



# Rubber Rib Mat Electrical - Class 2 (17KV)

Rubber Rib Mat Electrical - Class 2 (17KV) is a premium, non-conductive rubber safety mat, specifically designed to insulate and protect workers from high-voltage electric shocks. Certified to BS EN 61111:2009/IEC 61111:2009 Class 2, this mat is tested to withstand up to 30,000 volts, with a recommended working voltage of 17,000 volts. The regulation standard is clearly printed on the reverse, ensuring compliance.

With a fine ribbed surface that offers great anti-slip protection, the mat has an overall thickness of 4mm, making it both durable and reliable for high-voltage environments.

### Features

- ◆ **Typical applications:** Perfect solution for live switchboards, lower voltage switchboard applications, generators, electrical equipment and repair workstations.
- ◆ **Material:** Natural rubber.
- ◆ **Cleaning:** Wash with cold water, use a vacuum cleaner, or a pressure pump to remove dirt. The use of harsh detergents is not recommended.
- ◆ **Sustainability:** REACH compliant. Contributes to a clearer environment by reducing the need to use cleaning chemicals.
- ◆ **Warranty:** Lifetime.



Suitable for indoor use



For more information about this product or, to place an order [click here](#)

Code	Metric	Imperial	Thickness	Weight	Type	Colour
RE4100-CL2	100cm x 10m	3' x 33'	4mm	44kgs	Roll	Black
RE4100-CL2C	100cm wide	3' wide	4mm	6kgs	Cut length - per m	Black

Please note, all Imperial sizes have either been rounded up or down to the nearest whole number

### Our delivery promise

We guarantee your order will be shipped on time, every time. That's the Blue Diamond difference.

v1.10.24

### Get in touch

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## Technical Specification

Slip resistant:	Great slip resistance to level 2
Anti-fatigue:	Good anti-fatigue properties, resistant to level 1
Wear resistant:	The fine ribbed surface offers great wear resistance to level 2
Cut to length:	Yes
Cut to size:	Yes
Disability friendly:	Yes, the low profile makes it suitable for wheelchair users
Dry area:	Yes
Heavy area:	Yes
Wheeled area:	Yes, the low profile allows easy access for light weight wheeled traffic
Environment:	Suitable for indoor use
Impact resistant:	Yes
Non-conductive (Electrical):	Yes
Non-conductive (HV Electrical):	Yes

Product testing:	◆ Tested and certified according to: BS EN 61111:2009/IEC 61111:2009 Class 2
	◆ Working voltage: 17,000 volts (17KV)
	◆ Proof test voltage: 20,000 volts (20KV)
	◆ Withstand test voltage: 30,000 volts (30KV)
	◆ Tensile strength: 4.0 +/- 0.5MPa (ISO 37:2017)
	◆ Hardness: 60 +/- 5 shore A (ISO 48-1979E)
	◆ Mechanical puncher resistance: >70
	◆ Heat resistant: Pass
	◆ Flame resistant: Pass
	◆ Oil and acid test: Pass
	◆ Low temperature folding: Pass

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## Technical Specification

Sustainability:   
 ◆ REACH (Registration, Evaluation, Authorisation and Restrictions of Chemicals)   
 ◆ Contributes to a cleaner environment by reducing the need to use cleaning chemicals

Temperature resistance: Up to 55°C

Cleaning: Wash with cold water, use a vacuum cleaner, or a pressure pump to remove dirt. The use of harsh detergents is not recommended

## Different classes of Electrical Safety Matting

There are various classes of Electrical Safety Matting, each offering different levels of voltage protection. Selecting the appropriate class is essential for the safety and protection of your workforce.

	450v	Class 0	Class 2	Class 4
Working voltage	450 volts	1,000 volts	17,000 volts	36,000 volts
Proof Test voltage	—	5,000 volts	20,000 volts	40,000 volts
Withstand test voltage	11,000 volts	10,000 volts	30,000 volts	50,000 volts
Thickness	6mm	3mm	4mm	6mm
Width	90cm, 100cm and 120cm wide		100cm	
Length	Available in 10m roll and cut lengths per m			
Testing standard	BS 921:1976		BS EN 61111:2009/IEC 61111:2009	

**Working voltage** refers to the maximum voltage the electrical matting is designed to safely handle during normal operation. It ensures that the material performs effectively and safely within its intended application.

**Proof test voltage** is a higher voltage applied to check for defects and confirm the quality of the insulation before use.

**Withstand test voltage** refers to an elevated voltage applied to ensure the material can endure extreme conditions, such as high voltage surges in electrical systems. This is the voltage at which the material begins to exhibit breakdown, such as arcing or degradation of its insulating properties.

## A guide to BS 921:1976

BS 921:1976 is a British Standard that specifies the requirements for rubber-insulating matting used in electrical installations to protect individuals from electric shock. It outlines the testing criteria for key properties such as electrical insulation, durability, and resistance to wear, ensuring a safe working surface in environments with electrical hazards. This standard is typically applied to matting used in lower voltage applications, up to 650V.

