























# EARTHING AND LIGHTNING PROTECTION PRODUCT CATALOGUE



www.omegaredgroup.com

# SSI group of companies



IWS delivers cost effective, professional solutions through our expert teams, working throughout the United Kingdom. We mitigate and manage risk from mechanical and electrical failures for a wide range of customers in the public and private sectors.



Our expert teams will help you to assess, manage and mitigate risks relating to water hygiene issues, as well as training your staff to understand their responsibilities with regard to water hygiene regulations.

# HydroSave

As a leading service provider to the UK water industry, Hydrosave provide technical and management solutions to ensure a sustainable environment for the future. Specialising in clean water services, we are committed to key issues such as leakage reduction, water conservation and demand management.





Provides a broad range of specialist services from design through installation, testing and repair to long term maintenance contracts. The business serves the public and private sector from water utilities through to the Environment Agency, major contractors and FM companies and works across the water, wastewater, water hygiene, rail, construction and Local Authority markets.





Respected throughout the waste water industry, with vast experience in surveying, managing and maintaining the industry's assets. Through a single point of contact, OnSite can provide engineering-based services dealing with all aspects of the waste water cycle.





Is a specialist supply, installation, testing and maintenance company, within the electrical earthing and lightning protection market. Operating nationally, the business focuses on providing top quality safety-critical systems and services for the protection of people, buildings and infrastructure.





Specialises in water engineering and drilling, including water supply boreholes, geothermal energy systems, drilling, pumping, surveys and the refurbishment and rehabilitation of existing boreholes.





Provides a tariff and water bill validation check for industrial and retail water users. Immerse can also manage potential over charges and a water rebate process on behalf of customers.





Provides a one stop shop for all vehicle solutions, full dealership facilities and service at a fraction of the cost, using all the latest equipment.







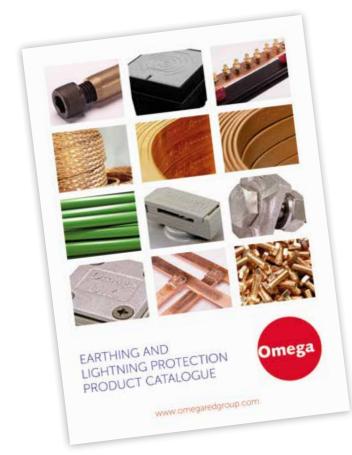
# Contents

4	Introduction	
7	Project references	
8	Memberships & accreditations	
10	Product location guide	
12	Introduction to the standards	
13	Earthing	Earthing
25	Conductors	Conductors
33	Lightning protection	Lightning protection
37	Fixings	Fixings
54	Exothermic welding	Exothermic welding
55	Accessories & miscellaneous	Accessories & miscellaneous
60	Surge protection	
62	Index	

# Welcome to the new product catalogue from **Omega Red Group Ltd ...**



... the UK market leader in the design, supply, installation, test and maintenance of earthing and lightning protection systems. Here you will find an extensive range of conductors, components, fixings and accessories, all designed and manufactured to ensure compliance with the latest national and international standards and, when installed and maintained correctly, to provide longevity in service, quality in performance and peace of mind.



Omega Red is a specialist installation, testing and maintenance contractor within the electrical earthing, lightning and surge protection market. The business focuses on providing high quality, safety-critical services for the protection of people, equipment, buildings and infrastructure. protection system remains in optimum working order, and compliant with all statutory obligations, for many years to come.

- Best practice design systems and engineering processes produce bespoke earthing and lightning protection systems in accordance with prevailing national and international standards
- Fully integrated service capability from initial survey, through design, supply and installation to ongoing testing and maintenance
- Design, installation, testing and maintenance carried out by qualified and accredited engineers to ensure compliance with all statutory obligations
- Flexible service offering, from any single element all the way through to a comprehensive turnkey solution in both earthing and lightning protection

The business operates in both the public and private sectors across the construction, rail, power, renewable energy, telecommunications, leisure, education and industrial markets. Whether it is a simple office block or one of Britain's biggest construction or engineering projects, Omega Red has the technical expertise, resources, national reach, experience and proven track record to deliver a long-lasting, cost-effective, quality solution.



# Introduction

# LIGHTNING PROTECTION



Lightning strikes can cause injury or loss of life, significant structural damage and the failure of electrical equipment and systems. However, protective measures can be installed, to existing and



new structures, to mitigate the hazardous effects of lightning related events. As the recognised market leader Omega Red Group Ltd offer current and prospective clients help to evaluate the risk of suffering the effects of lightning; plus the design of compliant lightning protection systems, in line with the requirements of the IEC/BS EN 62305 standards.

Omega is able to offer a full turnkey service from initial site survey, risk assessment, material supply, installation, inspection and testing, and ongoing maintenance.



# LIGHTNING PROTECTION TESTING & MAINTENANCE



All lightning protection systems require regular maintenance, in accordance with the relevant

British standard. Omega's nationwide fleet of inspection and testing engineers are fully competent in undertaking the detailed inspection and testing of all lightning



protection systems. We recommend that inspections are conducted every 11 months, to take account of seasonal variations, ensuring that the lightning protection system is operational at all times.

Following our inspection we will provide a certificate, along with a report on the condition of your system, plus details of any repairs required to bring it into a serviceable condition.



# Introduction

# **POWER EARTHING SYSTEMS**



Power earthing systems are vital for the continued safe operation of electrical supplies and for the safety of people, under fault conditions, in accordance



with the relevant British standards.

Omega is able to offer a full turnkey service from initial soil resistivity survey, earthing system design, installation, testing and commissioning; plus analysis and subsequent improvement of existing earthing systems.

Omega's services and solutions are undertaken using industry recognised CDEGS design software to ensure compliance with BS 7430, BS EN 50522 and other relevant specifications.



# **HEIGHT SAFETY**



At Omega Red Group Ltd our commitment to protecting those who work at height is paramount. To ensure end-user protection, and compliance with The Work at Height Regulations 2005, the installation of fall protection systems is just the beginning of our height safety offering.

Omega is an approved installer of the Latchways<sup>™</sup> product range and is a specialist in the design, supply, installation, inspection and test of all fall protection

systems, as well as offering end-user height safety training.

Our range of products and services includes: Latchways™



ManSafe<sup>™</sup> fall protection systems; plus walkways, guardrails (freestanding and fixed), eyebolts (including PushLock<sup>™</sup> eyebolts), personal protective equipment, periodic inspection and testing, and end-user training.



# Project references

# **DESIGN, MATERIAL SUPPLY AND INSTALLATION**



#### UTILITIES

- Hinkley Point 'C' Nuclear **Power Station**
- **Kilmington Sewerage** Treatment Works
- Pembroke CCGT Power Station
- Flintshire Bridge Convertor Station
- West Burton CCGT Power Station
- Nationwide STOR Generation
- Greenwich Peninsula Substation

- Limmo Peninsula Substation
- Crossness Sewerage **Treatment Works**
- Beauly to Denny OHL Upgrade
- **Fiddlers Ferry Power Station**
- Ferrybridge Power Station
- Langage Energy Centre
- **Finnieston Substation**
- **Becton Sewerage Treatment** Works



#### DEFENCE

- Atomic Weapons Establishment HQ
- Royal Military Academy, Sandhurst
- Aspire Defence Capital Works
- Defence & National Rehab Centre
- **Glen Douglas Ammunitions** Base

- Government **Communications HQ**
- Storage Depot, Falkland Islands
- **RAF Menwith Hill**
- DSDC Donnington
- MOD Whitehall (DCMC)
- Thales Naval Intelligence



#### **RAIL & INFRASTRUCTURE**

- Heathrow Airport Terminal 5
- **Dublin Light Railway**
- Channel Tunnel Rail Link
- Crossrail
- East London Line
- Manchester Tram
- Nottingham Tram
- Portsmouth Area Infrastructure Project
- **Great Western Electrification** Project
- Northern Line Power Upgrade (LU)
- District Line Upgrades (LU)
- SMART Motorways
- **OIL, GAS & PETROCHEMICAL**
- Burton Agnes Gas to Energy Plant
- Polmadie Energy From Waste
- Levenseat Energy From Waste
- Margham Energy From Waste
- **Buckingham Energy From Waste**
- St Fergus Gas Terminal
- **Ensus Bioethanol Plant**
- **BP Kingsbury Terminal**
- **Dunbar Energy From Waste**
- **Gibraltar LNG Plant**



#### **COMMERCIAL CONSTRUCTION**

- Mersey Gateway Bridge
- DP World London Gateway
- The Shard
- **Olympic Stadium**
- Lidl Distribution Centres
- Hilton Hotels
- Snow Hill Tower Block
- Northampton Town Football Club
- Nottinghamshire Cricket Club
- Shires Shopping Centre
- **Bluewater Shopping Centre**



#### **GOVERNMENT & PUBLIC CONSTRUCTION**

- Whitecross County Council Offices
- North Ayrshire Community Hospital
- Media City
- Project Horizon (Data Centre)
- **Cranfield University**
- **Birmingham University**
- Sheffield Children's Hospital
- Queen's Medical Centre



# Memberships & accreditations

MEMBERSHIPS		Registration no.
ATLAS	Association of Technical Lightning Access Specialists	9302
	Electrical Contractors Association	681961
ECIA	Engineering Construction Industry Association	94750
Citb	Construction Industry Training Board	1191252
bsi.	British Standards Institution	41111073
East Midlands Chamber Dictorolog Notifiquesurve Leicesterolog	East Midlands Chamber of Commerce	317888

