

LAPP Insulators Resistance Graded RG® Post Insulators

LAPP Resistance Grade® Technology

Resistance Graded RG® Glaze Insulators

Unlike protective coatings applied after an insulator is fired, our semi-conductive glaze on Resistance Graded RG® insulator is a permanent, integral part of the insulator. Because the glaze is applied as part of the normal manufacturing process, Resistance Graded RG® insulators are less costly than insulators that are first glazed with a regular glaze, then covered with a hydrophobic coating.

Heating Effect

The 1mA current flow over the electrically equivalent resistor created on the surface of an Resistance Graded RG® insulator warms the surface a few degrees above the ambient temperature. This discourages moisture accumulation. Moisture is necessary to make contaminants conductive.

Linear Voltage Distribution

Voltage drop across the entire length of the Resistance Graded RG® insulator surface is uniform so that all parts of the insulator are evenly stressed. A lower and evenly graded e-field reduces RIV and corona activity.

Prevent Dry Band Arcing

Dry bands form on Resistance Graded RG® insulators with uneven wetting and drying, just as they do on regular insulators. However, Resistance Graded RG® insulators provide a conductive shunt path across the dry bands, preventing any visible scintillations or arcing. The result? Prevention arc propagation into a full length flashover event.

Resistance Graded® Insulators benefits

Eliminate Washing

Washing can cost utilities hundreds of thousands of dollars a year; a cost which Resistance Graded RG® insulators eliminate.

They Reduce the Need for Greasing or Coating

Periodically applying silicone grease or RTV coating to insulators in contaminated areas is another costly maintenance procedure which Resistance Graded RG® insulators eliminate.

Reduce the need to over Insulate

- Significant reduction in construction and operating costs
- Eliminate cost of over insulating
- Smaller structures provide aesthetic and economical advantages
- Provides the ability to design new, visually appealing solutions.
- Significant cost saving in foundation and steel structures
- Surface heat helps prevent ice bridge

Pedigree

Backed By Years of Field Experience

First installed in the 1970's, Lapp Insulators Resistance Graded RG® post insulators have built an enviable operating record in contaminated areas where no standard insulator can perform. Whether the contamination problem is the result of coastal salt fog or mist, industrial pollution, agricultural dust or chemicals, the hundreds of thousands of Resistance Graded RG® insulators already in service have provided excellent performance for utilities around the world.

