



EARTHING & LIGHTNING PROTECTION

COPPER BONDED GROUNDING ROD

“HEX” copper bonded earth rod are made from low carbon steel of grade BS 970 or AISI 1018 with a high tensile strength of atleast 600 N/mm². Low carbon steel core are molecularly bonded with 99.9% pure electrolytic copper.

Salient Features :

- Perfectly bonded rod will last longer, drive easier and will not crack.
- Corrosion resistance while providing the lowest resistance to ground.
- Threads are rolled by roll threading process, which ensures that an even copper covering is maintained, even at the root of the thread. Roll thread gives greater strength than cut thread.
- Thread rolling process raises the surface of the rod, so that Thread dia. (T) is greater than Shank dia. (S).

DIMENSIONS ROD SIZE (DIA x LENGTH)	ACTUAL ROD DIA. 'S' in MM	THREAD DIA. 'T' in MM	PROD. CODE
9.5 x 1200 (UN-THREADED)	9.5	-	HBR - 012
9.5 x 1800 (UN-THREADED)	9.5	-	HBR - 018
14 x 1200	12	14	HBR - 1412
14 x 1500	12	14	HBR - 1415
14 x 1800	12	14	HBR - 1418
14 x 2000	12	14	HBR - 1420
14 x 2400	12	14	HBR - 1424
5/8" x 4'or 16 mm x 1200	14.2	5/8"	HBR - 112
5/8" x 5'or 16 mm x 1500	14.2	5/8"	HBR - 115
5/8" x 6'or 16 mm x 1800	14.2	5/8"	HBR - 118
5/8" x 8'or 16 mm x 2400	14.2	5/8"	HBR - 124
5/8" x 10'or 16 mm x 3000	14.2	5/8"	HBR - 130
5/8" x 4'or 16 mm x 1200	16	5/8"	HBR - 312
5/8" x 5'or 16 mm x 1500	16	5/8"	HBR - 315
5/8" x 6'or 16 mm x 1800	16	5/8"	HBR - 318
3/4" x 4'or 19 mm x 1200	17.2	3/4"	HBR - 212
3/4" x 5'or 19 mm x 1500	17.2	3/4"	HBR - 215
3/4" x 6'or 19 mm x 1800	17.2	3/4"	HBR - 218
3/4" x 8'or 19 mm x 2400	17.2	3/4"	HBR - 224
3/4" x 10'or 19 mm x 3000	17.2	3/4"	HBR - 230

- HEX, also offers other sizes as per customer specification.

EARTH ROD - ACCESSORIES

DRIVING STUD

Mtl. : High Tensile Steel

These are used to drive the Earth Rod to the Ground.

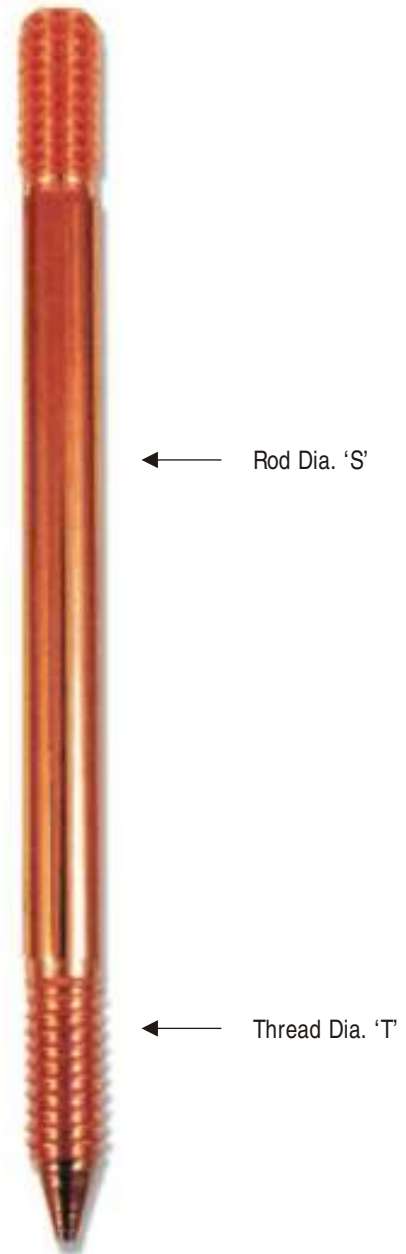
Size (mm)	Prod. Code
14 mm	HDS - 14
5/8" or 16 mm	HDS - 16
3/4" or 19 mm	HDS - 19
1/2"	HDS - 12

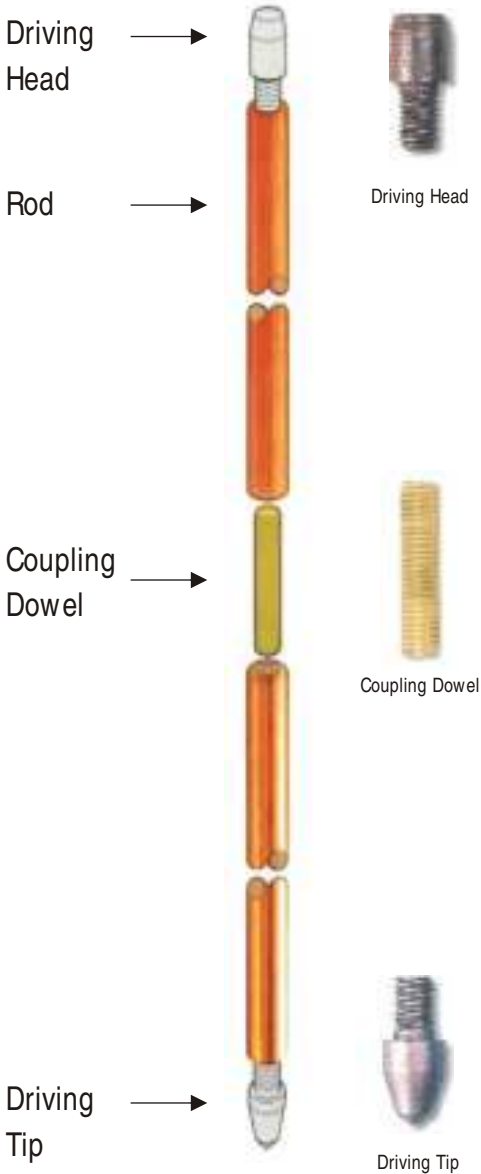
COUPLER

Mtl. : Copper Alloys

Couplers are counter bored to completely enclose threads & protect from damage and