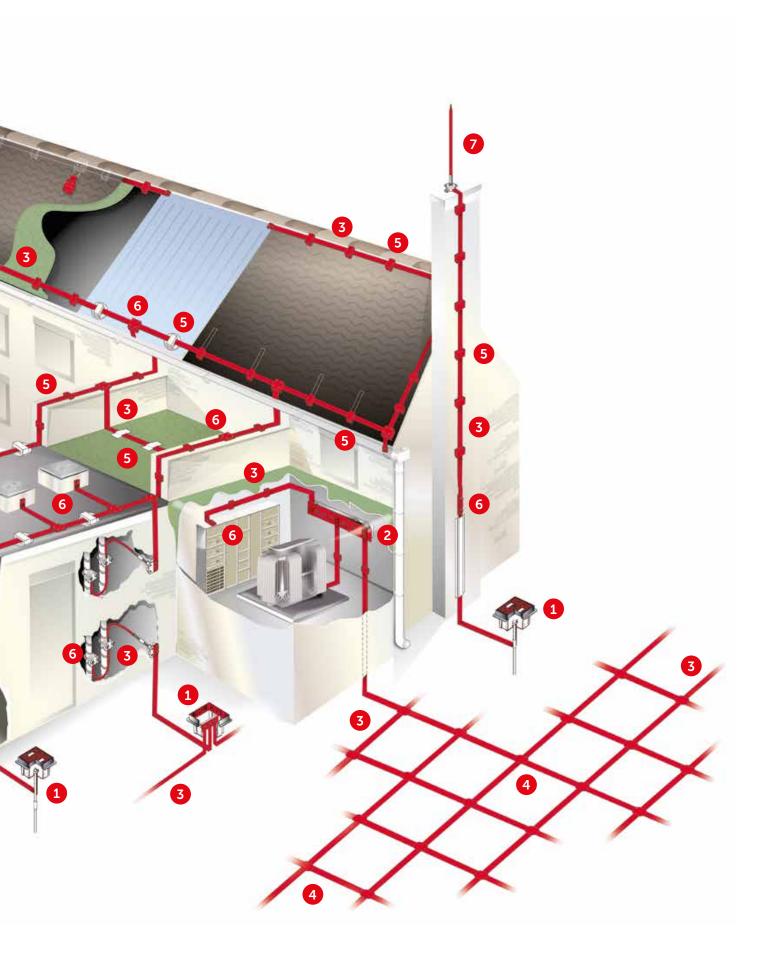
# Memberships & accreditations

ACCREDIT	TATIONS	Registration no.
Constructionline	Constructionline	5590
safecontractor 🛞	SAFE Contractor	NS6836
	UVDB and UVDB Verify	55190
PROFILE	Builder's Profile	20072
exor	Exor	NS6836
	Building Confidence	300227
CUALIFICATI	RISQS Qualified and Audited	55190
Exercise to the second se	CHAS	N/A
www.smasitd.com	SMAS	15719
altic	Altius CDM Vendor	374637
	ISO9001 - Quality Management	C0427
	ISO 14001 - Environmental Management	2221
	OHSAS 18001 - Health & Safety Management	827

# Structural lightning protection & earthing product location guide

(ey	PAGE	
1 Earth Electrodes and Accessories	13-22	e
2 Earth Bars	23-24	
3 Conductors	25-32	
4 Exothermic Welding	54	
5 Tape Fixings	37-50	
Bonds, Clamps and Test Points	51-53	
Air Termination	33-36	6
6	1	

This illustration is not intended to represent a design to any particular standard. It shows the relationship between components, a structure and systems.



## IEC/BS EN 62305 and IEC/BS EN 62561

#### IEC/BS EN 62305 - Protection against lightning

IEC 63205 is the recognised worldwide standard for lightning protection system (LPS) design, installation and maintenance. BS EN 62305 is the British standard and is derived from the IEC document. Both have the following four complementary parts:

#### Part 1: General principles

IEC/BS EN 62305-1 provides the general principles for the protection of structures, their people, contents and electrical installations, against the damaging effects of lightning.

#### Part 2: Risk management

IEC/BS EN 62305-2 provides the procedure for the evaluation of the risk of damage from a lightning related event.

#### Part 3: Physical damage to structures and life hazard

IEC/BS EN 62305-3 provides the requirements for the protection of a structure against physical damage, by means of a lightning protection system, and for protection against injury to living beings due to touch and step voltages, in the vicinity of an LPS.

# Part 4: Electrical and electronic systems within structures

IEC/BS EN 62305-4 provides information for the design, installation and maintenance of surge protection measures (SPM), for electrical and electronic systems within structures, able to reduce the risk of permanent failures due to lightning electromagnetic impulse (LEMP).

# IEC/BS EN 62561 series - Lightning protection system components

Clients, Specifiers, Designers and Installers of lightning protection systems (LPS) need to be assured that all components, such as conductors, fasteners and earth electrodes must be able to withstand long term exposure to the environmental elements, whilst retaining the ability to dissipate lightning current safely to earth, over many years.

The IEC/BS EN 62561 series of standards defines the processes by which lightning protection components are proved fit for purpose by performance testing.

There are currently seven parts to the series:

IEC/BS EN 62561-1 Lightning protection system components (LPSC) Requirement for connection components

IEC/BS EN 62561-2 Lightning protection system components (LPSC) Requirements for conductors and earth electrodes

IEC/BS EN 62561-3 Lightning protection system components (LPSC) Requirements for isolating spark gaps

IEC/BS EN 62561-4 Lightning protection system components (LPSC) Requirements for conductor fasteners

IEC/BS EN 62561-5 Lightning protection system components (LPSC) Requirements for earth electrode inspection housings and earth electrode seals

IEC/BS EN 62561-6 Lightning protection system components (LPSC) Requirements for lightning strike counters

IEC/BS EN 62561-7 Lightning protection system components (LPSC) Requirements for earth enhancing compounds

#### Independent testing

IEC/BS EN 62561 series requires manufacturers and suppliers to undertake performance testing of all component parts. Specimens of component parts are tested once assembled with the appropriate conductors, and in accordance with the manufacturer's and supplier's instructions.

Performance testing includes environmental preconditioning, using various treatments, such as salt mist spray or exposure to a humid sulphurous atmosphere; and is designed to replicate the effects of ageing under environmental site conditions. This is followed by subjection to simulated lightning discharges, to prove the component's ability to conduct lightning over time.

This ensures that components have been correctly manufactured for their intended application and that they meet the requirements of the relevant standard. All tests are undertaken by an independently certified test laboratory.

#### **Passing the test**

Each part of IEC/BS EN 62561 provides the criteria for the satisfactory performance of component parts. All test specimens must satisfy all of the conditions set out in the relevant IEC/BS EN 62561 document, in order to be classed as being successful. Following the tests, a report and certification will be produced by the test laboratory. IEC/BS EN 62561 requires that manufacturers and suppliers retain the reports, along with supporting documentation regarding the testing, the product application and any relevant installation instructions.

13	Earthing
14	EARTH ELECTRODES & ACCESSORIES
17	EARTH ROD CLAMPS
19	REBAR CLAMPS
20	EARTH INSPECTION PITS & BACKFILLS
21	BACKFILL & EARTH POINTS
22	EARTH BOSSES & BRAID BONDS
23	EARTH BARS & INSULATORS



# Copperbond Earth Rods

Manufactured in accordance with the latest standards, all copperbond earth rods are made from a low carbon, high tensile steel core with a minimum 0.254 mm thickness of 99.9% pure electrolytic copper molecularly bonded to the steel.

PART NUMBER	THREAD SIZE UNC -2A	ROD DIA (mm)	LENGTH (mm)	WEIGHT (kg)
ORG11006	5/8''	14.2	1200	1.53
ORG11007	5/8''	14.2	1500	1.88
ORG11008	5/8''	14.2	1800	2.29
ORG11009	5/8''	14.2	2400	3.00
ORG11010	5/8''	14.2	3000	3.79
ORG11011	3/4''	17.2	1200	2.19
ORG11012	3/4''	17.2	1500	2.73
ORG11013	3/4''	17.2	1800	3.27
ORG11014	3/4''	17.2	2400	4.35
ORG11015	3/4''	17.2	3000	5.44

**Material:** High tensile steel core with pure molecularly bonded copper **Standards:** IEC/BS EN 62561-2 & BS 7430



## Threaded Couplings

High strength copper alloy to ensure excellent corrosion resistance. Protects the copperbond earth rod threads against damage. Used for connecting copperbond earth rods with the use of a driving stud.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG11022	5%'' Threaded Coupling	0.08
ORG11023	¾" Threaded Coupling	0.13

Material: High strength copper alloy Standards: IEC/BS EN 62561-2 & BS 7430



# **Driving Studs**

High strength steel, designed to be used repeatably with the threaded couplings and with power hammers.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG11029	5%" Threaded Driving Stud	0.08
ORG11030	<sup>3</sup> /4" Threaded Driving Stud	0.12

Material: High strength tensile steel

## Solid Copper Earth Rods

Used in high aggressive soil conditions where corrosion is a concern. Can be used in boreholes and backfilled with conductive cement to achieve low resistance.

PART NUMBER	ROD TYPE	ROD DIA (mm)	LENGTH (mm)	WEIGHT (kg)
ORG11017	Solid Copper Internally Threaded M10	15	1200	1.64
ORG11117	Solid Copper Internally Threaded M10	15	1500	2.35
ORG11018	Solid Copper Internally Threaded M10	20	1200	3.34
ORG11118	Solid Copper Internally Threaded M10	20	1500	4.18

Material: 99.9% Pure Solid Copper Hard Drawn Rod

Standards: IEC/BS EN 62561-2 & BS 7430

# Solid Copper Earth Rod Fittings

Consisting of a driving spike, coupling dowel and driving head to aid the solid copper rods to be connected and driven into the ground without damaging the rods.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG11024	M10 x 40 mm Coupling Dowel	0.02
ORG11031	15mm Driving Head	0.02
ORG11032	20mm Driving Head	0.05
ORG11034	15mm Driving Spike	0.02
ORG11035	20mm Driving Spike	0.05

Material: Phosphor Bronze (Coupling Dowel); Hardened Steel (Driving Head & Spike) Standards: BS 7430

## Solid Stainless Steel Earth Rods

Used in high aggressive soil conditions where galvanic corrosion is a concern caused by other dissimilar metals. Can be used in boreholes and backfilled with conductive cement to achieve low resistance.

PART NUMBER	ROD TYPE	ROD DIA (mm)	LENGTH (mm)	WEIGHT (kg)
ORG11019	Stainless Steel Internally Threaded M10	16	1200	1.87
ORG11119	Stainless Steel Internally Threaded M10	16	1500	2.34
ORG11120	Stainless Steel Internally Threaded M10	20	1200	1.87
ORG11121	Stainless Steel Internally Threaded M10	20	1500	3.65

Material: Austenitic Stainless Steel

Standards: IEC/BS EN 62561-2 & BS 7430





Earthing









# Solid Stainless Steel Earth Rod Fittings

Consisting of a driving spike, coupling dowel and driving head to aid the solid stainless steel rods to be connected and driven into the ground without damaging the rods.

