

The following pages (41 – 52) detail the products required to install a 'Flat tape' lightning protection system. Additionally, accessories can be found on pages 63 – 64.

Details of the flat tape conductors can be found in the Conductors section.

Air rod

Rod length	Rod diameter	Thread diameter	Material	Weight each	Part No.
500mm	15mm	16mm	Copper	0.73kg	RA215
1000mm	15mm	16mm	Copper	1.51kg	RA225
1500mm	15mm	16mm	Copper	2.35kg	RA230 NEW
2000mm	15mm	16mm	Copper	3.00kg	RA240
3000mm	15mm	16mm	Copper	4.70kg	RA250 NEW
500mm	15mm	16mm	Aluminium	0.29kg	RA015
1000mm	15mm	16mm	Aluminium	0.53kg	RA025
1500mm	15mm	16mm	Aluminium	0.80kg	RA030 NEW
2000mm	15mm	16mm	Aluminium	1.06kg	RA040
3000mm	15mm	16mm	Aluminium	3.20kg	RA050 NEW



Manufactured from high conductivity hard drawn copper or aluminium, with rolled threads. Supplied complete with locknut.

"Field Trials in the United States, carried out over many years research have confirmed that blunt air rods are struck by lightning in preference to taper pointed air rods."

"Lightning rod improvement studies" by C B Moore, W Rison, J Mathis, G Aulich. Journal of Applied Meteorology, May 2000.

Note: during high winds and extreme weather conditions air rods over 1000mm long can be subjected to fatigue mechanisms. It is therefore recommended that additional supports are considered before installation.



BS EN 50164-2

Multiple point

Rod diameter	Material	Weight each	Part No.
15mm	Copper	0.27kg	RA600

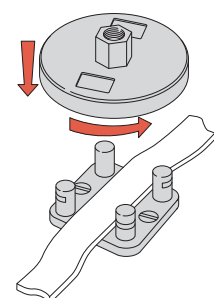
Manufactured from high conductivity hard drawn copper, suitable for use with copper air rods only.

Air rod base

Rod diameter	Thread diameter	Maximum conductor width	Material	Weight each	Part No.
15mm	16mm	25mm	Copper	0.43kg	SD105-H NEW
15mm	16mm	25mm	Aluminium	0.14kg	SD003-H NEW



Pat. pending



Manufactured from high quality copper and aluminium alloys. Simple to install, providing an effective connection between air rod and air termination tape.



BS EN 50164-1 Class H



Fix using countersunk wood screws (Part no. SW005 or SW105) and wall plugs (Part no. PS305). See page 63 for Accessories.



NEW Free-standing extendable air rod

Description	Height	Part No.
Extendable tripod base and air rod	4.5m	TP100
Extendable tripod base and air rod	6.5m	TP200
Extendable tripod base and air rod	8.5m	TP300

Manufactured from galvanized steel box section. Includes air rod and concrete blocks to create a free-standing, height adjustable air terminal. Provides an effective connection between air rod and air termination tape.



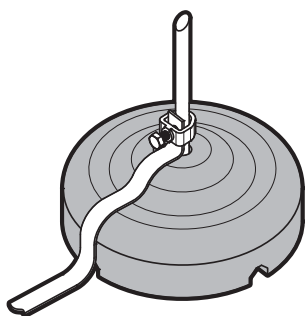
NEW Free-standing concrete air rod base

Description	Diameter	Weight each	Part No.
Concrete block	280mm	10kg	BC100
Concrete block	400mm	17kg	BC200

Use in conjunction with standard air rods to create a free-standing air terminal on roofs where conventional fixings are not possible e.g. single ply or bitumen felt.

