of connectors used - exothermic joints will take 100% of the fault current, whereas bolted, braided and crimp connections do not (a chain is only as good as its weakest link).

Copper conductor ratings: fault current

CONDUCTOR SIZE	CSA (mm ²)	kA for 1 sec	kA for 3 sec
12.5 x 1.5	18.75	3.3	1.9
12.5 x 3	37.5	6.6	3.8
20 x 1.5	30	5.3	3.0
20 x 3	60	10.6	6.1
25 x 1.5	37.5	6.6	3.8
25 x 3	75	13.2	7.6
25 x 4	100	17.6	10.2
25 x 6	150	26.4	15.2
30 x 2	60	10.6	6.1
30 x 3	90	15.8	9.1
30 x 4	120	21.1	12.2
30 x 5	150	26.4	15.2
31 x 3	93	16.4	9.5
31 x 6	186	32.7	18.9
38 x 3	114	20.1	11.6
38 x 5	190	33.4	19.3
38 x 6	228	40.1	23.2
40 x 3	120	21.1	12.2
40 x 4	160	28.2	16.3
40 x 5	200	35.2	20.3
40 x 6	240	42.2	24.4
50 x 3	150	26.4	15.2
50 x 4	200	35.2	20.3
50 x 5	250	44.0	25.4
50 x 6	300	52.8	30.5

The following conductor ratings are based upon the recommendations of BS 7430 with an initial conductor temperature of 30°C and a maximum temperature of 250°C.



STRIKEBAND - a bimetallic lightning conductor for above ground applications

STRIKEBAND combines the corrosion resistance and inherent low resistivity of copper, with the lightness and flexibility of aluminium, providing a low cost, easy to use alternative to solid copper.

Seamless, high conductivity copper is bonded (through high pressure) to a solid core of electrical grade aluminium. The copper thickness used is 15% by volume of the cross-sectional area. The resultant material is easier to bend, having less spring-back than copper. This is a distinct advantage to the Lightning Protection installer when “dressing” the conductor to the contours of the building. Combining longer coil lengths and a light weight makes this product an ideal choice where the advantages of copper above ground are required, but with cost reductions.

STRIKEBAND is offered in two sizes and has passed testing to IEC/BS:EN 62561-2.

For Flat Tape see page COND:9. For Circular Conductor see page COND:15.

Benefits

- **Reduce labour costs**
Due to its reduced weight and ease of handling **STRIKEBAND** can save labour costs when compared with installing a copper conductor of equal dimensions
- **Reduce weight by up to 60%**
The relative density of **STRIKEBAND** vs copper results in the mass of **STRIKEBAND** conductors being only 41% of that of a solid copper bar of equal dimensions
- **Reduce material costs**
1 metre of **STRIKEBAND** costs less than 1 metre of copper, therefore the same stock provides lower inventory values, meaning lower financing costs
- **Uses standard Lightning Protection components**
- **Longer coil lengths**
When compared to equivalent solid copper section

Characteristics

STRIKEBAND is easy to bend, having less spring-back than copper. The relevant datasheet should be consulted for recommended bending radii. **STRIKEBAND** is also easy to drill, cut and punch.

Tested to BS:EN 62561-2

STRIKEBAND is tested to ensure it fully complies with the requirements of BS:EN 62561-2.



STRIKEBAND Copper Covered Aluminium

STRIKEBAND Copper Covered Aluminium is sold in the specified coil length only. Copper thickness is 15% by volume, giving a radial thickness of 0.25mm.

DESCRIPTION	DIMENSION (mm)	COIL LENGTH (m)	WEIGHT (per m) (kg)	PART NO.
Copper/aluminium bimetallic conductor	25 x 3	74	0.27	CCAT2530

Material: 99.9% purity copper and 99.7% purity aluminium



Copper Tape (Bare)