DESCRIPTION	WEIGHT (kg)
M10 x 40 mm Coupling Dowel	0.02
15mm Driving Head	0.02
20mm Driving Head	0.05
15mm Spike	0.02
20mm Spike	0.05
	M10 x 40 mm Coupling Dowel 15mm Driving Head 20mm Driving Head 15mm Spike

Material: Stainless Steel (Coupling Dowel); Hardened Steel (Driving Head) Standards: BS 7430

# Solid Copper Earth Plates

Can be used as an alternative to earth rods where driving rods is impracticle due to site conditions. Other sizes are available on request and can be provided with pre welded copper conductor tails.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG11037	600 mm x 600 mm x 1.5 mm	4.80
ORG11039	900 mm x 900 mm x 1.5 mm	10.80
ORG11038	600 mm x 600 mm x 3 mm	9.60
ORG11040	900 mm x 900 mm x 3 mm	21.60
ORG11041	400 mm x 400 mm x 1.5 mm	2.14

Material: Hard Drawn High Conductivity Copper Standards: BS EN 12163



## **Copper Lattice Earth Mats**

Can be used as an alternative to earth rods where driving rods is impracticle due to site conditions. Other sizes are available on request and can be provided with pre welded copper conductor tails.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG11042	600 mm x 600 mm x 3 mm	3.98
ORG11043	900 mm x 900 mm x 3 mm	6.10

Material: High Conductivity Annealed Copper Tape Standards: BS EN 13601

# Rod to Tape Clamp (Type A)

Mechanical clamp for connecting flat copper tapes to earth rods.

PART NUMBER	ROD DIA (mm)	MAX CONDUCTOR (mm)	WEIGHT (kg)
ORG12001	16 & 20	26 x 12 & 26 x 10	0.16
ORG12002	20	26 x 10	0.16
ORG12003	16	40 x 12	0.24
ORG12004	20	51 x 12	0.31
ORG12008	20	32 x 9	0.20

Material: High Strength Copper Alloy

Standards: IEC/BS EN 62561-1 Class H, BS 7430

# Rod to Cable Clamp (Type G)

Mechanical clamp for connecting stranded copper cables or solid round copper conductor to earth rods.

PART NUMBER	ROD DIA (mm)	CONDUCTOR SIZE (MM SQ)	WEIGHT (kg)
ORG12021	16	16-70	0.08
ORG12022	20	35-95	0.09

Material: High Strength Copper Alloy

Material: High Strength Copper Alloy

Standards: IEC/BS EN 62561-1 Class H, BS 7430

Standards: IEC/BS EN 62561-1 Class H, BS 7430

# Rod to Cable Lug Clamp (Type B)

Mechanical clamp for connecting stranded copper cables to earth rods combined with a compression type cable lug.

PART NUMBER	ROD DIA (mm)	MAX CONDUCTOR (MM SQ)	WEIGHT (kg)
ORG12012	14, 15	300	0.30
ORG12014	17 & 20	300	0.30

-





# U-Bolt Type (Type E)

Mechanical clamp to connect flat copper tape or stranded cable to earth rods or to steel reinforcing bars.

PART NUMBER	ROD DIA (mm)	MAX CONDUCTOR (mm)	WEIGHT (kg)
ORG12035	14 - 25	25 x 6 (single clamp)	0.20
ORG12040	25 - 40	25 x 6 (single clamp)	0.44
ORG12080	50	25 x 6 (single clamp)	0.45

Material: High Strength Copper Alloy

Standards: IEC/BS EN 62561-1 Class H, BS 7430





# U-Bolt Type (Type E)

Mechanical clamp to connect flat copper tape to earth rods or to steel reinforcing bars.

PART NUMBER	ROD DIA (mm)	MAX CONDUCTOR (mm)	WEIGHT (kg)
ORG12045	14 - 25	25 x 3 (twin clamp)	0.26
ORG12050	25 - 40	25 x 3 (twin clamp)	0.52
ORG12081	50	25 x 3 (twin clamp)	0.58

Material: High Strength Copper Alloy

Standards: IEC/BS EN 62561-1 Class H, BS 7430

# Rod to Cable Clamp (Type GUV)

Mechanical clamp for connecting stranded copper cables or solid round copper conductor to earth rods or to steel reinforcing bars.

PART NUMBER	ROD DIA (mm)	CONDUCTOR SIZE (MM SQ)	WEIGHT (kg)
ORG12030	14 - 20	70 - 150	0.39
ORG12031	25	150 - 300	0.62
ORG12033	14 - 20	150 - 300	0.62
ORG12034	14 - 20	16 - 70	0.39
ORG12036	25	16 - 70	0.39

Material: High Strength Copper Alloy

Standards: IEC/BS EN 62561-1 Class H, BS 7430



# Rebar to Rebar Connecting Clamps

Used for connecting two internal steel reinforcing bars in parallel.

PART NUMBER	REBAR DIA (mm)	WEIGHT (kg)
ORG17751	16 - 16	0.05
ORG17752	20 - 20	0.06
ORG17753	25 - 25	0.07
ORG17754	32 - 32	0.07
ORG17755	40 - 40	0.08



Material: Stainless Steel

Standards: IEC/BS EN 62561-1 Class H, BS 7430



# Concrete Inspection Pit

Concrete pit is designed for installation in block paving, walkways and light duty traffic areas due to its minimum load rating of 3500 kgs and can be used with either an earth rod or with the earth bar accessory for multiple connections.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG13001	Concrete Inspection Pit 320mm x 320mm x 192mm	30.00
ORG13010	5 Hole Copper Earth Bar	0.49

Material: Concrete (Pit); High Conductivity Hard Drawn Copper Bar (Earth Bar) Standards: IEC/BS EN 62561-5, BS EN 12163



## Heavy Duty Lightweight Inspection Pit

Omega market leading lightweight pit is designed for installation in block paving, walkways and heavy duty traffic areas due to its minimum load rating of 5000 kgs. The unique design allows the lid to lock into the base without the need for any additional tools or screws and can be used with either an earth rod or with the earth bar accessory for multiple connections.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG13005	Polypropylene Inspection Pit 306mm x 306mm x 216mm	2.60
ORG13015	5 Hole Copper Earth Bar	0.40

Material: High Performance Polypropylene (Pit); High Conductivity Hard Drawn Copper Bar (Earth Bar) Standards: IEC/BS EN 62561-5, BS EN 12163



# Soil Conditioning Backfill Materials

The Marconite/Omega brand is the world's leading premium electrically conductive backfill which enhances the effects of earth electrodes to reduce the resistance of a lightning protection or earthing system.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG13037	Marconite Pre Mixed With Cement	25
ORG13047	Marconite only	25
Material: Conductive Aggregate		

Material: Conductive Aggregate Standards: IEC/BS EN 62561-7

## Soil Conditioning Backfill Materials

Bentonite is used as a conductive backfill to reduce soil resistivity by retaining water from the surrounding soil.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG13040	Bentonite Granules	25
ORG13045	Bentonite Powder	25

Material: Sodium carbonate activated calcium montmorillonite

## Earth Points

Used to cast into concrete columns to provide a connection onto steel reinforcing bars that form part of the earthing and lightning protection system when used as the down conductors. Can be provided with or without a pre welded cable.

PART NUMBER	DESCRIPTION	HOLE SIZE	LENGTH	WEIGHT (kg)
ORG14060	Single Hole Earth Point	M8 x 15	80mm	0.14
ORG14061	Two Hole Earth Point	M8 x 12	80mm	0.25
ORG14062	Four Hole Earth Point	M8 x 14	75mm	0.41
ORG14063	Two Hole Earth Point With Front Plate	M8 x 12	80mm	0.44
ORG14065	Front Plate Only for Two Hole Earth Point 25x3 or 70 mmsg	10 mm Dia		0.19

Material: Copper Alloy

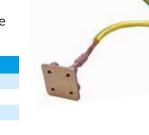
Standards: IEC/BS EN 62561-1 Class H, BS 7430

### Earth Points With Pre Welded Cable

Used to cast into concrete columns to provide a connection onto steel reinforcing bars that form part of the earthing and lightning protection system when used as the down conductors. Can be provided with or without a pre welded cable.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG14067	As 014060 with 500mm long tail of 70mm PVC Cable	0.56
ORG14068	As 014061 with 500mm long tail of 70mm PVC Cable	0.84
ORG14069	As 014062 with 500mm long tail of 70mm PVC Cable	1.14
ORG14075	As 014063 with 500mm long tail of 70mm PVC Cable	0.84
ORG14080	As 014062 with 500mm long tail of 150mm PVC Cable	1.20

Material: Copper Alloy Standards: IEC/BS EN 62561-1 Class H, BS 7430





Earthing



## Earth Boss

Designed to be welded onto steel structures, steel tanks and steel columns as a earth bonding connection.

PART NUMBER	DIAMETER / LENGTH	THREAD SIZE	WEIGHT (kg)	
ORG14100	50 mm x 50 mm	M10	0.79	
ORG19385	60 mm x 60 mm	M10	0.95	
Note: Other sizes available on request				

Material: Mild Steel BS 970 (230M07)



# Flexible Copper Braid Bonds

Used for bonding across metallic objects where flexibility and movement is required such as fences, gates doors etc.

PART NUMBER	DIMENSIONS (HOLE CTRS)	WEIGHT (kg)	
ORG15000	25 x 3.5mm (100 ctrs)	0.06	
ORG15001	25 x 3.5mm (200 ctrs)	0.09	
ORG15003	25 x 3.5mm (1000 ctrs)	0.34	
ORG15005	25 x 3.5mm (400 ctrs)	0.15	
ORG15017	25 x 3.5mm (500 ctrs)	0.19	
Note: Other sizes available on request			

Material: Copper wire Standards: BS EN 13602

# Particular D

# Flexible Tinned Copper Braid Bonds

Used for bonding across metallic objects where flexibility and movement is required such as fences, gates doors etc.

PART NUMBER	DIMENSIONS (HOLE CTRS)	WEIGHT (kg)		
ORG15010	25 x 3.5mm (200 ctrs)	0.09		
ORG15015	25 x 3.5mm (400 ctrs)	0.15		
ORG15018	25 x 3.5mm (600 ctrs)	0.25		
Note: Other sizes available on request				

Note: Other sizes available on request

Material: Copper wire Standards: BS EN 13602

# Earth Bars

Used in both indoor and outdoor applications where a convenient and efficient way of connecting earthing conductors to a common earth point is required.



PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG19506	6 Way Earth Bar no Disconnect Link	1.80
ORG19508	8 Way Earth Bar no Disconnect Link 2.42	
ORG19510	10 Way Earth Bar no Disconnect Link	2.63
ORG19558	12 Way Earth Bar no Disconnect Link	2.97
ORG19561	16 Way Earth Bar no Disconnect Link	4.21
ORG19563	20 Way Earth Bar no Disconnect Link	4.72
ORG19512	6 Way Earth Bar Single Disconnect Link	2.60
ORG19514	8 Way Earth Bar Single Disconnect Link	3.15
ORG19516	10 Way Earth Bar Single Disconnect Link	3.89
ORG19518	12 Way Earth Bar Single Disconnect Link	4.36
ORG19560	16 Way Earth Bar Single Disconnect Link	4.93
ORG19564	20 Way Earth Bar Single Disconnect Link	5.68
ORG19513	6 Way Earth Bar Double Disconnect Link	3.26
ORG19515	8 Way Earth Bar Double Disconnect Link	3.57
ORG19517	10 Way Earth Bar Double Disconnect Link	4.38
ORG19577	12 Way Earth Bar Double Disconnect Link	4.92
ORG19570	16 Way Earth Bar Double Disconnect Link	5.81
ORG19571	20 Way Earth Bar Double Disconnect Link	7.00
ORG19590	Disconnect Link Only	0.60
Note: All earth b	ars also available in tinned copper	

Material: High Conductivity Hard Drawn Copper Bar Standards: BS 7430

# Insulators & Accessories

Used for mounting copper earth bars directly onto a structure.