Accessories

Description	Thread diameter	Weight each	Part No.
Polyethylene tray for concrete blocks	M16	0.05kg	PD100



NEW Insulated distance holders

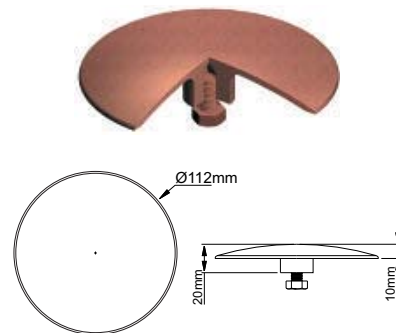
Description	Length	Weight each	Part No.
Glass fibre insulated rod	3m	0.70kg	IR100
16mm dia. air rod holder	-	0.20kg	IR200
Fixing plate	-	0.50kg	IR300
Glass fibre insulated rod attachment to cylindrical objects	1m	1.00kg	IR400

Strike pad

Conductor material	Weight each	Part No.
Copper	0.41kg	PL010
Aluminium	0.13kg	PL005
Copper stem for use with PL010	0.07kg	SM010

Manufactured from high quality copper and aluminium alloys. Designed to provide an exposed attractive point on conductor systems hidden/embedded in the building's fabric e.g. below the tiles of a pitched roof.

Supplied with setscrew for attachment of lightning conductors.



Ridge saddle

Rod diameter	Thread diameter	Maximum conductor width	Material	Weight each	Part No.
15mm	16mm	31mm	Copper	1.07kg	SD115

For supporting lightning conductor air rods on ridges.



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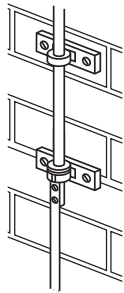


Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. **SW005** or **SW105**) and wall plugs (Part no. **PS305**) – see Accessories page 63.



Tightening torque 15Nm





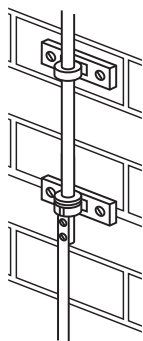
Rod brackets

Rod diameter	Rod material	Weight each	Part No.
15mm	Copper	0.90kg	BR105
15mm	Aluminium	0.28kg	BR005

Manufactured from high quality copper and aluminium alloys. Simple to install, providing an effective means of mounting an air rod on a vertical surface e.g. chimney stack. Use in conjunction with a rod to tape coupling.



Fix using roundhead wood screws 1½" x no. 12 or M8 and wall plugs



Rod to tape coupling

Rod diameter	Thread diameter	Rod material	Weight each	Part No.
15mm	16mm	Copper	0.23kg	CG600
15mm	16mm	Aluminium	0.08kg	CG500

Manufactured from high quality copper and aluminium alloys. Provides an effective connection between air rod and air termination tape. Use in conjunction with rod brackets.



BS EN 50164-1 Class H

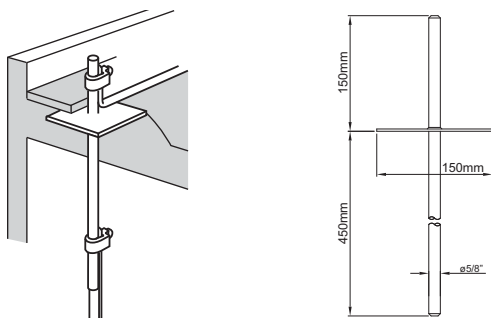


Tightening torque 7Nm

Puddle flange

Material	Weight each	Part No.
Copper	1.54kg	PF105
Aluminium	0.50kg	PF005

Permits lightning conductors to pass through flat roofs without damaging the waterproof nature of the roof.



DC tape clip

Use with bare copper

Conductor size	Weight each	Part No.
20 x 3mm	0.06kg	CP205
25 x 4mm	0.07kg	CP216
30 x 5mm	0.10kg	CP227
38 x 5mm	0.12kg	CP245
40 x 4mm	0.14kg	CP241
50 x 4mm	0.15kg	CP256

Made from high quality copper alloys.

Use with PVC covered copper

Conductor size	Weight each	Part No.
25 x 3mm	0.10kg	CP215
25 x 6mm	0.13kg	CP225
50 x 6mm	0.26kg	CP265

Made from high quality copper alloys.

Use with lead covered copper

Conductor size	Weight each	Part No.
25 x 3mm	0.20kg	CP305

Made from high quality copper alloys.

