U-PROTEC

Shocking Potential Grounded Attitude

An ISO 9001:2015 Company

U-PROTEC EARTHING PVT. LTD

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

BOARD OF DIRECTOR

Dear Client,

Our family run business stands for safety and pioneering spirit in all matters of lightning and surge protection and safety equipment. Increasingly complex technical innovations and networks require enhanced protection.

We offer you the added value of readily available protective components, equipment, solutions and services of consistently high quality. You can rely on us, your worldwide partner for lightning and surge protection and safety equipment, to provide the best possible service.

We think ahead and ensure that the solutions we find with you today are also fit to meet the requirements of tomorrow.

With heart and mind, passion and pioneering spirit, we drive forward developments in surge and lightning protection and safety equipment.

Digital transformation touches all aspects of our lives. We want to be your partner when it comes to protecting trend setting smart energy and data solutions because all intelligent components have one thing in common: the sensitive "smart" electronics need protecting against the effects of lightning and surges. This applies to all electrically conductive systems, i.e. both power technology and information and communications technology. Let us combine our products, services and expertise with your protection requirements to create a tangible benefit for you and for us. We want to create a safer environment for you with new protection solutions to fit the continuously developing technology.

Take advantage of what we have on offer in terms of lightning and surge protection and safety equipment and help us to make the world just that little bit safer. I look forward to your interest and the chance to work with you!

Your,

(Amit Yewle)
Director

(Harshad Khadasare)
Director

ANNEXURE

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

A Test Certificates

B Overview

C Earthing & Lightning Protection

i. Earthing & Lightning Protection
ii. Technical Advice, Support & Design Services

D Key Markets

E UPE Earth Electrode

i. Pure Copper Earth Electrode
ii. Pipe Earth Electrode
ii. Solid Earth Electrode

F Copper Bonded Grounding Rods

i. Threaded/Plain Grounding Rods
ii. Grounding Rod Clamps
ii. Accessories-Threaded Rod
    (a) Coupler
    (b) Driving Stud

G Solid Copper/Copper Bonded Grounding Rods

i. Internally Threaded
ii. Accessories- Internally Threaded Rods
ii. Externally Threaded

H Hot Dip Galvanized Grounding Rod

I Chemical Back Filling Compund

i. Carbon Based Back Filling Compound
ii. Bentonite Based Back Filling Compound
ii. Granular Based Back Filling Compound

J Polymer Earth Pits

i. Square Polymer Earth Pits
ii. Round Polymer Earth Pits
ii. Concrete Earth Pits
iv. CI Chamber with cover

K Lightning Arrester Protection System

i. Conventional Lightning Arrester
ii. Advanced Technology Based on Ion Generator
    a. Cosmos ESE LA
    b. Roof Connection Pipe Specification
        (i). Gi Mast
    e. Protection Radius Table
    f. Lightning Strike Counter
    g. Down Conductor
    h. Testlink Box
    i. ESE LA Accessories
    j. Aviation Lamp

L Earthing Accessories

i. Clamp A
ii. Rod to Strip Clamp B
iii. Rod to Cable Clamp C
iv. U Bolt Rod Clamp
v. Double Plated U Bolt Rod Clamp
vi. DC Strip Clamp
vii. Square Strip Clamp
viii. HD Cast Cable Saddle
ix. Cable to Strip Junction Clamp
x. Strip to Strip Junction Clamp
xi. T Clamp

M Strips

i. GI Strips
ii. Copper Strips

N Insulator

O Earth Bus Bar

P Bare Solid Round Conductor

Q Earthing Plates

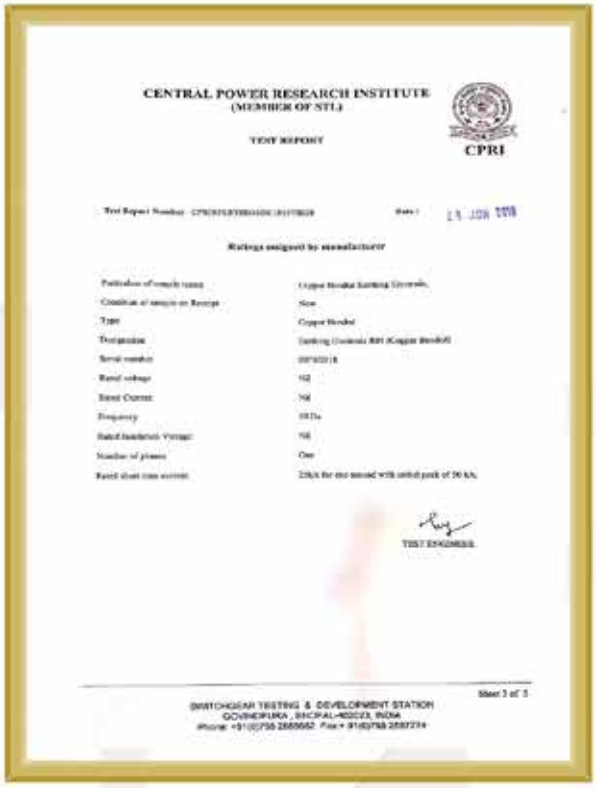
TEST CERTIFICATES

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

CENTRAL POWER RESEARCH INSTITUTE
(MEMBER OF STL)

TEST REPORT

CPRI



CENTRAL POWER RESEARCH INSTITUTE
(MEMBER OF STL)

TEST REPORT

CPRI

SWITCHGEAR TESTING & DEVELOPMENT STATION
GOVINDPURA, BHOPAL-462023, INDIA

National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

ELCA QUALITY SYSTEMS & CALIBRATIONS PVT. LTD.

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

PLOT NO. S-152, S BLOCK, BHOSARI MIDC, PIMPRI CHINCHWAD, INDUSTRIAL AREA, PUNE, MAHARASHTRA, INDIA

in the field of

TESTING

Certificate Number: TC-5744

Issue Date: 15/04/2019 Valid Until: 14/04/2021*

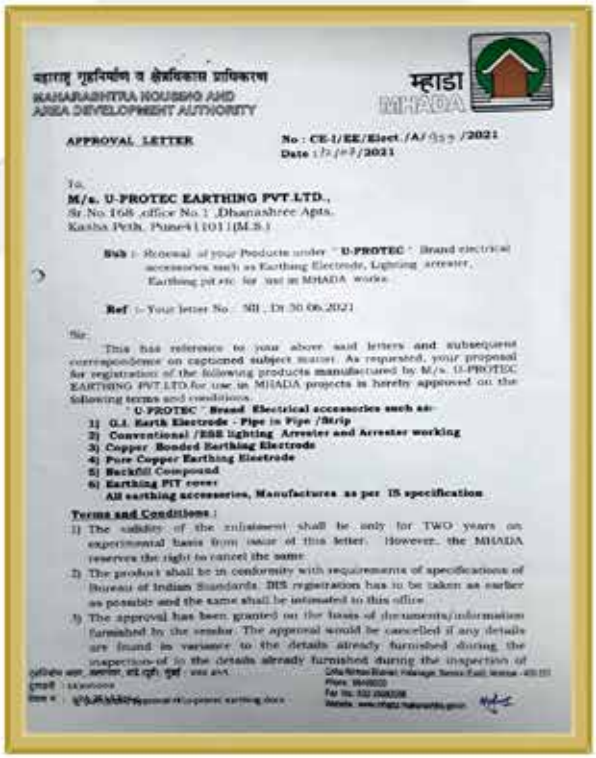
*The validity is extended for one year up to 14.04.2022

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of the laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity : ELCA QUALITY SYSTEMS & CALIBRATIONS PRIVATE LIMITED

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer



महाराष्ट्र गृहनिर्माण व क्षेत्रविकास प्राधिकरण
MAHARASHTRA HOUSING AND AREA DEVELOPMENT AUTHORITY

म्हाडा
MHADA

APPROVAL LETTER

No : CE-1/EE/Elect./A/ /2021
Date : /2021

To,
M/s. U-PROTEC EARTHING PVT.LTD.,
Sr.No.168 ,office No.1 ,Dhanashree Apts.
Kasba Peth, Pune411011(M.S.)