PART NUMBER	DESCRIPTION	WEIGHT (KG)	MATERIAL
ORG11026	M10 x 40 All Thread Dowel	0.04	Stainless Steel
ORG18390	Top Hat Section Wall Mounting Base	2.90	Galvanised Steel
ORG18900	M10 x 12 mm Hex Head Setscrew	0.03	Stainless Steel
ORG18920	M10 Flat Washer	0.01	Stainless Steel
ORG18930	M10 Full Nut	0.03	Stainless Steel
ORG19595	Insulator 50 mm x 35 mm x M10	0.09	Glass Reinforced Polyester
ORG19600	Insulator 40 mm x 40 mm x M10	0.08	Glass Reinforced Polyester



Omega earth bars are a cost effective, efficient and convenient way of providing a common earth point. The use of disconnecting links allows for quick isolation for testing purposes.



Standard earth bars are available in a variety of lengths, and consist of a 50 mm wide x 6 mm thick high conductivity hard drawn copper bar, mounted on a powder coated steel base by GRP insulators and assembled with M10 termination screws as standard.

#### **Features and benefits**

- The powder coated steel base is corrosion proof and is suitable for indoor and outdoor applications.
- Assembled using zero halogen, glass reinforced polyester insulators.
- The base has pre-drilled fixing holes for ease of installation.
- A range of three standard designs to meet most installation requirements.
- Available in bare copper or tinned copper high conductivity hard drawn bar.
- Assembled with compatible M10 setscrews, nuts and washers as standard.

#### Non standard earth bars

Our standard earth bars meet the majority of applications, however Omega offer customer specific earth bars, design suggestions and advice based on our market leading knowledge of installing earth bars in many different types of projects.

#### Non-standard earth bar designs can include:

- Different size and type of setscrew, nut and washer
- Different lengths, widths and thickness of copper earth bar
- The number and positioning of the disconnecting links
- The number of and size of the insulators
- Supplied with insulators and mounting base or with insulators only

# Conductors

25	Conductors
26	COPPER
30	ALUMINIUM
32	ANTI-VANDAL GUARDS



# Bare Flat Copper Tape

Omega UK high conductivity annealed bare copper tapes are used in both lightning protection and earthing applications as the primary conductor.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)		
ORG15600	25 x 3	10	0.67		
ORG15030	25 x 3	25	0.67		
ORG15031	25 x 4	30	0.89		
ORG15033	25 x 6	20	1.33		
ORG15039	30 x 5	40	1.33		
ORG15038	31 x 3	30	0.83		
ORG15110	31.5 x 4	40	1.13		
ORG15036	38 x 3	50	1.01		
ORG15072	38 x 5	15	1.69		
ORG15115	40 x 3	25	1.06		
ORG15100	40 x 4	15	1.42		
ORG15105	40 x 5	25	1.78		
ORG15106	40 x 6	25	2.16		
ORG15107	40 x 6.3	25	2.24		
ORG15037	50 x 3	40	1.33		
ORG15034	50 x 4	15	1.78		
ORG15035	50 x 6	10	2.67		
ORG15041	50 x 7	20	2.80		
Note: Other sizes available on request					

Material: 99.9% High Conductivity Annealed Copper Tape Standards: IEC/BS EN 62561-2, BS EN 13601

# Tinned Flat Copper Tape

Omega UK high conductivity annealed tinned copper tapes are used in both lightning protection and earthing applications as the primary conductor.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)		
ORG16040	25 x 3	25	0.67		
ORG16041	25 x 4	30	0.89		
ORG16038	25 x 6	20	1.33		
ORG16039	40 x 4	15	1.42		
ORG16042	50 x 4	15	1.78		
ORG16043	50 x 6	10	2.67		
Note: Other sizes available on request					

Material: 99.9% High Conductivity Annealed Tinned Copper Tape Standards: IEC/BS EN 62561-2, BS EN 13601



# Conductors

# PVC Covered Flat Copper Tape

Omega UK high conductivity PVC covered copper tapes are used in both lightning protection and earthing applications for aesthetic purposes and additional protection.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	COLOUR	WEIGHT PER METER (kg)
ORG16045	25 x 3	25	Brown	0.77
ORG16046	25 x 3	25	Stone	0.77
ORG16047	25 x 3	25	Grey	0.77
ORG16048	25 x 3	25	Black	0.77
ORG16049	25 x 3	25	White	0.77
ORG16050	25 x 3	25	Green	0.77
ORG16052	25 x 3	25	Green/Yellow	0.77
ORG16053	25 x 6	20	Green	1.53
ORG16061	25 x 6	20	Grey	1.53
ORG16054	50 x 6	10	Green	2.95
ORG16060	50 x 6	10	Stone	2.95
Nata: Other sim	aa ayailah la an wanyaat			



Note: Other sizes available on request

Material: 99.9% High Conductivity Annealed Copper Tape; PVC UV Stabilised; Colours to BS 5252 Standards: IEC/BS EN 62561-2, BS EN 13601

## LSZH Covered Flat Copper Tape

Omega UK high conductivity LSZH covered copper tapes are used in both lightning protection and earthing applications for aesthetic purposes and additional protection.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	COLOUR	WEIGHT PER METER (kg)
ORG16200	25 x 3	25	White	0.77
ORG16210	25 x 3	25	Green	0.77
ORG16211	25 x 3	25	Black	0.77
ORG16051	25 x 6	20	Green	1.53
ORG16220	50 x 6	10	Green	2.95

Note: Other sizes available on request

Material: 99.9% High Conductivity Annealed Copper Tape; PVC UV Stabilised; Colours to BS 5252 Standards: IEC/BS EN 62561-2, BS EN 13601

# Lead Covered Flat Copper Tape

Omega UK high conductivity lead covered copper tapes are used in both lightning protection and earthing applications for additional protection against corrosion.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)
ORG16035	25 x 3	25	2.56

Material: 99.9% High Conductivity Annealed Copper Tape Standards: BS EN 13601





# Hard Drawn Bare Copper Bar

Can be used for bespoke earth bars used with Omega channel base, insulators, setscrews, nuts, washers, etc.

PART NUMBER	CONDUCTOR SIZE (mm)	LENGTH (mm)	WEIGHT PER METER (kg)
ORG15045	25 x 3	3000	0.67
ORG15050	25 x 6	4000	1.33
ORG15052	38 x 6	4000	2.03
ORG15053	50 x 3	4000	1.33
ORG15055	50 x 6	3000	2.67
ORG15060	75 x 6	4000	4.00
ORG15064	100 x 6	4000	5.34

Material: 99.9% High Conductivity Hard Drawn Copper Bar Standards: BS EN 12163

# Flexible Flat Bare Copper Braid

Used for earth bonding where flexibility is required.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)		
ORG15065	25 x 3.5	50	0.34		
ORG15070	30 x 5	50	0.48		
ORG16092	19 x 2.5	50	0.16		
Note: Other sizes available on request					

Material: Copper wire

Standards: BS EN 13602



# Flexible Flat Tinned Copper Braid

Used for earth bonding where flexibility is required and additional protection against corrosion.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)
ORG16080	25 x 3.5	50	0.34
ORG16090	30 x 5	50	0.48

Material: Copper wire

Standards: BS EN 13602

# Conductors

# Bare Solid Circular Copper Conductor

Used as a lightning protection conductor as an alternative to using the traditional bare flat copper tape.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)
ORG15040	8 Dia	50	0.44

Material: 99.9% High Conductivity Annealed Bare Copper Standards: BS EN 13601

# PVC Solid Circular Copper Conductor

Used as a lightning protection conductor as an alternative to using the traditional PVC flat copper tape.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)
ORG16055	8mm Brown PVC	50	0.49
ORG16056	8mm Stone PVC	50	0.49
ORG16057	8mm Grey PVC	50	0.49
ORG16058	8mm Black PVC	50	0.49
ORG16059	8mm White PVC	50	0.49

Material: 99.9% High Conductivity Annealed PVC Copper ; PVC UV Stabilised; Colours to BS 5252 Standards: BS EN 13601

# Bare Soft Drawn Stranded Copper Cable

Primarily used for earthing systems or as a bonding conductor.

PART NUMBER	CONDUCTOR SIZE (mm)	NOMINAL DIA (mm)	WEIGHT PER METER (kg)
ORG15075	16	5.10	0.15
ORG15076	25	6.42	0.23
ORG15077	35	7.56	0.32
ORG15079	50	8.90	0.43
ORG15080	70	10.70	0.62
ORG15081	95	12.60	0.86
ORG15082	120	14.21	1.09
ORG15083	150	15.75	1.33
ORG15084	185	17.64	1.67
ORG15090	240	20.25	2.20

Material: Soft Drawn Stranded Copper Cable

Standards: BS EN 60228



# PVC Green/Yellow Soft Drawn Stranded Copper Cable

Primarily used for earthing systems or as a bonding conductor.

PART NUMBER	CONDUCTOR SIZE (mm)	NOMINAL DIA (mm)	WEIGHT PER METER (kg)
ORG16100	16	7.10	0.19
ORG16101	25	8.90	0.29
ORG16102	35	10.10	0.41
ORG16103	50	11.80	0.53
ORG16104	70	13.60	0.73
ORG16105	95	15.90	1.00
ORG16106	120	17.50	1.16
ORG16107	150	19.40	1.54
ORG16108	185	21.70	2.01
ORG16109	240	24.50	2.49
ORG16110	300	27.50	3.05

Material: Soft Drawn Stranded Copper Cable

Standards: BS EN 60228; BS 6746C

### LSZH Green/Yellow Soft Drawn Stranded Copper Cable

Primarily used for earthing systems or as a bonding conductor.

PART NUMBER	CONDUCTOR SIZE (mm)	NOMINAL DIA (mm)	WEIGHT PER METER (kg)
ORG16150	70	13.60	0.73
ORG16112	95	15.90	1.00
ORG16153	120	17.50	1.16
ORG16157	150	19.40	1.54
ORG16154	185	21.70	2.01
ORG16159	240	24.50	2.49
ORG16155	300	27.50	3.05

Material: Soft Drawn Stranded Copper Cable

Standards: BS EN 60228; BS EN 50363



# Bare Flat Aluminium Tape

Omega UK annealed bare aluminium tapes are primarily used for the lightning protection roof network.