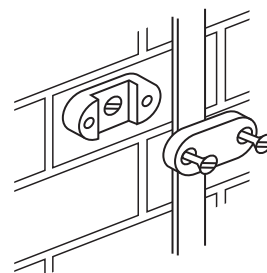
Use with bare aluminium

Conductor size	Weight each	Part No.
20 x 3mm	0.02kg	CP105

Use with PVC covered aluminium

Conductor size	Weight each	Part No.
25 x 3mm	0.04kg	CP115
50 x 6mm	0.06kg	CP130

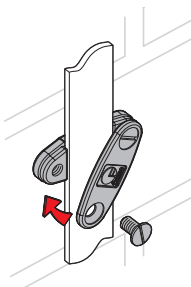
Made from high quality aluminium alloys.



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. SW005 or SW105) and wall plugs (Part no. PS305) – see Accessories page 63.



Pat. Pending



NEW Swing lid DC tape clip

Use with bare copper

Conductor size	Weight each	Part No.
25 x 3mm	0.07kg	CP210-H
25 x 6mm	0.08kg	CP220-H

Use with bare aluminium

Conductor size	Weight each	Part No.
25 x 3mm	0.03kg	CP110-H
25 x 6mm	0.04kg	CP120-H

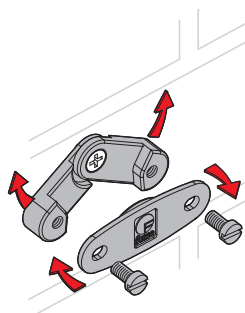
DC tape clips manufactured from high quality copper and aluminium alloys for excellent corrosion resistance and high pull off loads.



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. SW005 or SW105) and wall plugs (Part no. PS305) – see Accessories page 63.



Pat. Pending



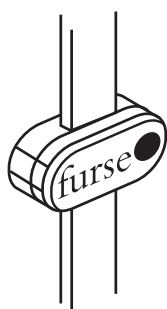
NEW Adjustable DC tape clip

Conductor size	Weight each	Part No.
31 x 3mm and 31 x 6mm – use with bare copper	0.10kg	CP230-H
38 x 3mm, 38 x 6mm and 40 x 6mm – use with bare copper	0.12kg	CP240-H
50 x 3mm and 50 x 6mm – use with bare copper	0.16kg	CP260-H
50 x 6mm – use with bare aluminium	0.05kg	CP125-H

DC tape clips manufactured from high quality copper and aluminium alloys for excellent corrosion resistance and high pull off loads.



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. SW005 or SW105) and wall plugs (Part no. PS305) – see Accessories page 63.



Non-metallic DC tape clip

Use with bare tape

Conductor size	Colour	Weight each	Part No.
20 x 3mm	Brown	0.01kg	CP005
20 x 3mm	Grey	0.01kg	CP010
25 x 3mm	Brown	0.01kg	CP015
25 x 3mm	Grey	0.01kg	CP020
38 x 5mm	Brown	0.01kg	CP060*
50 x 6mm	Brown	0.02kg	CP065*

Use with PVC covered tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.01kg	CP025
25 x 3mm	Black	0.01kg	CP030
25 x 3mm	Green	0.01kg	CP035
25 x 3mm	Grey	0.01kg	CP040
25 x 3mm	Stone	0.01kg	CP045
25 x 3mm	White	0.01kg	CP050

Manufactured from high grade Polypropylene, UV stabilised against degradation by sunlight and non-brittle to prevent cold weather damage. Available in six colours to match bare and PVC covered copper and aluminium tapes. This unique design provides easy installation and resists high pull off loads.



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. SW005 or SW105) and wall plugs (Part no. PS305) – see Accessories page 63.

* Not as illustrated.

Bitumen felt roof clip

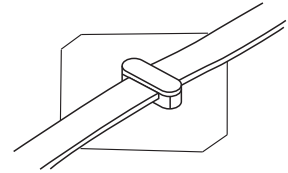
Use with bare tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.09kg	FP015
25 x 3mm	Grey	0.09kg	FP020

Use on bitumen felt roofing only

Use with PVC covered tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.09kg	FP025
25 x 3mm	Black	0.09kg	FP030
25 x 3mm	Green	0.09kg	FP035
25 x 3mm	Grey	0.09kg	FP040
25 x 3mm	Stone	0.09kg	FP045
25 x 3mm	White	0.09kg	FP050



Tape clip

Use with bare copper

Conductor size	Weight each	Part No.
20 x 3mm	0.02kg	CP510
25 x 3mm	0.02kg	CP515

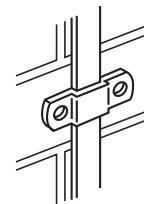
Use with PVC covered tape

Conductor size	Weight each	Part No.
25 x 3mm	0.02kg	CP517

Use with bare aluminium

Conductor size	Weight each	Part No.
20 x 3mm	0.01kg	CP405
25 x 3mm	0.01kg	CP410

Manufactured from pure copper or aluminium, these simple pressed clips are available in a range of sizes to suit bare and PVC covered copper and aluminium tapes.



