

TIE TOP INSULATOR GUARDS

For most powerline structures, Tie Top insulators are situated on perch locations preferred by birds. Phase to phase or phase to ground contact from wingspans are common. Reliaguard Tie Top Insulator Guards protect endangered species, birds, squirrels, raccoons, snakes, feral cats and other wildlife from contact with energized risk points.

Better by Design

- Based on the 100 years of collective knowledge of the Reliaguard linemen who specialize in wildlife mitigation, designs consider all risk points. A team of CAD designers support our linemen to incorporate features unique to only Reliaguard Tie Top Insulator Guards.
- Reliaguard Tie Top Insulator Guards are designed to remain securely in place without compromising an insulator's BIL rating
- Tie Top Insulator Guards accommodate a wide range of wire sizes and configurations. Guards can be adapted to fit various insulator neck types for volume orders.

Superior Material

- All Reliaguard products are made from Reliatanium, a proprietary material designed by Reliaguard's chemical engineering founders.
- Reliatanium achieves a V-0 flammability classification, the highest rating for the UL 94 test standard and has a 15+ year lifespan.
- Reliatanium material properties incorporate UV stability and flame retardancy
- Rigid and robust material in properties and design
- Tested to meet specific guidelines of IEEE 1656-2010

Ease of Installation

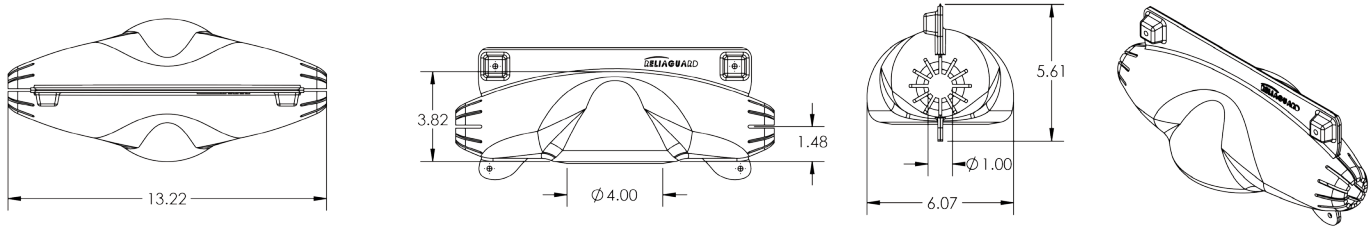
Power linemen like our products for the following features:

- Reliaguard Tie Top Insulator Guards are designed to stay in place. Retention of the guard once applied is a critical design feature to be considered.
- Guards accommodate a wide range of wire conductors and configurations
- Fits a wide range of insulators
- Complete coverage is achieved when installed with GreyEEL Conductor Cover



Technical Features

Designed to prevent wildlife caused outages, these guards are tested for application on equipment up to 38kV.



Product Name	Part Number	Height Dimension *	Diameter Dimension *	Additional Dimension*	Pack Size (MOQ)
Tie Top Insulator Guard - K - 4.003*	PI-12001	3.25 (82.5)	5.75 (146)	4.00 (101.6)	12
Tie Top Insulator Guard - C - 2.253*	PI-12003	3.25 (82.5)	5.75 (146)	2.25 (57.15)	12
Tie Top Insulator Guard - F - 2.873*	PI-12004	3.25 (82.5)	5.75 (146)	2.87 (72.90)	12
Tie Top Insulator Guard - J - 3.503*	PI-12005	3.25 (82.5)	5.75 (146)	3.50 (88.90)	12

*Dimensions in inches (millimeters)

RELIATANIUM MATERIAL PERFORMANCE TESTING All tests conducted at 38KV.

Performance Test #	Test Standards	Details	Test Result
Flammability	UL - 94	Vertical Flame Test Test plaques self-extinguishing with no drips	V-0
Ultraviolet Aging	IEEE std 1656™ - 2010 Section 5.6	After completing 1000 hours, no perceived changes to the condition of test samples.	Completed
Tracking and Erosion Resistance	IEC 60587	6 hrs (Full duration of test)	Achieved @ 2KV
Wet Power Frequency Flashover	IEEE Std 1656™-2010 Section 5.3	Average flashover value of all samples greater than 90% of the value obtained on the test fixture alone	Passed
Wet Withstand	IEEE Std 1656™-2010 Section 5.2.1	Option 1 - moving Electrode All Samples did not puncture or flash over	Passed
Tensile Strength at Break	ASTM D638		2,000 psi
Shore Durometer	ASTM D2240		65 Shore D
Heat Deflection	ASTM D648		225°F 66 psi