ORG16555 12.5 x 1.5 50   ORG15520 25 x 3 50	0.05
<b>ORG15520</b> 25 x 3 50	
	0.21
<b>ORG16551</b> 40 x 6 50	0.67
<b>ORG16550</b> 50 x 6 50	0.85

Material: Bare Aluminium Tape BS EN 755-5 Standards: IEC/BS EN 62561-2

# PVC Flat Aluminium Tape

Omega UK annealed PVC covered aluminium tapes are primarily used for the lightning protection down conductor network to improve aesthetics.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	COLOUR	WEIGHT PER METER (kg)
ORG16510	25 x 3	50	Brown	0.31
ORG16511	25 x 3	50	Stone	0.31
ORG16512	25 x 3	50	Grey	0.31
ORG16513	25 x 3	50	Black	0.31
ORG16514	25 x 3	50	White	0.31
ORG16515	25 x 3	50	Green	0.31

Material: Bare Aluminium Tape BS EN 755-5; PVC UV Stabilised; Colours to BS 5252 Standards: IEC/BS EN 62561-2

# Bare Solid Circular Aluminium Conductor

Used as a lightning protection conductor as an alternative to using the traditional bare flat aluminium tape.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)
ORG15525	8 Dia	50	0.12

Material: Bare Aluminium circular conductor BS EN 755-5 Standards: IEC/BS EN 62561-2

# PVC Solid Circular Aluminium Conductor

Used as a lightning protection conductor as an alternative to using the traditional PVC flat aluminium tape.

PART NUMBER	CONDUCTOR SIZE (mm)	COIL SIZE (MTRS)	WEIGHT PER METER (kg)
ORG16520	8mm Brown PVC	50	0.18
ORG16521	8mm Stone PVC	50	0.18
ORG16522	8mm Grey PVC	50	0.18
ORG16523	8mm Black PVC	50	0.18
ORG16524	8mm White PVC	50	0.18

Material: Bare Aluminium circular conductor BS EN 755-5; PVC UV Stabilised; Colours to BS 5252 Standards: IEC/BS EN 62561-2





31





# Anti Vandal Conductor Guards

Used for protecting external flat bare and PVC covered copper and aluminium conductors against theft, damage and vandalism.

PART NUMBER	DESCRIPTION	LENGTH (mm)	WEIGHT (kg)
ORG18380	Galvanised Anti-Vandal Guard	2000	1.95
ORG18390	Galvanised Anti-Vandal Guard	3000	2.90
ORG70050	Galvanised Anti-Vandal Guard	1100	1.50

Material: Galvanised Steel

# Lightning protection

33	Lightning protection
34	AIR TERMINATION

## Air Rods

Used for capturing a lightning strike. Can be either mounted on the roof or on the side of a structure.

PART NUMBER	ROD LENGTH (mm)	ROD DIA. & THREAD DIA (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17015	500	10 & 10	Copper	0.33
ORG17019	1000	10 & 10	Copper	0.65
ORG17016	300	15 & 16	Copper	0.53
ORG17017	500	15 & 16	Copper	0.75
ORG17021	1000	15 & 16	Copper	1.50
ORG17023	2000	15 & 16	Copper	3.00
ORG17024	3000	15 & 16	Copper	4.50
ORG17001	500	10 & 10	Aluminium	0.11
ORG17005	1000	10 & 10	Aluminium	0.22
ORG17003	500	16 & 16	Aluminium	0.29
ORG17007	1000	16 & 16	Aluminium	0.58
ORG17009	2000	16 <del>8</del> 16	Aluminium	1.16

Material: Hard Drawn High Conductivity Copper Rod or Hard Drawn Aluminium Rod Standards: IEC/BS EN 62561-2

# Multi-Point Head

Used in conjunction with a copper air rod.

PART NUMBER ROD DIA (mm) MATERIAL WEI				
ORG17065	15	Copper	0.27	

Material: Hard Drawn High Conductivity Copper Rod



# Air Rod Base (Tape System)

Used to secure the air rod and the flat tape onto flat roof surfaces.

<b>OPG17037</b> 15 & 16 25mm Copper 0.43	PART NUMBER	ROD DIA. & THREAD DIA (mm)	MAX CONDUCTOR WIDTH	CONDUCTOR MATERIAL	WEIGHT (kg)
251111 Copper 0.45	ORG17037	15 & 16	25mm	Copper	0.43
<b>ORG17035</b> 16 & 16 25mm Aluminium 0.14	ORG17035	16 & 16	25mm	Aluminium	0.14

Material: Copper or Aluminium Alloy Standards: IEC/BS EN 62561-1 Class H

# Lightning protection

# Air Rod Base (Tape System)

Used to secure the air rod and the flat tape onto roof ridges.

PART NUMBER	ROD DIA. & THREAD DIA (mm)	MAX CONDUCTOR WIDTH (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17030	15 <del>8</del> 16	25	Copper	0.45



Material: Copper Alloy Standards: IEC/BS EN 62561-1 Class H

# Air Rod Base (Solid Circular System)

Used to secure the air rod and the solid circular conductor onto horizontal or vertical flat surfaces.

PART NUMBER	ROD DIA. & THREAD DIA (mm)	MAX CONDUCTOR DIA (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17040	10 & 10	8	Copper - Horizontal	0.30
ORG17046	10 & 10	8	Copper - Vertical	0.30
ORG17036	10 & 10	8	Aluminium - Horizontal	0.11
ORG17045	10 & 10	8	Aluminium - Vertical	0.11



Material: Copper or Aluminium Alloy

Standards: IEC/BS EN 62561-1 Class H

# Side Mounting Brackets (Tape System)

Used to mount the air rod on a vertical surface to the side of a structure.

PART NUMBER	ROD DIA (mm)	MAX CONDUCTOR WIDTH (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17055	16	25	Copper	0.90
ORG17075	16	25	Aluminium	0.28

Material: Copper or Aluminium Alloy





# Rod to Tape Coupling (Tape System)

Used in conjunction with the side mounting brackets. Connects the coupling to the 25 mm tape.

PART NUMBER	ROD DIA (mm)	THREAD DIA (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17060	15	16	Copper	0.23
ORG17080	15	16	Aluminium	0.08

Material: Copper or Aluminium Alloy



# Strike Plate

Used as an alternative to air rods when the conductor system is embedded or hidden under the building fabric.

PART NUMBER	DESCRIPTION	DIAMETER (mm)	WEIGHT (kg)
ORG18030	Strike Plate Copper	112	0.41
ORG18010	Strike Plate Aluminium	112	0.13

Material: Copper or Aluminium Alloy



37	Fixings
38	FIXING CONDUCTOR CLIPS
51	TEST & JUNCTION CLAMPS



#### Metallic Direct Contact (DC) Clips (Flat System)

Used to fix bare flat copper tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17100	20 x 3	Bare Copper	0.06
ORG17102	25 x 3	Bare Copper	0.07
ORG17103	25 x 4	Bare Copper	0.07
ORG17104	25 x 6	Bare Copper	0.08
ORG17610	31 x 6	Bare Copper	0.10
ORG17105	38 x 3	Bare Copper	0.11
ORG17670	38 x 5	Bare Copper	0.11
ORG17109	38 x 6	Bare Copper	0.12
ORG17112	40 x 4	Bare Copper	0.12
ORG17672	40 x 6	Bare Copper	0.13
ORG17107	50 x 3	Bare Copper	0.14
ORG17111	50 x 4	Bare Copper	0.14
ORG17106	50 x 6	Bare Copper	0.15

Material: Copper Alloy

Standards: IEC/BS EN 62561-4



#### Metallic Direct Contact (DC) Clips (Flat System)

Used to fix PVC covered flat copper tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17108	25 x 3	PVC Copper	0.10
ORG17110	25 x 6	PVC Copper	0.13
ORG17114	50 x 6	PVC Copper	0.26

Material: Copper Alloy

Standards: IEC/BS EN 62561-4



### Metallic Direct Contact (DC) Clips (Flat System)

Used to fix bare flat aluminium tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17118	20 x 3	Bare Aluminium	0.02
ORG17119	25 x 3	Bare Aluminium	0.02
ORG17120	50 x 6	Bare Aluminium	0.05

Material: Aluminium Alloy

Standards: IEC/BS EN 62561-4

Used to fix PVC covered flat aluminium tape to the surface of the structure.

ORG17122 25 x 3 PVC Aluminium 0.04	PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
	ORG17122	25 x 3	PVC Aluminium	0.04

Material: Aluminium Alloy Standards: IEC/BS EN 62561-4

### Non-Metallic Direct Contact (DC) Clips (Flat System)

Used to fix bare flat copper tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17151	20 x 3	Bare Copper	Brown	0.01
ORG17153	25 x 3	Bare Copper	Brown	0.01
ORG17183	38 x 5	Bare Copper	Brown	0.01
ORG17500	50 x 6	Bare Copper	Brown	0.02

Material: Polypropylene UV stabilized

Standards: IEC/BS EN 62561-4

#### Non-Metallic Direct Contact (DC) Clips (Flat System)

Used to fix bare flat aluminium tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17155	20 x 3	Bare Aluminium	Grey	0.01
ORG17157	25 x 3	Bare Aluminium	Grey	0.01

Material: Polypropylene UV stabilized Standards: IEC/BS EN 62561-4



Fixings









### Non-Metallic Direct Contact (DC) Clips (Flat System)

Used to fix PVC covered flat aluminium and copper tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17159	25 x 3	PVC Brown	Brown	0.01
ORG17161	25 x 3	PVC Stone	Stone	0.01
ORG17163	25 x 3	PVC Grey	Grey	0.01
ORG17165	25 x 3	PVC Black	Black	0.01
ORG17167	25 x 3	PVC White	White	0.01
ORG17169	25 x 3	PVC Green	Green	0.01

Material: Polypropylene UV stabilized

Standards: IEC/BS EN 62561-4



#### Metallic Direct Contact Tape Clips (Flat System)

Used to fix bare flat copper tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17124	20 x 3	Bare Copper	0.02
ORG17126	25 x 3	Bare Copper	0.02

Material: Copper



### Metallic Direct Contact Tape Clips (Flat System)

Used to fix PVC covered flat copper tape to the surface of the structure.

