

# Insulating Rubber Products

## General Info

Insulating Rubber Products are essential to the safety of electrical workers. These items are designed primarily to prevent shock and electrocution.

**OSHA Standard 29 CFR 1910.137** provides the design requirements and in-service care and use requirements for electrical insulating gloves and sleeves as well as insulating blankets, matting, covers, and line hose.

As an accredited NAIL for PET laboratory, Cementex has the ability to provide both products and services to help keep qualified electricians in compliance with OSHA requirements and most importantly - SAFE.

All rubber products from Cementex are electrically tested and ready to be placed into service. A "Plain English" stamp (shown below) identifies the date of testing and the maximum use voltage of the item.

Cementex Products, Inc.  
Max Use: 7,500VAC | 11,250VDC  
Date Tested: \_\_\_\_\_



ID Tag	Class	AC Proof Test Voltage	AC Max Use Voltage	DC Proof Test Voltage	DC Max Use Voltage*
Beige	00	2,500	500	10,000	750
Red	0	5,000	1,000	20,000	1,500
White	1	10,000	7,500	40,000	11,250
Yellow	2	20,000	17,000	50,000	25,500
Green	3	30,000	26,500	60,000	39,750
Orange	4	40,000	36,000	70,000	54,000

OSHA Table I-4 Identifies test voltages.

\*Each glove and sleeve has a colored ID Tag labelled noting class and maximum voltage for which the glove may be used.

Rubber Insulating Equipment	When to Test	Governing Standard for Test Voltage
Blankets	Before first issue; every 12 months thereafter†	ASTM F 479
Covers	If insulating value is suspect	ASTM F 478
Gloves	Before first issue; every 6 months thereafter	ASTM F 496
Line Hose	If insulating value is suspect	ASTM F 478
Sleeves	Before first issue; every 12 months thereafter	ASTM F 496

OSHA Table I-5 Identifies test intervals.

\*If the insulating equipment has been electrically tested but not issued for service, the insulating equipment may not be placed into service unless it has been electrically tested within the previous 12 months.



Insulating Rubber



# Cementex Field Care, Inspection and Storage of Rubber Insulating Gloves (RIGs)

## PHYSICAL CLEANING

Clean gloves as necessary after use. Gloves should remain free of dirt or oil found on gloves when removing protectors.



In a sink wash gloves inside and out with mild soap/soapy water. Be sure not to wear rings or any damaging jewelry.



NOTES: Only soapy water or denatured alcohol should clean label area.

Rinse thoroughly with water.



Air dry gloves away from direct sunlight and sources of ozone or high heat (120°F / 49°C).

## STORAGE AND INSPECTION

RIGs should be stored in protective bag separately from protectors. This decreases stress on fingers.

Gloves should be placed in cuff down and with fingers facing up. Do not store gloves inside out and avoid any folds or creasing.



Store in cool, dark, and dry place avoiding heat, sunlight away from electrical discharges. Keep away from potential physical damages (sharp and/or heavy objects) and environmental damages (ozone, chemicals – oils, solvents, or damaging fumes).



Inspect for damage prior to use daily, and after any incident suspected of causing damage.

Use a glove inflator to expand the glove to 1-1/2 times – expansion stretches the rubber to check for physical damage such as punctures, cuts, knicks, cracks scratches or abrasions.

Check for chemical damages such as swelling, softness, hardness, or stickiness.



## WEAR AND RETEST

Mechanical protection is required to be worn over RIGs for protection against cuts, abrasions, and punctures. Leather Protectors can also offer additional protection to the gloves and worker.

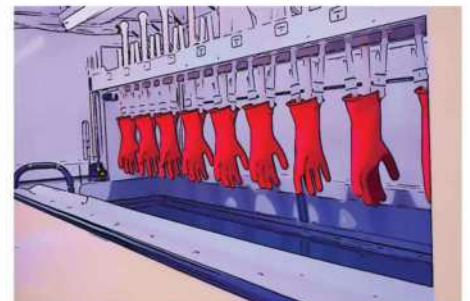


It is so important to wear gloves when required and as required. Comfort is critical. Either cotton glove liners or

glove talc may be exactly what is needed to provide additional comfort when wearing gloves.