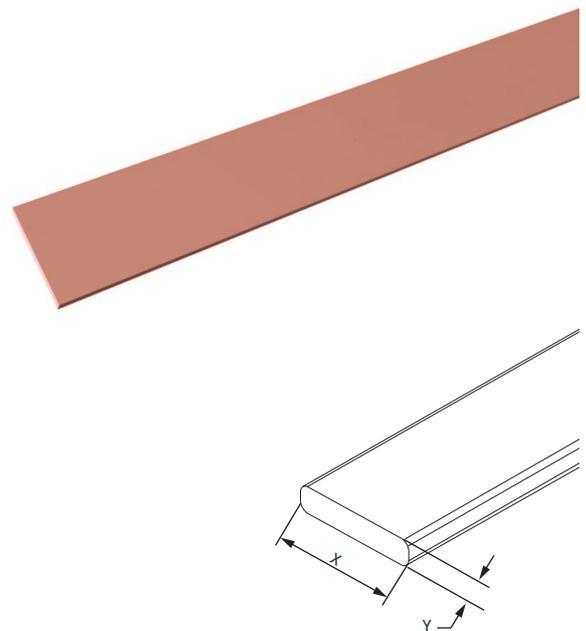
Kingsmill **Copper Tape** is embossed 'Kingsmill (UK)' for identification and is manufactured from high conductivity annealed copper.

All **Bare Copper Tape** sold in the specified coil lengths only. However, **CTBA2530** can be cut to desired length. Please speak to the sales office for further details referencing part no. **CTBA2530/DRUM**.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
12.5 x 1.5	18.75	100	0.17	CTBA1215
12.5 x 3	37.5	100	0.33	CTBA1230
20 x 1.5	30	100	0.27	CTBA2015
20 x 3	60	100	0.53	CTBA2030
25 x 1.5	37.5	100	0.33	CTBA2515
25 x 3	75	25	0.67	CTBA2530/25
25 x 3	75	50	0.67	CTBA2530
25 x 4	100	50	0.89	CTBA2540
25 x 6	150	40	1.34	CTBA2560
30 x 2	60	50	0.53	CTBA3020
30 x 3	90	50	0.80	CTBA3030
30 x 4	120	40	1.07	CTBA3040
30 x 5	150	40	1.33	CTBA3050
31 x 3	93	50	0.83	CTBA3130
31 x 6	186	30	1.65	CTBA3160
38 x 3	114	50	1.01	CTBA3830
38 x 5	190	30	1.69	CTBA3850
38 x 6	228	25	2.03	CTBA3860
40 x 3	120	40	1.06	CTBA4030
40 x 4	160	30	1.42	CTBA4040
40 x 5	200	25	1.78	CTBA4050
40 x 6	240	25	2.13	CTBA4060
50 x 3	150	40	1.33	CTBA5030
50 x 4	200	30	1.78	CTBA5040
50 x 5	250	20	2.22	CTBA5050
50 x 6	300	20	2.68	CTBA5060

Material: Copper to BS:EN 13601 (formerly BS 1432)

Standard: BS:EN 62561-2 : 2012



Copper Tape (PVC covered)



Kingsmill offers a wide range of UV-stabilised **PVC Covered Copper Tapes** in a range of colours.

These colours have been chosen to match the most common structural materials and will reduce the visual impact of Lightning Protection conductor.

All **PVC Covered Copper Tape** is sold in the specified coil lengths only.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COLOUR (to BS 5252*)		COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
25 x 3	75	BLACK	18B29*	25	0.78	TCBL253
25 x 3	75	BROWN	06C39*	25	0.78	TCBN253
25 x 3	75	GREEN	BS 6746C	25	0.78	TCGN253
25 x 3	75	GREY	00A07*	25	0.78	TCGY253
25 x 3	75	STONE	08B23*	25	0.78	TCST253
25 x 3	75	WHITE	10B15*	25	0.78	TCWH253
25 x 6	150	GREEN	BS 6746C	40	1.53	TCGN256
31 x 6	186	GREY	RAL 7037	25	1.91	TC3160
31 x 6	186	IVORY	RAL 1015	25	1.91	TCIV316
31 x 6	186	OYSTER	RAL 1013	25	1.91	TCOW316
31 x 6	186	WHITE	RAL 9003	25	1.91	TCW316
50 x 6	300	GREEN	BS 6746C	20	2.96	TCGN506