<b>ORG17128</b> 25 x 3 PVC Copper 0.02	PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
	ORG17128	25 x 3	PVC Copper	0.02

Material: Copper

### Metallic Direct Contact Tape Clips (Flat System)

Used to fix bare flat aluminium tape to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	WEIGHT (kg)
ORG17130	20 x 3	Bare Aluminium	0.01
ORG17132	25 x 3	Bare Aluminium	0.01

Material: Aluminium

# Non-Metallic Direct Contact (DC) Clip Slate Holdfast (Flat System)

Used to fix bare flat aluminium and copper tape to the surface of the roof tiles without the need for drilling.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17266	25 x 3	Bare Copper	Brown	0.06
ORG17264	25 x 3	Bare Aluminium	Grey	0.06

Material: Polypropylene DC Clip & Aluminium Tape to BS EN 755-5

## Non-Metallic Direct Contact (DC) Clip Slate Holdfast (Flat System)

Used to fix PVC covered flat aluminium and copper tape to the surface of the roof tiles without the need for drilling.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17268	25 x 3	PVC Brown	Brown	0.06
ORG17270	25 x 3	PVC Stone	Stone	0.06
ORG17272	25 x 3	PVC Grey	Grey	0.06
ORG17274	25 x 3	PVC Black	Black	0.06
ORG17276	25 x 3	PVC White	White	0.06

Material: Polypropylene DC Clip & Aluminium Tape to BS EN 755-5







## Self Adhesive Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to fix bare flat aluminium and copper tape to the surface of the roof without the need for drilling.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17224	25 x 3	Bare Copper	Brown	0.03
ORG17222	25 x 3	Bare Aluminium	Grey	0.03

Material: Polypropylene DC Clip & Polycarbonate Base



#### Self Adhesive Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to fix PVC covered flat aluminium and copper tape to the surface of the roof without the need for drilling.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17226	25 x 3	PVC Brown	Brown	0.03
ORG17228	25 x 3	PVC Stone	Stone	0.03
ORG17230	25 x 3	PVC Grey	Grey	0.03
ORG17232	25 x 3	PVC Black	Black	0.03
ORG17234	25 x 3	PVC White	White	0.03

Material: Polypropylene DC Clip & Polycarbonate Base



## Surface Primer For Self Adhesive Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to prepare the surface before applying the self adhesive clip.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG17240	Surface Primer	0.23

Note: COSHH datasheet available on request

## Solvent Weldable Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to fix bare flat aluminium and copper tape to PVC single ply roof membranes without the need for drilling.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17198	25 x 3	Bare Copper	Brown	0.03
ORG17194	25 x 3	Bare Aluminium	Grey	0.03

Material: Polypropylene DC clip & PVC base

## Solvent Weldable Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to fix PVC covered flat aluminium and copper tape to PVC single ply roof membranes without the need for drilling.

PART NUMBER	CONDUCTOR SIZE (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17200	25 x 3	PVC Brown	Brown	0.03
ORG17196	25 x 3	PVC Grey	Grey	0.03
ORG17202	25 x 3	PVC Black	Black	0.03
ORG17204	25 x 3	PVC White	White	0.03

Material: Polypropylene DC Clip & PVC Base

## Cleaning Solvent For Weldable Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to clean and prepare the lacquered roofing membrane surface.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG17205	Cleaning Solvent	0.62

Note: COSHH datasheet available on request









#### Welding Solvent For Weldable Non-Metallic Direct Contact (DC) Tape Clip (Flat System)

Used to solvent weld the PVC disc to the roofing membrane surface.

	WEIGHT (kg)
ORG17206 Welding Solvent	0.57

Note: COSHH datasheet available on request



#### **Mineral Felt Fixing**

Heat applied felt pad for securing flat aluminium and copper tape to bituman type roofs.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG18040	Mineral Felt Pad for 25 x 3 tape	0.03
Material: Mineral	Felt (bitumen)	

Material: Mineral Felt (bitumen)



#### Metallic Square Clamps (Flat System)

Used to fix bare flat copper tape in either a 'cross', 'tee', or 'right angle' connection to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14003	25 x 3	Copper	0.20
ORG14004	25 x 6	Copper	0.40
ORG14015	38 x 6	Copper	0.59
ORG14005	50 x 6	Copper	0.98

Material: Copper Alloy

Standards: IEC/BS EN62561-1 Class H

### Metallic Square Clamps (Flat System)



Used to fix bare flat aluminium tape in either a 'cross', 'tee', or 'right angle' connection to the surface of the structure.

PART NUMBER	CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14013	25 x 3	Aluminium	0.06
ORG14014	25 x 6	Aluminium	0.17

Material: Aluminium Alloy Standards: IEC/BS EN 62561-1 Class H

#### Non-Metallic 'Push-In' Roof Conductor Clips (Solid Circular System)

Used to fix bare solid circular copper or aluminium conductor to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17300	8	Bare Copper	Brown	0.01
ORG17310	8	Bare Aluminium	Grey	0.01
Note: Also suits 5	0 mm sg bare stranded cable			

Material: Polypropylene

### Metallic Conductor Clip Saddles (Solid Circular System)

Used to fix bare solid circular copper or aluminium conductor to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	MATERIALS	WEIGHT (kg)
ORG17135	8	Bare Aluminium	0.03
ORG17137	8	Bare Copper	0.09
Note: Also suits 50 r	nm sq bare stranded cable		

Material: Aluminium or Copper Alloy

#### Metallic Conductor Clip Saddles (Solid Circular System)

Used to fix PVC covered solid circular copper or aluminium conductor to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	MATERIALS	WEIGHT (kg)
ORG17143	10	PVC Aluminium	0.04
ORG17145	10	PVC Copper	0.10
Note: Also suits 70	mm sq bare stranded cable		

Material: Aluminium or Copper Alloy





Fixings



#### Non-Metallic 'Push-In' Roof Conductor Clips (Solid Circular System)

Used to fix PVC covered solid circular copper or aluminium conductor to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17320	10	PVC Copper or Aluminium	Brown	0.01
ORG17330	10	PVC Copper or Aluminium	Stone	0.01
ORG17340	10	PVC Copper or Aluminium	Grey	0.01
ORG17350	10	PVC Copper or Aluminium	Black	0.01
ORG17360	10	PVC Copper or Aluminium	White	0.01
NU 1 AL 11 TO				

Note: Also suits 70 mm sq bare stranded cable

Material: Polypropylene

#### Non-Metallic 'Butterfly' Down Conductor Clips (Solid Circular System)

Used to fix bare solid circular copper or aluminium conductor to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17380	8	Bare Copper	Brown	0.01
ORG17370	8	Bare Aluminium	Grey	0.01
Note: Also suits 50 mm sq bare stranded cable				

Material: Polypropylene



#### Non-Metallic 'Butterfly' Down Conductor Clips (Solid Circular System)

Used to fix PVC covered solid circular copper or aluminium conductor to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17390	10	PVC Copper or Aluminium	Grey PVC	0.01
ORG17400	10	PVC Copper or Aluminium	Brown PVC	0.01
ORG17410	10	PVC Copper or Aluminium	Stone PVC	0.01
ORG17420	10	PVC Copper or Aluminium	Black PVC	0.01
ORG17430	10	PVC Copper or Aluminium	White PVC	0.01

Note: Also suits 70 mm sq bare stranded cable

Material: Polypropylene

#### Non-Metallic 'Push-In' Slate Holdfast (Solid Circular System)

Used to fix bare solid circular copper or aluminium conductor to the surface of the roof tiles without the need for drilling.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)	
ORG17250	8	Bare Aluminium	Grey	0.03	
ORG17252	8	Bare Copper	Brown	0.03	
Note: Also suits 5	Note: Also suits 50 mm sg bare stranded cable				

Material: Polypropylene Clip & Aluminium Tape to BS EN 755-5

#### Non-Metallic 'Push-In' Slate Holdfast (Solid Circular System)

Used to fix PVC covered solid circular copper or aluminium conductor to the surface of the roof tiles without the need for drilling.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17254	10	PVC Brown	Brown	0.03
ORG17258	10	PVC Grey	Grey	0.03
ORG17259	10	PVC Stone	Stone	0.03
ORG17260	10	PVC Black	Black	0.03
ORG17261	10	PVC White	White	0.03

Note: Also suits 70 mm sq bare stranded cable

Material: Polypropylene Clip & Aluminium Tape to BS EN 755-5

## Self Adhesive Non-Metallic 'Push-In' Roof Conductor Clips (Solid Circular System)

Used to fix bare solid circular copper or aluminium conductor to the surface of the roof without the need for drilling.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17208	8	Bare Aluminium	Grey	0.02
ORG17210	8	Bare Copper	Brown	0.02
Note: Also suits 50 mm sq bare stranded cable				

Material: Polypropylene Clip & Polycarbonate Base





## Self Adhesive Non-Metallic 'Push-In' Roof Conductor Clips (Solid Circular System)

Used to fix PVC covered solid circular copper or aluminium conductor to the surface of the roof without the need for drilling.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)	
ORG17212	10	PVC Brown	Brown	0.02	
ORG17213	10	PVC Black	Black	0.02	
ORG17216	10	PVC Grey	Grey	0.02	
ORG17228	10	PVC Stone	Stone	0.02	
ORG17234	10	PVC White	White	0.02	
Note: Also suits 70 mm sq bare stranded cable					

Material: Polypropylene Clip & Polycarbonate Base



#### Surface Primer For Self Adhesive Non-Metallic 'Push-In' Conductor Clips (Solid Circular System)

Used to prepare the surface before applying the self adhesive clip.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG17240	Surface Primer	0.23

Note: COSHH datasheet available on request



#### Solvent Weldable Non-Metallic 'Push-In' Roof Conductor Clips (Solid Circular System)

Used to fix bare solid circular aluminium or copper conductor to PVC single ply roof membranes without the need for drilling.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17186	8	Bare Aluminium	Grey	0.02
ORG17190	8	Bare Copper	Brown	0.02
Note: Also suits 50 mm sq bare stranded cable				

Material: Polypropylene Clip & PVC Base

#### Solvent Weldable Non-Metallic 'Push-In' Roof Conductor Clips (Solid Circular System)

Used to fix PVC covered solid circular aluminium or copper conductor to PVC single ply roof membranes without the need for drilling.

PART NUMBER	CONDUCTOR DIA. (mm)	CONDUCTOR MATERIAL	COLOUR	WEIGHT (kg)
ORG17188	10	PVC Grey	Grey	0.02
ORG17192	10	PVC Brown	Brown	0.02
Note: Also suits 70 mm sq bare stranded cable				

Material: Polypropylene Clip & PVC Base

### Cleaning Solvent For Weldable Non-Metallic 'Push-In' Conductor Clips (Solid Circular System)

Used to clean and prepare the lacquered roofing membrane surface.