OSHA mandates dielectric retests at least once every six (6) months in a NAIL-accredited laboratory per ASTM F496.





# Insulating Gloves

Manufactured using natural rubber in ISO manufacturing facilities, rubber insulating gloves provided by Cementex are compliant with OSHA 1910.137, OSHA 1910.268, NFPA 70E, CSA Z462, and exceed the ASTM D120 and European EN60903 standards for use around Electrical Hazards and Arc Flash Protection.

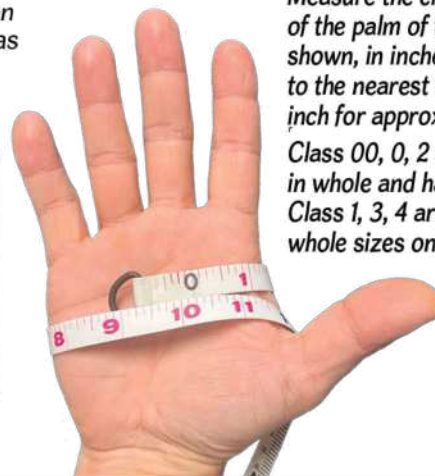
These gloves are made of natural rubber construction offering the required dielectric properties combined with flexibility, strength, and durability. Gloves feature rolled cuffs and are anatomically shaped thereby reducing hand fatigue. Each glove is chlorinated for maximum comfort. All classes of gloves are available in whole sizes. Class 00, 0, and 2 are also available in half sizes in various color options.

## OSHA Certification Requirements

All Cementex gloves ship tested and certified according to OSHA regulation 1910.137(b)(2)(xii) which states the employer shall certify that equipment has been tested in accordance with the requirements of paragraph (b)(2)(viii), (b)(2)(ix), and (b)(2)(xi) of this section. The certification shall identify the equipment that passed the test and the date it was tested.

Measure the circumference of the palm of the hand, as shown, in inches. Round up to the nearest half or whole inch for approximate sizing. Class 00, 0, 2 are available in whole and half sizes. Class 1, 3, 4 are available in whole sizes only.

Glove Kits Include: Insulating Rubber Gloves, TruFit Cinch Strap Protectors, and Cementex Canvas Storage Bag  
 Glove Color may be specified by the addition of -B=Black, -R=Red, -Y=Yellow  
 \*color availability indicated



Insulating Rubber Gloves



IG00-11-9B

Class 00 GLOVES	DESC
IG00-11-(SIZE)	Class 00 - 500VAC/750VDC - 11" OAL (black)
Class 00 GLOVE KITS	DESC
IGK00-11-(SIZE)	Class 00 - 500VAC/750VDC - 11" OAL (black) (OAL=Overall Length)

Class 0 GLOVES	DESC
IGO-11-(SIZE)	Class 0 - 1,000VAC/1,500VDC - 11" OAL (red, black, yellow)
IGO-14-(SIZE)	Class 0 - 1,000VAC/1,500VDC - 14" OAL (black, yellow)
IGO-14-(SIZE)YB-SC	Class 0 - 1,000VAC/1,500VDC - 14" OAL Dual Color (yellow over black)

Class 0 GLOVE KITS	DESC
IGK0-11-(SIZE)	Class 0 - 1,000VAC/1,500VDC - 11" OAL (red, black, yellow)
IGK0-14-(SIZE)	Class 0 - 1,000VAC/1,500VDC - 14" OAL (black, yellow) (OAL=Overall Length)



94 IGO-11-9Y



IGO-11-9R



IGO-11-9B



IGO-14-9YB-SC



IGO-14-9B



**Class 1 GLOVES** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IG1-14-(SIZE).....Class 1 - 7,500VAC/11,250VDC - 14" OAL (black, yellow)  
 IG1-14-(SIZE)YB-SC.....Class 1 - 7,500VAC/11,250VDC - 14" OAL Dual Color  
 (yellow under black)  
 IG1-16-(SIZE).....Class 1 - 7,500VAC/11,250VDC - 16" OAL (black)

