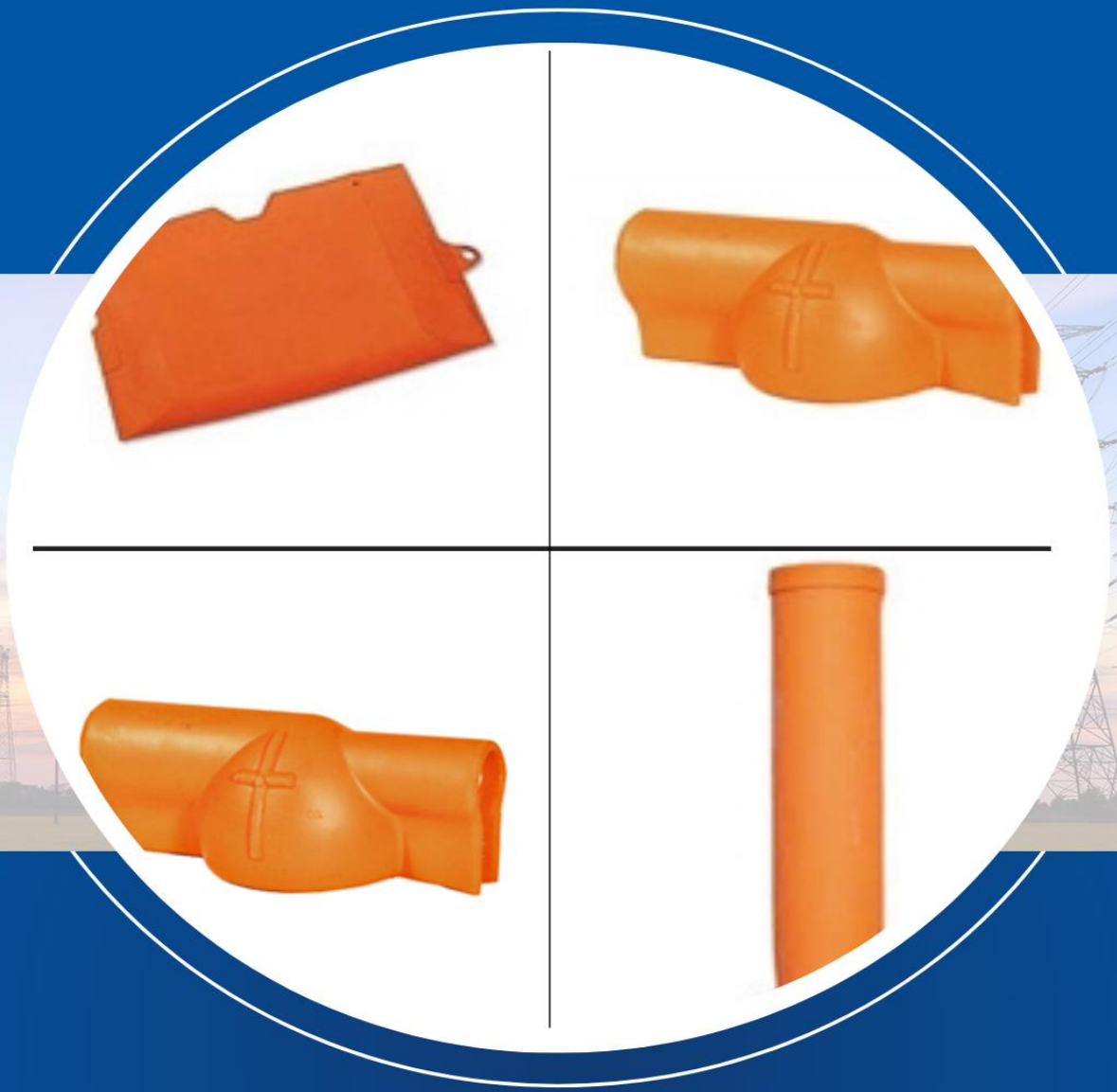
Burlington
Safety Laboratory Inc.

DIELECTRIC TESTING PROCESS

Hoods



www.burlingtonsafety.com

Burlington Safety Laboratory has been testing protective equipment since 1971. We are accredited by NAIL for PET, and our test procedures meet or exceed ASTM/ANSI, MIL Specs, NFPA 70E, FED and CAL OSHA standards. Our quality control procedures include thorough and accurate records of each and every article tested, along with dates and test values. Burlington Safety Laboratory's technicians are fully trained before they perform critical tests on your personal protective equipment.