Size mm	Prod. Code Brass	Prod. Code Al. Bronze	Prod. Code Gunmetal
14	HEC - 14	HEC - 15	HEC - 15G
16 or 5/8"	HEC - 16	HEC - 17	HEC - 17G
19 or 3/4"	HEC - 19	HEC - 20	HEC - 20G





SOLID COPPER GROUNDING ROD

“HEX” solid copper earth rod are made from 99.9% pure electrolytic copper. Solid copper rods offers greater resistance to corrosion. They are ideally used in applications where soil conditions are very aggressive, for eg. soil with high salt content.

DIMENSION	ROD DIA.	Length	PROD. CODE
16 x 1200 or 4'	15 mm	1200 mm or 4'	HSC - 512
16 x 1500 or 5'	15 mm	1500 mm or 5'	HSC - 515
20 x 1200 or 6'	20 mm	1200 mm or 4'	HSC - 520
16 x 1500 or 5'	20 mm	1500 mm or 5'	HSC - 521

SOLID COPPER EARTH ROD - ACCESSORIES

SIZE	ITEM	PROD. CODE
15 mm	Driving Head	HDH - 15
20 mm	Driving Head	HDH - 20
15 mm	Coupling Dowell	HCD - 15
20 mm	Coupling Dowell	HCD - 20
15 mm	Driving Tip	HDT - 15
20 mm	Driving Tip	HDT - 20

MECHANICALLY CLADED / COATED COPPER GROUNDING ROD

Mechanically cladded copper coated grounding rod is made when electrolytic grade 99.9% copper tube with wall thickness of 0.25 (250 microns) is cladded to a low carbon steel rod.

Rod Size “S”	Length	Prod Code.
12	1200 (4 ft)	HCR - 1412
	1800 (6 ft)	HCR - 1418
	2400 (8 ft)	HCR - 1424
14	1200 (4 ft)	HCR - 112
	1800 (6 ft)	HCR - 118
	2400 (8 ft)	HCR - 124
16	1200 (4 ft)	HCR - 312
	1800 (6 ft)	HCR - 318
	2400 (8 ft)	HCR - 324
	3000 (10 ft)	HCR - 330
19	1200 (4 ft)	HCR - 412
	1800 (6 ft)	HCR - 418
	2400 (8 ft)	HCR - 424
	3000 (10 ft)	HCR - 430

This rod can also be supplied with threading and can be made as per customer specification.

STAINLESS STEEL GROUND ROD

“HEX” stainless steel ground rods are used to overcome many of the problems caused by galvanic corrosion which can take place between dissimilar metals buried in close proximity. Other advantages of stainless steel rod are that they are highly resistant to corrosion and are much more anodic than copper.



DIAMETER		LENGTH		PKG.	WEIGHT UNIT (KG)	PROD. CODE
INCHES	MM	FEET	M			
5/8"	14.2	5'	1.50	10	2,05	HSS - 145
5/8"	14.2	8'	2.44	10	3,28	HSS - 148
5/8"	14.2	10'	3.05	10	4,10	HSS - 1410
3/4"	17.2	5'	1.50	5	2,75	HSS - 175
3/4"	17.2	10'	3.05	5	5,50	HSS - 1710
1.0"	23.1	10'	3.05	1	10,23	HSS - 2410

EARTH PLATE

Solid Copper Earth Plate

Mtl : Electrolytic Copper

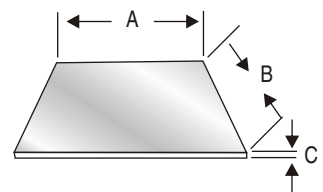


SIZE (A x B x C)	PROD. CODE
600 x 600 x 1.5	HSCP - 615
600 x 600 x 3	HSCP - 63
600 x 600 x 5	HSCP - 65
500 x 500 x 3	HSCP - 53
500 x 500 x 3	HSCP - 55
900 x 900 x 3	HSCP - 93
900 x 900 x 5	HSCP - 95
1000 x 1000 x 3	HSCP - 103
1000 x 1000 x 5	HSCP - 105

Copper Bonded Earth Plate

Mtl : Steel

SIZE (A x B x C)	PROD. CODE
600 x 600 x 1.5	HBP - 615
500 x 500 x 1.5	HBP - 515
600 x 600 x 3	HBP - 63
900 x 900 x 3	HBP - 93
500 x 500 x 3	HBP - 53



PLASTIC EARTH PIT / HOUSING

This 'HEX' Earth housing pit is manufactured from heavy high-grade polypropylene for high strength & stress levels to absorb a maximum load of 2000 kg. Stabilised against degradation by non-brittle and by sunlight to prevent cold weather damage. The lightweight feature allows easy handling, storage and transportation, thus increasing installation efficiency. Termination area is increased by 100% due to simple locking of two units together, allowing deeper earth electrode connections to be made and reducing the effects from harmful voltage gradients.