Fix using roundhead wood screws 1½" No. 10 or M6 (Part no. **SW305** or **SW405** and wall plugs (Part no. **PS305**) – see Accessories page 63.

Glue down DC tape clip

Use with bare tape

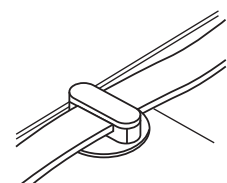
Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.03kg	GD015
25 x 3mm	Grey	0.03kg	GD020

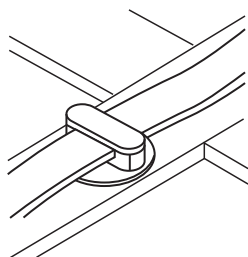
Use on clay roof tiles. Supplied in a box of 50 complete with adhesive.

Additional glue gun is required.

Use with PVC covered tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.03kg	GD025
25 x 3mm	Black	0.03kg	GD030
25 x 3mm	Grey	0.03kg	GD040
25 x 3mm	Stone	0.03kg	GD045
25 x 3mm	White	0.03kg	GD050





Adhesive DC tape clip

Use with bare tape

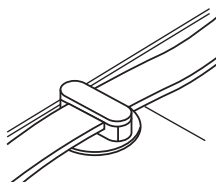
Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.03kg	CA015
25 x 3mm	Grey	0.03kg	CA020

Use with PVC covered tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.03kg	CA025
25 x 3mm	Black	0.03kg	CA030
25 x 3mm	Grey	0.03kg	CA040
25 x 3mm	Stone	0.03kg	CA045
25 x 3mm	White	0.03kg	CA050

Designed to secure conductors to surfaces that cannot be penetrated by a screw. Ideal for aluminium, spangled galvanized steel, colour coated steel, glass, perspex, enamel and stainless steel etc. Manufactured from high grade plastic, UV stabilised against degradation by sunlight and non-brittle to prevent cold weather damage.

Use on surfaces other than PVC roofing.



Weldable DC tape clip

Use with bare tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.03kg	CW015
25 x 3mm	Grey	0.03kg	CW020

Use with PVC covered tape

Conductor size	Colour	Weight each	Part No.
25 x 3mm	Brown	0.03kg	CW025
25 x 3mm	Black	0.03kg	CW030
25 x 3mm	Grey	0.03kg	CW040
25 x 3mm	Stone	0.03kg	CW045
25 x 3mm	White	0.03kg	CW050

Provides a secure means of fixing conductors to single ply PVC roof membranes. Manufactured from high grade PVC, UV stabilised against degradation by sunlight and non-brittle to prevent cold weather damage.

For dressing tool, see page 64.

Clips are available for Polypropylene, Polyethylene and other roof membranes. Please contact Furse for advice.



Universal welding solvent, Cleaning solution and Surface primer

Description	Weight each	Part No.
Universal welding solvent 500ml spray applicator (sufficient for application of approx 200 clips). Use with Furse weldable clips only.	0.57kg	CW905
Cleaning solution (Acetone) 500ml spray applicator. For cleaning lacquered roofing membranes.	0.62kg	CW999
Surface primer 250ml spray applicator (sufficient for application of approx 500 clips). Use with Furse adhesive clips only.	0.24kg	CA900

Solvent and surface primer cannot be supplied outside the UK. For overseas projects, please contact Furse for advice.

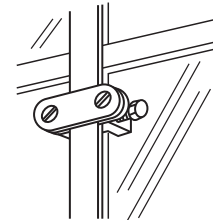
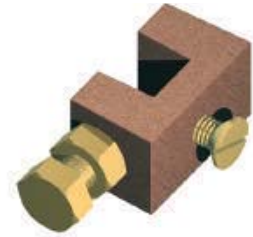
CoSHH Datasheets available on request.