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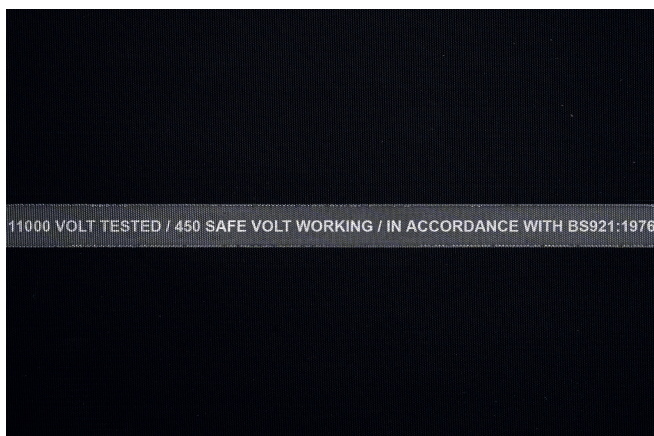
## A guide to BS EN 61111:2009/IEC 61111:2009

BS EN 61111:2009 is a British and European Standard that specifies requirements for electrical insulating matting used in areas where there is a risk of electric shock. IEC 61111:2009 is the international equivalent of this standard. Both standards offer guidelines for testing, performance, and classification of insulating mats that protect individuals from electrical shocks, particularly in low-, medium-, and high-voltage environments. The standards ensure that insulating mats are safe, durable, and effective under various environmental conditions, which is crucial for maintaining electrical safety in industrial and commercial settings.

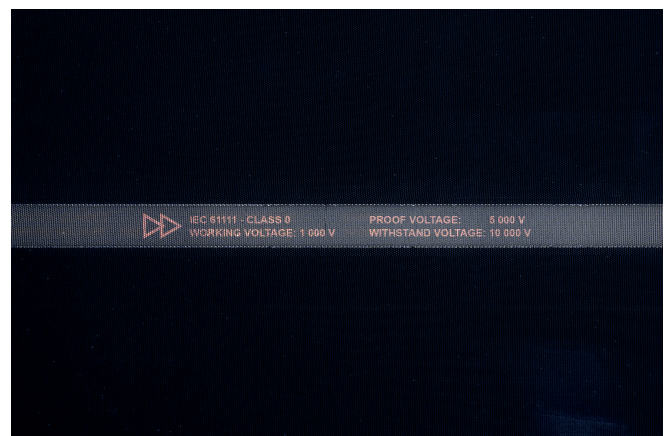
## Regulation Standard

Each metre of electrical matting is tested, and the regulation standard stamped on the reverse at one-metre intervals. These markings ensure clear identification and compliance with safety regulations for various voltage levels.

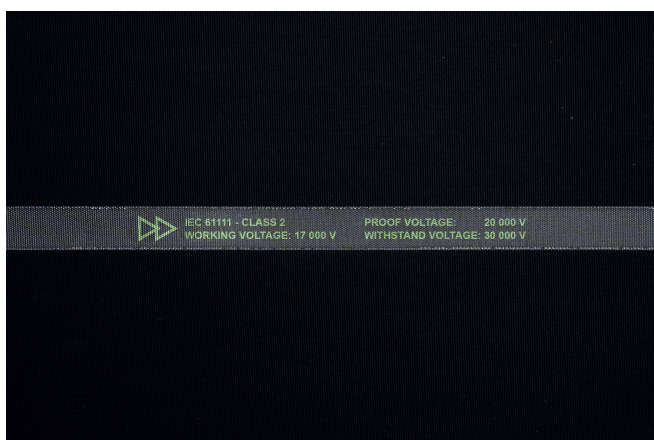
The colour differences are:



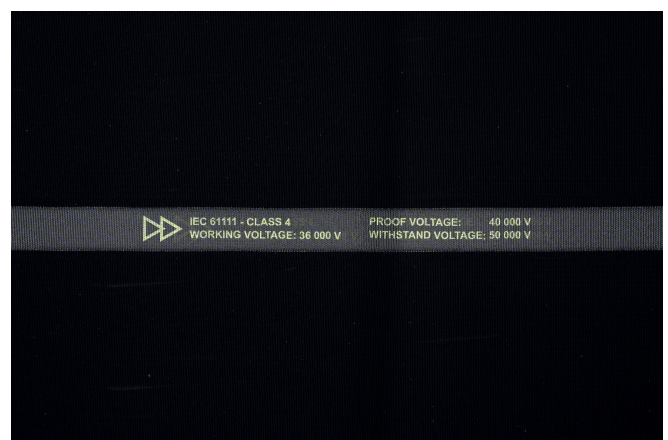
White – lower voltage



Red – Class 0



Green – Class 2



Yellow – Class 4

Testing certificates for the full range can be provided on request.