COPPER ALLOY CLAMPS

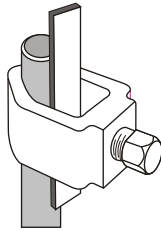
These clamps are made from copper alloy body which gives strong resistance to corrosion. HEX offers following range of clamps :-

Clamp - A type

Suitable for Rod dia. 12 mm

Material : Brass with MS fastener

PROD. CODE : HAC - 1



Rod to Tape Clamp - B type

Size	Max Cond.	Prod. Code
5/8"	26 x 12	HBC - 1
5/8"	40 x 12	HBC - 2
5/8"	51 x 12	HBC - 3

Also available in Gunmetal.

Please add G to Prod. Code (Ex. HBC-1 G for HBC-1)

Rod to Cable Clamp - C type

Size	Max Cond.	Prod. Code
3/8"/9.5	35mm ²	HCC - 1
5/8"/16	50mm ²	HCC - 2
5/8"/16	70mm ²	HCC - 3
3/4"/20	95mm ²	HCC - 4

Also available in Gunmetal.

Please add G to Prod. Code (Ex. HCC-1 G for HCC-1)

Rod to Cable Lug Clamp - D type

Rod Dia.	Prod. Code
3/8"/9.5	HDC - 1
5/8"/16	HDC - 2
3/4"/20	HDC - 4

Brass Cable Clip

Used for connecting 13mm rod to a cable range of 6 - 16mm²

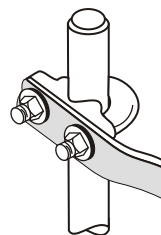
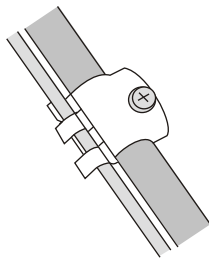
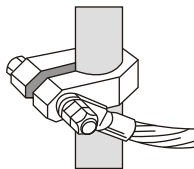
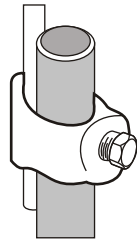
PROD. CODE : HBCC - 1

U Bolt - Rod Clamp

These are made from Copper with Gunmetal plate.

They can be supplied for all rods from 5/8" to 1" and Copper Tape

Nom. Rod	Hole Centres	Prod. Code
5/8'	37 mm	HUU - 16
3/4'	37 mm	HUU - 20
1'	37 mm	HUU - 25

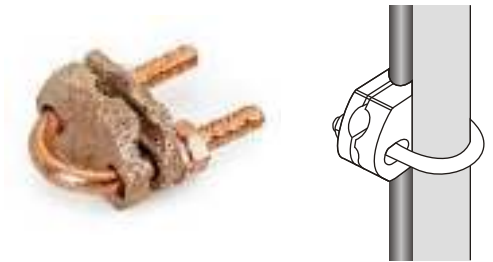


COPPER ALLOY CLAMPS

U Bolt - Rod to Cable Clamp

These are made from Copper with Gunmetal plate.
These are used for Connecting Rod to Cable.
Available with different Rod & Cable size.

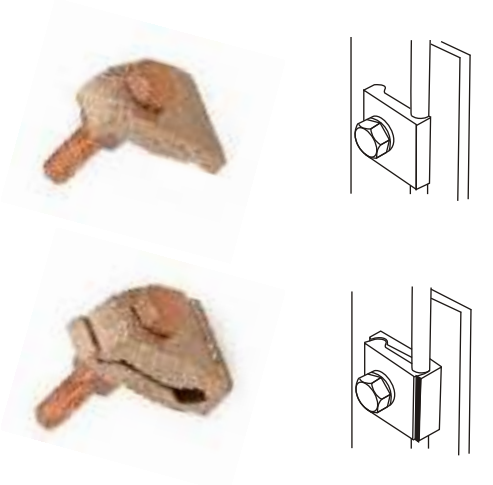
Nominal Rod Dia. to cable dia.	Conductor Range mm ²	Prod. Code
5/8" to 16 mm	16 - 95	HURC - 1
3/4" to 20 mm	16 - 70	HURC - 2
1" to 16 mm	70 - 185	HURC - 3
5/8" to 20 mm	70 - 150	HURC - 4



Tower Bond Clamp

Mtl - Gunmetal
These are suitable for bonding copper cable or wire to steel structures.

Cond. Size mm ²		Channel Thickness mm	Bolt	Prod. Code
Min.	Max.			
16	70	10	M10	HTB - 16
70	120	10	M12	HTB - 70
25	50	10	M10	HTB - 25
25	50	10	M10	HTB - 25A

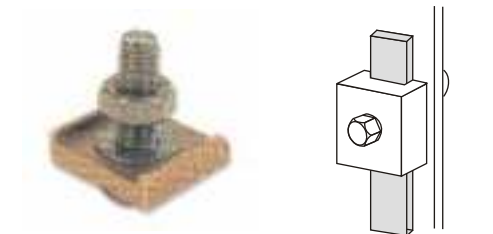


BONDS

Tower Bond Clamp

Mtl - Gunmetal
These are used for bonding tape to steel structures.

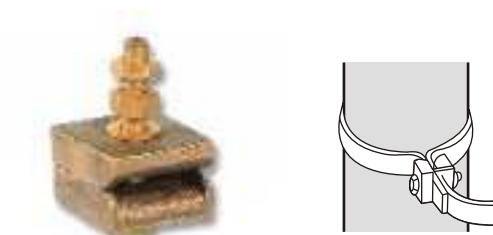
Max. Tape Width mm	Bolt Size	Prod. Code
26	M 10	HB - 26



Rain Water Pipe Bond

Mtl - Gunmetal
These are suitable for bonding tape to Rain Water Pipes, Handrails etc.