**Class 1 GLOVE KITS** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IGK1-14-(SIZE).....Class 1 - 7,500VAC/11,250VDC - 14" OAL (black, yellow)  
 IGK1-16-(SIZE).....Class 1 - 7,500VAC/11,250VDC - 16" OAL (black)  
 (OAL=Overall Length)



IG1-14-9B

IG1-14-9YB-SC

**Class 2 GLOVES** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IG2-14-(SIZE).....Class 2 - 17,000VAC/25,500VDC - 14" OAL  
 (red, black, yellow)  
 IG2-16-(SIZE).....Class 2 - 17,000VAC/25,500VDC - 16" OAL  
 (black)  
 IG2-16-(SIZE)YB-SC.....Class 2 - 17,000VAC/25,500VDC - 16" OAL  
 Dual Color (yellow under black)  
 IG2-16-(SIZE)YB-BC.....Class 2 - 17,000VAC/25,500VDC - 16" OAL  
 Bell Cuff - Dual Color (yellow under black)  
 IG2-18-(SIZE)YB-CC.....Class 2 - 17,000VAC/25,500VDC - 18" OAL  
 Contour Cuff - Dual Color (yellow under black)

**Class 2 GLOVE KITS** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IGK2-14-(SIZE).....Class 2 - 17,000VAC/25,500VDC - 14" OAL  
 (red, black, yellow)  
 IGK2-16-(SIZE).....Class 2 - 17,000VAC/25,500VDC - 16" OAL  
 (black)  
 (OAL=Overall Length)



IG2-14-9B

IG2-14-9R

IG2-16-9B

IG2-16-9YB-SC

IG2-16-9YB-BC

IG2-18-9YB-CC

**Class 3 GLOVES** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IG3-16-(SIZE).....Class 3 - 26,500VAC/39,750VDC - 16" OAL (black)  
 IG3-16-(SIZE)YB-SC.....Class 3 - 26,500VAC/39,750VDC - 16" OAL Dual Color  
 (yellow under black)  
 IG3-16-(SIZE)YB-BC.....Class 3 - 26,500VAC/39,750VDC - 16" OAL  
 Bell Cuff - Dual Color (yellow under black)  
 IG3-18-(SIZE)YB-CC.....Class 3 - 26,500VAC/39,750VDC - 18" OAL  
 Contour Cuff - Dual Color (yellow under black)

**Class 3 GLOVE KITS** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IGK3-16-(SIZE).....Class 3 - 26,500VAC/39,750VDC - 16" OAL (black)  
 (OAL=Overall Length)



IG3-16-9B

IG3-16-9YB-SC

IG3-16-9YB-BC

IG3-18-9YB-CC

**Class 4 GLOVES** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IG4-18-(SIZE).....Class 4 - 36,000VAC/54,000VDC - 18" OAL (black)  
 IG4-18-(SIZE)YB-SC.....Class 4 - 36,000VAC/54,000VDC - 18" OAL Dual Color  
 (yellow under black)  
 IG4-18-(SIZE)YB-BC.....Class 4 - 36,000VAC/54,000VDC - 18" OAL  
 Bell Cuff - Dual Color (yellow under black)  
 IG4-18-(SIZE)YB-CC.....Class 4 - 36,000VAC/54,000VDC - 18" OAL  
 Contour Cuff - Dual Color (yellow under black)

**Class 4 GLOVE KITS** \_\_\_\_\_ **DESC** \_\_\_\_\_  
 IGK4-18-(SIZE).....Class 4 - 36,000VAC/54,000VDC - 18" OAL (black)  
 (OAL=Overall Length)



IG4-18-9B

IG4-18-9YB-SC

IG4-18-9YB-BC

IG4-18-9YB-CC

Insulating Rubber Gloves



# TruFit® Leather Protectors

Quality Leather protectors result in better dexterity, comfort, and a safer working conditions for qualified workers. This fact has driven Cementex to create our TruFit® Leather Protectors. By using only premium materials and a new, more ergonomic design, we have created a safe and comfortable solution to energized work requirements. The newly designed palm and 3D-fingers create a more conforming fit around rubber gloves, reducing hand fatigue and greatly improving dexterity.

To get the utmost protection and life from rubber gloves, leather protectors should always be worn over the rubber gloves, while in use.

