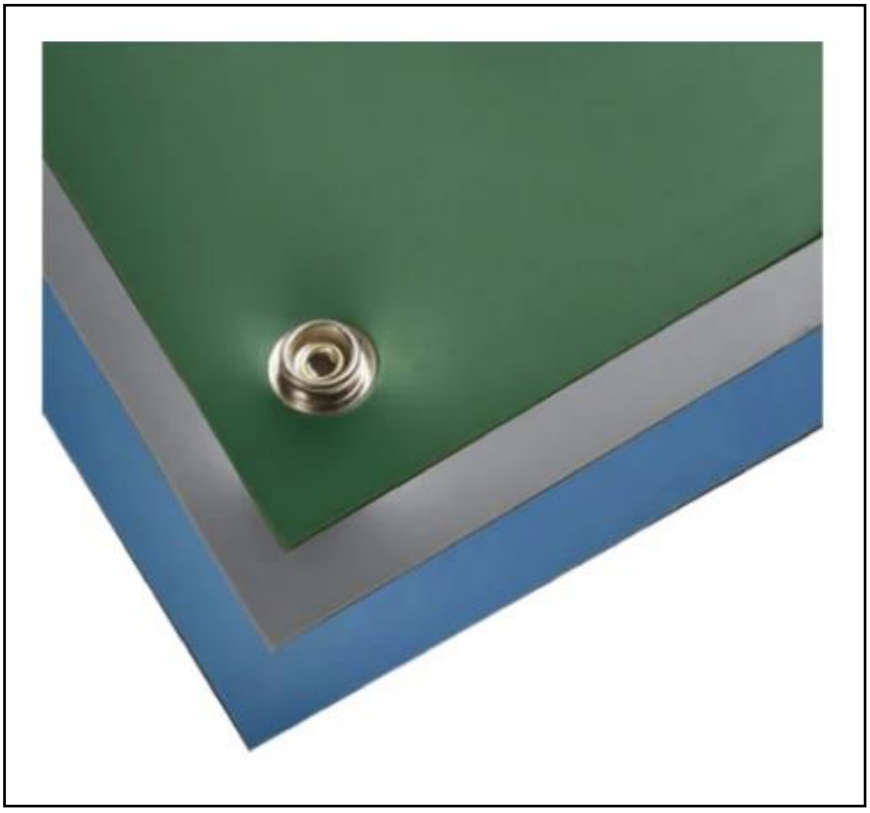
FEATURES

- RS PRO Electrostatic Discharge safe (ESD-safe) mat
- Chemical resistance, continuous monitoring and soldering applications
- Comes with 10 mm studs for ease of use on workbenches
- Durable triple-layer construction
- Thickness of 3 mm
- Length of 3 m
- Width of 1.22 m

Bench ESD-Safe Mat, 3m x 1.22m x 3mm

RS Stock No.: 787-2118



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

Ideal for use in workshops or advanced laboratories for microelectronic industries such as electronic semiconductor devices, electronic communication equipment and integrated circuits, this anti-static matting from RS PRO protects sensitive equipment from damage due to Electrostatic Discharge (ESD). It's made from anti-static and static-dissipative materials in synthetic rubber.

The three-layer ESD-safe mat is 3 mm thick and houses a conductive layer between two static-dissipative layers, for maximum safety and durability. It comes with 10 mm studs in each corner for ease of use on workbenches. The mat is 3 meters long and 1.22 meters wide and makes a practical addition to ESD protected areas (EPAs).

General Specifications

Use Type	Bench
Suitable For	Chemical Resistance, Continuous Monitoring, Soldering
Colour	Blue
Complies with EN 61340-5-1	Yes
Surface Texture Type	Smooth
Material	Synthetic Rubber
Number Of Material Layers	3
Applications	Chemical resistance, continuous monitoring and soldering applications

Electrical Specifications

Surface Resistance	1x106< R < 1x109O
Bottom Resistance	1x103< R < 1x106O
Volume Resistance	1x105< R < 1x108O
Temperature Resistance	180°C (Instantaneous Temp)

Mechanical Specifications

Size	3m x 1.2m
Length	3m
Width	1.2mm
Thickness	3mm Permissable Tolerance +0.1mm

Operation Environment Specifications

Temperature	20°C to 26°C
Relative Humidity	40% to 65%

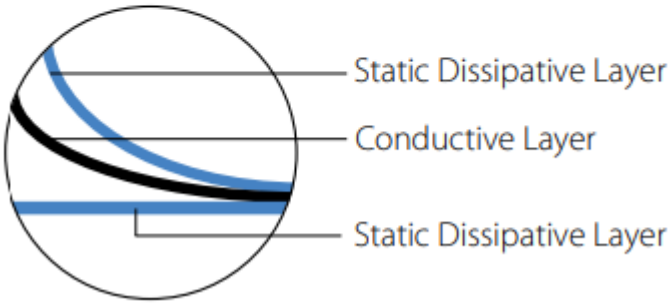
Approvals

Compliance/Certifications	ESD S20.20 and EN 61340-5-1 ESD

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
- Bottom layer is a 1.25mm thick static-dissipative layer

3 LAYER CONSTRUCTION:



CONFORMS TO ESD S20.20 AND EN 61340-5-1 ESD.

TEST RESULTS:

	TEST METHOD:	UNIT:	VALUE:
Surface Resistance / R_{TG}	SJ/T10694-2004	Ω	$1x10^6 \leq R \leq 1x10^9$
Bottom Resistance / R_{TT}	SJ/T10694-2004	Ω	$1x10^3 \leq R \leq 1x10^6$
Volume Resistance	GB/T14437-97	Ω	$1x10^5 \leq R \leq 1x10^8$
Thickness	YY-1001	mm	Permissable Tolerance +0.1
Temperature Resistance	YY-1001	°C	180 (Instantaneous Temp)
Temperature	N/A	°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 $1x10^6$ to $1x10^9$ Ω. ANSI/ESD S-20.20 has an upper limit of $<1 x10^9$ Ω. 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 $>1x10^6$ Ω.

ARTICLE:	DESCRIPTION:	SIZE:	ADDITIONAL NOTES:
7872118	Buried Layer Matting Roll	3x1.22m	Blue