Product Data Sheet

ESD Worktop Matting - 2 Layer Smooth

ESD Worktop Matting is a cost-effective, hard-wearing anti-static matting ideal for laying on workbenches in advanced laboratories, and microelectronic industries such as electronic semiconductor devices, electronic computers, electronic communication equipment, and integrated circuits.

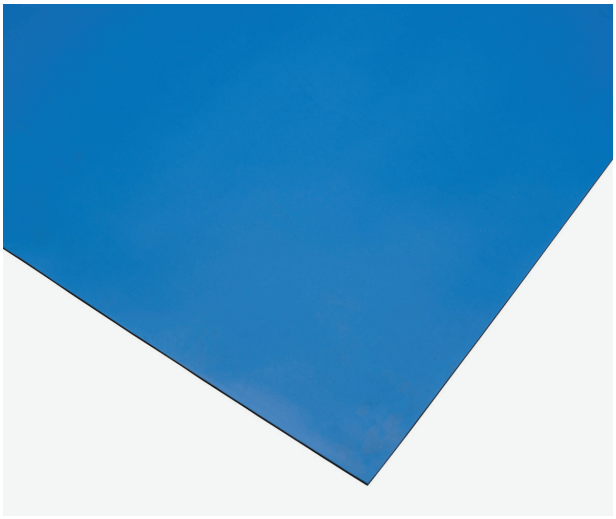
The mats feature two layers, a static-dissipative surface and a conductive backing. The static-dissipative surface is resistant to abrasion, heat, solders flux, and most commonly used solvents, and the black conductive layer provides a superior and consistent ground path to Earth.

Available in dark blue or dark grey, these mats are easy to clean with excellent lay-flat properties for a flat work surface.

Optional accessories available - Common Grounding Point Cord - Socket, Coiled Earth Lead – 10mm to 10mm Stud, Wrist Band, Earth Bonding Plug, and Heel Grounder. The matting can be supplied with studs if required.

Features

- **Typical applications**: Ideal for assembly lines, logistics warehouses, workshops and individual workstations, laboratories, automotive, computer and electronics' industries, hospitals and even, photocopy areas.
- **Material**: Nitrile rubber.
- **Cleaning**: For optimum electrical performance, the surface must be cleaned regularly using an ESD safe mat cleaner.
- **Sustainability**: Fully RoHS and REACH compliant meeting requirements of IEC61340-1-5 International Standard and US ESD Associations. ANSI S4.1 and S20.20 guidelines.
- **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
EW2448BU-2LS	60cm x 120cm	2' x 4'	2mm	1.8kg	Mat	Blue
EW2448GY-2LS	60cm x 120cm	2' x 4'	2mm	1.8kg	Mat	Grey
EW4833BU-2LS	120cm x 10m	4' x 33'	2mm	30kg	Roll	Blue
EW4833GY-2LS	120cm x 10m	4' x 33'	2mm	30kg	Roll	Grey

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Code	Metric	Imperial	Thickness	Weight	Type	Colour
EW48BU-2LS	120cm wide	4' wide	2mm	3kg	Cut length - per m	Blue
EW48GY-2LS	120cm wide	4' wide	2mm	3kg	Cut length - per m	Grey
EA0522	Common Grounding Point Cord - Socket					Blue
EA0531	Coiled Earth Lead – 10mm to 10mm Stud					Blue
EA0542	Wrist Band					Blue
EA0551	Earth Bonding Plug					Yellow
EA0561	Heel Grounder					Blue/Black

Please note, all Imperial sizes have either been rounded up or down to the nearest whole number
Please note, the width and length can be +/- 2%
This product has a tendency to shrink slightly when first unrolled. In applications where length is critical, allow the material to relax for at least 4 hours before cutting to size. Matting should always be trimmed with a sharp knife or razor blade

Technical Specification

Cut to length:	Yes, mat can be cut to length
Cut to size:	Yes, mat can be cut to bespoke sizes
Dry area:	Yes
Environment:	Suitable for indoor use
Impact resistant:	Yes
Non-static (ESD):	Yes