Leather protectors are to be used for the mechanical protection of rubber gloves and shall not be used alone for electrical protection per ASTM F696.

*Warning! Do not use leather protectors alone for protection against electric shock. Serious injury or death will result. Always use a properly rated insulating glove for the voltage being worked.*

**Arc Flash Protection - per NFPA 70E Rubber insulating gloves with protectors provide arc flash protection in addition to electric shock protection. Higher class rubber insulating gloves with protectors, due to their increased material thickness, provide increased arc flash protection.**

**TruFit® Low Voltage Leather Protectors** are constructed of Premium Top Grain Goat Hide providing a soft, flexible feel and excellent protection.

- Whole Sizes 8-12 (complementary fit for associated half sizes)
- 10" Overall Length (OAL)
- Designed for use over Class 00 and Class 0 Insulating Rubber Gloves
- Cinch Strap style is standard for kits\*  
\*transition based on inventory levels of elasticized style

**TruFit® High Voltage Leather Protectors** are constructed of Premium Top Grain Cow Hide providing a soft feel and our highest level of protection.

- Features Wrist Cinch Strap
- Whole Sizes 8-12 (complementary fit for associated half sizes)
- 12" Overall Length (OAL)
- Designed for use over Class 1, 2, 3 and 4 Insulating Rubber Gloves

PN \_\_\_\_\_ DESC \_\_\_\_\_  
 P0-10-(SIZE)\*..... Class 00/0 - 10" OAL TruFit® Protector  
 P0-10-(SIZE)CS... Class 00/0 - 10" OAL TruFit® Protector  
 with Cinch Strap

P2-12-(SIZE)..... Class 1/2/3/4 - 12" OAL TruFit® Protector

*\*NOTE: TruFit® Protector without cinch strap will have limited sizes and quantities as we transition to cinch strap style only.*



P0-10-9CS



P2-12-10 shown

Leather Protectors



# Glove Inflator

The Cementex Glove Inflator allows for simple, effective daily compliance. Physical inspection is just as important as your Dielectric Test! Do it the right way--inspect the entire glove tip to cuff and without breaking the bank!

## OSHA 1910.137(c)(2)(ii)

Insulating equipment shall be inspected for damage before use each day and immediately following any incident that can reasonably be suspected of causing damage. Insulating gloves shall be given an air test along with visual inspection.

- Easy-to-use design
- Non-slip base
- Comply with ASTM F496 and NFPA 70E
- Includes velcro strap and storage bag

PN \_\_\_\_\_ DESC \_\_\_\_\_  
 CPGI..... Glove Inflator  
 CPGI-VS.... Replacement Velcro Strap



How to Use



# Glove Talc

Cementex Gove Talc provides pure comfort

- No dangerous additives; designed for safe use with insulating goods.
- Will not damage Type I or Type II rubber.
- Absorbs moisture and perspiration
- Minimizes friction
- Prevents rubber from becoming 'sticky'

PN \_\_\_\_\_ DESC \_\_\_\_\_

- CPGT-6SB..... 6 oz. Bottle
- CPGT-12CB....Case of 6 oz. Bottles (12)
- CPGT-1QC.....1 Quart Container (32 oz.)
- CPGT-4QC.....Case of Quart Containers (4)
- CPGT-1GC.....1 Gallon Bottle
- CPGT-5GC.....5 Gallon Container



Glove Talc SDS



CPGT-6SB

Rubber Accessories

# Insulating Rubber Sleeves

Manufactured using natural rubber in ISO manufacturing facilities the rubber insulating sleeves provided by Cementex are compliant with OSHA 1910.137, OSHA 1910.268, NFPA 70E®, CSA Z462, and exceed the ASTM D1051 standards for use around Electrical Hazards and Arc Flash Protection.

These sleeves offer the required dielectric properties combined with flexibility, strength, and durability. Sleeves are anatomically shaped thereby providing optimal comfort and range of motion. Sleeves are chlorinated for maximum comfort and available in *Regular, Large, and Extra Large* in varying colors.

Insulating Rubber Sleeves share the colored Class Identification tags noted for Insulating Rubber Gloves.

Sleeve Kits Include: Insulating Rubber Sleeves, Sleeve Straps and Buttons, and Sleeve Bag.

