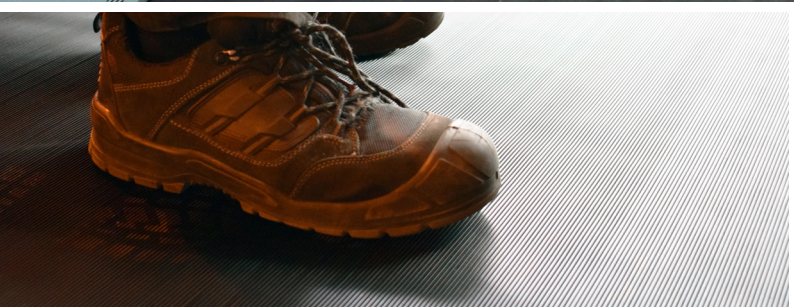


# ELECTRICAL INSULATING RUBBER MATTING

A COMPREHENSIVE GUIDE FOR ALL OF YOUR ELECTRICAL SAFETY MATTING NEEDS



ISO  
9001 : 2015  
REGISTERED



Manufacturers · Designers · Distributors

Experts in  
**Rubber**

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## Meet The Rubber Safety Matting Experts

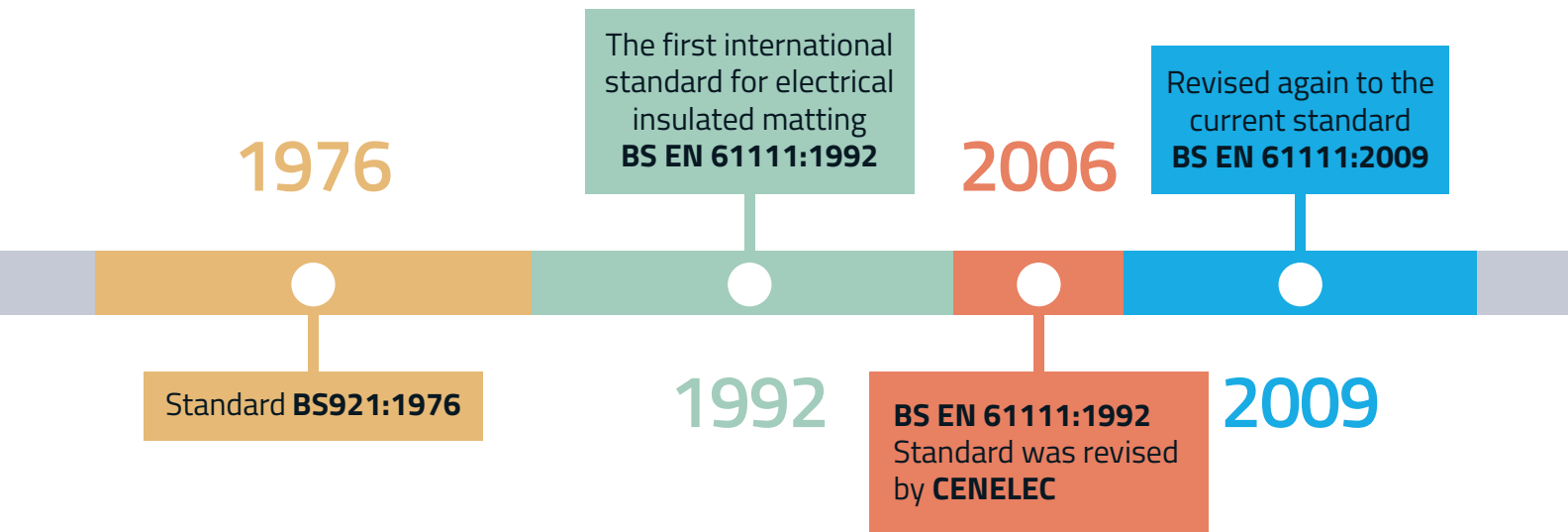
*"Here at The Rubber Company we design and manufacture an extensive range of rubber safety matting products. We can also provide over 75 years of experience in supplying rubber safety products to customers all around the world, for use in a variety of applications. Let The Rubber Company take care of all of your electrical safety matting needs."*