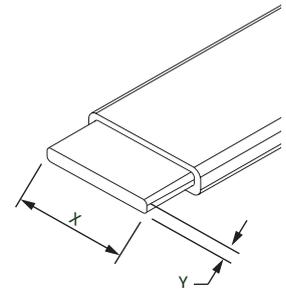
Material: Copper

Standard: BS:EN 13601 (formerly BS 1432)

PVC Colour: BS 5252, except green BS 6746C

SPECIAL COLOURS

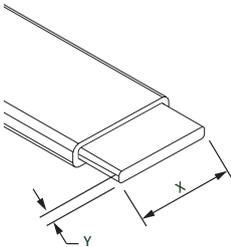
Special colours are available upon request but are subject to minimum quantity and higher set-up costs. Please contact our sales team with details of your requirements.



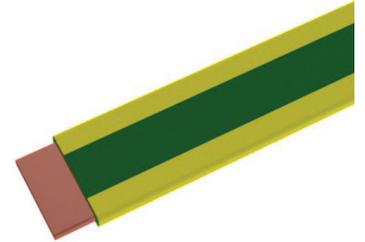
Copper Tape (Green/yellow covered)

Kingsmill **Copper Tape (Green/yellow covered)** visually indicates it is for earthing purposes. It is sold in the specified coil lengths only.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
25 X 3	75	25	0.78	TCGN/Y253



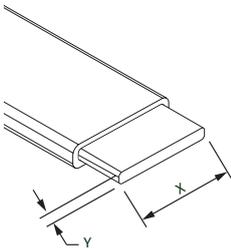
Material: Copper
Standard: BS:EN 13601 (formerly BS 1432)
PVC Colour: BS 6746C



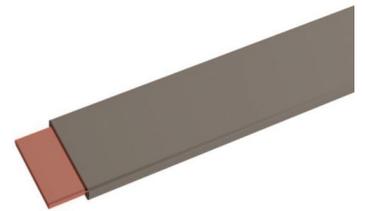
Copper Tape (Lead covered)

Kingsmill **Copper Tape (Lead covered)** is used in special applications where corrosion is an issue eg at the top of chimneys. It is sold in the specified coil lengths only.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
25 x 3	75	25	2.56	TCLD253



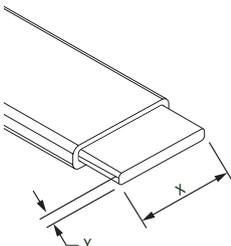
Material: Copper
Standard: BS:EN 13601 (formerly BS 1432)
Covering: Type 'B' Lead Alloy (2mm thick coating)



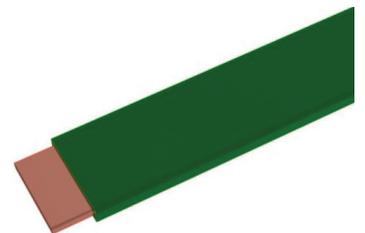
Copper Tape LSOH (Low smoke, zero halogen covered)

Kingsmill **Copper Tape LSOH** is used in tunnel situations eg underground railways and road tunnels. It is sold in the specified coil lengths only.

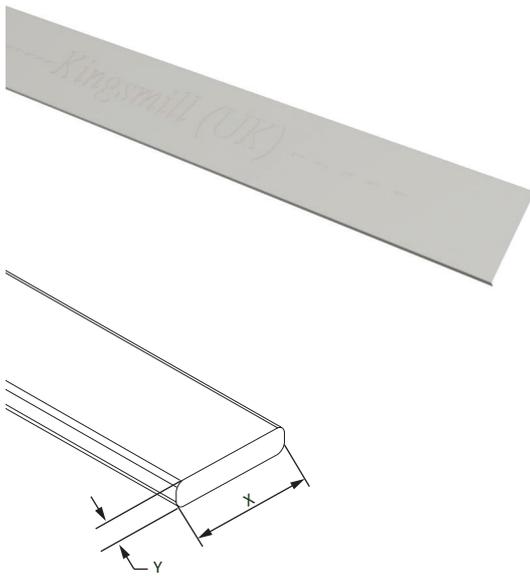
CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
25 x 3	75	25	0.77	TCGN253LS
25 x 3	75	50	0.77	TCGN253LS/50
25 x 6	75	40	1.53	TCGN256LS
50 x 6	300	20	2.95	TCGN506LS



Material: Copper
Standard: BS:EN 13601 (formerly BS 1432)
PVC Colour: BS 6746C



Tinned Copper Tape



Kingsmill **Tinned Copper Tape** is embossed 'Kingsmill (UK)' for identification purposes and is manufactured from high conductivity annealed copper.

