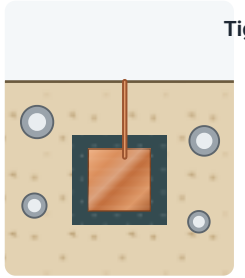
Selection guide: copper plate or earth rod?

Which electrode for which ground: installation, GIM, copper weight, connection and relative cost compared

KALOT EARTH ELECTRODES · SCEP · ERCB · SCER

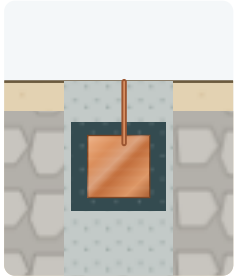
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Tight space, many underground services

Copper plate in a GIM hole

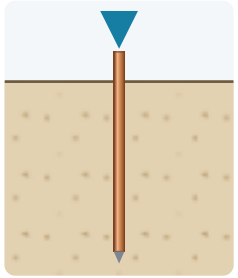
The whole electrode fits in one hole and takes little space.



Rock or hard layer near the surface

Copper plate in a GIM hole

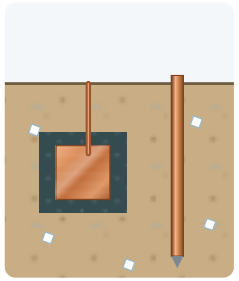
Where an earth rod cannot be driven, we install the plate in an excavated hole with GIM.



Soft soil and enough space

Copper-bonded earth rod

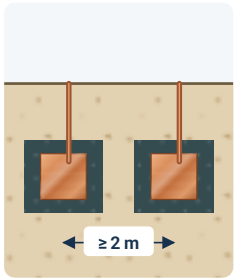
We drive the earth rod to the depth needed, with no excavation and at the lowest cost.



Saline, corrosive soil

Solid copper: copper plate or solid copper earth rod

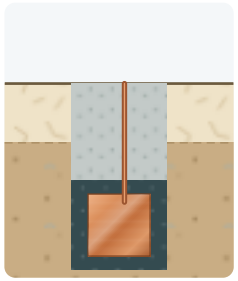
Copper through the full thickness gives a larger corrosion margin.



Lower resistance needed

Two plates at least 2 m apart

Two parallel plates linked by bare copper conductor lower the total resistance.



Dry topsoil

Plate in a deeper hole

We dig the hole deeper so the plate's top edge sits below the dry layer, in moist soil.

Feature	Copper plate, 660 × 660 and 660 × 500	Copper-bonded earth rod (two 1500 lengths)	Solid copper earth rod (two 1500 lengths)
Installation	A hole at least 30 cm wider than the plate	Driven, no excavation; 15 cm pilot hole in hard ground	Borehole with improvement material, or driven in soft soil
GIM ground improvement material	37 bags for 660 × 660 and 24 bags for 660 × 500	No GIM when driven; 3 bags in a 15 cm borehole	As for the copper-bonded earth rod
Copper weight per electrode	8.9 to 19.5 kg (3 or 5 mm thick)	0.29 and 0.36 kg (copper coating)	5.4 and 8.4 kg
Conductor connection	exothermic welding	Exothermic welding or clamp	Exothermic welding or clamp
Full installation cost ranking	**3 (highest)** $ $ $	**1 (lowest)** $	**2** $ $

Suitable for

Copper plate: Rock or hard layer near the surface, tight spaces, many underground services and projects whose specifications call for a plate ·**Copper-bonded:**Most projects ·**Solid copper:**Saline, corrosive soil

The cost ranking covers the complete installation of one electrode (metal, excavation, GIM and connection) and changes with the daily copper price (21 Mehr 1405). We measure the final resistance after installation.

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We keep improving our products; please confirm final dimensions with our experts.