Glazing bar holdfast

Conductor material	Maximum glazing bar width	Weight each	Part No.
Copper	12mm	0.11kg	HF705
Aluminium	12mm	0.05kg	HF710

Manufactured from high quality copper and aluminium alloys. Simple to install, providing secure anchorage to thin metallic sections that cannot be drilled e.g. window mullions, angle iron etc. Once fixed any metallic or non-metallic conductor clip can be attached with the screw provided.

Conductor clip sold separately.



Slate holdfast

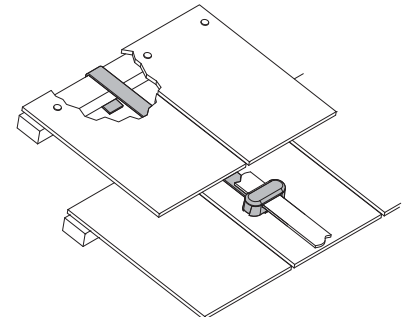
Use with bare tape

Conductor size	DC Clip Colour	Weight each	Part No.
25 x 3mm	Brown	0.06kg	HF015
25 x 3mm	Grey	0.06kg	HF020

Use with PVC covered tape

Conductor size	DC Clip Colour	Weight each	Part No.
25 x 3mm	Brown	0.06kg	HF025
25 x 3mm	Black	0.06kg	HF030
25 x 3mm	Grey	0.06kg	HF040
25 x 3mm	Stone	0.06kg	HF045

Designed to allow tape conductors to be fixed to tiled roofs without compromising the waterproofing nature of the roof. The 500mm tail fits neatly between overlapping tiles and is wrapped around/ fixed to the tile lathe for secure fitting.



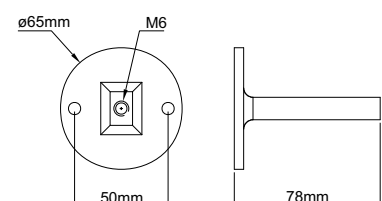
Back plate holdfast stem

Conductor material	Weight each	Part No.
Copper	0.30kg	HF320
Aluminium	0.10kg	HF325-FU

Supplied with M6 fixing screw to secure appropriate conductor clip.

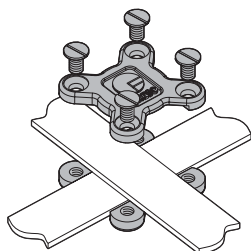


Fix using roundhead wood screws 1½" No. 10 or M6 (Part no. SW305 or SW405) and wall plugs (Part no. PS305) – see Accessories page 63.





Reg. Design



Square tape clamp

	Conductor size	Material	Weight each	Part No.
NEW	25 x 3mm	Copper	0.12kg	CT105-H
NEW	25 x 6mm	Copper	0.30kg	CT110-H
NEW	50 x 6mm	Copper	0.60kg	CT115-H
NEW	25 x 3mm	Aluminium	0.06kg	CT005-H

Manufactured from high quality copper and aluminium alloys. Simple to install, providing an effective low resistance connection between overlapping tapes to allow cross, tee, through and right angle joints to be formed.



BS EN 50164-1 Class H



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. **SW005** or **SW105**) and wall plugs (Part no. **PS305**) – see Accessories page 63.

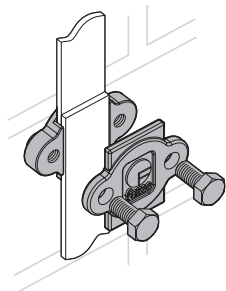


Tightening torque 5Nm

Oblong test or junction clamp



Reg. Design



	Conductor size	Material	Weight each	Part No.
NEW	26 x 8mm	Copper	0.29kg	CN105-H
	26 x 8mm	Aluminium	0.12kg	CN005*

Manufactured from high quality copper and aluminium alloys. Simple to install, providing an effective low resistance connection between overlapping tapes. The clamped connection is easily made/remade to allow for periodic testing.