Sizing Small (S), Regular (R), Extra Large (XL)

**PN** \_\_\_\_\_ **DESC** \_\_\_\_\_

SLV0-(SIZE)..... Class 0 Sleeves Only

SLVK0-(SIZE)..... Class 0 Sleeve Kit

SLV1-(SIZE)..... Class 1 Sleeves Only

SLVK1-(SIZE)..... Class 1 Sleeve Kit

SLV2-(SIZE)..... Class 2 Sleeves Only

SLVK2-(SIZE)..... Class 2 Sleeve Kit

SLVSTP-8POS..... Sleeve Straps: 8 Position Adjustable (1 Pair)

SLVBUT-4..... Sleeve Buttons (4 Pair)

SLVHB-2..... Sleeve Harness with Buttons (1 Pair)

**SLV2**



\*\*\*\*Sleeve color may vary.\*\*\*\*

**SLVSTP-8POS**



**\*\*NOTE:** Additional classes available individually or as kits upon request.\*\*

# Insulating Rubber Apron

Insulating Rubber Aprons were designed initially for work on and around battery storage systems where technicians must regularly reach over energized conductors to perform standard maintenance.

Utilizing Cementex Class 0 Roll Blankets as the base material, these aprons are made from high-strength, fabric-reinforced Type II rubber. This rubber is highly puncture- and tear-resistant, as well as flame (self-extinguishing), oil, and ozone-resistant.

Designed, manufactured, and tested in the USA in strict accordance to current ASTM F2320 specifications.

**PN** \_\_\_\_\_ **DESC** \_\_\_\_\_

APRON-0..... Class 0 Shock Protection Apron

APRON-0-WS..... Class 0 Apron with Waist Strap

APRON-0-WS2B...Apron Replacement Waist Strap/Buckle





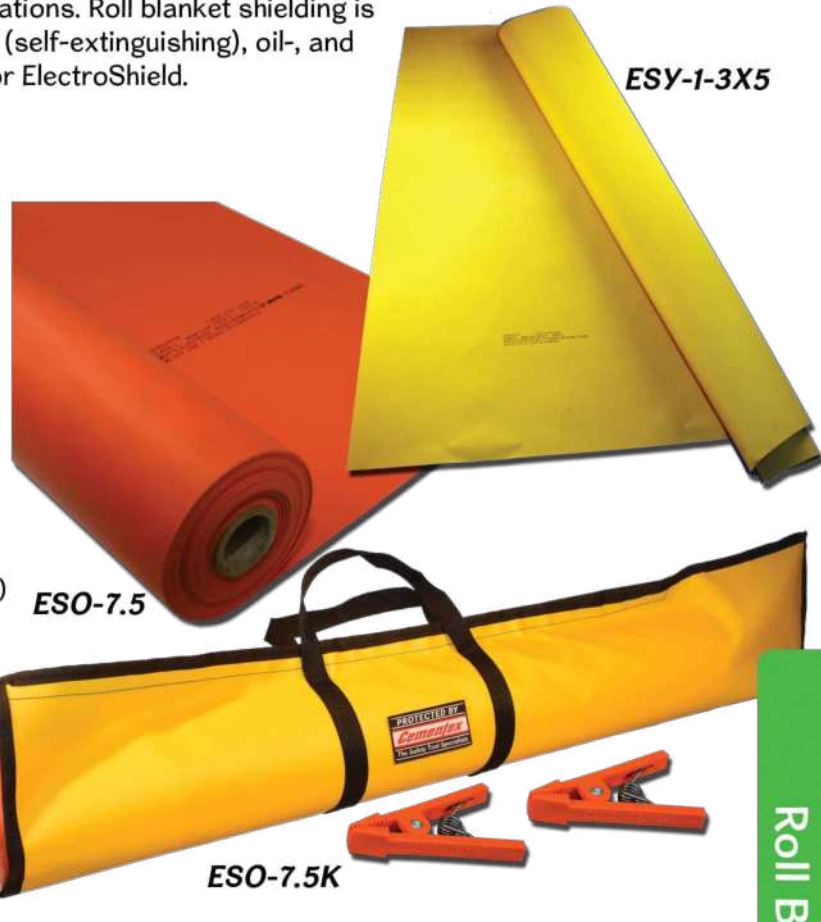
# Roll Blankets

Made from high-strength, fabric-reinforced Type II rubber, Cementex Roll Blankets, aka ElectroShield, allow custom-cut fit for each application at the job site. Designed, manufactured, and tested in the USA in strict accordance to current ASTM F2320 specifications. Roll blanket shielding is highly puncture- and tear-resistant, as well as flame- (self-extinguishing), oil-, and ozone-resistant. There are no retest requirements for ElectroShield.

