

Chemical Ground Electrode



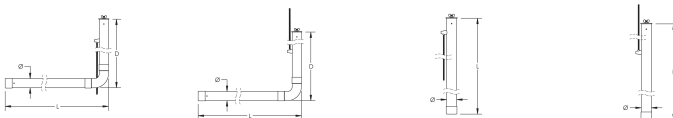
Chemical ground electrodes provide a low impedance ground in locations of high soil resistivity and dry soil conditions. Used in conjunction with a bentonite backfill and nVent ERICO's unique GEM material, the nVent ERICO chemical ground rod electrode systems provide a method to improve soil resistivity directly surrounding the electrode, and can replace multiple conventional ground rods. It maintains a low ground resistance, that dissipates lightning energy and other dangerous electrical fault currents, even in sandy or rocky soil conditions.

The chemical ground electrode is useful for providing an effective earth in poor soil conditions where space for electrodes is limited. Applications include telecommunications, power generation and distribution, commercial and industrial, manufacturing, transportation (rail and aviation), lightning protection, recreational facilities, and defense. The nVent ERICO chemical ground rod electrode systems are most effective when installed as part of a total system that includes high conductivity backfill materials, access/inspection wells, and permanent, reliable nVent ERICO Cadweld connections. They may be installed either vertically or horizontally.

CERTIFICATIONS



DIAGRAMS



FEATURES

Contains natural electrolytic salts, which permeate into the surrounding soil to condition the soil and increase its conductivity

Easy connection to ground electrode conductor using the factory provided pigtail (up or down orientation)

Provides decades of reliable services due to rugged construction and high-quality metals with a 30-year minimum service life

2-1/8" (54 mm) outside diameter copper pipe with 0.083" (2.1 mm) wall

Available in continuous sections up to 10' (3.05 m) in length; longer rods can be field assembled using 5' (1.52 m) or 10' (3.05 m) extensions

Optional factory-attached radial strips are available to reduce impedance to high-frequency lightning energy and to control the direction of the dissipation

L-shaped rods are available for horizontal installation applications where it is impractical to auger deep vertical holes

Access segment on horizontal (L-shaped) chemical ground electrodes is 32" (813 mm) deep

SPECIFICATIONS

Material: Copper

Table 1/1

Catalog Number	Installation	Electrode Length	Pigtail Length	Depth	Conductor Size	Kit
ECRE352L1UB	Vertical with Pigtail Up	10.7m	0.3m		3/0 Stranded	No
ECRV101T2U	Vertical with Pigtail Up	3.1m	0.6m		#2 Solid	Yes
ECRE202C4D	Vertical with Pigtail Down	6.1m	1.2m		1/0 Stranded	Yes
ECRE202C4DB	Vertical with Pigtail Down	6.1m	1.2m		1/0 Stranded	No
ECRH082C4U	Horizontal with Pigtail Up	2.4m	1.2m	813mm	1/0 Stranded	Yes
ECRH102C4D	Horizontal with Pigtail Down	3.1m	1.2m	813mm	1/0 Stranded	Yes
ECRH102C4U	Horizontal with Pigtail Up	3.1m	1.2m	813mm	1/0 Stranded	Yes
ECRV102C4U	Vertical with Pigtail Up	3.1m	1.2m		1/0 Stranded	Yes
ECRE102Q4D	Vertical with Pigtail Down	3.1m	1.2m		4/0 Stranded	Yes
ECRE152Q4U	Vertical with Pigtail Up	4.6m	1.2m		4/0 Stranded	Yes
ECRE201T4U	Vertical with Pigtail Up	6.1m	1.2m		#2 Solid	Yes

CatalogNumber	Installation	Electrode Length	Pigtail Length	Depth	Conductor Size	Kit
ECRE202G4U	Vertical with Pigtail Up	6.1m	1.2m		2/0 Stranded	Yes
ECRH101T4D	Horizontal with Pigtail Down	3.1m	1.2m	813mm	#2 Solid	Yes
ECRH101T4DB	Horizontal with Pigtail Down	3.1m	1.2m	813mm	#2 Solid	No
ECRH101T4U	Horizontal with Pigtail Up	3.1m	1.2m	813mm	#2 Solid	Yes
ECRH102G4D	Horizontal with Pigtail Down	3.1m	1.2m	813mm	2/0 Stranded	Yes
ECRH102G4U	Horizontal with Pigtail Up	3.1m	1.2m	813mm	2/0 Stranded	Yes
ECRV101T4U	Vertical with Pigtail Up	3.1m	1.2m		#2 Solid	Yes
ECRV102Q4DB	Vertical with Pigtail Down	3.1m	1.2m		4/0 Stranded	No
ECRV102V4U	Vertical with Pigtail Up	3.1m	1.2m		250 kcmil Stranded	Yes
ECRV122Q4U	Vertical with Pigtail Up	3.7m	1.2m		4/0 Stranded	Yes
ECRH101T5U	Horizontal with Pigtail Up	3.1m	1.5m	813mm	#2 Solid	Yes
ECRV102Q5U	Vertical with Pigtail Up	3.1m	1.5m		4/0 Stranded	Yes

ADDITIONAL PRODUCT DETAILS

Chemical ground rods can be ordered as individual components or as a complete kit. Kits include the chemical electrode (pre-filled with electrolytic salts), GEM, bentonite, and a high-density polyethylene inspection well.

ECR-V-10-2Q-4-U-B		
ECR	ERICO Chemical Ground Electrode System	
V	Installation	H: Horizontal HE: Horizontal Extended V: Vertical E: Vertical Extended
10	Electrode Length (')	
2Q	Cable Size	1G: #6 Sol, 1L: #4 Str, 1T: #2 Sol, 1V: #2 Str 2C: 1/0 Str, 2G: 2/0 Str, 2K: 3/0 Sol, 2L: 3/0 Str, 2Q: 4/0 Str 2V: 250 kcmil Str, 3D: 350 kcmil Str, 3Q: 500 kcmil Str, 4L: 750 kcmil Str
4	Pigtail Length (')	
U	Pigtail Orientation	U: Up, D: Down
B*	Rod assembly only	Add "B" for rod assembly only. Leave blank for kit.

* Empty if none

WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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