

Description

Anti-static matting should be laid out in the workshops or advanced laboratories for microelectronic industries such as electronic semi conduct devices, electronic computers, electronic communication equipment and integrated circuits etc.

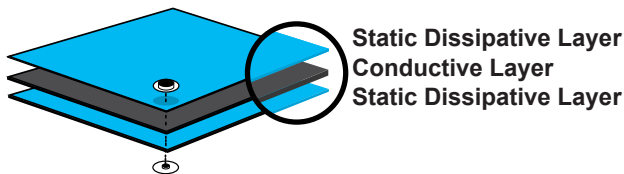
Features

- Great value ESD Bench Matting made from anti-static (conductive) and static-dissipative materials with synthetic rubber
- All bench mats come with 10mm studs in each corner

3 layer

- 3mm thick double-layer structure
- Surface layer is a 1.25mm thick static-dissipative layer
- Middle layer is a 0.5mm conductive layer

3 Layer Construction



Grounding

Sufficient ground cords should be used to reliably meet EN 61340-5-1 Table 3 less than 1×10^9 ohms for working surfaces. Industry recommendation is that continuous runs of ESD matting should be grounded at 10ft intervals to allow proper charge decay rates. Each individual ESD mat should be grounded with ground snaps located no further than five feet from either end.

Cleaning

Please note that contact between the matting surface and any acid or alkali solvent is strictly prohibited (such as Benzene, Alcohol etc), this will result in the antistatic performance wearing away. If cleaning is required, the matting may be wiped with a cloth coated in a neutral solution (such as water).

Guidance on use

Matting materials have 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.

Cutting tolerances

Width + 6mm

Length + 6mm every linear foot of running material

RoHS Compliance

None of the following materials are intentionally added in manufacturing this product: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) as outlined in the Directive 2002/95/EC Article 4.1.

Test Results

	Test Method	Unit	Value
Surface Resistance / R_{TG}	SJ/T10694-2004	Ω	$1 \times 10^6 \leq R \leq 1 \times 10^9$
Bottom Resistance / R_{TT}	SJ/T10694-2004	Ω	$1 \times 10^3 \leq R \leq 1 \times 10^6$
Volume Resistance	GB/T14437-97	Ω	$1 \times 10^5 \leq R \leq 1 \times 10^8$
Thickness	YY-1001	mm	Permissible Tolerance +0.1
Temperature Resistance	YY-1001	$^{\circ}C$	180 (Instantaneous Temp)
Temperature	N/A	$^{\circ}C$	20-26
Relative Humidity	N/A	%	40-65

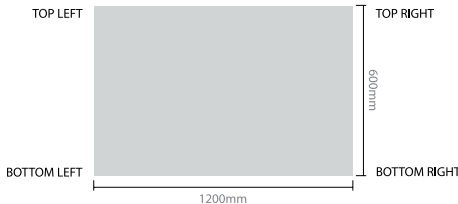
R_{TG} is the resistance from one point on the mat's surface to the mat's ground point, and is the fundamental electrical test for a mat. A proper R_{TG} insures that a mat can conduct charge from a point on the surface to the mat ground point. The guideline in ESD STM-4.1 for R_{TG} is 1×10^6 to $1 \times 10^9 \Omega$. ANSI/ESD S-20.20 has an upper limit of $< 1 \times 10^9 \Omega$.

R_{TT} is the resistance from one point on the mat's surface to another point. A proper R_{TT} insures the consistency of the mat's resistance properties. The ESD STM-4.1 guideline for R_{TT} is $> 1 \times 10^6 \Omega$.

Fig 1: Stud Positioning

Requesting Cut Mats with Studs

If ordering pre cut mats and you require studs to be added, please ensure that the position of the stud is specified as per Fig 1.



Part Number Table

Description	Part Number
ESD Bench Matting, 3 Layer, Smooth Finish, 600 × 1200mm, Blue	082-0319
ESD Bench Matting, 3 Layer, Smooth Finish, 1200 × 1800mm, Blue	082-0320
ESD Bench Matting, 3 Layer, Smooth Finish, 600 × 1200mm, Grey	082-0318
ESD Bench Matting, 3 Layer, Smooth Finish, 1200 × 1800mm, Grey	082-0321

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.