

PIPE BUS GUARDS (BB 20045-R; BB25045-R; BB-40045-R; BB45045-R)

Bus coverage may be required when tight clearances create a greater risk for bird and animal contact. Whether phase to phase or phase to ground contact risk exists, protection is frequently needed. Reliaguard Pipe Bus 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 Pipe Bus Guards.
- Pipe Bus Guards are designed to couple together allowing for any length of application.

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

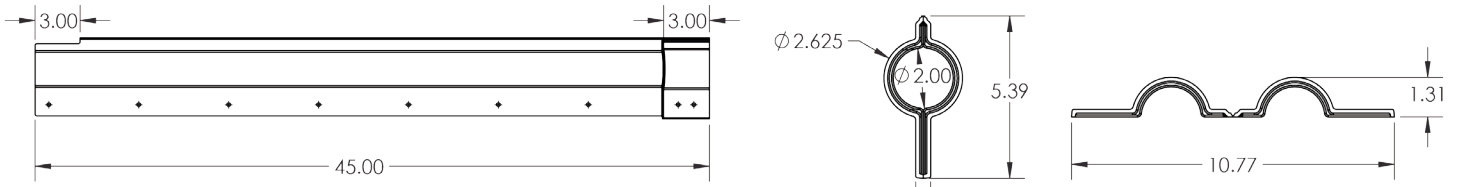
Ease of Installation

Substation technicians like our products for the following features:

- Pipe Bus Guards are available in multiple lengths and dimensions
- Guards are clamshell design for easy opening by hand
- Easy coupling of mated connections
- Push through pins are provided to easily install the Pipe Bus Guards by hand
- Retention of the guard once applied is a critical design feature to be considered.

Technical Features

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



Product Name	Part Number	Diameter*	Length*	Min Order Quantity
Pipe Bus Guard – 2"	BB-20045-R	2.00 (50.8)	45.00 (1143)	6
Pipe Bus Guard – 2.5"	BB-25045-R	2.50 (63.5)	45.00 (1143)	6
Pipe Bus Guard – 4"	BB-40045-R	4.00 (101.6)	45.00 (1143)	6
Pipe Bus Guard – 4.5"	BB-45045-R	4.50 (114.3)	45.00 (1143)	6

*Dimensions in inches (millimeters)

Species at Risk:

Listed below are those specific animals that have been identified by the IEEE survey as known or potential sources of animal-related outages. (Source: IEEE 1264™-2015)

Animals	% Utilities Responding to IEEE Survey
Squirrels	90%
Birds	86%
Raccoons	57%
Snakes	46%
Cats	43%
Mice	30%
Rats	19%
Opossums	13%

Several other animals were identified by utilities as problematic. These animals are not major contributors, as none were reported by more than 5% of the utilities:

Bats, deer, dogs, foxes, frogs, gophers, ground hogs, insects, lizards, moles, monkeys, pikas, rabbits, ring-tailed cats, skunks, weasels

Fits the following equipment manufacturers' products:

- Designed for all types of Pipe Bus Manufacturers equipment