Sub :- Renewal of your Products under " U-PROTEC " Brand electrical accessories such as Earthing Electrode, Lighting arrester, Earthing pit etc. for use in MHADA works.

Ref :- Your letter No. NIL, Dt.30.06.2021

Sir,

This has reference to your above said letters and subsequent correspondence on captioned subject matter. As requested, your proposal for registration of the following products manufactured by M/s. U-PROTEC EARTHING PVT.LTD.for use in MHADA projects is hereby approved on the following terms and conditions.

" U-PROTEC " Brand Electrical accessories such as:-

1) G.I. Earth Electrode - Pipe in Pipe /Strip
2) Conventional /ESE lighting Arrester and Arrester working
3) Copper Bonded Earthing Electrode
4) Pure Copper Earthing Electrode
5) Backfill Compound
6) Earthing PIT cover
All earthing accessories, Manufactures as per IS specification

Terms and Conditions :

1) The validity of the enlistment shall be only for TWO years on experimental basis from issue of this letter. However, the MHADA reserves the right to cancel the same.
2) The product shall be in conformity with requirements of specifications of Bureau of Indian Standards. ISI registration has to be taken as earlier as possible and the same shall be intimated to this office.
3) The approval has been granted on the basis of documents/information furnished by the vendor. The approval would be cancelled if any details are found in variance to the details already furnished during the inspection of in the details already furnished during the inspection of

TEST CERTIFICATES

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

RBS

Registration Certificate

This is to certify that the

U-PROTEC EARTHING PRIVATE LIMITED

GROUND FLOOR, SR.NO.168, OFFICE NO.1, DHANSHREE APARTMENT, KASBA PETH, PUNE CITY, PUNE, MAHARASHTRA.

has been assessed and certified by RBS Cert as meeting the requirements of

ISO 9001:2015

Quality Management System

For the following scope of activities:

MANUFACTURING OF MAINTENANCE FREE EARTHING SYSTEMS EARTHING COMPOUNDS & COPPER EARTHING ROD & ESE LIGHTING ARRESTER

Certificate Number: 2016081899R

Government of India
Ministry of Micro, Small and Medium Enterprises

UDYAM
REGISTRATION CERTIFICATE

For any assistance, you may contact:

BE A CHAMPION with the Ministry of MSME

CMPT Cell
Headquarters
Chief Engineer
Southern Command
Pune – 411001

CESG/CMPT/ 4Y /Gen

Oct 2021

M/s U Protec Earthing Pvt Ltd
Sr No 168, Off No 1 Dhanashree Apts
Kasba Peth, Pune – 411 011

IMPLEMENTATION OF NEW POLICY DT 15 JUN 2021 FOR APPROVAL OF PRODUCTS CMPT COMMITTEE

1. Your Products is approved upto 28 Feb 2022 as per ABOO 2020-21
2. As Per new policy Approval/Renewal/Upgradation of your product will henceforth be done at Zonal CE level by CMPT III
3. You are requested to collect the papers submitted to this office at the earliest.

(Anand Parashar)
SE
OIC & Secy CMPT
For Chief Engineer

Encl : as above

CIDCO

CITY AND INDUSTRIAL DEVELOPMENT CORPORATION OF MAHARASHTRA LIMITED

Ref. No. CIDCO/ EE (PA & Ps) P-1950/ 2022/ 2-5-5

Date : 25.04.2022

To,
M/s U-Protec Earthing Pvt. Ltd.
Sr. No. 168, Off. No. 1, Dhanashree Apartments
Kasba Peth, Pune – 411 011

Sub: Registration as an Approved Vendor

Ref: Your application vide file no P-1950 dtd. 23.07.2021

Dear Sir,

With reference to your request application on subject matter, we are pleased to inform you that, your registration as an approved vendor for our projects / works for the following products is approved herewith for a period of Two (02) years.

Sr. No.	Material Description	Material Name/Size/ Range/Brand
1	Electrical Miscellaneous Items	Chemical Earthing Electrodes- G.I. Earth, Pure Copper, Copper Bonded

Kindly note that:

a) The validity of this enlistment is valid for Two (02) Years i.e. from 25.04.2022 up to 24.04.2024. However the Corporation reserves the right to cancel the same in case complaints are received from users within that period.
b) The product shall be in conformity with requirements of BIS/ISO Standards. You shall keep your BIS/ISO registration valid and any changes in the same shall be intimated to this office.

Page 1 of 2

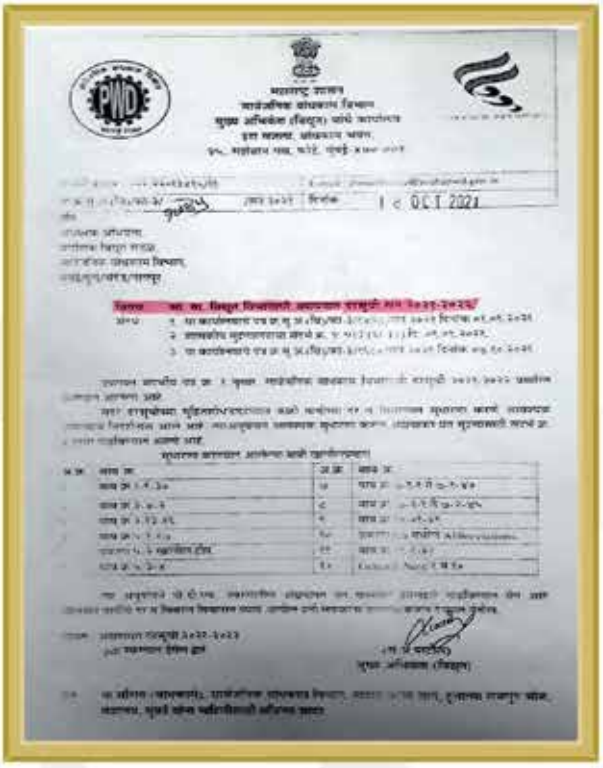
In case of any corruption related complaints, please visit www.cidco.maharashtra.gov.in Click on Dakshata link

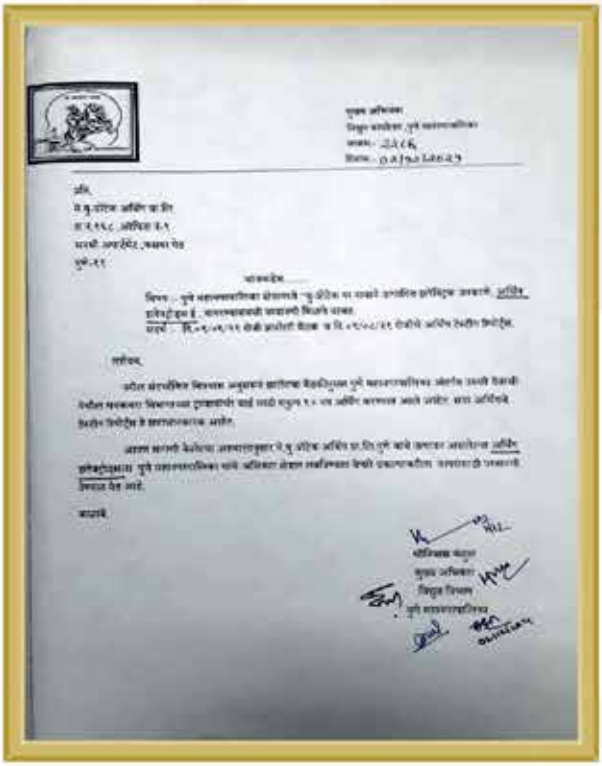
TEST CERTIFICATES

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

TSE DENEY ve KALİBRASYON MERKEZİ BAŞKANLIĞI

MUAYENE VE DENEY RAPORU
TEST REPORT





National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

ELCA QUALITY SYSTEMS & CALIBRATIONS PVT. LTD.

