

GEM Ground Enhancement Material

Power Utilities



Ground Enhancement Material (GEM) is a superior conductive material that solves your toughest grounding problems. It is the ideal material to use in areas of poor conductivity, such as rocky ground, mountain tops and sandy soil. GEM dramatically reduces earth resistance and impedance measurements. Furthermore, GEM may reduce the size of the grounding system where conventional methods are unsatisfactory. Once installed, GEM is maintenance-free, not requiring periodic charging or the presence of water to maintain its conductivity.

Third-party testing has been completed to verify that GEM conforms to IEC® 62561-7. This standard introduces a benchmark for electrical performance and corrosion of earth enhancement materials that has been absent from the industry to date.

nVent ERICO offers GEM Calculator software that provides resistivity values for common GEM applications and can help estimate the amount of GEM required for an installation. It operates in four languages - English, Spanish, French and German - and performs calculations in Imperial or Metric units. The GEM Calculator is available for download on our website at erico.com.

DESIGN

Maintains constant resistance for the life of the system once in its set form

Performs in all soil conditions even during dry spells

Does not require periodic charging treatments or placement

Does not require the continuous presence of water to maintain its conductivity

Fully sets within 3 days, fully cures within 28 days

Does not dissolve, decompose, or leach out with time

Non-corrosive

Reduces vandalism and theft since conductors are hard to remove from concrete

Easy-to-handle 25 lb (11.3kg) bags or buckets

Requires only one person to install

Exceeds IEC® 62561-7 which sets the benchmark for corrosion, leaching, sulfur content, and other environmental regulations

Complies to the U.S. Environmental Protection Agency (EPA) Toxicity Characteristic Leaching Procedure (TCLP), EPA test method 1311

Can be installed using trench or ground rod backfill methods

SPECIFIKATIONER

Enhetens vikt: 11.360 kg

Table 1/1

Katalognummer	Artikelnummer	E-nummer	Förpackning
GEM25A	163670	0632367	Väska med handtag
GEM25ABKT			Plasthink med låsbart lock

Beräknad längd i fot av jordningsledare som täcks per GEM-säck

Dikesbredd	Total tjocklek av GEM		
	10.2 cm	12.7 cm	15.2 cm
10 cm	1.0 m	0.8 m	0.7 m
15.2 cm	0.7 m	0.5 m	0.4 m
20.3 cm	0.5 m	0.4 m	0.3 m
25.4 cm	0.4 m'	0.3 m	0.3 m
30.5 cm	0.3 m	0.3 m	0.2 m

Föreslagna specifikationer

Parameter	Rekommenderade värden	Provningsmetod
Standarduppfyllande		Uppfyller helt IEC 62561-7 EPA toxicitet Karakteristisk urlakning Procedur (TCLP), provningsmetod 1311
Urlakning	Arsenik <1,5 mg/l, Barium <60 mg/l, Kadmium <0,15 mg/l, Krom <3,0 mg/l, Bly <1,5 mg/l, Kvicksilver <0,06 mg/l, Selen <1,0 mg/l	EC 62561-7 EN 12457-2
Svavelinnehåll	<2 %	ISO 14869-1
Resistivitet	<2 Ωcm för pulver <20 Ωcm för blandat och härdat material	Komprimerat pulver enligt ASTM G187-12 Blandat och härdat enligt ASTM D991-89
Korrosionsegenskaper	För kopparbelagda jordelektroder skall polariseringsresistansen vara >8 Ωm ² för aggressiva miljöer För galvaniserade jordelektroder skall polariseringsresistansen vara >7,6 Ωm ² för aggressiva miljöer	IEC 62561-7, kap. 5.5, aggressiv miljö
Böjhållfasthet (sträckgräns)	2 070–3 100 kPa [300–450 psi]	ASTM C293
Tryckhållfasthet	690–1 390 kPa [100–200 psi] efter 672 timmars härdningstid	ASTM C109

Beräknat antal GEM-säckar för fyllning omkring jordningspett till en densitet av 1 017 kg/m³ (63.5 lb/ft³)													
Håldiameter		ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
Tum	Centimeter	5	1.5	6	1.8	8	2.4	10	3	15	4.6	20	6.1
4	10.2	2		2		2		3		4		5	
6	15.2	3		3		4		5		8		10	
8	20.3	5		6		8		9		14		18	
10	25.4	7		9		12		14		21		28	
12	30.5	10		12		16		20		30		40	

VARNING

nVent produkter ska installeras och användas endast så som anges i nVents bruksanvisning och utbildningsmaterial. Bruksanvisningar är tillgängliga på www.nvent.com och från din nVent kundtjänstrepresentant. Felaktig installation, missbruk, felapplicering eller annan brist i att helt följa nVents instruktioner och varningar kan orsaka att produkten brister, egendomsskador, allvarliga kroppsskador och dödsfall och/eller ogiltigförklara din garanti.

⚠ WARNING: This product can expose you to chemicals including silica and hexavalent chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Vårt starka utbud av varumärken:

CADDY ERICO HOFFMAN ILSCO SCHROFF TRACHTE