		WEIGHT (kg)
ORG17205 Cleaning S	Solvent	0.62

Note: COSHH datasheet available on request

#### Welding Solvent For Weldable Non-Metallic 'Push-In' Conductor Clips (Solid Circular System)

Used to solvent weld the PVC disc to the roofing membrane surface.

PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG17206	Welding Solvent	0.57

Note: COSHH datasheet available on request













### Metallic Square Clamps (Solid Circular System)

Used to fix bare solid circular conductor in either a 'cross', 'tee', or 'right angle' connection to the surface of the structure.

PART NUMBER	CONDUCTOR DIA. (mm)	MATERIALS	WEIGHT (kg)	
ORG14021	8	Copper	0.17	
ORG14025	8	Aluminium	0.07	
Materials Copper or Aluminium Alley				

Material: Copper or Aluminium Alloy Standards: IEC/BS EN 62561-1



#### Metallic Tee Clamps (Solid Circular System)

Used to fix bare solid circular conductor in either a 'T' connection. i.e roof conductor to the down conductor.

PART NUMBER	CONDUCTOR DIA. (mm)	MATERIALS	WEIGHT (kg)
ORG14042	8	Aluminium	0.07
ORG14044	8	Copper	0.18

Material: Copper or Aluminium Alloy Standards: IEC/BS EN 62561-1



#### Metallic Jointing Clamps (Solid Circular System)

Used to fix bare solid circular conductor in either a straight connection. i.e roof conductor to the down conductor.

PART NUMBER	CONDUCTOR DIA. (mm)	MATERIALS	WEIGHT (kg)
ORG14043	8	Aluminium	0.08
ORG14045	8	Copper	0.18

Material: Copper or Aluminium Alloy Standards: IEC/BS EN 62561-1

Used for connecting straight through overlapping flat bare copper tapes.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14030	26 x 8	Copper	0.29
Material: Copper Alloy			

Standards: IEC/BS EN 62561-1 Class H

#### Oblong Test and Junction Clamp

Used for connecting straight through overlapping flat bare aluminium tapes.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14033	26 x 8	Aluminium	0.12
Material: Aluminium Alloy			

Standards: IEC/BS EN 62561-1 Class H

### Plate Type Test and Junction Clamp

Used to form a disconnecting test joint between the earthing and lightning protection systems flat copper tape.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14031	26 x 12	Copper	0.62
Material: Copper Alloy			

Standards: IEC/BS EN 62561-1 Class H

### Screw Down Test and Junction Clamp

Used to form a disconnecting test joint between the earthing and lightning protection systems using bare flat copper tape.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14032	26 x 8	Copper	0.84

Material: Copper Alloy

Standards: IEC/BS EN 62561-1 Class H











#### **Bi-metallic Test Connector**

Used to connect aluminium flat tape to copper flat tape without the risk of corrosion between dissimilar metals.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIAL	WEIGHT (kg)
ORG14034	25 x 3	Copper/Aluminium	0.19
ORG14037	25 x 3	Stainless Steel	0.18

Material: Copper/Aluminium Friction Weld or Stainless Steel Standards: IEC/BS EN 62561-1 Class H



#### 'B' Bond

Used to connect flat aluminium or copper tapes to flat metal sufaces for bonding purposes.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14001	25 x 6	Copper	0.12
ORG14010	25 x 6	Aluminium	0.6

Material: Copper Alloy or Aluminium Alloy Standards: IEC/BS EN 62561-1 Class H

#### Rain Water Pipe Bond

Used to connect flat aluminium or copper tapes to round metal surfaces for bonding purposes.

PART NUMBER	MAXIMUM CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14002	25 x 6	Copper	0.18
ORG14011	25 x 6	Aluminium	0.08

Material: Copper Alloy or Aluminium Alloy Standards: IEC/BS EN 62561-1 Class H Used for connecting straight through bare solid circular conductor and flat tape.

PART NUMBER	CONDUCTOR SIZE. (mm)	MATERIALS	WEIGHT (kg)
ORG14046	8 to 8 or 8 to 25 x 3	Copper	0.24
ORG14048	8 to 8 or 8 to 25 x 3	Aluminium	0.10

Material: Copper or Aluminium Alloy Standards: IEC/BS EN 62561-1

#### **Bi-metallic Test Connector**

Used to connect aluminium solid circular conductor to copper soild circular conductor and flat tape without the risk of corrosion between dissimilar metals.

PART NUMBER	CONDUCTOR SIZE (mm)	MATERIALS	WEIGHT (kg)
ORG14035	8	Copper/Aluminium	0.25
ORG14036	8 to 25 x 3	Copper/Aluminium	0.20
ORG14040	8	Stainless Steel	0.20
ORG71014	8 to 25 x 3	Stainless Steel	0.20

Material: Copper/Aluminium Friction Weld or Stainless Steel Standards: IEC/BS EN 62561-1 Class H

#### Pipe Bond

Used to connect bare aluminium or copper solid circular conductor to round metal surfaces for bonding purposes.

PART NUMBER	CONDUCTOR SIZE. (mm)	MATERIALS	WEIGHT (kg)
ORG14020	8	Copper	0.46
ORG14024	8	Aluminium	0.25

**Material:** Copper Alloy & Perforated Copper Tape or Aluminium Alloy & Perforated Stainless Steel Tape **Standards:** IEC/BS EN 62561-1 Class H, BS 7430

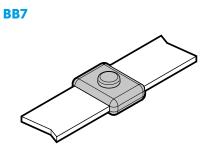


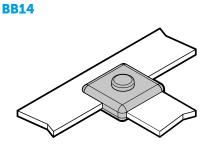
## Exothermic welding

Exothermic welds are available for almost every type and orientation of joint or connection.

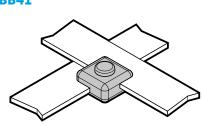
Examples of popular types are shown below.

Should you require any further information or wish to discuss your immediate product needs, please contact our sales office.

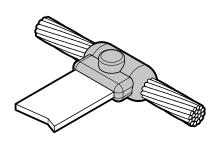




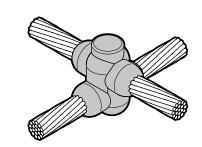
BB41



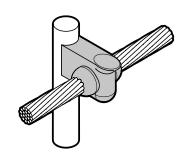
CB5



CC11



CR3



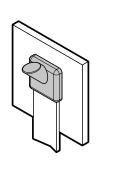


0115 877 6666 www.omegaredgroup.com

BS1

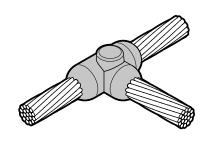
CC1

BR1

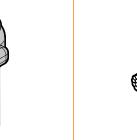


CC2

CB4



CR1



## Accessories & miscellaneous

55

Accessories & miscellaneous



#### Glazing Bar Holdfasts

Used for connecting to thin metallic sections and can be used with Omega DC Clips or cable saddles.

PART NUMBER	DESCRIPTION	MATERIALS	WEIGHT (kg)
ORG18005	Glazing Bar Holdfast	Aluminium	0.05
ORG18025	Glazing Bar Holdfast	Copper	0.11

Material: Aluminium Alloy or Copper Alloy



### Pyramid Type Holdfast

Used on the roof to hold the conductors away from the building surface.

PART NUMBER	CONDUCTOR SIZE. (mm)	MATERIALS	WEIGHT (kg)
ORG17263	8 mm	Copper or Aluminium	1.00
Material: Diastia () (			

Material: Plastic & Concrete



#### Puddle Flange

Used to to connect the lightning conductor to the flange allowing the conductor to pass through roofs without damaging the waterproofing.

PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT (kg)
ORG18001	Puddle Flange	Aluminium	0.50
ORG18021	Puddle Flange	Copper	1.54

Material: Aluminium or Copper

### Compression Cable Lugs

Used for crimping cables and connecting to earth bars, metallic earth bosses etc.

PART NUMBER	CONDUCTOR SIZE MM SQ	FIXING/HOLE SIZE	WEIGHT (kg)
ORG19605	25	6	0.01
ORG19606	25	8	0.01
ORG19607	25	10	0.01
ORG19608	25	12	0.01
ORG19625	35	6	0.01
ORG19626	35	8	0.01
ORG19627	35	10	0.01
ORG19628	35	12	0.01
ORG19635	50	6	0.02
ORG19636	50	8	0.02
ORG19637	50	10	0.02
ORG19638	50	12	0.02
ORG19646	70	8	0.04
ORG19647	70	10	0.04
ORG19648	70	12	0.04
ORG19649	70	14	0.04
ORG19650	70	16	0.04
ORG19656	95	8	0.06
ORG19657	95	10	0.06
ORG19658	95	12	0.06
ORG19659	95	14	0.06
ORG19660	95	16	0.06
ORG19666	120	8	0.06
ORG19667	120	10	0.06
ORG19668	120	12	0.06
ORG19669	120	14	0.06
ORG19670	120	16	0.06
ORG19799	150	10	0.09
ORG19801	150	12	0.09
ORG19700	185	10	0.11
ORG19710	185	12	0.11
ORG19715	185	14	0.11
ORG19720	185	16	0.11
ORG19675	240	10	0.14
ORG19676	240	12	0.14
ORG19677	240	14	0.14
ORG19680	300	10	0.17
ORG19690	300	12	0.17
ORG19691	300	14	0.17

Note: Various other sizes available please call our Sales Team

Material: Tinned plated electrolytic copper

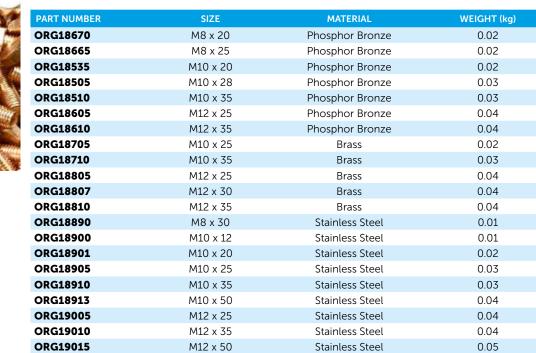
Standards: BS EN 12449



## Accessories & miscellaneous

### Fixings and Fastenings

#### **Hexagon Head Setscrews**





#### Flat Washers

PART NUMBER	SIZE	MATERIAL	WEIGHT (kg)
ORG18660	8	Phosphor Bronze	0.01
ORG18520	10	Phosphor Bronze	0.01
ORG18620	12	Phosphor Bronze	0.01
ORG19120	8	Brass	0.01
ORG18720	10	Brass	0.01
ORG18820	12	Brass	0.01
ORG18920	10	Stainless Steel	0.01
ORG19020	12	Stainless Steel	0.01

