

## **GAF**®

### Grounding Augmentation Fill™

# 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 achieve 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<br>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

