Lightning Eliminators & Consultants, Inc.

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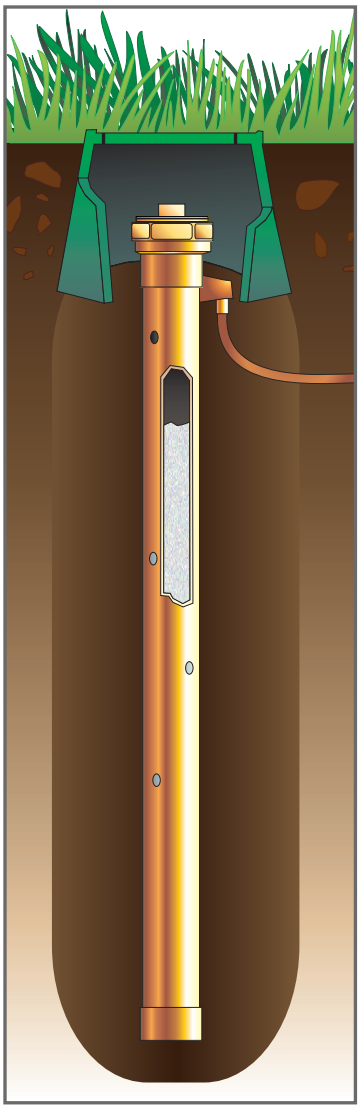
GROUNDING AUGMENTATION FILL™ (GAF™)

Low Resistance Backfill for Better Grounding

Proper grounding is critical to personnel safety and uninterrupted operations, but local soil conditions often make it difficult to acheive target resistance.

Grounding Augmentation Fill (GAF) from *Lightning Eliminators* is specially formulated to help create a low resistance earth interface, making it **easier and less expensive** to meet your grounding requirements.

Reducing Ground Resistance



Ninety-five percent of the resistance of a grounding electrode is established by the soil within an area whose radius is 1.1 times the electrode's length, called the interfacing hemisphere. As shown in the table below, augmenting local soil with GAF conductive backfill facilitates a low resistance ground connection. The greater the percentage of soil replaced, the lower the ultimate grounding resistance.

Hole Diameter	Bags of GAF	Reduction in Resistance
6" (15 cm)	2	34%
12" (30 cm)	6	45%
24" (61 cm)	23	56%
36" (91 cm)	50	63%

With just 1/3 the resistivity of bentonite, GAF has a lower freezing point and expansion factor, and retains moisture better than local soil. **Using GAF contributes to overall safety** in applications such as electrical substations by reducing step and transfer voltages, even in worst case soil conditions.

GAF Specifications

- Resistivity of 0.5 ohm/meter
- Available in 50 pound (22.6 kg) bags
- 1.5 cubic feet (0.0425 cubic meters) per bag
- Call for volume discounts and bulk packaging options

We are a full service consulting firm aligned to solve your most complex challenges in lightning protection, grounding, and surge suppression. Visit us online at **www.lecglobal.com** to learn more.

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