Lynne Jurd - Sales Director



# UNDERSTANDING IEC MATTING

## - A Timeline



## IEC ELECTRICAL MATTING MAXIMUM WORKING VOLTAGES

1.0KV: CLASS '0'  - RED

7.5KV: CLASS '1'  - WHITE

17.0KV: CLASS '2'  - YELLOW

26.5KV: CLASS '3'  - GREEN

36.0KV: CLASS '4'  - ORANGE

## MANUFACTURED TO THE HIGHEST STANDARDS

During manufacture we regularly test the sheeting in order to ensure there is a standard of conformity running throughout the entire product.





# IEC 61111:2009 ELECTRICAL INSULATION MATTING

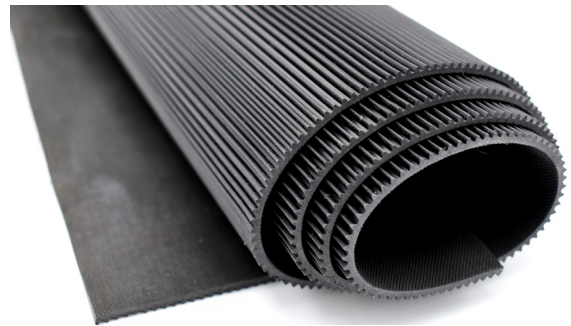
Product Code: RC04153

IEC 61111:2009 CLASS 0 – 4

Our electrical safety matting is fully certified to BS EN 61111:2009; the industry standard since the withdrawal of the now obsolete BS 921:1976. This electrical safety matting is available in 5 different classes (0 – 4) and consists of a fine ribbed, non-slip surface with a cloth impression on the reverse. In accordance with the IEC 61111:2009 requirements, the underside of the mat consists of colour coded text to denote the working voltage and class. We supply the full class range: class 0, 1, 2, 3 and 4 grades from 1000 volts working to 36000 volts working.

## Key Features

- Anti-slip finish. Conforming to slip resistant test
- Resistant to acid, oil and low temperatures
- Ozone, UV and weather resistant
- Permanent marking – durable and un-erasable
- Fully traceable supply
- Low maintenance
- Highly durable & quality rubber compound





**THE RUBBER COMPANY | www.therubbercompany.com**  
**DIN EN 60243-1 | IEC 61111:2009**

- Fully tested to specification IEC 61111:2009
- Provides safety for operators against electrical shock
- High electrical resistance up to 50 KV/50000 volts
- Suitable for both AC and DC applications
- Health and safety regulation halogen free, flame-retardant material
- Highly flexible mats with self-gripping design
- Anti-fatigue properties, comfortable while standing for long periods

IEC 61111:2009 CLASS 0 – 4

Product Code	Class	Stock Thickness	Roll Size	Max. Use Voltage	Proof Voltage	Withstand Voltage	Colour Code
RC04153-CLO-BLK	0	3mm	1m x 10m	1000 Volts	5000 Volts	10000 Volts	Red
RC04153-CL1-BLK	1	3mm	1m x 10m	7500 Volts	10000 Volts	20000 Volts	White
RC04153-CL2-BLK	2	4mm	1m x 10m	17000 Volts	20000 Volts	30000 Volts	Yellow
* RC04153-CL3-BLK	3	5mm	1m x 10m	26500 Volts	30000 Volts	40000 Volts	Green
RC04153-CL4-BLK	4	6mm	1m x 10m	36000 Volts	40000 Volts	50000 Volts	Orange

\* Please note: Class 3 IEC Electrical Insulation Matting not held in stock.