MATERIAL

Phosphor Bronze

Phosphor Bronze

Stainless Steel

Stainless Steel

SIZE

10

12

10

12





#### ORG19025 Full Nuts

**Spring Washers** 

PART NUMBER

ORG18525

ORG18625

ORG18925

PART NUMBER	SIZE	MATERIAL	WEIGHT (kg)
ORG18530	10	Phosphor Bronze	0.01
ORG18630	12	Phosphor Bronze	0.02
ORG18730	10	Brass	0.01
ORG18830	12	Brass	0.02
ORG18930	10	Stainless Steel	0.01
ORG19030	12	Stainless Steel	0.02

WEIGHT (kg)

0.01

0.01

0.01

0.01

## Accessories & miscellaneous

### Miscellaneous Items

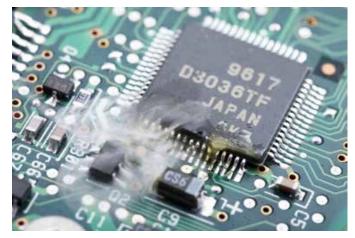
PART NUMBER	DESCRIPTION	WEIGHT (kg)
ORG14125	Oxide Inhibiting Paste (8 oz)	0.23
ORG18039	Galvanised Spray Zinc Based	0.50
ORG18042	Tinning Solder	0.52
ORG18060	Gripfill Adhesive	0.30
ORG18374	Denso Tape (50 mm x 10 mtr approx)	0.76
ORG18392	Anti Vandal Paint	5 ltr
ORG19321	Silfos Brazing Foil (50 mm x 0.12 mm x 8 mtr approx)	0.50
ORG18049	Cable Cleat 150mm <sup>2</sup>	0.03
ORG18051	Cable Cleat 185mm <sup>2</sup>	0.03
ORG18052	Cable Cleat 240mm <sup>2</sup>	0.04
ORG18053	Cable Cleat 300mm <sup>2</sup>	0.04
ORG18055	Cable Cleat 50mm <sup>2</sup>	0.01
ORG18050	Cable Cleat 70mm <sup>2</sup>	0.02
ORG18047	Cable Cleat 95mm <sup>2</sup>	0.02
ORG18370	Insulating Tape Green-Yellow 25mm X 33m	0.14
ORG19400	Insulating Tape Brown 19mm X 33m	0.12
ORG19410	Insulating Tape Green 19mm X 33m	0.12
ORG19420	Insulating Tape White 19mm X 33m	0.12
ORG19430	Insulating Tape Black 19mm X 33m	0.12







### Surge protection



#### What are transient over voltages?

Transient overvoltages are high magnitude voltage peaks of only micro seconds duration, also known as surges. Direct and indirect lightning strikes are the most common source, but they are also created with the switching of large inductive or capacitive electrical loads within buildings.

### What are the risks from transient over voltages?

Transient overvoltages cause damage to electrical systems and equipment and disrupt critical and operational services, resulting in expensive downtime and repair costs. Measured against the potential losses, to business operation or the provision of essential services, the need for protection against transient overvoltages become clear.



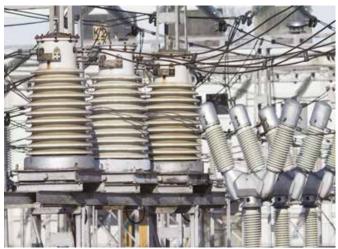


#### **Reducing the risks**

Surge protection devices (SPDs) are divided into two basic types and each performs a critical function.

Lightning current SPDs are designed to prevent partial lightning currents from entering a structure during lightning activity. They should be installed on all cables entering or leaving a building, either where a structural lightning protection system is installed, or where a building is supplied via overhead cables. Cable entry and exit locations can be at ground, side and roof levels.

Transient overvoltage SPDs are designed to reduce the risk of damage to electrical systems and equipment, from the secondary effects of lightning and switching transients. They should be installed locally to protect critical electrical and electronic equipment or, where cables enter or leave a building when there is no structural lightning protection.



### Surge protection

#### Solution

For outstanding protection against transient overvoltages, Omega Red can supply all of your surge protection requirements, as all of our products we offer are sourced directly from the leading recognised manufacturers. SPDs from Omega Red offer a cost effective and more importantly a best engineered solution. Compliance with the latest BS EN 62305 standard can achieved where they are installed as part of a lightning protection system. Being virtually maintenance free, and with repeated protection built in as standard, all SPDs from Omega Red offer the best choice to achieve long lasting, cost effective protection against transient overvoltages.



Please contact our Nottingham office for more information.



### Index

DESCRIPTION	PAGE NUMBER
Air Rods	34
Air Rod Base (Solid Circular System)	35
Air Rod Base (Tape System)	34/35
Anti Vandal Conductor Guard	32
B' Bond	52
Bare Flat Aluminium Tape	30
Bare Flat Copper Tape	26
Bare Soft Drawn Stranded Copper Cable	29
Bare Solid Circular Aluminium Conductor	31
Bare Solid Circular Copper Conductor	29
Bi-metallic Test Connector	52/53
Cleaning Solvent For Non-Metallic 'Push In" Conductor Clips (Solid Circular System)	49
Cleaning Solvent For Weldable Non-Metallic Direct Contact (DC) Clips (Flat System)	43
Cleaning Solvent For Weldable Non-Metallic 'Push In" Conductor Clips (Solid Circular System)	49
Compression Cable Lugs	57
Concrete Inspection Pit	20
Copperbond Earth Rod	14
Copper Lattice Earth Mats	16
Driving Studs	14
Earth Bars	23
Earth Boss	22
Earth Points	21
Earth Points with Pre Welded Cable	21
Exothermic Welding	54
Fixings and Fastenings	58
Flexible Copper Braid Bonds	22
Flexible Flat Bare Copper Braid	28
Flexible Flat Tinned Copper Braid	28
Flexible Tinned Copper Braid Bonds	22
Glazing Bar Holdfasts	56
Hard Drawn Bare Copper Bar	28
Heavy Duty Lightweight Inspection Pit	20
Insulators & Accessories	23
Lead Covered Flat Copper Tape	27
LSZH Covered Flat Copper Tape	27
Metallic Conductor Clip Saddles (Solid Circular System)	45
Metallic Direct Contact (DC) Clips (Flat System)	38/39
Metallic Direct Contact Tape Clips (Flat System)	40/41
Metallic Jointing Clamps (Solid Circular System)	50
Metallic Square Clamps (Flat System)	44
Metallic Square Clamps (Solid Circular System)	50
Metallic Tee Clamps (Solid Circular System)	50
Mineral Felt Fixing	44
Miscellaneous Items	59
Multi Point Head	33
Non-Metallic 'Butterfly" Down Conductor Clips (Solid Circular System)	46
Non-Metallic Direct Contact (DC) Clips (Flat System)	39/40
	55740

### Index

DESCRIPTION	PAGE NUMBER
Non-Metallic Direct Contact (DC) Clip Slate Holdfast (Flat System)	41
Non-Metallic 'Push In' Roof Conductor Clips (Solid Circular System)	45/46
Non-Metallic 'Push In' Slate Holdfast (Solid Circular System)	47
Oblong Test and Junction Clamp	51
LSZH Green/Yellow Soft Drawn Stranded Copper Cable	30
Pipe Bond	53
Plate Type Test and Junction Clamp	51
Puddle Flange	56
PVC Covered Flat Copper Tape	27
PVC Flat Aluminium Tape	31
PVC Green/Yellow Soft Drawn Stranded Copper Cable	30
PVC Solid Circular Aluminium Conductor	31
PVC Solid Circular Copper Conductor	29
Pyramid Type Holdfast	56
Rain Water Pipe Bond	52
Rebar to Rebar Connecting Clamps	19
Rod to Cable Clamp (Type G)	17
Rod to Cable Clamp (Type GUV)	18
Rod to Cable Lug Clamp (Type B)	17
Rod to Tape Clamp (Type A)	17
Rod to Tape Coupling (Tape System)	36
Screw Down Test and Junction Clamp	51
Self Adhesive Non-Metallic Direct Contact (DC) Clips (Flat System)	42
Self Adhesive Non-Metallic 'Push In' Roof Conductor Clips (Solid Circular System)	47/48
Side Mounting Brackets (Tape System)	35
Soil Conditioning Backfill Materials	20/21
Solid Copper Earth Plates	16
Solid Copper Earth Rods	15
Solid Copper Earth Rods Fittings	15
Solid Stainless Steel Earth Rods	15
Solid Stainless Steel Earth Rods Fittings	16
Solvent Weldable Non-Metallic Direct Contact (DC) Clips (Flat System)	43
Solvent Weldable Non-Metallic 'Push In" Conductor Clips (Solid Circular System)	48/49
Strike Plate	36
Surface Primer For Self Adhesive Non-Metallic Direct Contact (DC) Clips (Flat System)	42
Surface Primer For Self Adhesive Non-Metallic 'Push In" Conductor Clips (Solid Circular System)	48
Test and Junction Clamp	53
Threaded Couplings	14
Tinned Flat Copper Tape	26
U-Bolt (Type E)	18
Welding Solvent Non-Metallic Direct Contact (DC) Clips (Flat System)	44
Welding Solvent For Weldable Non-Metallic 'Push In' Conductor Clips (Solid Circular System)	49



Service, Safety, Security **Earthing and Lightning protection** Call Omega now on **0115 877 4444** 

### **Omega Red Group Ltd**

#### Nottingham Regional Office

Dabell Avenue, Blenheim Industrial Estate, Bulwell, Nottingham NG6 8WA T: 0115 877 2222 F: 0115 876 7722 E: enquiries@omegaredgroup.com

#### London Regional Office

Unit 10, Prospect Way, Hutton Industrial Estate, Brentwood, Essex CM13 1XA T: 01277 260469 F: 01277 203542 E: enquiries@omegaredgroup.com

#### **Edinburgh Regional Office**

Unit 10 B2, Brewster Square, Brucefield Industry Park, Livingston EH54 9BJ T: 01506 464 620 F: 01506 461 382 E: enquiries@omegaredgroup.com

#### Manchester Regional Office

Unit 1B, Ashburton Park, Wheel Forge Way, Off Ashburton Road West, Trafford Park, Manchester M17 1EH T: 0161 877 9881 F: 0161 877 9882 E: enquiries@omegaredgroup.com

#### **Bristol Regional Office**

Unit 7, Eagles Wood Business Park, Woodlands Lane, Bradley Stoke, Bristol, BS32 4EU T: 0117 938 1112 F: 0117 938 1522 E: enquiries@omegaredgroup.com

#### **Nottingham Head Office**

Dabell Avenue, Blenheim Industrial Estate, Bulwell, Nottingham NG6 8WA T: 0115 877 6666 F: 0115 876 7766

### www.omegaredgroup.com