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

PLOT NO. S-152, S BLOCK, BHOSARI MIDC, PIMPRI CHINCHWAD, INDUSTRIAL AREA, PUNE, MAHARASHTRA, INDIA

in the field of

TESTING

Certificate Number: TC-5746

Valid Until: 14/04/2024

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

Name of Legal Entity: ELCA QUALITY SYSTEMS & CALIBRATIONS PRIVATE LIMITED

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

U-PROTEC EARTHING OVERVIEW

With over 5 years of experience U-Protec Earthing provide leading Earthing, Lightning and Electronic Systems Protection solutions. From our own designed and manufactured products, through to risk assessment and systems design advice, UPE offer a renowned total Solution for earthing and lightning protection.

U Protec Earthing is Sister branch of the Shree Sai Group which incorporated in 2017, and through the wider distributor network we offer, the UPE brand has now become established as a Leading leader in earthing and lightning protection, with our products specified and installed in many prestigious projects in multiple states. The combined expertise of UPE and the experience with in the electrical sector Shree Sai Group provide, allows us to share the knowledge we hold in key industry sectors with our clients. In turn this promotes properly informed decision making on the best earthing and lightning protection solution to suit your needs.

Expertise

Specialist advice from our fully qualified technical engineers focusing on your earthing and lightning protection issues and concerns.

Experience

Providing the optimum design one that doesn't use more material than is necessary, saving you money.

Products

Our knowledge of the latest products ensures a tailored design that can be installed using the most appropriate and up-to-date products.

Technical

With over 12 years accumulated knowledge of developing earthing and lightning protection s olutions, we provide design systems to any recognized standard.

Customer service

Our sales and technical teams are ready to assist with all your earthing and lightning protection needs.

Knowledge

Our knowledge of the latest standards ensures designs and selected products comply with the latest IEC/CPRI/NABL/ROHS/UL standards.

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

EARTHING & LIGHTNING PROTECTION

Lightning is one of nature's most powerful and destructive phenomena. Lightning strikes present a real and significant threat to life, to the structures in which we live and work, and to the electronic systems which support us in our daily lives.

The consequences of lightning can be devastating:

- Direct lightning strikes damage structures, and create fire,explosion and electric shock hazards.
- Indirect lightning (up to a kilometer away) creates transient overvoltage's which degrade electronic systems and disrupt essential services.

Secondary effects of lightning

- The effects of a direct strike are obvious and immediately apparent - buildings damaged, trees blown apart, personal injuries and even loss of life.
- However, the secondary effects of lightning - the shortduration, high voltage spikes called transient over voltages -can, and do, cause equally catastrophic, if less visually obvious, damage to electronic systems within structures.

EXTERNAL LIGHTNING PROTECTION

The function of an external lightning protection system is to intercept, conduct and disperse a lightning strike safely to earth.

Ensuring effective external protection

- Lightning can cause fires, explosions, chemical release ormechanical disruption within or around a structure.
- Step and touch voltages generated from a lightning strike can cause injury, or even loss of life.
- Critical services, such as mains power and telecoms etc., can be heavily disrupted, resulting in major potential losses
- Offices risk physical damage to servers and PCs, as well as loss of key data; factories risk machinery downtime and repair costs along with health and safety hazard to personnel.
- The UPE Total Solution takes account of all the potential risks from a direct lightning strike, and incorporates all the elements necessary to deliver full and effective external lightning protection, including:
  - Structural lightning protection
  - Earth termination

Structural lightning protection

- A structural lightning protection system is designed to protect the fabric of a structure and the lives of people inside by channeling lightning strike energy in a safe and controlled manner to the earth termination network.

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

Earth termination

- The earth termination network connects to the down conductor network at the base of the building, and is the means through which the lightning current is dissipated to the general mass of earth.

TECHNICAL ADVICE, SUPPORT & DESIGN SERVICES

Sharing knowledge and expertise with our customers has been a fundamental ingredient to the success of our Total Solution approach to earthing and lighting protection.

1. Lightning protection solutions

- Team of experienced engineers
- Engineered designs to meet client specifications
- Risk assessment complying to latest standards

2. Soil resistivity surveys

- Experienced surveyors
- Key to creating effective earthing system
- Multiple readings taken to ensure safe and accurate designs

3. Analysis & earthing design

- Experienced team to optimize designs
- Range of detailed reports to clients requirements

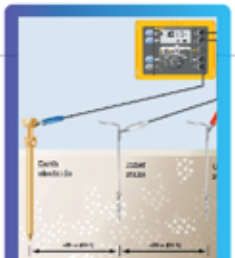
4. Earth resistance testing

- Verification of earthing design through measurement
- Experienced team of engineers with full understanding of electrode testing

Lighting Protection Solution

Soil resistivity surveys

Analysis & earthing design


Earth resistance testing

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

KEY MARKETS

World-leading solution to earthing & lightning protection for all our customers

U Protec Earthing Total Solution approach to earthing & lightning protection is the leading solution for all project types.

Oil & Gas / Petrochemical

- Offshore platforms & oil fields
- Gas & oil refineries
- Pipelines
- Petrochemical processing

Commercial Construction

- Landmark commercial projects
- Financial services institutions
- Convention & exhibition centres
- Office blocks
- Stock exchanges & trade centres
- Commercial centres, showrooms & retail units lightning protection

Cultural & Heritage

- Historical sites
- Mosques, churches & cathedrals
- National libraries
- Monuments

High tech & industrial

- Pharmaceutical factories
- High-tech manufacturing & semiconductor plants
- Telecoms stations, exchanges & transmission towers
- IT Parks & technoparks
- Heavy industry including steel, cement, glass fibre & synthetics

Sports & recreation

- Hotels & resorts
- Sports facilities & training grounds
- Theatres & opera houses
- Shopping malls

Government & public sector

- Central government buildings
- Embassies & official residences
- Local authority premises
- Police stations
- Hospitals & healthcare facilities
- Technical colleges & universities

Utilities

- Power stations (coal, gas, nuclear)
- Electricity substations
- Overhead transmission lines
- Waste water treatment facilities
- Desalination plants

Rail & Infrastructure

- National railways
- City metro & light rail systems
- Airports & airport terminal
- expansions Subsea tunnel

Residential

- High rise residential towers &
- apartment blocks
- Condominiums
- Housing development projects

Renewable Energies

- Solar / PV farms
- Wind turbines
- Hydro-power stations

UPE EARTH ELECTRODES

A simple GI / Copper bonded/ Pure Copper pipe with or without back filling compound mixture can provide the necessary path for the fault current to be grounded. However, over a period of time, depending on the effect of the corrosive elements in the soil, the GI pipe gets eaten away resulting in an increase of the Earth pit's resistance.

To ensure that the life of the earth electrode is enhanced exponentially, the UPE Team engineered an innovative design for the Earth Electrode System, the UPE Earth Electrode.

The UPE electrode consists of the main earth electrode which is either a pipe or a strip, encapsulated within another pipe filled with the highly conductive & corrosion resisting compound UPE. The main earth electrode is protected by the presence of this highly conductive compound and the outer pipe. Because of its highly conductive property the fault current gets immediately discharged through the outer pipe to the surrounding area.