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Technical Specification

Product testing:	◆ Static dissipative top surface: 10^(6) - 10^(9) ◆ Black conductive bottom layer: 10^(3) - 10^(5) ◆ Volume resistance: 10^(5) - 10^(8) ◆ Wear rate: 0.02g/cm^(2) ◆ Electrostatic dissipation time: <0.1s ◆ Tensile strength: 4-6 Mpa ◆ Elongation at break: 250% ◆ Tear strength: (Right angle type) 20.6KN/m ◆ Resilience: Samples by six-layer rubber sheet laminated. 0.14 ◆ Impact brittleness temperature: (no incision – 250°C without destruction) ◆ Set compression: 700°C x 22h: 25% MAX ◆ Scratch resistance: No clear scratch ◆ Heat resistance: Resists solder splash and hot paste, rubber doesn't melt if in contact with hot metal parts and soldering debris. Up to 120°C ◆ Charge decay: <0.1 sec per FTMS 101C, M4046 ◆ Charge generation: <100 volts per ANSI/ ESD STM4.2 Others: no curling, no pin holes, no irritant odour
Sustainability:	◆ REACH (Registration, Evaluation, Authorisation and Restrictions of Chemicals) ◆ RoHS (Restriction of Hazardous Substances) ◆ Meets requirements of IEC61340-1-5 International Standard and US ESD Associations ANSI S4.1 and S20.20 guidelines
UV resistant:	No major discolouration
Cleaning:	Contact between the matting surface and any acid or alkali solvent is strictly prohibited (such as Benzene, Alcohol etc) as this will result in the antistatic performance degrading. For optimum electrical performance, the surface must be cleaned regularly using an ESD safe mat cleaner.

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ESD Accessories

Common Grounding Point Cord - Socket

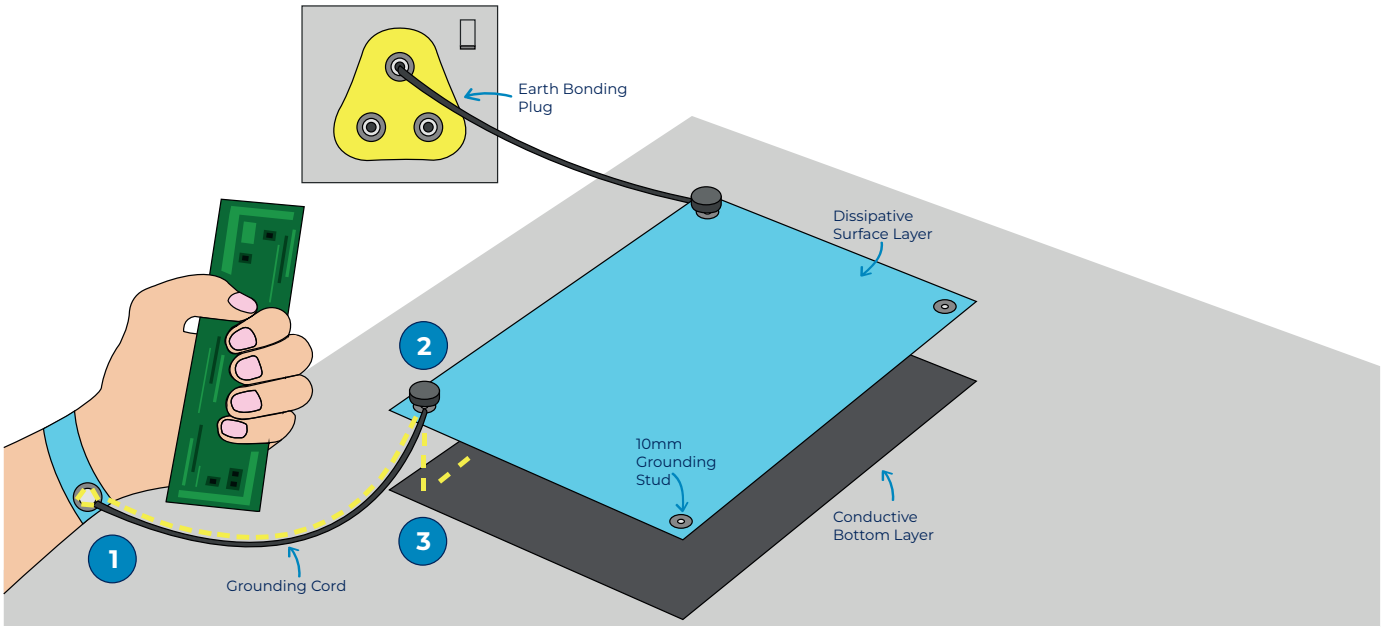
Coiled Earth Lead – 10mm to 10mm Stud

Wrist Band

Earth Bonding Plug

Heel Grounder

How the ESD Worktop Matting works?



1. Operator is grounded as charge passes through the wrist strap into the coil cord.
2. Coil cord is connected to the 10mm grounding stud.
3. The static charge passes through the mat, through the grounding lead to earth.