Max. Tape Width mm	Bolt Size	Prod. Code
26	M 10	HRW - 26

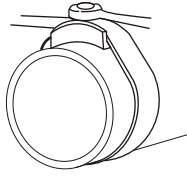


BONDS

Watermain Bond

Mtl - Gunmetal

These are used for bonding copper tape to Watermain pipes.

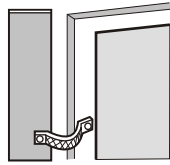


Max. Tape Width mm	Conductor Material	Prod. Code
26	Copper	HWMB - 26

Flexible Braid Bond

Mtl - Copper

Copper Flexible Braids are used for bonding gates, doors, fences etc.



Size mm	Cross Section area	Hole Size mm	Hole Centre mm	Prod. Code
25 x 3.5	35 mm ²	11	200	HFB - 252
25 x 3.5	35 mm ²	11	400	HFB - 254

LIGHTENING PROTECTION

Aerial Elevation Rod

Mtl : Electrolytic Copper

Air Rod can be installed with or without Multiple Point.



Rod Diameter	Thread Diameter	Length of Rod	Product Code
15	5/8"	500	HAE - 15
15	5/8"	1000	HAE - 40
15	5/8"	2000	HAE - 120

Multiple Point

Mtl : Electrolytic Copper

Multiple Point is used with Elevation rod.



Rod Diameter	Product Code
16 - 5/8'	HMP - 16
20 - 3/4'	HMP - 20

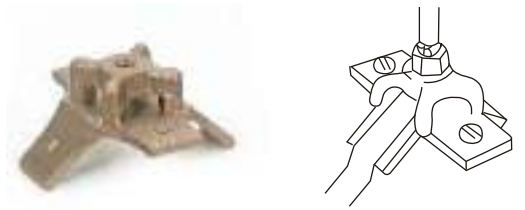
LIGHTNING PROTECTION

Ridge Saddle

PROD. CODE : HRDS - 1

Mtl - Gunmetal / Brass

Used for supporting Lightning Conductor Air Terminals on Ridges.



Aerial Rod + Terminal Base

Aerial Rod + Multiple Point + Terminal Base

Item	Product Code
A	HLA - 144
B	HLA - 14
C	HLA - 154



A B C

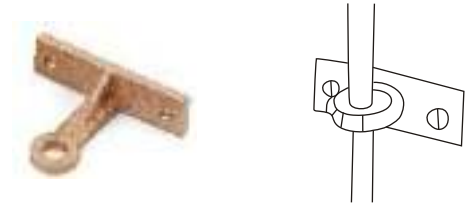
Side Mounting Rod Bracket

Mtl : Brass / Gunmetal

Above bracket provides a 75mm projection from the face of a wall.

Mfgd. either in Gunmetal or Brass.

Air Rod Diameter (mm)	Product Code
10	HSM - 10
16	HSM - 16
20	HSM - 20



Light Duty Saddle

Mtl : Brass / Gunmetal

Used for supporting lightning conductor Air Terminals.

Thread Dia. mm	Max Cond. Width mm	Prod. Code
10	25	HLD - 1025
16	25	HLD - 1625
20	25	HLD - 2025

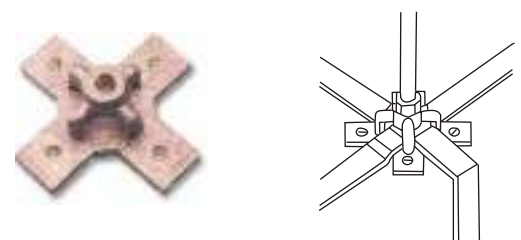


Flat Saddle

Mtl : Brass / Gunmetal

Used for supporting lightning conductor Air Terminals.

Thread Dia. mm	Max Cond. Width mm	Prod. Code
10	25	HFLD - 1025
16	25	HFLD - 1625
20	25	HFLD - 2025



LIGHTENING PROTECTION

Flat Saddle - A

Mtl : Brass / Gunmetal

Used for supporting taper pointed or blunt air rods on flat surfaces.

Recommended fixing :- Countersunk woodscrew 11/2" x no.10 & wall plug.

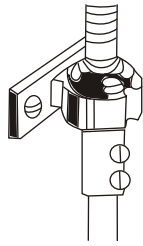


Rod Length	Rod Dia.	Thread Dia.	Prod. Code
50 mm	15 mm	5/8"	HSD - 155
70 mm	15 mm	5/8"	HSD - 160
95 mm	15 mm	5/8"	HSD - 165

Rod to Tape Coupling

Mtl : Brass / Gunmetal

Used to secure elevation rod by means of a bolted connection

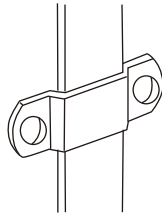


Air Rod Dia. mm	Thread Dia. mm	Rod Material	Prod. Code
15	16	Copper	HRT - 16C
15	16	Aluminium	HRT - 16A

Tape Clip

Mtl : Brass

These are used with Bare Copper Tape.

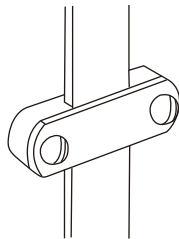


Conductor Size (mm)	Product Code
20 x 3	HTC - 203
25 x 3	HTC - 253
50 x 6	HTC - 506

DC Tape Clip

Mtl : Naval Brass / Gunmetal

These are used with Bare Copper Tape Conductor.