The size of the robust top connection plate is scientifically designed so as to prevent a bottleneck for fault current flow at this critical junction.

The whole assembly of UPE electrode is then inserted into a bore made in the earth and the space around is filled by the scientifically developed Back Fill Compound UPE.

UPE Earth Electrodes have been successfully tested at CPRI, Bhopal for Short Circuit and other tests. The reports are given in this catalogue for your reference.

Pure Copper Earthing Rod

Pure Copper Earthing Electrode is made of Electrolytic Copper that is 99.9% pure. It has an excellent corrosion resistance. It is used when higher conductivity and corrosion resistance are required.

PRODUCT CODE	ELECTRODE	
	DIA (MM)	LENGTH (MTR)
★ PCU803UP	76	3
★ PCU503UP	48	3

PS- Client requirement also available on request for all type of electrode

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

UPE - PIPE IN PIPE (PIP)

GI EARTHING ELECTRODE

PROD. CODE	OUTER PIPE OD (mm)	LENGTH (Mtrs.)
GI1001HUP	HYBRID 100	1
GI883UP	88	3
GI882UP	88	2
GI803UP	76	3
GI802UP	76	2
GI503UP	48	3
GI502UP	48	2

COPPER BONDED 250 MICRONS

PROD. CODE	OUTER PIPE OD (mm)	LENGTH (Mtrs.)
CB80P3UP250	76	3
CB80P2UP250	76	2
CB50P3UP250	48	3
CB50P2UP250	48	2

COPPER BONDED 100 MICRONS

CB80P3UP100	76	3
CB80P2UP100	76	2
CB50P3UP100	48	3
CB50P2UP100	48	2

COPPER BONDED STD MICRONS

CB80P3UP	76	3
CB80P2UP	76	2
CB80P1UP	76	1
CB50P3UP	48	3
CB50P2UP	48	2
CB50P1UP	48	1

UPE - STRIP IN PIPE (SIP)

GI EARTHING ELECTRODE

PROD. CODE	OUTER PIPE OD (mm)	LENGTH (Mtrs.)
GI88S3UP	88	3
GI88S2UP	88	2
GI80S3UP	76	3
GI80S2UP	76	2
GI80S1UP	76	1
GI80S05UP	76	0.5
GI50S3UP	48	3

COPPER BONDED 250 MICRONS

PROD. CODE	OUTER PIPE OD (mm)	LENGTH (Mtrs.)
CB80S3UP250	76	3
CB80S2UP250	76	2
CB50S3UP250	48	3
CB50S2UP250	48	2

COPPER BONDED 100 MICRONS

CB80S3UP100	76	3
CB80S2UP100	76	2
CB50S3UP100	48	3
CB50S2UP100	48	2

COPPER BONDED STD MICRONS

CB803UP	76	3
CB802UP	76	2
CB801UP	76	1
CB503UP	48	3
CB502UP	48	2
CB501UP	48	1

OD/ID OF PIPES/SOLID ROD MAY CHANGE SUBJECT TO MARKET AVAILABILITY

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

UPE - SOLID ROD

COPPER BONDED STD MICRONS (V Shape)

PROD. CODE	ROD Dia (mm)	LENGHT (Mtrs.)
CB173HUP	17.2	3
CB172HUP	17.2	2
CB171HUP	17.2	1
CB253HUP	25	3
CB252HUP	25	2
CB251HUP	25	1
CB323HUP	32	3
CB322HUP	32	2
CB321HUP	32	1

COPPER BONDED 100 MICRONS (V Shape)

PROD. CODE	ROD Dia (mm)	LENGHT (Mtrs.)
CB173UP100	17.2	3
CB172UP100	17.2	2
CB171UP100	17.2	1
CB253UP100	25	3
CB252UP100	25	2
CB251UP100	25	1
CB323UP100	32	3
CB322UP100	32	2
CB321UP100	32	1

COPPER BONDED 250 MICRONS (V Shape)

PROD. CODE	ROD Dia (mm)	LENGHT (Mtrs.)
CB173UP250	17.2	3
CB172UP250	17.2	2
CB171UP250	17.2	1
CB253UP250	25	3
CB252UP250	25	2
CB251UP250	25	1
CB323UP250	32	3
CB322UP250	32	2
CB321UP250	32	1

UPE - SOLID ROD

COPPER BONDED STD MICRONS (Plain With Hole)

PROD. CODE	ROD Dia (mm)	LENGHT (Mtrs.)
CB173UP	17.2	3
CB172UP	17.2	2
CB171UP	17.2	1
CB253UP	25	3
CB252UP	25	2
CB251UP	25	1
CB323UP	32	3
CB322UP	32	2
CB321UP	32	1

COPPER BONDED 250 MICRONS (PLAIN WITH HOLE)

PROD. CODE	ROD Dia (mm)	LENGHT (Mtrs.)
CB173HUP250	17.2	3
CB172HUP250	17.2	2
CB171HUP250	17.2	1
CB253HUP250	25	3
CB252HUP250	25	2
CB251HUP250	25	1
CB323HUP250	32	3
CB322HUP250	32	2
CB321HUP250	32	1

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

COPPER BONDED GROUNDING RODS

UPE copper bonded earth rods are made from low Carbon Steel as per IS standard with high tensile strength material. Low carbon steel rods are molecularly bonded with 99.9% pure electrolytic copper.

Salient Features:

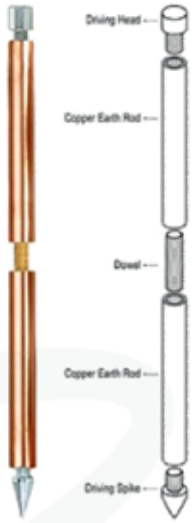
- Perfectly bonded rod will last longer, drive easier and will not crack.
- Corrosion resistant while providing the lowest resistance to ground.
- Threads are formed by roll threading process, which ensure that an even copper coating is maintained, even at the root of the thread. Roll threads give greater strength than cut threads.

Shank Diameter	Length		Copper Thk. Micron	Thds.	Net kg	Product Code
	ft	mm				
14.2 mm	4	1200	250	Plain	1.49	CB14P120UP
14.2 mm	6	1800	250	Plain	2.25	CB14P180UP
14.2 mm	8	2500	250	Plain	3.11	CB14P250UP
14.2 mm	10	3000	250	Plain	3.73	CB14P300UP
14.2 mm	4	1200	250	5/8"	1.49	CB14T120UP
14.2 mm	6	1800	250	5/8"	2.25	CB14T180UP
14.2 mm	8	2500	250	5/8"	3.11	CB14T250UP
14.2 mm	10	3000	250	5/8"	3.73	CB14T300UP
17.2 mm	5	1500	250	Plain	2.67	CB17P150UP
17.2 mm	6	1800	250	Plain	3.21	CB17P180UP
17.2 mm	8	2500	250	Plain	4.46	CB17P250UP
17.2 mm	10	3000	250	Plain	5.35	CB17P300UP
17.2 mm	5	1500	250	3/4"	2.67	CB17T150UP
17.2 mm	6	1800	250	3/4"	3.21	CB17T180UP
17.2 mm	8	2500	250	3/4"	4.46	CB17T250UP
17.2 mm	10	3000	250	3/4"	5.35	CB17T300UP
25.0 mm	10	3000	250	Plain	11.57	CB25P300UP
32.0 mm	10	3000	250	Plain	18.95	CB32P300UP

SOLID COPPER/COPPER BONDED GROUNDING RODS INTERNALLY THREADED

U Protec Earthing solid Copper earth rods are made from 99.9% pure electrolytic copper. Solid Copper rods offers greater resistance to corrosion.