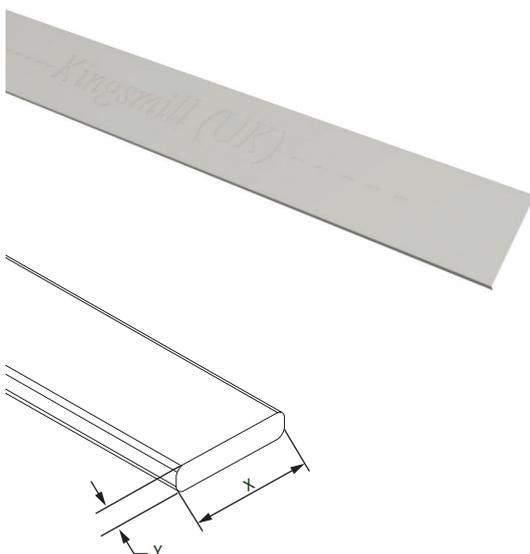
Tinned Copper Tape is sold in the specified coil lengths only.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
12.5 x 1.5	18.75	100	0.17	TCTD1215
12.5 x 3	37.5	100	0.33	TCTD1230
20 x 1.5	30	100	0.27	TCTD2015
20 x 3	60	100	0.53	TCTD2030
25 x 1.5	37.5	100	0.33	TCTD2515
25 x 3	75	50	0.67	TCTD2530
25 x 4	100	50	0.89	TCTD2540
25 x 6	150	40	1.34	TCTD2560
30 x 2	60	50	0.53	TCTD3020
30 x 3	90	50	0.80	TCTD3030
30 x 4	120	40	1.07	TCTD3040
30 x 5	150	40	1.33	TCTD3050
31 x 3	93	50	0.83	TCTD3130
31 x 6	186	30	1.65	TCTD3160
38 x 3	114	50	1.01	TCTD3830
38 x 5	190	30	1.69	TCTD3850
38 x 6	228	25	2.03	TCTD3860
40 x 3	120	40	1.06	TCTD4030
40 x 4	160	30	1.42	TCTD4040
40 x 5	200	25	1.78	TCTD4050
40 x 6	240	25	2.13	TCTD4060
50 x 3	150	40	1.33	TCTD5030
50 x 4	200	30	1.78	TCTD5040
50 x 5	250	20	2.22	TCTD5050
50 x 6	300	20	2.68	TCTD5060

Material: Tinned Copper

Standard: BS:EN 13601 (formerly BS 1432)

Galvanised Steel Tape



Kingsmill **Galvanised Steel Tape** is suitable for BS:EN 62305 internal foundation earthing rings.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
30 x 3.5	105	30	0.84	GST3035

Material: Galvanised Steel

Standard: BS:EN 62561-2

Insulated Lightning Conductor

Insulated Lightning Conductor can be used with standard connection accessories for 8mm size conductor.

The **Insulated Lightning conductor** can be used in conjunction with the **Air Terminals** outlined on pages AT:38 - 40, but it can also be used in applications where it is not possible to maintain the separation distance between down conductors and the structure being protected, eg running close to photovoltaic array panels.