Other thicknesses are also available upon request. Maximum thickness offered in any class is 14mm

Properties	Values
Material	Rubber Elastomer
Colour	Black
Hardness	65° (Shore A)
Density	1.4 (Specific Gravity)
Tensile Strength	70kg / cm <sup>2</sup> (Minimum)
Elongation Break Point	300% (Minimum)
Minimum Temperature	-40°C
Maximum Temperature	+70°C
Flame Retardant Test	(Pass) - Flame shall not reach any point on a 50mm circle
Acid Resistance Test	(Pass) - Min. 75% retention & no breakdown on specified voltage
Oil Resistance Test	(Pass) - Min. 75% retention & no breakdown on specified voltage

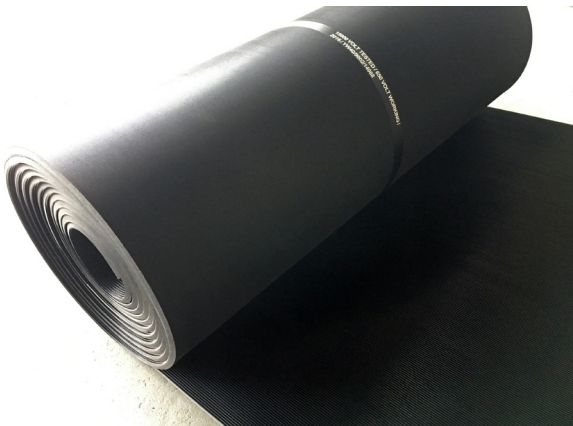
# ELECTRICAL RUBBER SAFETY MATTING

## 650 VOLTS WORKING VOLTAGE

Product Code: **RC04130**

650V PROTECTION

- Fully certified and tested to: 15,000 volts
- Recommended safe working voltage: 650 volts

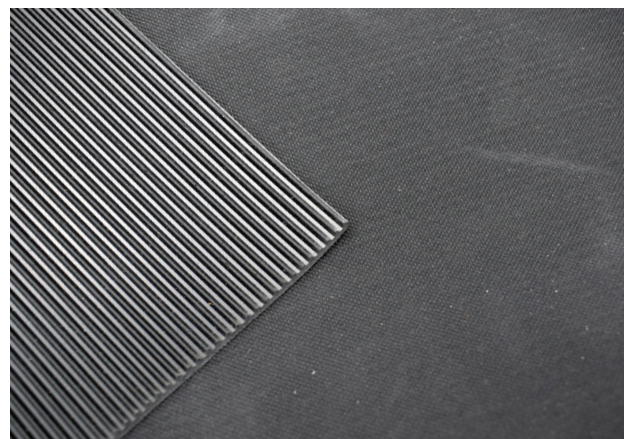


Fine ribbed rubber matting conforming to the superseded specification - BS921:1976 health and safety standards. Despite being replaced by the IEC standard, this is still a very popular electrical safety matting product. It is designed to primarily protect personnel from electrical shock in metering panel, switchboards and substation applications. We recommend this matting when working with 415V, three phase switchgear applications as it allows for a 50% safety margin.

### Stock Roll Sizes:

Product Code	Max. Use Voltage	Thickness	Width	Length	Weight
RC04130/0.914	650 Volts	9.5mm	0.91m	10m	12kg/m <sup>2</sup>
RC04130/1.0	650 Volts	9.5mm	1m	10m	12kg/m <sup>2</sup>
RC04130/1.2	650 Volts	9.5mm	1.2m	10m	12kg/m <sup>2</sup>

Technical Specifications	Values
Compound	Natural Rubber/SBR
Hardness (Shore A)	65°
Density (Specific Gravity)	1.3
Tensile Strength	5 Mpa
Elongation at Break	250%
Abrasion Resistance	180mm <sup>3</sup>
Minimum Temperature	-20°C
Maximum Temperature	+70°C





# ELECTRICAL RUBBER SAFETY MATTING

## 450 VOLTS WORKING VOLTAGE

Product Code: **RC04129**

- Fully certified and tested to: 11,000 volts
- Recommended safe working voltage: 450 volts



Our electrical safety matting 450 volts working is the lowest voltage matting we offer that also complies with health and safety standards. At 6mm thick this matting offers a lightweight alternative to our other electrical matting products. We regularly supply this product for use on assembly lines or applications which are using a 240-volt single phase switchgear. We always recommend allowing a 90% safety margin in order to protect against potential electrical discharge.