Rod Dia.	Length	Product Code
14.2 mm	1200 mm	CB14INT4UP
14.2 mm	1500 mm	CB14INT5UP
17.2 mm	1200 mm	CB17INT4UP
17.2 mm	1500 mm	CB17INT5UP



ACCESSORIES

Size	Item	Product Code
14 mm	Driving Head	DH14UP
17 mm	Driving Head	DH17UP
14 mm	Coupling Dowel	CD14UP
17 mm	Coupling Dowel	CD17UP
14 mm	Driving Tip	DT14UP
17 mm	Driving Tip	DT17UP

Driving Stud | Coupler | Earth Rod | Couper | Earth Rod | Drilling Head

ACCESSORIES - THREADED RODS

COUPLER

Material: Copper Alloys Couplers are counter bored to completely enclose the threads & protect from damage and corrosion.

Size (mm)	Product Code Brass	Product Code Copper	Product Code Gunmetal
14	CPLR14BUP	CPLR14CUP	CPLR14GNUP
16 or 5/8"	CPLR16BUP	CPLR16CUP	CPLR16GNUP
19 or 3/4"	CPLR19BUP	CPLR19CUP	CPLR19GNUP

DRIVING STUD

Material: High Tensile Steel These are used to drive the grounding rod into the ground

Size (mm)	Product Code
14 mm	DRSD14UP
5/8" or 16 mm	DRSD16UP
3/4" or 19 mm	DRSD19UP
1/2"	DRSD12UP

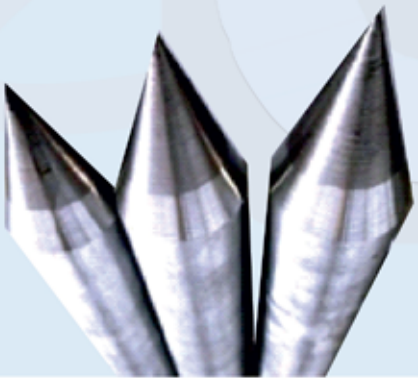
GROUNDING ROD CLAMPS

Material	Size of Earthing Rod/Pipe	Product Code
Bronze	1/2"	CLMP12UP
Bronze	5/8"	CLMP16UP
Bronze	3/4"	CLMP19UP

HOT DIP GALVANIZED GROUNDING ROD

U Protec Earthing High Quality Customized Earth Rod Hot Dip Galvanized Steel Ground Rod comes in three different types of various diameter and length and has cone point for easy driving. The Plain Rods are used with ground rod clamps for proper electrical contact. Hot Dip Galvanized Ground Rods start with high-strength steel. This high-strength steel is then immersed in a bath of pure molten zinc a rust-proof barrier.

Diameter	Length	Weight Unit (Kg)	Product code
18	2000	4	HDGI18S2UP
18	3000	6	HDGI18S3UP
20	2000	4.94	HDGI20S2UP
20	3000	7.4	HDGI20S3UP
25	2000	7.71	HDGI25S2UP
25	3000	11.6	HDGI25S3UP



CHEMICAL BACK FILLING COMPOUND

A.CARBON BASED BACK FILLING COMPOUND

Carbon Based Compound is suitable in areas where the soil resistivity is considerably higher. This is electronically super conductive so that it provides a normalized soil conductivity. This doesn't contain any hazardous chemicals which harm the environment. Carbon based BFC improves earthing effectiveness, especially in areas of poor conductivity (rocky ground, areas of moisture variation, sandy soils etc.) by enhancing its absorption power and increasing its richness with charge carrying ions.

PHYSICAL PROPERTIES

- MAKE: U Protec Earthing
- Product Code: **BFC25GOLD**
- MATERIAL: Bentonite with high contents ofCarbon
- WEIGHT: 25 Kg/Bag
- RESISTIVITY: Max. 0.09 Ohm-Mtr
- PH: 8.64
- MOISTURE RETAINTION: 3.36% @ 105°C/ 3Hr
- DURABILITY: Best
- METAL CORROSION: None
- TOXIC SUBSTANCE: None
- APPEARANCE: Grayish Powder

FEATURES:

- High conductivity, Non-corrosive, Thermally stable, Interact in homogeneous way, Suitable for use on any kind of electrode, Hygroscopic, Does not adversely affect the soil & Does not leach ions or contaminate ground water
- SIZE- **650 (L) x 400 (W) x 130 (H)**

B. BENTONITE BASED BACK FILLING COMPOUND

Bentonite moisture-retaining clay, commonly used as a backfill for earth rods installed in drilled holes, or as a layer encapsulating horizontal earth conductors buried in a trench.

Its main advantage as far as earthing is concerned is that it has the ability to retain moisture in the immediate vicinity of an earth rod, and hold it there for a considerable period of time. This reduces contact resistance and increases the effective size of earth electrodes.

PHYSICAL PROPERTIES

- MAKE: U Protec Earthing
- Product Code: **BFC25SILVR**
- MATERIAL: Bentonite
- WEIGHT: 25 Kg/Bag
- MOISTURE RETAINTION: 3.36% @ 105°C/ 3Hr
- DURABILITY: Good
- METAL CORROSION: None
- TOXIC SUBSTANCE: None
- APPEARANCE: Brownish Powder

FEATURES:

- High conductivity, Non-corrosive, Thermally stable, Interact in homogeneous way, Suitable for use on any kind of electrode, Hygroscopic, Does not adversely affect the soil & Does not leach ions or contaminate ground water
- SIZE- 650 (L) x 400 (W) x 130 (H)

C. GRANULAR BASED BACK FILLING COMPOUND

It is used where moisture soil is often wet. Soil resitivity is in acceptable range.

- MAKE: U Protec Earthing
- Product Code: **BFC25STD/BFC15STD**
- MATL: Graphite, coal, salt, Silicates,
- WEIGHT: 25 Kg/Bag & 15 Kg/Bag
- DURABILITY: Good
- METAL CORROSION: None
- TOXIC SUBSTANCE: None
- APPEARANCE: Black Powder

FEATURES:

- high conductivity, non-corrosive, thermally stable, suitable for use on any kind of electrode, Does not adversely affect the soil & Does not leach ions or contaminate ground water, For partial soluble, less hygrosopic

POLYMER EARTH PITS

A.SQUARE POLYMER EARTH PITS

These Square Earth housing pits are manufactured from high-grade poly-propylene for high strength & stress levels to absorb significant loads as given below. They are stabilised against degradation by sunlight and non-brittle to prevent cold weather damage. The light weight 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.

Product Code	Length (mm)	Width (mm)	Height (mm)	Weight (Kgs.)	Load (Tons)
PCSQ300	308	308	214	2.5	5
PCSQ300T	300	300	260	2.9	2

B. ROUND POLYMER EARTH PITS

These compact UPE Round Earth Pits our manufactured from special high- grade polymer compounds which ensure high strength and stress levels. They are tested for high loads as given below and are stabilized against degradation by sunlight and cold weather damage. Being ultra light weight they allow for easy handling, storage and transportation. The knock out areas provided allow for easy termination, thus increasing installation efficiency.