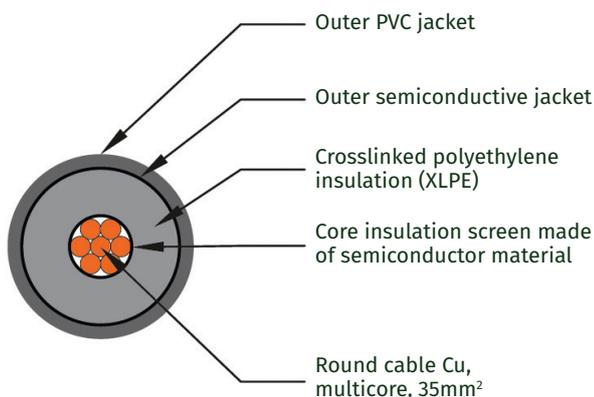


Part Number	KM30000199
Colour	Black
The outer diameter	23.4mm
Cross-section of the cable core	35mm ²
Maximum conductor resistance at 20°C	0.524 Ω/km
Equivalent of separation distance for air	750mm
Equivalent of separation distance for regular building materials	1500mm
Cable weight	0.735kg/m
Operating temperature range	From -30°C to 70°C
Assembly temperature range	From -5°C to 40°C
Minimum bending radius	About 280mm
Cable flammability	Not spreading flame
Flammability test	PN-EN 60332-1-2; IEC 60332-1
Bending radius	280mm

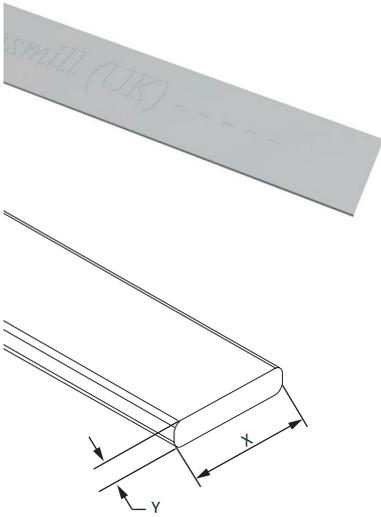
Used for equivalent separation distances of $\leq 0.75\text{m}$ in air and $\leq 1.5\text{m}$ in solid material.

The **Insulated Lightning Conductor** is flame-resistant in accordance with IEC EN 60332-1-2, its twisted copper core is surrounded by insulation layers of meshed cross-linked polyethylene (XLPE) and the ageing-resistant polyvinyl chloride (PVC) sheath. The cable is flexible and ideally suited for routing in external areas, roofs, walls and embedding in concrete.

Kingsmill **Insulated Lightning conductor** has a tested arresting capacity of 100kA lightning surge current (1.2/50 μs) and it meets the requirements of IEC EN 62561-1.



Aluminium Tape



Kingsmill **Aluminium Tape** is sold in the specified coil lengths only.

OVERALL NOMINAL SIZE (X x Y) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
12.5 x 1.5	18.75	50	0.05	ATBA12515
20 x 3	60	50	0.17	ATBA2030
25 x 3	75	50	0.21	ATBA2530
30 x 3	90	50	0.25	ATBA3030
25 x 6	150	50	0.42	ATBA2560
40 x 6	240	50	0.67	ATBA4060
50 x 6	300	50	0.85	ATBA5060

Material: Aluminium

Standard: BS:EN 755-5

PVC Covered Aluminium Tape



Kingsmill offers UV-stabilised **PVC Covered Aluminium Tape** in a range of colours. Colours match the most common structural materials and will reduce the visual impact of a Lightning Protection conductor.

PVC covering of aluminium provides an aesthetically pleasing product and it also protects the product from corrosion.

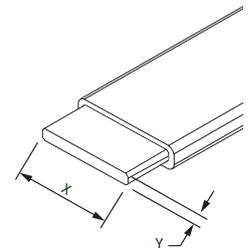
Sold in the specified coil lengths only.

CONDUCTOR SIZE (X x Y) (mm)	CSA (mm ²)	COLOUR (to BS 5252*)		COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
12.5 x 1.5	18.75	BLACK	18B29*	50	0.09	TABL12515
20 x 3	60	BLACK	18B29*	50	0.25	TABL2030
25 x 3	75	BLACK	18B29*	50	0.31	TABL253
25 x 3	75	BROWN	06C39*	50	0.31	TABN253
25 x 3	75	GREEN	BS 6746C	50	0.31	TAGN253
25 x 3	75	GREY	00A07*	50	0.31	TAGY253
25 x 3	75	STONE	08B23*	50	0.31	TAST253
25 x 3	75	WHITE	10B15*	50	0.31	TAWH253

Material: Aluminium, PVC

Standard: BS:EN 755-5

PVC Colour: BS 5252 (green to BS 6746C)



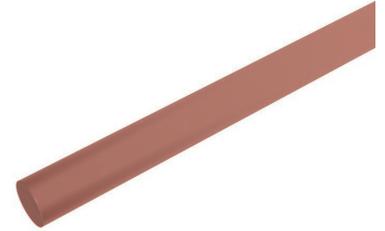
Solid Circular Copper

Solid Circular Copper is sold in the specified coil lengths only.