PN	DESC
ESY-1.....	Class 0 Full Roll: 3' x 30' (Yellow)
ESY-1-2X3.....	Class 0 2' x 3' (Yellow)
ESY-1-3X3.....	Class 0 3' x 3' (Yellow)
ESY-1-3X5.....	Class 0 3' x 5' (Yellow)
ESY-1K.....	Class 0 Full Roll Kit: 3' x 30' (Yellow)
ESY-1RF.....	Class 0 By the foot* x 3' wide (Yellow)
ESO-7.5.....	Class 1 Full Roll: 3' x 30' (Orange)
ESO-7.5-3X3..	Class 1 2' x 3' (Orange)
ESO-7.5-3X5..	Class 1 3' x 3' (Orange)
ESO-7.5K.....	Class 1 Full Roll Kit: 3' x 30' (Orange)
ESO-7.5RF.....	Class 1 By the foot* x 3' wide (Orange)
PVC-7.5.....	Class 1 PVC Full Roll: 3' x 30' (Clear)
PVC-7.5K.....	Class 1 PVC Full Roll Kit: 3' x 30' (Clear)
ES-CLAMP.....	ElectroShield Clamp (Pair)
ES-CSB.....	ElectroShield Carry/Storage Bag

\*Remnant Foot lengths are limited to available remnant inventory.

Roll Blanket Shielding Kits Include: Clamps (Pair) and Carry/Storage Bag.



ESY-1-2424V

## ElectroShield with Velcro®

PN	DESC
ESY-1-1212V.....	Class 0 ElectroShield 12" x 12" with Velcro®
ESY-1-1236V.....	Class 0 ElectroShield 12" x 36" with Velcro®
ESY-1-1818V.....	Class 0 ElectroShield 18" x 18" with Velcro®
ESY-1-1836V.....	Class 0 ElectroShield 18" x 36" with Velcro®
ESY-1-2424V....	Class 0 ElectroShield 24" x 24" with Velcro®
ESY-1-2448V....	Class 0 ElectroShield 24" x 48" with Velcro®
ESY-1-3X3V.....	Class 0 ElectroShield 36" x 36" with Velcro®



ESY-1-1212V

ESY-1-1236V

Roll Blankets



# Low Voltage Insulating Blankets

Superior quality dielectric blankets are designed, manufactured, and tested in the USA in strict accordance to current ASTM D1048 specifications.

The Class Identification voltage rating system is the same as insulating rubber gloves but there is no colored identification tag.

Class 0 and Class 4 Blankets are both Type II: made of ozone-resistant EPDM synthetic rubber.

Class 2, Type I Blanket is made of natural rubber.

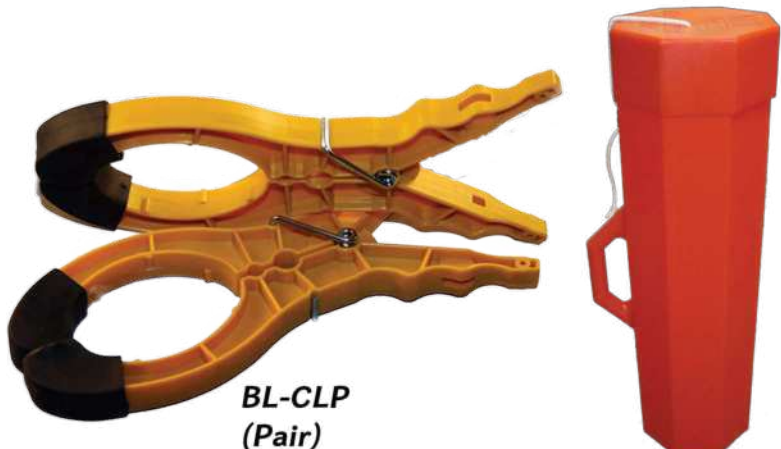
All blankets measure 36" x 36" unless otherwise identified.