Product Code	Top Dia (mm)	Bottom Dia (mm)	Height (mm)	Weight (Kgs.)	Load (Tons)
PCRD150	160	235	230	0.48	1
PCRD250	250	230	260	1.29	2

C. CONCRETE EARTH PITS

The UPE Concrete Earth Pits are suitable for load rating 5/10/15 Ton made from RCC material. They also offer water resistance (low porosity) & high insulation properties, long life, stability under all weather conditions. Precast thus no mess on site. Customized as per your size and requirement

Product Code	Length	Width	Height	Thickness
	(mm)	(mm)	(mm)	(mm)
PCRCC600	600	600	600	50
PCRCC450	450	450	450	50
PCRCC300	300	300	300	50

P.S. : Sizes / Loads available on request

D. CI CHAMBER WITH COVER

It is light weight low durable chamber made from cast iron

Product Code	Length	Width	Height	Thickness
	(mm)	(mm)	(mm)	(mm)
PCCI600	600	600	600	50
PCCI450	450	450	450	50
PCCI300	300	300	300	50

P.S. : Sizes and locking type available on availability

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

⌀ LIGHTNING ARRESTER PROTECTION SYSTEM

Introduction to Lightning Protection Technology

Lightning Conductor's function is to divert to itself a lightning discharge, which might otherwise strike a vulnerable part of the structure/facility to be protected.
Before proceeding with the detailed design of a lightning protective system, the following essential steps should be taken:

i. Decide whether or not the structure needs protection and, it, so, what are the special requirements.
ii. Ensure a close liaison between the architect, the builder, the lightning protection system engineer so that the
appropriate design is made which provides the complete protection cover to the building / facility.
iii. Ensure the correct the procedures for erection, commissioning, testing and future maintenance.

⌀ A. CONVENTIONAL LIGHTNING ARRESTER

These are oldest concept in Lightning protection. The ability of the conventional rod is to concentrate electric field under the electric storm condition around the corona. The corona is observed in the near vicinity of the tip, as the field concentration created by its geometric shape will decrease rapidly with distance, provided the tips are really sharp. The conventional rod offers a cone of protection based upon its installed height above the structure .It assume a positive angle from projections and structural components within are deemed to be protected against direct strikes. Angles of 45° are the general case protection angle for these rods. With a Conventional Lightning Rod of height 1 meter installed at the roof top of the building will be able to give an area of protection of 1.732 meters sq. So for a building with top area of say 5 m x 5 m = 25 sq meter, approximately 8-9 Lightning Conductors shall have to be used. However, limitations of this concept particularly manifest themselves when applied to very tall structures. Normally Conventional rod is commanded non-effective above 20-25 m height and continuously reduces the protection angles with increased structure height. Also when we are installing these lightning conductors on the building we have to install maximum nos. of conventional rods to cover maximum area and each rod requires separate down conductor with earthing and each earthing has be bonded with each other. This makes the system very complicated and costly. It also will require more maintenance and typically considering the Building protection against the lightning, the use of multiple numbers of rods defaces the buildings.

PRODUCT CODE	PRODUCT NAME	DIA	LENGTH	SPIKE
LAPCUS14B	**A.**PURE COPPER SOLID LA WITH BASE PLATE	14	1000	5
LAPCUHB	**B.**PURE COPPER HOLLOW LA WITH BASE PLATE	25	1000	5
LAPCUH	**C.**PURE COPPER HOLLOW LA WITHOUT BASED PLATE	25	1000	5
LAPCB5CY	**D.**COPPER BONDED SOLID LA WITH BASE	16	1000	5
LAPCB4CY	**E.**COPPER BONDED SOLID LA WITH BASE	16	1000	4

B. ADVANCED TECHNOLOGY BASED ON ION GENERATOR

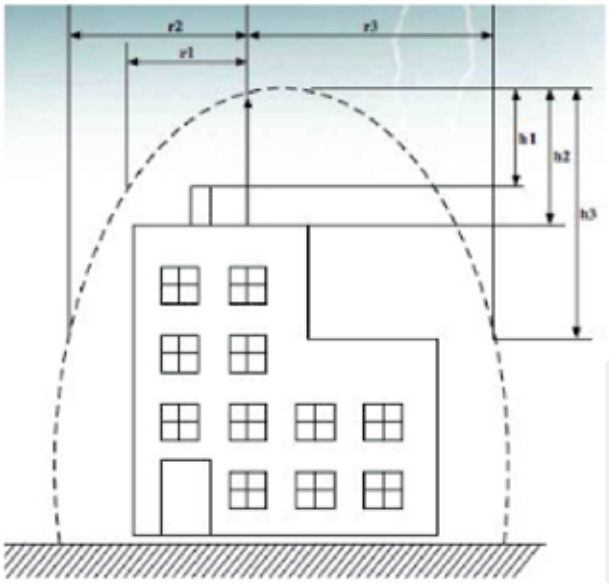
The result of many years of ongoing field research is the Advanced Lightning protection system. This unit provides the design
engineer with an air termination relatively free of space charges, which is capable of creating ionization and which
concentrate electric field to release free electron on the approach of a lightning leader. As a result mostly only one lightning
conductor is required against a large number of Conventional Lightning conductors.
This Advanced Lightning conductor is a dynamic device which has a very strong central ion generating system that is able to
generate ions and requires no external source of power supply. This remarkable terminal has the ability to concentrate only
the electric field, which occur in microsecond time slot as the leader charges approach to ground. The unique lightning
protection system has been designed to provide repetitive electrical discharge only during the time of approach of the
downward Leader. If we have to install this protection device to a certain Building, we require only One Lightning conductor,
only one down conductor with 3 earth pit and which will protect the entire buildings, monuments and surrounding area from
direct lightning damages.

CONSTRUCTION:

Metal Used: Stainless steel, weather proof, chemical reaction proof and non corrosive, making it a fit and forget installation.
Lightning Intercepting Rod: It is again a stainless steel portion which intercepts lightning.
Electro-atmospheric Energy Block: The portion within the high tension stroke generator
Ion Electrodes: These provides high tension strokes which are produced in high tension stroke generator to form ion.
Earth Connector: Stainless steel portion which transfers the lightning discharge to ground conductor.
Pipe Connection Adaptor: Portion through which lightning rod is connected to 2" pipe which is used to as shaft to raise the
lightning conductor.

PROTECTION RADIUS

Lightning conductor is categorized based on area or radius within which it provides protection.Radius of protection of lightning conductors is calculated based on following formula derived by NFC 17-102 2011 standard:



Rp= √h(2D-h)+ΔL(2D+ΔL)
Where
Rp – Radius of protection in a horizontal plane situated at a vertical distance 'h' of lightning conductor
h - Height of top of lightning conductor above area to be protected
D - Lightning advancement step or leaping interval of lightning along the way. D=20m for Level I protection, D=30m for Level
II, D=45m for Level III protection and D=60m for Level IV protection as per NFC-17-102- 2011 standard.
ΔL – Distance to catch lightning in ΔT period
ΔT – Early Ionisation time period / Initiation advance time / Early Streamer Warning Time
ΔL (m) = V (m/µsec) X ΔT (µsec)
For calculation purpose, V to be considered as 1 m/µsec.
So, higher ΔT active reaction time of lightning conductor is better. Lightning conductors with higher ΔT intercepts lightning
faster and provides wider protection area. It is recommended to used lightning conductors with ΔT > 60 µsec.

Level of protection: It is defined as the risk of lightning strike on a structure. It depends upon the various factors like
Dimensions of building, structural & environmental coefficients, structure contents & occupancy, lightning density or number of lightning or thunderstorm days, etc.

COSMOS ESE LA

MAKE: COSMOS

TYPE: ESE (EARLY STREAMER EMISSION)

MODEL: COSMOS C60/C40/C25

MATERIAL: STAINLESS STEEL

TIME ADVANTAGE FOR IONISATION ΔT: Refer Table

Product Code	Type
ESEC60LA	C-25
ESEC40LA	C-40
ESEC25LA	C-60

FEATURES:

The ESE lightning protection system is in full compliance with French lightning protection standard NFC 17-102 & Spanish norm UNE-21186.