DIAMETER (X) (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
8.0	50	50	0.44	CC08

Material: Copper

Standard: BS:EN 13601 (formerly BS 1432)

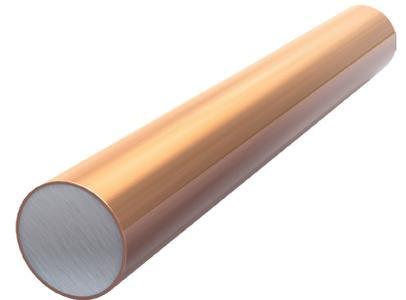


STRIKEBAND Copper Covered Aluminium

STRIKEBAND Copper Covered Aluminium is sold in the specified coil length only. Copper thickness is 15% by volume, giving a radial thickness of 0.31mm.

DESCRIPTION	CSA (mm ²)	DIAMETER (mm)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
Copper/aluminium bimetallic conductor	50	8.0	110	0.18	CCA08

Material: 99.9% purity copper and 99.7% purity aluminium



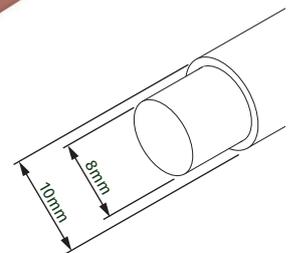
PVC Covered Solid Circular Copper

Kingsmill offers UV-stabilised PVC Covered Solid Circular Copper in a range of colours*. Colours match the most common structural materials to reduce visual impact of a Lightning Protection conductor. Outer diameter (10mm) includes the PVC sheathing. Sold in the specified coil lengths only. **Use with 10mm clips.**

COLOUR	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	BS 5252 COLOUR	PART NO.
Black	50	50	0.49	18B29*	CCBL
Brown	50	50	0.49	06C39*	CCBN
Grey	50	50	0.49	00A07*	CCGY
Stone	50	50	0.49	08B23*	CCST
White	50	50	0.49	10B15*	CCWH

Material: Copper

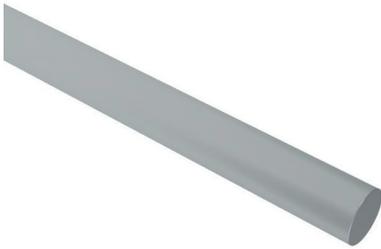
Standard: BS:EN 13601 (formerly BS 1432) (conductor)
BS 5252 (*PVC colours)



SPECIAL COLOURS

Special colours are available upon request but are subject to minimum quantity and higher set-up costs. Please contact our sales team with details of your requirements.

Solid Circular Aluminium

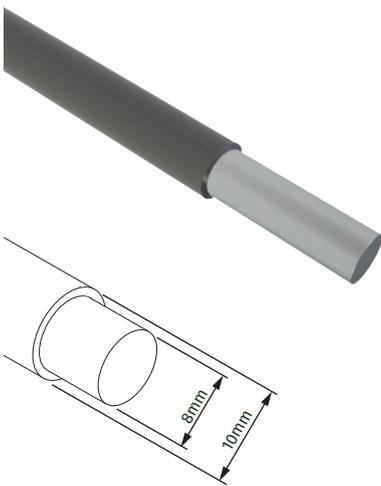


Kingsmill **Solid Circular Aluminium** is easy to install. It is sold in the specified coil length only.

