

ASSEMBLY AREA ESD BENCH MAT KIT **Professional Grade, Tested and Certified**

Includes Mat, Wrist Strap, Common Point Ground, Certification & Calibration



The United Assembly Area ESD Mat Kits are manufactured using a high quality, dual layer rubber that is so robust it can handle the rigors of THE heaviest equipment without tearing, ripping, delaminating or cracking. They are heat resistant, easy to clean and resistant to most common chemicals used in the electronic manufacturing environment. The semi soft material allows exposed circuit board pins to

make excellent contact with the matting. We install a heavy duty 3/8" ground snap, attach a common point ground cord with TWO inputs and supply a comfortable elastic band ESD wrist strap with each unit.

Each kit is serialized and tested to stringent ANSI ESD S20.20-2014 standards using NIST traceable and in compliance lab grade test equipment.

Compliance documentation is shipped with each kit and a copy is maintained at UnitedSCP for a period of 5 years. The matting material is warranted for 5 years against wear and loss of electrical properties. The wrist strap and common point ground cord are warranted for 1 year. The matting material may be trimmed on site with no loss of the electrical properties.

- Include Wrist Strap, Common Point Ground and Mat.
- Tested, Certified & Serialized. Calibration sticker added to each unit.
- Documentation provided with EACH Mat
- Tough, lays flat, wear resistant
- Easy to keep clean and heat resistant.
- Permanent static conductivity
- Economical - Much less than failing an ESD Audit.
- Meets: ANSI ESD S20.20-2014 and ESD TR53-01-18



Matting: Physical Properties

Material: Dual Layer Premium Lead Free ESD Rubber
Thickness and Available Sizes: .072 +/- .010 inches thick. Standard sizes; 2' x 2', 2' x 3', 2' x 4'. Custom lengths available up to 50' long and in 2', 30 inches, 3' and 4' widths
Colors: Blue or Gray
Texture: Smooth and essentially non porous. Non glare finish
Hardness: 65 +/- 5 Shore "A" per ASTM-D2240
Temperature Resistance: Does not burn when coming into contact with hot soldering irons or flux.
Temperature Resistance without deformity or degradation: >450° F. Note: Highly resistant to soldering flux residues sticking to the material.
Cut Tolerance: Width +/- .250. Length +/- .250 per every single linear foot of running material
Chemical Resistance: Resistant to degradation by inorganic acids, organic acids reducing agents, aliphatic hydrocarbons, mineral oils, aldehydes and amines in concentrations normally used in job site conditions.

Matting: Electrical Properties

Electrical Resistance Point to Point per ESD S4.1: >1.0E06 and <1.0E09
Electrical Resistance to Ground per ESD S4.1: >1.0E06 and <1.0E09
Charge Decay Time: 1,0000 Volts to 50 Volts per MIL-Std.3010C, Method 4046 (formerly FTM 101C, method 4046), EIA 541, Appendix F, EN 100015/DIN 51953: <.2 seconds

Wrist Strap: Physical and Electrical Properties

Band Material: Elastic Band with silver monofilaments (360 degree conductivity)
Band Adjustment: Side adjustable D Ring
Snaps: 3/8" male on band / 3/8" female socket on cord (lead free)
Cord Length: 8' extended.
Cord specifics: High flex tinsel wound inside core with heavy duty insulating jacket
Termination: Barrel type banana plug with strain relief
Note: Each ground cord includes One Megohm safety resistor molded within the snap assembly.

Common Point Ground

Length: 10'
Inputs: 2 each banana inputs (for wrist straps), 1 each 3/8" female spring loaded snap fastener (for attachment to mat)
Ground Termination: #10 ring terminal (for attachment to center screw of AC face plate cover or other suitably grounded object, structure or common point ground bus).

Document Number 1037B, Approved SC, 10/1/21