FREQUENTLY ASKED QUESTIONS

Q: How does Greenjacket provide protection from bird and animal-caused outages?

A: Greenjacket covers, made of a highly dielectric material, are installed to prevent birds and animals from making contact with electrical equipment in distribution systems. By ensuring energized and/or grounded electrical components are isolated from contact, faults can be avoided and outages prevented.

Q: What are the competitive advantages of Greenjacket?

A: Advantages include:

- Greenjacket is a precise-fit solution developed to prevent bird and animal contacts which is key in improving system reliability.
- Easily installed right out of the box with minimal (if any) site modifications/adjustments required.
- Each site is assessed to determine risk points and desired level of protection.
- Site Assessments, which include data collection to determine accurate dimensions of equipment, are conducted by certified technicians while the system remains energized.
- Site Protection Plans are developed to provide a custom solution for each site or structure requiring protection.
- Comprehensive installation instructions are included with all orders
- On-site technical support and free online installation training are available for customers who choose to install covers themselves.

Q: What's so critical about the fit?

A: Covers that don't fit well can't adequately protect underlying equipment and may inadvertently cause numerous other issues. A cover that fits precisely, that was designed to suit the equipment it was intended to protect is key to preventing contacts.

- No gaps where equipment remains exposed and a potential contact could occur
- No open cavities that could promote birds/rodents from nesting and insect colonization
- Can easily be removed and reinstalled over the course of multiple maintenance events
- Properly secured to withstand operating conditions (wind, vibration, temperature shifts, etc.)
- Doesn't place additional mechanical stress or wear on electrical components

Q: Why would a few gaps or holes matter?

A: Where there's a gap in coverage, there's a risk for contact. All it may take to cause a fault is an inquisitive bird or animal to come within proximity of an exposed area. Holes and gaps also invite insects, small birds and rodents to make their homes or to store their food in covers. As a result, larger predators are drawn to the electrical equipment and the risk for contact becomes even more likely.

Q: What is Greenjacket made of?

A: Greenjacket covers are made of an extremely durable and dielectric polyurethane material.

FAQ

GREENJACKET "It Fits"

Q: Why are your covers green?

A: Green was chosen initially because it appealed aesthetically to our customers. Greenjacket covers are also available in grey by request.

**Please note Grey is only available for larger volume orders and there is an applicable surcharge.*

Q: How do Greenjacket covers affect our ability to IR scan bolted connections?

A: Infrared (IR) scanning is regularly performed on equipment protected with Greenjacket by most utilities. With covers installed, thermal variations and hot-spots are detectable with indirect readings. Subtleties in environmental conditions affecting covers (ambient temperature, sun exposure, and wind, for instance) need to be considered and adjusted for during scanning.

Q: Does installing Greenjacket covers affect the current-carrying capacity [ampacity] of conductors?

**Also referred to as derating of conductors*

A: Test results indicate that installing Greenjacket covers does not reduce the current-carrying capacity of conductors.

Q: Can your covers be installed on energized equipment?

A: Yes, but there are the following conditions to keep in mind:

- The feasibility of an energized installation can only be determined by our technicians during the Site Assessment.
- Only possible for covers that can be installed using accepted live-line methods in accordance with the safety standards of the Operating Authority and all applicable codes and standards of the regulatory agency.
- Some equipment configurations do not allow for safe access and therefore cannot be considered for energized installation
- Some Greenjacket covers may not accommodate certain live-line work methods because of their geometry or design.

Q: What are the thermal characteristics of the Greenjacket material?

A: Maximum recommended service temperature for continuous use is 125°C (260°F)

Melting point of 205°C (400°F)

Q: Does Greenjacket cover-up affect the temperature rise of the equipment to which it is applied?

A: Temperature Rise tests conducted by a third party lab concluded that Greenjacket covers do not adversely affect the temperature rise of the underlying equipment. These tests showed that the equipment protected with Greenjacket had a significantly lower temperature rise when compared to the same uncovered equipment used as the test control.

Q: How are grounds installed once cover-up has been applied?

A: Grounds are installed in the same way as they would be typically. Prior to a Greenjacket installation, grounding locations are identified by the installer (per the requirements of the Operating Authority) and cover-up is applied accordingly.

Q: What test result have been achieved by Greenjacket?

A: Greenjacket meets and exceeds the *IEEE Std 1656™-2010 Guide for Testing the Electrical, Mechanical, and Durability Performance of Wildlife Protective Devices on Overhead Power Distribution Systems Rated up to 38 kV.*

Test results are available upon request by contacting Cantega via email: sales@cantega.com

FAQ

GREENJACKET "It Fits"

Q: Why does Cantega include conductor cover as part of its Greenjacket solution?

A: Greenjacket's unique solution-based approach improves system reliability by preventing bird and animal contacts from occurring. Installing conductor cover (GreyEEL) in conjunction with precise-fit Greenjacket covers is an integral feature of this approach.

Greenjacket's custom solution is developed by examining the outage history of a site, bird/animal species present, and identifying contact risk during the Site Assessment. With the equipment dimensions obtained through photogrammetry, 3D models are created. These models then serve to determine what covers will be used and how they are to be modified in order to fit the underlying equipment correctly. Conductor cover sizes are selected in the same way with individual lengths determined according to the structure's contact risk area and the size of the problem species. Each site-specific solution is outlined in a Site Protection Plan which provides clear instructions on where and how covers are to be installed.

Q: How are Greenjacket covers maintained over their life cycle?

A: Very little maintenance is required other than periodic inspection for Greenjacket covers.

- Greenjacket covers can be removed and reinstalled on equipment that require regular inspection and maintenance. Before removing a cover, note its position and orientation relative to the underlying equipment and any corresponding or coupled parts. It's important that covers be reinstalled in the same way that they were intended to fit. Taking an image of the cover prior to removal can be useful in verifying the correct fit. A simple mistake such as reinstalling a cover over several insulator flights can significantly diminish the insulator's BIL rating.
- Sometimes drainage hole locations can't be predicted until covers are installed onto equipment. Drainage holes should be field drilled on the lowest point of covers, where most appropriate, at the time of installation.
- Greenjacket push fasteners can only be used once and need to be cut to be removed. Extra push fasteners are provided with every order and more can be obtained from Greenjacket Inc. as needed.
- Tracking caused by contamination places severe electrical stress on the surface of installed cover-up which can result in a flashover. When contaminated insulators/equipment require washing, Greenjacket covers should also be inspected and cleaned in the same fashion. Careful attention should be taken to ensure covers are not dislodged while being cleaned and that their original intended position is maintained.
- Greenjacket covers should never be reinstalled on damaged or malfunctioning equipment.

Q: What are delivery times for Greenjacket orders?

A: Delivery times are generally 4-6 weeks for most Greenjacket orders. This is from the time the Site Assessment is completed and the scope of work has been finalized. Greenjacket Inc. can expedite delivery when In-Service Dates need to be accommodated. Initial discussions about your project will include the estimated delivery time.

Q: How do I order Greenjacket covers?

A: To order Greenjacket covers call Greenjacket Inc. toll free at 1.866.464.7996 or email sales@greenjacketinc.com.

Q: Who do I contact for more info or technical questions?

A: Call Greenjacket Inc. toll free at 1.866.464.7996 or email sales@greenjacketinc.com.