DIAMETER (mm)	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	PART NO.
8.0	50	50	0.12	CA08

Material: Aluminium
Standard: BS:EN 755-5

PVC Covered Solid Circular Aluminium



Kingsmill offers UV-stabilised **PVC Covered Solid Circular Aluminium** in a range of colours*. Colours match the most common structural materials to reduce visual impact of a Lightning Protection conductor. Outer diameter (10mm) includes the PVC sheathing. Sold in the specified coil lengths only. **Use with 10mm clips.**

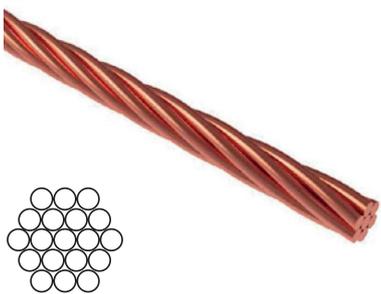
COLOUR	CSA (mm ²)	COIL SIZE (m)	WEIGHT (kg/m)	COLOUR (to BS 5252*)	PART NO.
Black	50	50	0.18	18B29*	CABL
Brown	50	50	0.18	06C39*	CABN
Grey	50	50	0.18	00A07*	CAGY
Stone	50	50	0.18	08B23*	CAST
White	50	50	0.18	10B15*	CAWH

Material: Aluminium
Standard: BS:EN 755-5 (formerly BS 1432) (conductor)
 BS 5252 (*PVC colours)

SPECIAL COLOURS

Special colours are available upon request but are subject to minimum quantity and higher set-up costs. Please contact our sales team with details of your requirements.

Copper Cable (Bare stranded)



Kingsmill **Copper Cable (Bare stranded)** is suitable for earthing applications.

CSA (mm ²)	STRANDING No./DIA (mm)**	NOMINAL DIAMETER (mm)	WEIGHT (kg/m)	PART NO.
6.0	7 / 1.04	3.12	0.05	BSCW006
16	7 / 1.70	5.10	0.15	BSCW016
25	7 / 2.14	6.42	0.23	BSCW025
35	7 / 2.52	7.56	0.32	BSCW035
50	19 / 1.78	8.90	0.43	BSCW050
70	19 / 2.14	10.70	0.62	BSCW070
95	19 / 2.52	12.60	0.86	BSCW095
120	37 / 2.03	14.21	1.09	BSCW120
150	37 / 2.25	15.75	1.33	BSCW150
185	37 / 2.52	17.64	1.67	BSCW185
240	61 / 2.25	20.25	2.20	BSCW240
300	61 / 2.52	22.68	2.76	BSCW300
400	61 / 2.85	25.65	3.53	BSCW400

Material: Soft drawn stranded copper cable to BS:EN 60228 (can supply hard drawn on request to BS 7884)

Standard: BS:EN 60228

Stranded Copper Cable (Green/yellow PVC covered)

Kingsmill **Stranded Copper Cable (Green/yellow PVC covered)** for use as earth continuity conductors, equipment tails etc.

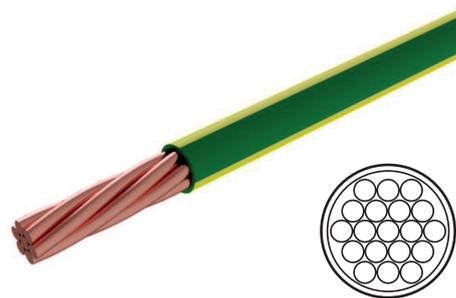
STRANDING No./DIA (mm)**	NOMINAL DIAMETER (mm)	CSA (mm ²)	WEIGHT (kg/m)	PART NO.
7 / 1.70	7.10	16	0.15	CCGY016
7 / 2.14	8.90	25	0.23	CCGY025
7 / 2.52	9.95	35	0.32	CCGY035
19 / 1.78	11.70	50	0.43	CCGY050
19 / 2.14	13.35	70	0.62	CCGY070
19 / 2.52	15.60	95	0.86	CCGY095
37 / 2.03	17.20	120	1.09	CCGY120
37 / 2.25	19.10	150	1.33	CCGY150
37 / 2.52	21.30	185	1.67	CCGY185
61 / 2.25	24.30	240	2.20	CCGY240
61 / 2.52	27.05	300	2.76	CCGY300
61 / 2.85	30.35	400	3.53	CCGY400

Material: Soft drawn stranded copper cable **Stranding may vary

Standard: BS:EN 60228 (conductor), BS 6746C (PVC colour)

Temp range: 0°C to 70°C

Such conductors are generally referred to in the industry as 6491X, voltage rating 450/750V (designated suitable 600/1000V).