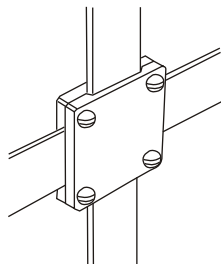


Conductor Size (mm)	Product Code
25 x 3	HDTC - 253
25 x 6	HDTC - 256
40 x 6	HDTC - 406
50 x 6	HDTC - 506

Square Tape Clamp

Mtl : Brass / Gunmetal

These are suitable for Four Way Connections of Copper Tape



Conductor Size (mm)	Product Code
25 x 3	HSTC - 253
25 x 4	HSTC - 254
25 x 6	HSTC - 256
50 x 6	HSTC - 506

LIGHTNING PROTECTION

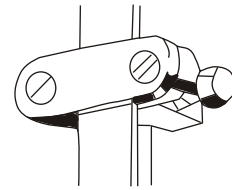
Glazing bar Holdfast

Mtl : Gunmetal

These are secured to Glazing Bar, Steel Frame, Girdles etc.

The Item is designed for use with appropriate size of metallic or non-metallic conductor fixing.

Max. Glazing Bar Width mm	Product Code
12	HGBH - 12



Universal Cable Connector

Mtl : Stainless Steel

These are used for connecting Cable Conductors

Conductor Size mm	Product Code
70	HUCC - 70
95	HUCC - 95
120	HUCC - 120



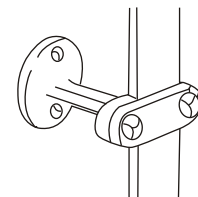
Back Plate Holdfast Stem

Mtl : Gunmetal

For use with appropriate DC Tape Clip.

It is used when the installation requires the tape to be secured 75 mm away from the face of the building

Prod. Code : HBPH - 12



Oblong Test Clamp

Mtl : Gunmetal / Brass

These are used with Bare Copper Tape Conductor

Conductor Size mm	Product Code
25 x 3	HOT - 253
40 x 6	HOT - 406
50 x 6	HOT - 506

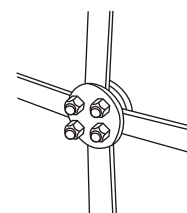


Test Bond / Test Clamp

Mtl : Gunmetal / Brass

These are used for 4 way Copper Tape Connection

Conductor Size mm	Product Code
26 x 12	HTBC - 2612

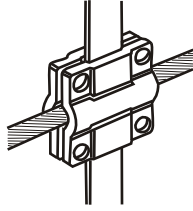


LIGHTNING PROTECTION

Cable to Tape Junction Clamp

Mtl : Gunmetal / Brass

These are used for connecting Copper Tape to Cable

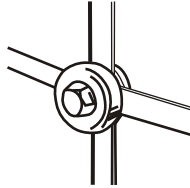


Tape Size mm	Cable Size mm ²	Prod. Code
25 x 3	50	HCTJ - 253

Screwdown Test Clamp

Mtl : Gunmetal / Brass

These are used for fixing 2 Way Copper Tape

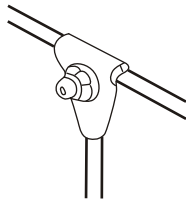


Conductor Size (mm)	Product Code
25 x 3	HSDTC - 253

Tee Clamp

Mtl : Copper / Brass

These are used for forming and bonding Tee joint for conductor.

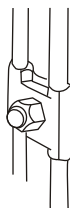


Conductor Size (mm)	Product Code
8 Cu	HTEC - 8C
8 Al	HTEC - 8A

Jointing Clamp

Mtl : Copper / Brass

These are used for forming straight through joints.

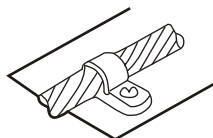


Conductor Size (mm)	Product Code
8 Cu	HJC - 8C
8 Al	HJC - 8A

One Hole Cable Clip

Mtl : Copper

These are recommended to fix cable conductors



Conductor Size (mm)	Product Code
8	HOH - 8
12	HOH - 12
16	HOH - 16
20	HOH - 20

LIGHTNING PROTECTION

Bi-Metallic Connector

Mtl : Copper / Aluminium

These are used for joining Aluminium & Copper circular conductors, particularly when Copper is used as Earthing in Aluminium lightning protection systems.

Application	Product Code
8 mm Dia. Al to 8 mm Dia. Cu	HBI - 8
8 mm Dia. Al to 25 x 3 Cu Tape	HBI - 825
20 x 3 Al Tape to 20 x 3 Cu Tape	HBI - 203
25 x 3 Al Tape to 25 x 3 Cu Tape	HBI - 253



Heavy Duty Cast Cable saddle

Mtl : Copper / Brass

These are used with 8mm conductor or for supporting Air Terminals when used in conjunction with wall mounted Air Terminal base.

Conductor Dia. mm	Product Code
8	HDCC - 8
10	HDCC - 10

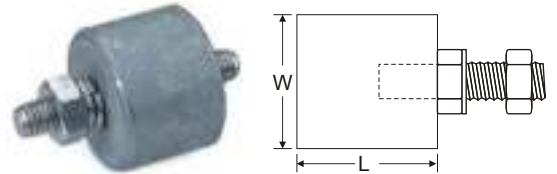


EARTH BOSS

Material : Body - Mild Steel, Fittings - Stainless Steel

The earth boss is designed to provide an earth point on a steel structure. The boss is welded into place.

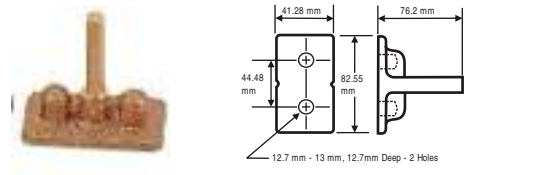
Hole Thread	L	W	Product Code
10	50	50	HPB - 01



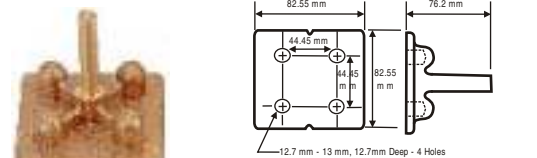
Cast Ground Plate or Earth Plate

These Plates when used in concrete structures offer convenient ground system connection points. They are used where reinforcing bars are electrically continuous & are to be used as down conductors. These earth points allow easy access for the lightning protection & earthing system.

