

GI Earthing Electrode

Model GI-EE-001 | Hot-Dip Galvanized Iron Earthing Electrode | IS 3043 Compliant

Product Overview

The DBA Earthing GI-EE-001 is a hot-dip galvanized iron earthing electrode engineered to provide a safe, low-resistance path for fault current to dissipate into the ground. Manufactured from mild steel pipe with an 80–100 micron zinc coating, it delivers reliable, corrosion-resistant grounding performance for residential, commercial, and industrial electrical installations. The electrode is perforated along its length to allow moisture and backfill compound penetration, maintaining stable earth resistance even in dry or rocky soil conditions.

80-100 Microns
Zinc Coating

IS 3043 : 2018
Standard

10-15 Years
Service Life

Specifications & Available Sizes

Model No.	Diameter	Length	Zinc Coating	Pipe Thickness	Recommended Application
GI-EE-001-40	40 mm	1 / 2 / 3 mtr	80-100 microns	3.5 mm	Residential, small commercial
GI-EE-001-50	50 mm	1 / 2 / 3 mtr	80-100 microns	4.0 mm	Commercial buildings, telecom towers
GI-EE-001-76	76 mm	1 / 2 / 3 mtr	100 microns	4.5 mm	Industrial plants, substations
GI-EE-001-80	80 mm	1 / 2 / 3 mtr	100 microns	5.0 mm	Heavy industrial, data centers

Custom diameters and lengths available on request. Minimum Order Quantity (MOQ) available on inquiry.

Material & Performance Data

Parameter	Value
Base Material	Mild Steel Pipe (hot-dip galvanized)
Coating Process	Hot-Dip Galvanization
Zinc Coating Thickness	80 - 100 microns
Typical Earth Resistance	1 - 5 ohms (soil and backfill compound dependent)
Design Life	10 - 15 years
Electrode Design	Perforated pipe for moisture and backfill penetration
Standard Compliance	IS 3043 : 2018 (Code of Practice for Earthing)
Testing	CPR1 test certification available on request

Parameter	Value
Country of Origin	Made in India

Features & Benefits

- Hot-dip galvanized surface resists corrosion and extends operational life
- Consistent pipe thickness for uniform, dependable performance
- Perforated design improves soil and moisture contact, keeping resistance low
- Lightweight construction allows fast, low-labor installation
- Stable earth resistance across varying soil and weather conditions
- Cost-effective alternative to copper and copper-bonded electrodes
- Minimal maintenance required after installation
- CPRI test certification available on request

Applications

- Residential and commercial buildings
 - Electrical substations
 - Data centers
 - Healthcare facilities and hospitals
- Industrial plants and factories
 - Telecom towers and communication equipment
 - Renewable energy installations (solar and wind)
 - Railway stations and airports

GI vs Copper Bonded vs Pure Copper Electrode

Parameter	GI Earthing Electrode	Copper Bonded Electrode	Pure Copper Electrode
Material	Galvanized Iron	Steel core + copper coating	Solid copper
Relative Cost	Lowest	Medium	Highest
Conductivity	Good	Very good	Excellent
Corrosion Resistance	Good (10-15 yrs)	Very good (20+ yrs)	Excellent (30+ yrs)
Best Suited For	Residential, general industrial	Telecom, data centers	Substations, coastal/critical sites

Installation Guidelines

The electrode is installed vertically in an augured earth pit (typically 3 meters deep), surrounded by earthing backfill compound to retain moisture and enhance conductivity. It is connected to the electrical installation via a GI or copper earthing strip and terminal clamp. An earth pit cover is recommended for easy inspection and maintenance access.

Standards & Certification

Manufactured in compliance with **IS 3043 : 2018** (Code of Practice for Earthing). CPRI (Central Power Research Institute) test certification for earth resistance and coating thickness is available on request for bulk and project orders.

***Note:** Specifications listed above are indicative and may be customized to project requirements. Please contact our technical team for project-specific sizing, backfill compound quantity, and installation support.*