Blanket Kits Include: Blanket Clamp Pins (Pair) and Canister (BLK-SC7)



Insulating Blankets

PN	DESC
BL-C0.....	Class 0 No Eyelets (Yellow)
BLK-C0.....	Class 0 Blanket Kit
BL-C2.....	Class 2 6 Eyelets (Black)
BLK-C2.....	Class 2 Blanket Kit
BL-C4.....	Class 4 6 Eyelets (Orange)
BLK-C4.....	Class 4 Blanket Kit
BL-C4-SLT.....	Class 4 Split 28 Eyelets (Orange)
BLK-C4-SLT..	Class 4 Split Blanket Kit
BL-CLP.....	Blanket Clamp Pins (Pair)
BL-CLP-HS....	Hot Stick Blanket Clamp Pins (Pair)
BL-MBT.....	Magnetic Blanket Button
BL-PNS.....	Two Way Button
BL-14VBS.....	14" Velcro Blanket Straps
BL-30VBS.....	30" Velcro Blanket Straps
BLK-SC4.....	4-1/2" I.D. Blanket Canister
BLK-SC6.....	6" I.D. Blanket Canister
BLK-SC7.....	7" I.D. Blanket Canister
BLK-SC7H.....	7" I.D. Blanket Canister with Handle
BLK-SC10H....	10" I.D. Blanket Canister with Handle



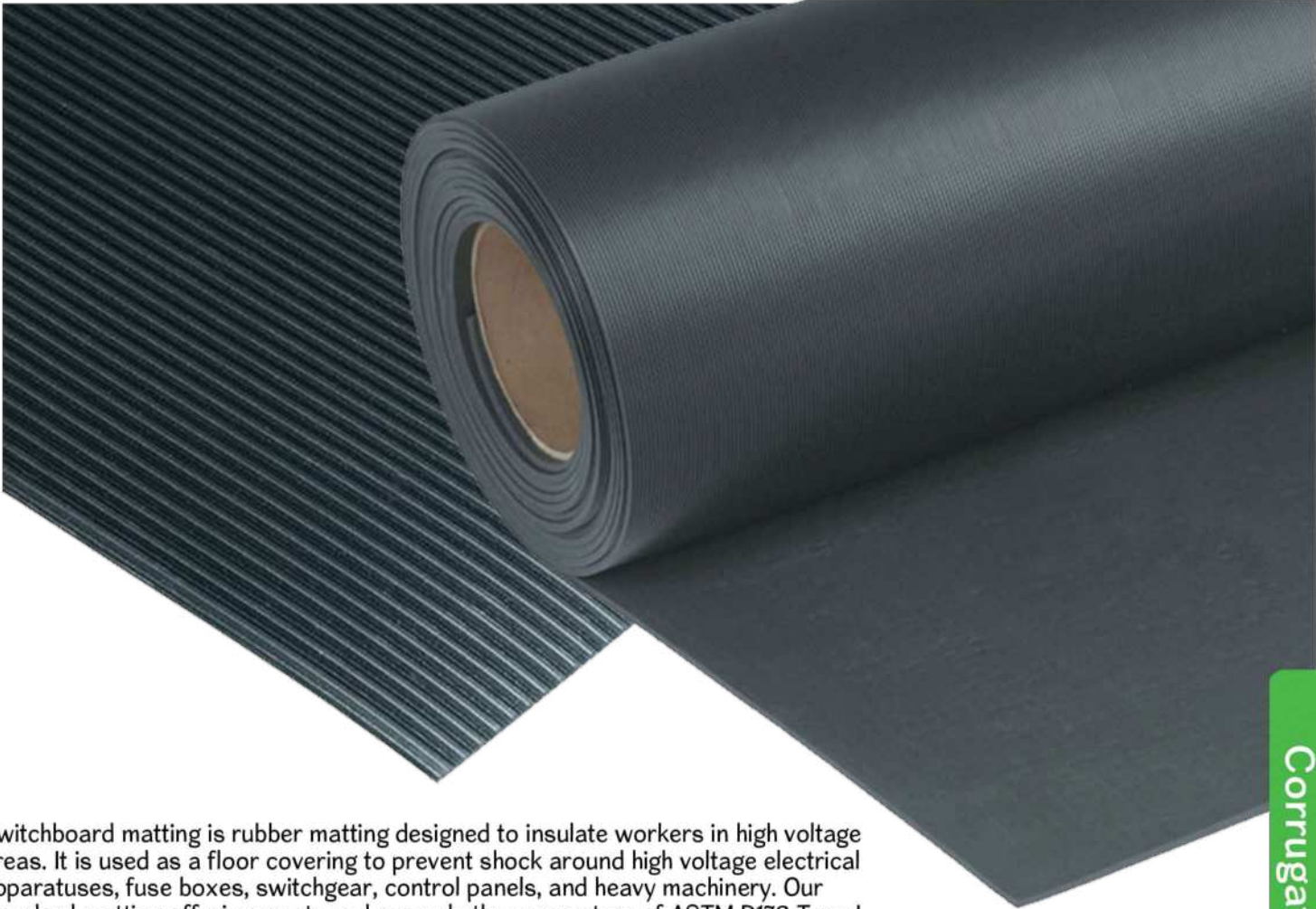
**BL-CLP**  
(Pair)