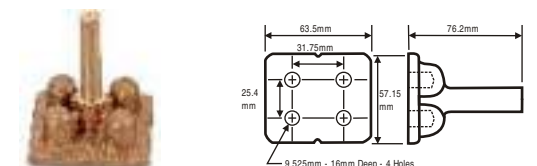
Drwg. No.	Cond. Size	Hole	Product Code
A	120	2 Hole	HCCP - 2120
B	120	4 Hole	HCCP - 4120
B	240	4 Hole	HCCP - 4240
C	240	4 Hole	HCCPL - 4240



Drwg. A : HCCP - 2120



Drwg. B : HCCP - 4120 / HCCP - 4240



Drwg. C : HCCPL - 4240



HDL - 11



HDL - 12



HDL - 13



HDL - 14



DISCONNECTING LINKS

Earth Bars and Disconnecting Links

All above products consists of 50 x 6 mm copper bar.

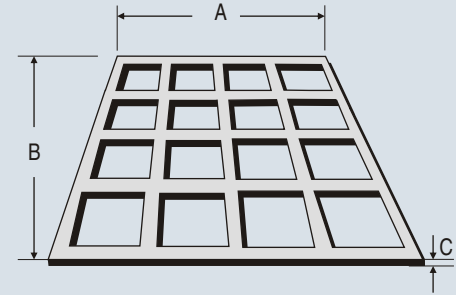
Tape Size mm	Length in mm	Width in mm	Height in mm	Prod. Code
Disconnecting Link	125	90	90	HDL - 11
Six way earth bar with single disconnecting link	575	90	96	HDL - 12
Six way earth bar with twin disconnecting link	650	90	96	HDL - 13
Six way earth bar	520	90	90	HDL - 14

All Copper Earth Bars are manufactured from 50 x 6 High Conductivity Bar to BS 2874. Other sizes & combinations of Earth Bars / Disconnecting Links are manufactured as " Special Items " and on request.

Earth Plate - Lattice Copper

Mtl : Electrolytic Copper

SIZE (A x B x C)	PROD. CODE
600 x 600 x 3	HLP - 63
900 x 900 x 3	HLP - 93
500 x 500 x 3	HLP - 53



WALL & ROOF CONDUCTOR HOLDERS

Niro Clip Snap-on-holder (for attaching wire to wall)

Snap - on Mechanism and base made up of Stainless Steel grade 304



Specification Metal - Top & Base	Dia. in mm	Size mm	Product Code
S.S. 304	7.0	8.0 / Type HFL	HNC - 001
S.S. 304	6.0	8.0 / Type HFL	HNC - 002

EQUIPOTENTIAL BONDING BARS

Equipotential Bonding Bar with HIP Plastic Cover and Base suitable for connecting.



Specification in mm
1 x flat bands to max. 30 x 5 or 8 to 10
1 x 8 - 12 round conductor
7 x one or multi-wired conductor to max. 25 mm ² and 16 mm ²

ROOF CONDUCTOR SUPPORT

Used for flat roof made up of black, weather resistant plastic a recyclable filling with one conductor holder.

Specification	Size	Product Code mm
Plastic Enclosed box and Lid	8.0	HURCH - 010



ROOF CONDUCTOR SUPPORT

Specification	Size mm	Product Code
Alu. w/Niro Clip	8 / Typ. HFL	HRCS - 007



END PIECE

Universal Roof Conductor Holder as per DIN 48826 B

Specification	Size mm	Product Code
Aluminum	8.0 - 10.0	HEPA - 022
Copper	8.0 - 10.0	HEPC - 023
Stainless Steel	8.0 - 10.0	HEPS - 024



ROOF CONDUCTOR HOLDER WITH NIRO-CLIP

Universal Roof Conductor Holder as per DIN 48826 B

Specification	Holder	Size mm	Product Code
S.S. 304	Plastic	8.0	HURCH - 008
Cooper	Plastic	8.0	HURCH - 009



WALL & ROOF CONDUCTOR HOLDERS (for attaching wire to wall)

As per DIN 48286 B pit for all the sizes

Specification Clips	Holder	Size mm	Product Code
S.S./Galvanized/Varnished	Niro Clip	8.0 / Type HFL	HNC - 011
S.S./Galvanized/Varnished	Niro Clip	8.0 / Type HFL	HNC - 012
S.S./Galvanized/Varnished	Niro Clip	8.0 / Type HFL	HNC - 013
S.S./Galvanized/Varnished	Niro Clip	8.0 / Type HFL	HNC - 014





ALU. SQUARE EARTH PLATE WITH ALU. PIPE

Used for flat roof made up Alu. square plate 1 mm thick with 100 mm long Alu. Pipe

Specification	Size mm	Product Code
Aluminium Earth Assembly	100 x 100 x 100 Max. 3 mm	HAEA - 010



LEAD SQUARE EARTH PLATE WITH LEAD PIPE

Used for flat roof made up Lead square plate 1 mm thick with 30 mm long Lead Pipe

Specification	Size mm	Product Code
Lead Earth Assembly	100 x 100 x 30 Thick - 1 to 5	HLEA - 010



CONNECTION CLAMPS & CROSS CLAMPS

NUMBER TAGS

Specification	Size mm	Product Code
Aluminum	8.0 - 10.0	HNT - 019
Aluminum	16.0	HNT - 020



MULTI CLAMP

Available from 8 mm to 16 mm rod connection

Specification	Size mm	Product Code
S. S. 304 / Glvanized	8.0 - 10.0	HMC - 024
Copper	8.0 - 16.0	HMC - 025



ROUND TYPE EARTH-CLAMP HOLDER - PLASTIC (NYLON SIX)

Specification	Size mm	Product Code
Nylon 6 Clamp	8.0	HNSC - 028

SQUARE TYPE EARTH-CLAMP HOLDER - PLASTIC (NYLON SIX)

Specification	Size mm	Product Code
Nylon 6 Clamp	8.0	HNSC - 028



ROUND DISC HOLDER WITH PVC POINTED EARTHING ROD ASSEMBLY

Specification	Size mm	Product Code
Round Clamp Assembly	8.0	HRCA - 028



PLASTIC DC TAPE CLIP

Specification	Material	Product Code
25 x 3 mm	High Impact PVC	HPDT - 021



EARTHING PIPE CLAMP

for conductor with a max. diameters of 50 mm².