* Not as illustrated



BS EN 50164-1 Class H

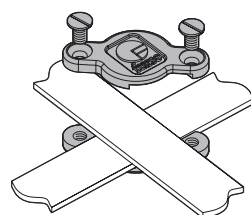


Tightening torque CN005 15Nm; CN105-H 13Nm

NEW Crossover clamp



Reg. Design



	Conductor size	Material	Weight each	Part No.
	25 x 3mm	Copper	0.09kg	CX105-H
	25 x 3mm	Aluminium	0.03kg	CX005-H

For forming cross joints in tape.



BS EN 50164-1 Class H



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. **SW005** or **SW105**) and wall plugs (Part no. **PS305**) – see Accessories page 63.



Tightening torque 5Nm

Plate type test clamp

Maximum conductor size	Conductor material	Weight each	Part No.
26 x 12mm	Copper	0.62kg	CT405

Manufactured from a high quality copper alloy. Simple to install, providing an effective low resistance connection between overlapping tapes. The clamped connection is easily made/remade to allow for periodic testing. Enables cross, tee, through and right angle joints to be formed.



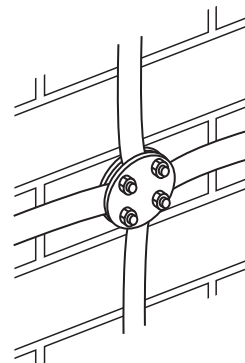
BS EN 50164-1 Class H



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. **SW005**) and wall plugs (Part no. **PS305**) – see Accessories page 63.



Tightening torque 15Nm



Screwdown test clamp

Maximum conductor size	Conductor material	Weight each	Part No.
26 x 8mm	Copper	0.84kg	CT305

Manufactured from a high quality copper alloy. Simple to install, providing an effective low resistance connection between overlapping tapes. The clamped connection is easily made/remade to allow for periodic testing. Enables cross, tee, through and right angle joints to be formed.



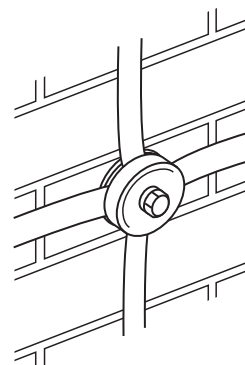
BS EN 50164-1 Class H



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. **SW005**) and wall plugs (Part no. **PS305**) – see Accessories page 63.



Tightening torque 20Nm



Expansion braid bond

Type	Material	Length	Cross-sectional area	Weight each	Part No.
Single length	Aluminium	200mm	50mm ²	0.07kg	BN001
Single length	Copper	200mm	50mm ²	0.17kg	BN101
Cross-over	Aluminium	300mm	50mm ²	0.23kg	BN002
Cross-over	Copper	300mm	50mm ²	0.53kg	BN102

Designed to remove the risk of damage or distortion to long conductor runs caused by thermal expansion and contraction.

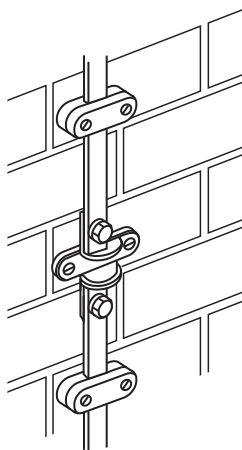




CN910



CN925



Bimetallic connector

Conductor size	Weight each	Part No.
25 x 3mm aluminium tape to 25 x 3mm copper tape	0.19kg	CN910
8mm diameter aluminium conductor to 25 x 3mm copper	0.19kg	CN920
25 x 3mm aluminium tape to 25 x 3mm copper tape	0.20kg	CN925

Manufactured from a friction welded joint between high conductivity copper and aluminium to provide the ideal means of interconnecting copper and aluminium conductors whilst avoiding bimetallic corrosion.



BS EN 50164-1 Class H



Fix using countersunk wood screws 1½" No. 10 or M6 (Part no. SW005 or SW105) and wall plugs (Part no. PS305) – see Accessories page 63.



Tightening torque 12Nm

Oxide inhibiting compound

Description	Weight each	Part No.
Plastic 8oz bottle	0.23kg	CM005

For all the items in this range we recommend the use of oxide inhibitor when aluminium fittings are installed.

Oxide inhibitor is a non-water soluble, natural-petroleum based polymer grease that seals electrical connections from oxygen and moisture.

CoSHH Datasheet available on request.