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Dielectric Testing Process for Electrical Safety Hoods

Burlington Safety Laboratory has a short 2 week turnaround upon receiving electrical safety hoods for laboratory testing to ASTM standards. Customers can either ship their gloves to us or drop them off at our facility for testing. Upon receiving, our testing process consists of:

1. **Wash**

Insulating hoods undergo a laundering process in accordance with ASTM Standards to ensure compliance with safety regulations. Utilizing an industrial cruise line washing machine guarantees thorough cleaning, effectively removing all traces of streaks, stains, dirt, dust, oils, and other contaminants that may compromise the insulation properties of the hoods. Additionally, this cleaning process ensures the removal of any stamps and markings from previous test certifications, providing a clean surface for subsequent testing procedures.

Figure 1 - Industrial Cruise Line Washing Machine

2. **Drip dry**

Following laundering, the insulating hoods are carefully placed on drying racks to air dry. Avoiding the use of a dryer prevents potential damage to the exterior of the hoods. Once each hood is completely dry, they are then transported to the dielectric testing station for further evaluation. This methodical drying process ensures the preservation of the hoods' integrity and prepares them for subsequent testing procedures.

3. **Dielectric Testing**

The dielectric testing process for hoods is a bit more specialized than most other rubber equipment. Each hood is placed in a molded “block” that conducts electricity. A molded insert is then carefully placed inside each hood and connected via wire to the energized component of the testing machine. This setup ensures that both the inside and outside of the hood are energized, allowing for comprehensive assessment of its dielectric properties in accordance with ASTM Standards. Due to the thickness of hoods, it is rare for them to fail this part of the testing process, underscoring their robust insulation capabilities.

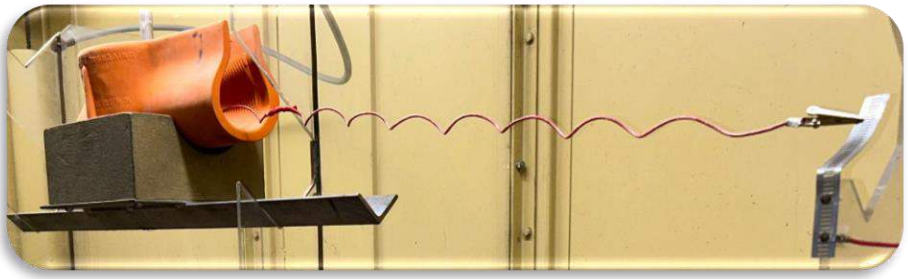

Figure 2 - Dielectric Testing

4. **Visual**

Following the dielectric testing, each hood undergoes a thorough visual inspection conducted by our technicians. While failures in general are rare due to the robust nature of hoods, our technicians remain diligent in inspecting each hood to ensure compliance with ASTM standards. Our technicians rigorously examine every aspect of the hoods to detect any potential defects or irregularities, ensuring the highest level of quality and safety standards are upheld.

5. **Stamp**

Each hood is then stamped with essential information including an identifying serial number, proof test voltage, maximum use voltage, and the date of testing completion. This stamping process enhances traceability and ensures that crucial information is readily accessible for each hood, facilitating effective monitoring of testing history and compliance with safety standards.

Figure 3 - Stamp

6. **Ship or Pickup**

Finally, the hoods are either dispatched to the customer via UPS for delivery or made available for customer pickup, based on their preference. This ensures efficient delivery of the tested hoods to the designated recipients, facilitating their prompt integration into their operations.

Figure 4 - Shipping or Pickup

Testing Specifications

Rubber Insulating Equipment	ASTM Designation
Rubber Insulating Gloves 2.5 – 40kV, Class 00 – Class 4	D120 / F496
Rubber Insulating Sleeves 5 – 40kV, Class 00 – Class 4	D1051 / F496
Rubber Insulating Footwear 5 – 20kV Overshoes & Boots	F1116/F1117
Rubber Insulating Blankets 5 – 40kV, Class 0 – Class 4	D1048/F479
Rubber Insulating Line Equipment Line Hose, Hoods, Covers, etc.	D1050/F478

Jumpers/Grounds	ASTM Designation
Hotline Jumpers Insulation & Voltage Drop Test	F2321
Ground Sets and Leads Voltage Drop Test	F855

Line Guards	ASTM Designation
Plastic Line Guards	F712

Hot Line Tools	ASTM Designation
All Hot Sticks Switch/straight, telescopic, and Grip-All sticks	F711

Voltage Detectors & Meters
Voltage Detectors (Manufacturer's Functional Test)
Meters (Manufacturer's Functional Test) **Calibration Services Available**

Testing Intervals

Equipment	Testing Interval
Gloves	Every 6 months
Sleeves	Every 12 months
Blankets	Every 12 months
Line Hose	Every 12 months
Boots	Every 6 months
Grounds	Every 12 months
Fiberglass Tools	Every 2 years

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