Specification	Size mm	Product Code
Copper / Galvanized tin-plated	17.2-26.9	HEPC - 029
Copper / Galvanized tin-plated	25.0-36.0	HEPC - 030



PIPE HOLDER

Nylon - 6 Pipe holder used for earthing pipes.

Specification in mm
1 inch. Pipe clamping attach with two cheese head screw

Product Code HPHN - 6





WIRE HOLDER

Nylon - 6 Pipe holder used for earthing pipes.

Specification in mm

10 mm Wire clamping attachment with two screw

Product Code HWHP - 6



COMB BAR / EARTHING STRAP

- Used for multipole bridging of lightning current and overvoltage arresters.
- Used to bridge earthing clamps from 2, 3 or 4 overvoltage arresters.

Specification in mm

Copper with plastic bar of 16 mm² and of 1 meter length.

Copper / tin plated with connection terminal 25 mm².

Product Code COBA - 161



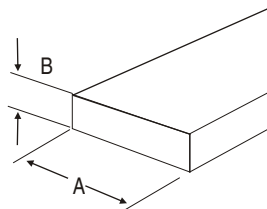
SADDLE CLAMP AND BASE

Specification dia	Distance btw. holes	Material	Product Code
7.0	7 - 10	Aluminum	HSC - 003
7.0	7 - 10	Copper	HSC - 004



BRASS EARTHING TERMINALS

PROD. CODE	Size (mm)	Finish
HBE - 4D	4 x 16	Dull Tin Plating (British)
HBE - 4B	4 x 16	Zinc Finnish(Imported)
HBE - 2516	1 x 25 + 3 x 16	Dull Tin Plating (British)
HBE - 816D	8 x 16	Dull Tin Plating (British)
HBE - 816B	8 x 16	Bright Zinc Finnish(Imported)
HBE - 2516D	2 x 25 + 6 x 16	Dull Tin Plating (British)
HBE - 2516B	2 x 25 + 6 x 16	Bright Zinc Finnish(Imported)



CONDUCTORS

Hard Drawn Copper Bar

High conductivity Copper Bar to BS - 2874 - C101/C103

Supplied in max. lengths of 3 mts.

Tinned on request.

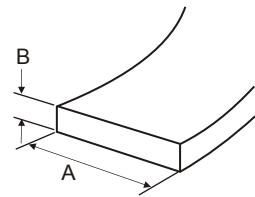
Conductor Size mm	Product Code
25 x 3	HDCB - 253
25 x 6	HDCB - 256
38 x 6	HDCB - 386
50 x 6	HDCB - 506
50 x 10	HDCB - 5010
75 x 6	HDCB - 756

CONDUCTORS

Bare Copper Tape

High conductivity Cu Tape to BS - 1432 - C101/C103

Conductor (A x B) mm	Product Code
20 x 1.5	HCT - 2015
25 x 1.5	HCT - 2515
25 x 3	HCT - 253
25 x 4	HCT - 254
25 x 6	HCT - 256
40 x 6	HCT - 406
50 x 3	HCT - 503
50 x 6	HCT - 506



FLEXIBLE COPPER BRAIDS

Flexible Copper Braid

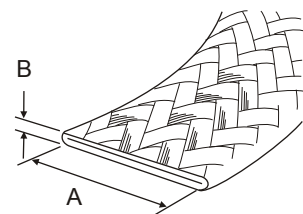
High conductivity Copper Wire to BS - 4109 - C101

Suitable for Earth Bonding.

Also supplied as Standard Drilled & Pre-Cut Bonds.

Customer specific sizes & types of braid can be manufactured on order.

Overall Nominal Equivalent Size mm (AxB)	Size mm ²	Product Code
Bare Braid 15 x 1.4	8.75	HBB - 151
Bare Braid 25 x 3.5	34.7	HBB - 253
Tinned Braid 25 x 3.5	34.7	HTB - 253



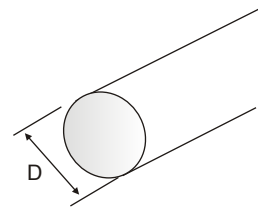
CONDUCTORS - SOLID / STRANDED

Bare Solid Circular Conductor

Cu to BS - 1433 - C101 / 103

Al to BS 2898 - 1350

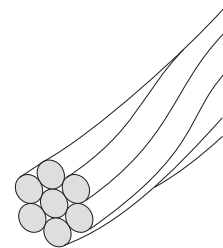
Conductor	Dia. (D) mm	Cross Section area mm ²	Product Code
Copper	8	50.27	HBSC - 8C
Aluminium	8	50.27	HBSC - 8A



Bare Stranded Copper Conductors

Soft Drawn Cu Conductor to BS - 6360

Size mm ²	Standing No. / mm	Product Code
6	7 / 1.04	HBCU - 6
16	7 / 1.70	HBCU - 16
25	7 / 2.14	HBCU - 25
35	7 / 2.52	HBCU - 35
50	19 / 1.78	HBCU - 50
70	19 / 2.14	HBCU - 70
95	19 / 2.52	HBCU - 95





What happens with normal Earthing using Salt & Charcoal

The Electrical drain gets clogged in summer allowing electrical energy to remain in the circuit destroying the electronic and electrical goods

The TEREC + Advantage

- Miracle compound
- Achieves resistance acceptable to any international body
- Maintenance Free
- Low Step and Touch Potential
- Environmentally Friendly
- Saves your electrical and electronic equipments from ground faults

The Electrical drain does not get clogged allowing immediate exit of the energy keeping all equipments intact.