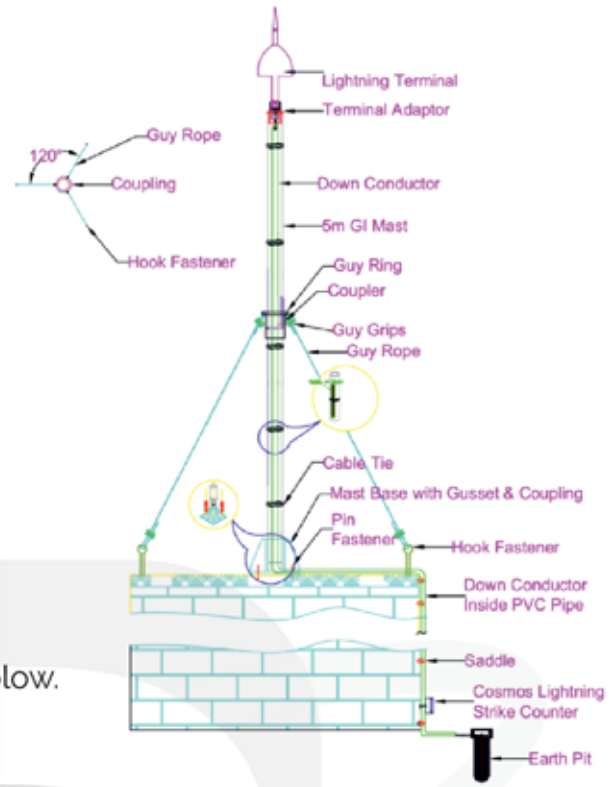
The air terminal is Early Streamer Emission (E.S.E.) type which is equipped with an upper series of spark-generating electrodes. The triggering device of the E.S.E. air terminal is sealed in a stainless-steel housing fixed at the center of its central rod.

The air terminal shall be fixed at the top of a GI elevation pole with base so as be at least 2 meters above the structure to be protected. Its height above roof level would be dependent on the level of protection and the protection radii required.

ROOF CONNECTION PIPE SPECIFICATION

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

MAKE: U PROTEC EARTHING
MATL: GALVANIZED IRON- HEAVY DUTY
OUTER DIA: 60MM
INNER DIA: 50MM
LENGTH: MIN. 2MTRS & MAX. 5MTRS (AS REQD)
END TREADING: 11TPI BOTH END TREADING



•Arrangement for pipe more than 3mtrs:

FOR 4 MTRS: 1NOS 4 MTRS PIPE WITH ONE NOS COUPLING WITH EYELET
FOR 5MTRS: 1NOS 2MTRS PIPE, 1NOS 3MTRS PIPE WITH COUPLING WITH EYELETS

The coupling with eyelet is meant for

support for guy rope, which will be require to stabilize the 4mtrs & 5mtrs GI Pipe against the wind blow.

Protection Radius Table

ESE CONDUCTORS	h= conductor tip height (m) 2	3	4	5
Level 1				
C-25	20	30	39	49
C-40	24	35	47	58
C-60	32	49	66	82
Level 2				
C-25	23	37	45	56
C-40	26	39	52	65
C-60	36	54	72	90
Level 3				
C-25	26	39	52	65
C-40	30	45	60	75
C-60	40	60	80	100
Level 4				
C-25	29	43	58	72
C-40	34	50	67	84
C-60	44	66	88	11

Product Code	Length (MTR)
ESEMST5	5
ESEMST4	4
ESEMST3	3

LIGHTNING STRIKE COUNTER

Lightning counter is of 6 digits digital, non-resettable and have IP67 protection. By using an inductive record, the counter is able to accurately count all lightning events for a later reference which system has safely discharged It should be installed at eye level. does not require any external power supply

Product code: ESECTUP6

Technical specifications:
Range: 000000 to 999999
Current discharge capacity >1KA

Conductor size: 50 sq.mm. to 95 sq.mm.

Temp: - 50°C to + 80°C

Degree of Protection: IP 67

DOWN CONDUCTOR

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

PRODUCT CODE: CBLC70C1
MAKE: Polycab/KEI/Finolex etc
SPECIFICATION: IS 694:2010
SIZE: 70 SQ MM
NOMINAL DIA. OF WIRE: 0.5
RADIAL THICKNESS OF INSULATION: 1.4MM
Conductor Material : Copper
Current Rating (A) : 215
INSULATION: PVC SINGLE INSULATION
CORE IDENTIFICATION: 1C, MULTI STRAND
SHEATH COLOR: BLACK
VOLTAGE: 1100V
FLAME RESISTANCE: SELF EXTINGUSHING WITHIN 30 SEC

FEATURES:

The air terminal shall be connected to the grounding system through an insulated down conductor consisting of single core PVC insulated stranded copper cable of conductor cross sectional area 50 sq. mm. actual length may vary as per site condition) to be supplied by the tenderer
In the final 3m/5m to the ground and where it is exposed to human intervention, the down conductor shall be placed in a protective PVC pipe of 3mm minimum wall thickness to avoid mechanical damage and increase human safety
The down conductor shall be capable of direct connection to the base of the air termination by use of bolted connection
The down conductor after routing must be kept in constant physical contact with the structure via conductive clamps. The top 10% of the installed length from the terminal must be anchored at least every 1meter

TESTLINK BOX

It is also called as disconnecting link and is used for all lightning conductors and earth grounding installations being visually inspected and tested by a qualified Electrical Engineer. Each individual earth grounding point and its conductors are electronically tested for resistance to ground.

PRODUCT CODE: TESTLBOX

ESE LA ACCESSORIES

PRODUCT CODE: GUYACC

Product Name	Dimension	Quantity	Purpose
Guy Rope	8 MM Dia	5 x 3= 15 MTR	FOR GI MAST
Foundation Bolt	12*300	4	FOR GI MAST
Big D hook		3	FOR GI MAST
Small D hook		6	FOR GI MAST
Anchor Fastner	10 x 75	3	FOR GI MAST
GI Nut Bolt With Double Washer	10 x 50	4	FOR GI MAST
Tie Pkt	200 mm	1	FOR CABLE
Insulation Tape		2	FOR CABLE
Half Threaded Screw	35 x 8	1	FOR CABLE
PVC Rawal Plug	35 x 8	1	FOR CABLE
Saddle	70 sq/ 50sq	DEPENDS	FOR CABLE
Cu Lug	70 sqmm	DEPENDS	FOR CABLE
GI Nut Bolt With Double Washer	10 x 35	DEPENDS	FOR TESTLINK BOX & ROD

AVIATION LAMP

Low intensity LED based aviation obstruction light (Single) ideally suited for installation on tower & chimney

PRODUCT CODE: LAMPAVI

Salient Features:-

IP 65, Omni Directional, LED based,
Operates directly on **12 VDC/24 VDC/48 VDC/110 VAC/230 VAC** can withstand high voltage fluctuations
Approx life of around 100000 hrs.
Luminous intensity- 10-35 CD

EARTHING ACCESSORIES

Earth Electrode Clamps

These clamps are made from a Brass alloy body which gives strong resistance to corrosion. U Protec Earthing offers following range of clamps:-

Clamp - A type

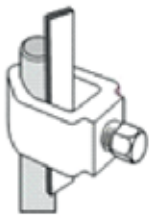
Suitable for Rod dia. 12 mm

Material: Brass with MS fastener

PROD. CODE: CLPA

Rod to Strip Clamp - B type

Rod Size	Strip Size	Product Code
14.2 to 17.2	25 x 3/6/8	CLPB25
14.2 to 17.2	40 x 6/8/10	CLPB40
14.2 to 17.2	50 x 6/8/10	CLPB50



Rod to Cable Clamp - C type

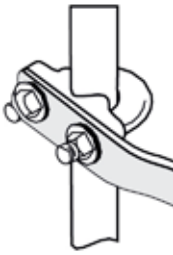
Rod Size	Cable Size	Product Code
10 mm	35 sqmm	CLPC-1
16mm	50 sqmm	CLPC-2
16mm	70 sqmm	CLPC-3
2 0mm	95 sqmm	CLPC-4

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 Strip

Rod Size	Hole center	Product Code
16	37 mm	CLPU16
20	37 mm	CLPU20
25	37 mm	CLPU25



U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

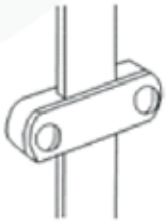
Double Plate "U" Bolt Clamp

Used to connect flat strip in a vertical position on the rod.
Material : Gunmetal
Plate with M10 threaded 'U' Bolt.