**BLK-SC10H**

*\*I.D. = Inside Diameter*



# Switchboard Matting



Corrugated Matting

Switchboard matting is rubber matting designed to insulate workers in high voltage areas. It is used as a floor covering to prevent shock around high voltage electrical apparatuses, fuse boxes, switchgear, control panels, and heavy machinery. Our standard matting offering meets and exceeds the parameters of ASTM D178 Type I.

Switchboard Matting is available in a number of custom-cut size variations. Full rolls of Class 1 (7.5kV\*), 2 (17kV\*), and 3 (26.5kV\*) measure: 36" Wide x 75' Long. Full rolls of Class 4 (46.5kV\*) measure: 36" Wide x 60' Long. Thicknesses vary based on class (see descriptions below). \*indicates Nominal Maximum Use Voltage

**\*NOTE:** Linear Foot ordering will be entered as the total number of feet required as the Quantity on the line. Comments on each line will indicate the number of pieces and feet each is to be cut (e.g., 2 pieces each cut 2' in length or similar (this would be a total quantity of 4).

PN	DESC
CPSM316-3675F.....	Class 1 3/16" Corrugated Roll (3'x75')
CPSM316-1LF.....	Class 1 3/16" Corrugated (Per foot)
CPSM140-3675F.....	Class 2 1/4" Corrugated Roll (3'x75')
CPSM140-1LF.....	Class 2 1/4" Corrugated (Per foot)
CPSM380-3675F.....	Class 3 3/8" Corrugated Roll (3'x75')
CPSM380-1LF.....	Class 3 3/8" Corrugated (Per foot)
CPSM120-3660F.....	Class 4 1/2" Corrugated Roll (3'x60')
CPSM120-1LF.....	Class 4 1/2" Corrugated (Per foot)

\*\*Type II matting offerings are available to custom order\*\*

ASTM D178 is a standard specification for rubber insulating matting used in electrical applications. It defines two types of matting: Type I and Type II. When selecting matting for electrical insulation purposes, it is important to consider the specific voltage requirements and application conditions to determine whether Type I or Type II matting is the most appropriate choice. The key differences between the two types are as follows:

**Voltage Class:** Type I matting is designed for use in low voltage applications, typically up to 1,000 volts. Type II matting is designed for higher voltage applications, usually up to 17,000 volts.

**Thickness:** Type I matting is generally thicker than Type II matting. Standard thickness for Type I matting ranges from 1/8" to 1/4", while Type II matting is typically available in thicknesses ranging from 1/8" to 3/8".

**Physical Properties:** Although both types of matting must meet certain performance requirements outlined in ASTM D178, there may be variations in physical properties such as tensile strength, elongation, hardness, and ozone resistance. These variations are intended to ensure that each type of matting is suitable for its intended voltage class and application.