450V PROTECTION

### Stock Roll Sizes:

Product Code	Max. Use Voltage	Thickness	Width	Length	Weight
RC04129/0.914	450 Volts	6mm	0.91m	10m	6.8kg/m <sup>2</sup>
RC04129/1.0	450 Volts	6mm	1m	10m	6.8kg/m <sup>2</sup>
RC04129/1.2	450 Volts	6mm	1.2m	10m	6.8kg/m <sup>2</sup>

Technical Specifications	Values
Compound	Natural Rubber/SBR
Hardness (Shore A)	65°
Density (Specific Gravity)	1.3
Tensile Strength	5 Mpa
Elongation at Break	250%
Abrasion Resistance	180mm <sup>3</sup>
Minimum Temperature	-20°C
Maximum Temperature	+70°C



# ELECTRICAL MATTING TO ASTM D178 INDUSTRY STANDARD

Product Code: **RC04133**

ASTM D178 MATTING

- Fully tested to specification ASTM D178
- Safe working voltage up to 36,000 volts
- Anti-slip surface finish
- Fully traceable supply

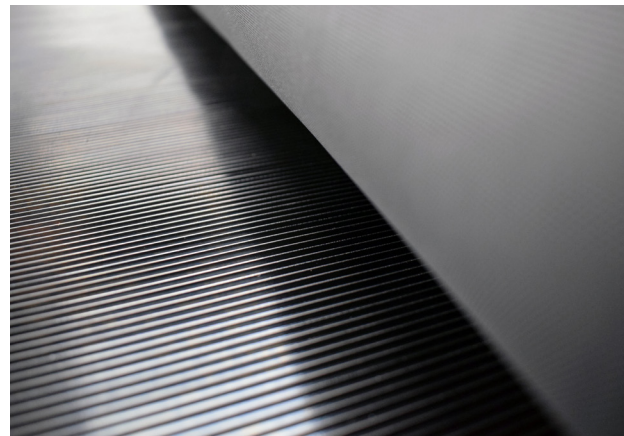
## Electrical Test Information:

Product Code	Class	Max. Use Voltage	Proof Voltage	Withstand Voltage
RC04133-CL1	1	7,500 Volts	10,000 Volts	20,000 Volts
RC04133-CL2	2	17,500 Volts	20,000 Volts	30,000 Volts
RC04133-CL3	3	26,000 Volts	20,000 Volts	40,000 Volts
RC04133-CL4	4	36,000 Volts	40,000 Volts	50,000 Volts

## Stock Roll Sizes:

Class	Thickness	Width	Length	Weight
1	4.5mm	0.91m, 1m, 1.2m	10m	5.2kg/m <sup>2</sup>
2	6.5mm	0.91m, 1m, 1.2m	10m	8.45kg/m <sup>2</sup>
3	9.5mm	0.91m, 1m, 1.2m	10m	12kg/m <sup>2</sup>
4	12.7mm	0.91m, 1m, 1.2m	10m	16.50kg/m <sup>2</sup>

Technical Specifications	Values
Compound	Natural Rubber/SBR
Hardness (Shore A)	65°
Density (Specific Gravity)	1.3
Tensile Strength	5 Mpa
Elongation at Break	250%
Abrasion Resistance	180mm <sup>3</sup>
Minimum Temperature	-20°C
Maximum Temperature	+70°C





# HOW TO GET THE MOST OUT OF YOUR ELECTRICAL SAFETY MATTING

## Increasing the life expectancy of the matting



### Storage

Matting should be stored in a container or package. Care should be taken in order to ensure that the matting is not compressed, folded or stored in proximity to steam pipes, radiators or other sources of artificial heat or exposed to direct sunlight, artificial light or other sources of ozone. It is desirable that the ambient temperature be between 10°C and 21°C.