Physical Properties

Presentation	: In granular form.
Granulometry	: 0.85mm to 4mm
Colour / Smell	: Grey / Inodorous
Volumetric Mass	: 500 to 650 Kg/m ³ compressed 450 to 500 Kg/m ³ uncompressed
Solubility in water	: Partially miscible
PH Value	: 6.9 to 7.2 of 1000gm/lit At 20o C

Miracle Compound For Earthing

- Ionic chemicals - Salts creates ions for easy conduction.
- Dispersion chemicals - Spreads the salts equally in the earth pit.
- Expansion chemicals - Expands 18 to 20 times and removes entrapped air to create strong connection between rod and soil.
- Diffusion chemicals - Diffuses into soil pores and creates conductive silicate roots enlarging conductive zone of earth pit.
- Hygroscopic chemicals - Absorbs atmospheric & surrounding moisture & retain it in the soil in form of jelly.

SATELIT 3

Authorised distributor only for Indian Sub-continent & Middle East Countries.

The Early Streamer Emission Lightning Conductor Including Teletesting supervision

This third generation of the Duval Messioen “Satelit” range uses this technology to force the lightning strike to follow a predetermined path towards the earthing system. The **Satelit 3** concept consists of polarising the lightning conductor tip with a voltage of between 35 kV and 45kV, synchronised with the progress of the descending tracer, and of triggering an anticipated start for the ascending tracer. with its **Satelit 3** Duval Messien is offering a ground-breaking development by introducing a remote system testing facility: the **TELETESTER-S3**. The **Satelit 3** range comprises three models with different performance characteristics: the **Satelit 3-25**, the **Satelit 3-45** and the **Satelit 3-60**.

Proven Performance

Satelit 3 lightning conductors have been conducted in various countries by independent, approved laboratories, as well as in France at the Bazet Test Centre (COFRAC approved) under Lloyd’s Register control (the certifier European body).

Satelit 3 Range

Protection radii (m)										
Type	h = tip height (m)									
SATELIT3	2	3	4	5	6	10	15	20	45	60
Level 1										
Satelit 3-25	17	25	34	42	43	44	45	45	45	45
Satelit 3-45	26	38	50	63	63	64	65	65	65	65
Satelit 3-60	32	48	64	79	79	79	80	80	80	80
Level 2										
Satelit 3-25	23	34	46	57	58	61	63	65	70	70
Satelit 3-45	34	48	64	81	81	83	85	86	90	90
Satelit 3-60	40	59	78	97	97	99	101	102	105	105
Level 3										
Satelit 3-25	26	39	52	65	66	69	72	75	84	85
Satelit 3-45	36	50	72	89	90	92	95	97	104	105
Satelit 3-60	44	65	87	107	107	109	111	113	119	120

A New Lightning Conductor Concept

Satelit 3 has been designed around a 304L quality stainless steel shell in order to guarantee high resistance to impacts, corrosion and chemical agents. The electronic components selected for the Satelit 3 are completely protected inside an inert resin block. The spark gap, any body steel, is designed to conduct currents greater than 180 kA. The Satelit 3 is powered by a NI-MH type battery, continuously recharged indestructible, flexible solar cells. The Faces of each cell are made of ethylene Tetra Fluoro-Ethylene (ETFE). As Well as being adhesion resistant, it does not turn yellow or crack up over time.

Duval Messien A Century Of Innovations

The origins of this success are to be found in the union of two great talents: that of Paul Duval, in 1835. Today, it is recognised as one of the world’s leading experts in the field of lightning protection. Benefiting from ISO 9001 and Qualifelec certification and MASE approval, has 2 operational units in France:



EARTHING CLAMPS

Special features :-

- Designed & Manufactured under strict and approved quality control procedures, as per BS 951 standards.
- Available in 2 Colours :
Red for Non-corrosive dry atmosphere and Blue for corrosive humid conditions.
- Available in 3 standard Band Lengths to suit
Pipe diameters of 12mm - 32mm, 32mm - 50mm and 50mm - 75mm.
- Available in 2 Terminal Sizes :
A-D for conductors of 2.5mm² - 10mm² and A-E for conductors of 2.5mm² - 16mm²
(A-E being identified by its Blue safety label)

Terminal Size	Features	Material Spec.	Product Code
A-D 2.5mm ² -10mm ²	Colour coded Red suitable for clean dry atmospheric conditions	Brass	HET 14
A-D 2.5mm ² -10mm ²	Colour coded Blue suitable for all environment	Phosphorous Bronze	HET 15
A-E 2.5mm ² -16mm ²	Colour coded Blue suitable for all environment	Phosphorous Bronze	HET 16

- For all above products, large bands are also available to special order.
- To increase the size of conductor usable with HET 16 Earth Clamp, use one of the HEX range of Cable Socket.
- All Earth Clamps have anodized Aluminium Labels indicating terminal size.

BAND EARTH CLAMP

used for steel and copper pipe range between diameter 17 - 115 mm

Specification	Size	Product Code
All part Stainless Steel	3/8" - 1 1/2"	HBEC - 031
	17 - 50 mm	
	3/4" - 4"	HBEC - 032
	27 - 115 mm	