Stranded Copper Cable (Tinned)

Kingsmill **Stranded Copper Cable (Tinned)** is used where extra corrosion protection is required.

STRANDING No./DIA (mm)**	NOMINAL DIAMETER (mm)	CSA (mm ²)	WEIGHT (kg/m)	PART NO.
7 / 1.70	5.10	16	0.15	BSCW016/T
7 / 2.14	6.42	25	0.23	BSCW025/T
7 / 2.52	7.56	35	0.32	BSCW035/T
19 / 1.78	8.90	50	0.43	BSCW050/T
19 / 2.14	10.70	70	0.62	BSCW070/T
19 / 2.52	12.60	95	0.86	BSCW095/T
37 / 2.03	14.21	120	1.09	BSCW120/T
37 / 2.25	15.75	150	1.33	BSCW150/T
37 / 2.52	17.64	185	1.67	BSCW185/T
61 / 2.25	20.25	240	2.20	BSCW240/T
61 / 2.52	22.68	300	2.76	BSCW300/T
61 / 2.85	25.65	400	3.53	BSCW400/T

Material: Tinned soft drawn stranded copper cable **Stranding may vary

Standard: BS:EN 60228



Galvanised Stranded Conductor

Kingsmill **Galvanised Stranded Conductor** is suitable for BS62305 internal foundation earthing rings.

STRANDING NO./DIA (mm)**	NOMINAL DIAMETER (mm)	CSA (mm ²)	WEIGHT (kg/m)	PART NO.
19/2	10.00	78.55	0.50	GSC10

Material: Galvanised steel **Stranding may vary

Standard: BS:EN 12385-4:2002 & A1:2008 Steel Wire Ropes DIN 3053



Copper Cable (Lead covered stranded)



Kingsmill **Copper Cable (Lead covered stranded)** is used in areas where corrosion is an issue.

CSA (mm ²)	STRANDING NO./DIA. (mm)	NOMINAL DIA. (mm)	WEIGHT (kg/m)	PART NO.
185	37 / 2.52	21.64	1.67	BSCW185/LS
240	61 / 2.25	24.25	2.20	BSCW240/LS
300	61 / 2.52	26.68	2.76	BSCW300/LS
400	61 / 2.85	29.65	3.53	BSCW400/LS

Material: Soft drawn stranded copper cable

Standard: BS:EN 60228

Covering: Type 'B' lead alloy (2mm thick coating)

Steel Tape Guards/Cable Guards



Kingsmill **Steel Tape Guards** protect against accidental damage, vandalism and theft. Suitable for 25 x 3 tape (including fixing clip). Easy to fix, with a low profile. A galvanised finish gives this product a long lasting resistance to corrosion.

LENGTH (mm)	WIDTH (mm)	DEPTH (mm)	WEIGHT (kg)	PART NO.
2500	90	15	2.68	GAVG

Material: Galvanised Steel

Powder Coated Steel Tape Guards blend to a building's aesthetics.

COLOUR	LENGTH (mm)	WIDTH (mm)	DEPTH (mm)	WEIGHT (kg)	PART NO.
Black	2400	90	15	2.70	GAVGB
White	2400	90	15	2.70	GAVGW
Grey	2400	90	15	2.70	GAVGG
Brown	2400	90	15	2.70	GAVGBR

Other **Tape Guards** are available. Please contact our sales office with your requirements.

CAN'T SEE A CONDUCTOR THAT MEETS YOUR REQUIREMENTS . . ?

Kingsmill supply a wide range of conductor, including: copper tape, insulated high voltage cable, aluminium tape, solid circular copper, copper covered aluminium, solid circular aluminium, copper cable and galvanised stranded conductor. If none of these meet your requirements, Kingsmill can source other types of conductor eg copper covered steel. Please contact us for details.