### Transportation

It is recommended that the matting be packaged in an individual container of sufficient strength to properly protect the matting from damage.

### Examination Before Use

Each time before use, the matting should be visually inspected. If the matting is thought to be unsafe, it should not be used and should be returned for testing or to be destroyed.

### Precautions In Use

Matting should not be exposed unnecessarily to heat, light or to be allowed to come into contact with oil, grease, turpentine, white spirit or strong acid.

When rubber matting becomes soiled, it should be washed with warm water, soap and then dried thoroughly. If insulating compounds such as paint continue to stick to the mat, the affected parts should be wiped immediately with a suitable solvent, avoiding excessive solvent use, and then immediately washed and treated as described above.

Matting which becomes wet in use or by washing should be dried thoroughly, ensuring that the temperature of the matting does not exceed 65°C.

# HEALTH & SAFETY PRODUCTS FOR EVERY APPLICATION

The Rubber Company also supplies a huge range of rubber and plastic products that have been specifically developed to increase safety in the workplace. We always manufacture our products using the highest quality compounds available in order to ensure that you get a product, which is fit for purpose and made to last.

Aside from electrical insulation matting we can provide a vast range of flooring products to suit even the most demanding applications. Some of our most popular flooring solutions include:

- **Roof Walkway Matting**
- **Anti-Slip Flooring**
- **Anti-Fatigue Matting**
- **Ground Reinforcement Matting**

We also manufacture a wide variety of highly versatile rubber and plastic extrusions. Many of these products are available in either long or cut lengths to suit your specific requirements. Some of our most popular extrusion products include:

- **D Section Rubber Buffers**
- **Cable Protectors**
- **Rubber Tubing**
- **Glazing Seals**
- **Edge Protection Profiles**

Don't hesitate to contact us for:

Rubber Extrusion Poster



Materials Sample Card - Gaskets, Seals, Washers, Sheet & Strip



# OTHER SAFETY PRODUCTS WE OFFER

Boot Dip Matting



Anti-Static Sheeting



Anti-Slip Flooring



Cable Protection



Impact Protection



Edge Protection



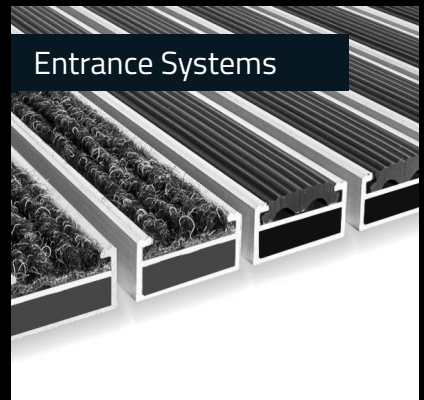
Traffic Management



Hose Ramps



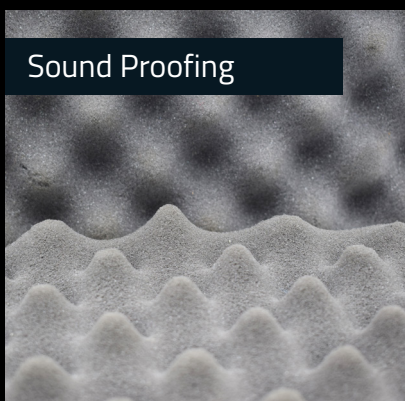
Entrance Systems



Floor Safety Tape



Sound Proofing



PVC Covers & Bellows



OTHER SAFETY PRODUCTS WE OFFER



# Experts in Rubber

Safety Matting  
Extrusions  
Fendering  
Fabrications  
Mouldings  
Sheeting  
Sponge & Foam  
Gaskets & Seals  
Hose & Ducting  
Noise Insulation  
Custom Parts

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Working with companies  
worldwide



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