Rod Size	Strip Width	Product Code
16	25	CLPUDP16
20		CLPUDP20
25		CLPUDP25
32		CLPUDP32

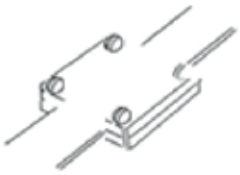
DC Strip Clamp

Conductor Size (mm)	Prod. Code
25 x 3	CLP253DC
25 x 6	CLP256DC
40 x 6	CLP406DC
50 x 6	CLP506DC



Square Strip Clamp
Material : Brass / Gunmetal
These are suitable for Two Way Connections of Copper/GI/Al. Strips

Conductor Size (mm)	Prod. Code
25 x 3	CLP253SQ
25 x 6	CLP256SQ
40 x 6	CLP406SQ
50 x 6	CLP506SQ



Heavy Duty Cast Cable saddle
Material : Brass

These are used with8mm/10mm conductor

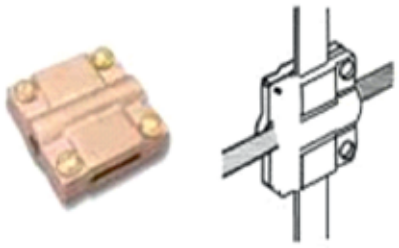
Conductor Dia. (mm)	Product Code
8	SDL8
10	SDL10

Cable to Strip Junction Clamp

Material : Gunmetal / Brass/ SS

These are used for connecting Copper/GI/AL. Strip to round conductors.

Strip Size (mm)	Cable Size (mm)	Product Code
25 x 3	50	CLPCSJN

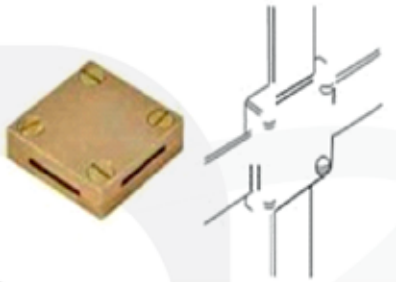


Strip to Strip Junction Clamp

Material : Gunmetal / Brass

These are used for connecting Copper/GI/AL. Strip to strip

TAPE SIZE (mm)	PROD. CODE
25 x 3	CLPSSJN

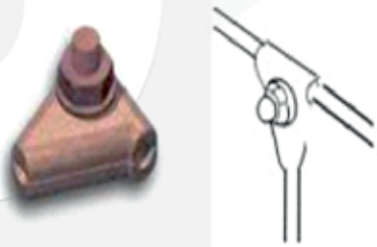


T Clamp

Material: Brass

These are used for forming a T joint for solid round conductors.

Conductor Dia. (mm)	Product Code
8 Cu	CLPTCU
8 Al	CLPTAL



GI STRIPS

GI Flat Earthing Strip is a conventional method for providing earthing to the various area like industrial, residential, commercial, etc. Our strips are usually used for providing a stable platform for operation of sensitive equipment. Our professionals use galvanized iron for manufacturing these strips. G.I earthing strip uses mild steel with Galvanized Iron coating to complete the earthing system. Steel is also a very good conductor of electricity and allows any dangerous electricity to flow to the ground, taking the danger away from you.

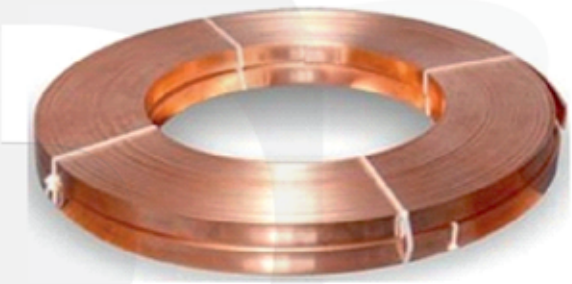
PRODUCT CODE	GI STRIPS Width	Thickness
GI253	25	3
GI255	25	5
GI405	40	5
GI506	50	6

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

PURE COPPER STRIPS

Copper strip is a malleable product which benefits from high thermal and electrical conductivity. Heat dissipation in copper is superior to other alloys. Copper strips offer high tensile strength combined with excellent corrosion resistance and benefits from a high degree of dimensional stability. Copper is also non-sparking and non-magnetic. Predominantly, the product finds extensive use in the global electronics sector.

PRODUCT CODE	COPPER STRIPS	
	Width	Thickness
PCU253	25	3
PCU256	25	6
PCU406	40	6
PCU506	50	6



INSULATOR

An electrical insulator casted with epoxy resin and hardener.
Epoxy resins are excellent electrical insulators and protect electrical components from short circuiting, dust and moisture.

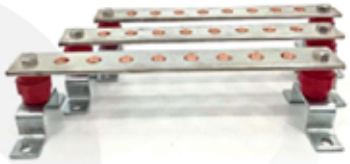
Product Code	Type	Size	Used For
INSP253	Flat	25 x 3	For strips
INSP256	Flat	25 x 6	
INSP506	Flat	50 x 6	
INS408	Round	40 x 8	For LA
INS308	Round	30 x 8	
INST SP 30 T Type			For strips

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

EARTH BUS BARS

A busbar is an electrical junction used for collecting electric power from the incoming feeders and distributes them to the outgoing feeders. The main purpose of a busbar is to carry electricity and distribute it. Busbars are used to make the systems more efficient. They can be an excellent solution for complicated electrical systems.

Strip Size mm	No of Terminations	L mm	Product Code
25 x 6	4	300	BUS-1
25 x 6	8	500	BUS-2
40 x 6	8	500	BUS-3
50 x 6	8	500	BUS-4

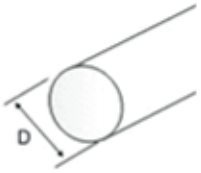


PS- On request variable sizes available

BARE SOLID ROUND CONDUCTOR

Bare Solid Circular Conductor is used as indispensable part of lighting and grounding systems. This metal conductor is capable of enduring mechanical damage and it can prevent corrosion caused by surrounding soil. It can easily integrate with earth electrode material.

Conductor	Dia. (D) mm	Product Code
Copper	8	BRC8CU
Aluminum	8	BRC8AL
Aluminum	10	BRC10AL
GI	4	BRC4GI
GI	4	BRC4GI



EARTHING PLATES

Solid Copper/GI Earth Plates

Material Type	Size (mm)	Product Code
COPPER	600 x 600 x 3.15	CU603P
COPPER	300 x 300 x 3.15	CU303P
GI	600 X 600 X 3	GI603P
GI	600 X 600 X 5	GI605P
GI	600 X 600 X 6	GI606P
GI	300 X 300 x 3	GI303P
GI	300 X 300 x 5	GI305P

U-PROTEC
Shocking Potential Grounded Attitude
An ISO 9001:2015 Company

OUR CLIENTS