



ESD Installation Tips

The purpose of an ESD protective work area is to protect employees and equipment from electrostatic shock which can cause damage or injury. Static dissipative materials ensure a slow and controlled removal of static build-up to prevent static discharge.

To achieve an ESD protective work area while complying with Standard IEC61340-5-1 or ANSI EOS/ESD 6.1, all conductors in the environment, including personnel, must be grounded to the same electrical ground point, creating a balance between all items and personnel.

Notrax® specialized line of ESD accessories ensure a static free workplace and protect employees and sensitive electrical equipment. Use these accessories to connect table work surface, employees and conductive material to a common grounding point.

Installing Floor Mats

Static dissipative floor mats offer an ergonomic benefit for fatigue relief and come with bevelled edges on all four sides to minimize risk of tripping.

Linear Length Mats and Rolls

1. Align the mat or roll before unrolling to ensure straight lines.
2. For the best results allow the mat to lay flat for about 4 hours at room temperature before use. This will give the material time to flatten out after shipment.

Modular Mat Installations

1. For the best results allow the mat to lay flat for about 4 hours at room temperature before installing. This will give the material time to flatten out if it was rolled for shipment.
2. Align the length and width of the outer perimeter of the matting installation with bevels to ensure straight lines. Position the product identification stamps in the same direction. This ensures proper alignment of male and female connectors, makes it easier to identify the mat compound, and is aesthetically more appealing.
3. The connectors can be attached by hand or with a light rubber mallet.
4. Continue to install the inner mats to finish off the configuration.
5. Mats and bevels can easily be customized for fit around corners using the cutting lines below. Simply cut with a knife.
6. If mats or bevels will be glued, check the insulation properties of the glue.

Grounding Mats

Most Notrax® anti-fatigue mats are manufactured from static dissipative compounds resulting in an ESD mat that is dissipative through and through with a measured resistance of Point to Point (Rp) of $10^6 - 10^9 \Omega$ and Point to Ground (Rg) of $10^6 - 10^9 \Omega$. This means that static will flow to the ground through the mat and it is not necessary to ground the mat.

If the mats will be installed on isolative flooring, e.g. wooden floors, it is recommended to ground the mats.

1. On request, Notrax® ESD mats can be supplied with a Snap Connection Point (Art. 051SCP0100) already installed.
2. If the mat is not supplied with a Snap Connection Point, then a connection point can be installed. The Screw Connection Point (Art. 051SCP0200) can be attached to the mat using a screw driver. Be sure to use the speed nut on the back of the mat to ensure a secure installation of the snap (Fig. 1).
3. Lay the mat in position with designated grounding points located out of the highest traffic pattern but close to an acceptable ground. It is recommended to ground continuous runs of ESD matting at three meters intervals to allow for proper charge decay rates.
4. Attach the end of the ground cord to the connection point installed on the mat. Snap the other end of the cord to the earth bonding plug (Fig. 2).

DO NOT CONNECT MULTIPLE MATS IN SERIES. This will increase the overall resistance and can limit the ability to properly dissipate and protect against static charges.

Art. 826 Diamond Stat™ Floor Mat

Art. 826 Diamond Stat™ Floor Mat always requires grounding and is supplied with a standard connection point and grounding cable.

1. Lay the mat in position with the designated grounding points located out of the highest traffic pattern but close to an acceptable ground. It is recommended to ground continuous runs of ESD matting at three meters intervals to allow for proper charge decay rates.
2. Snap on the Art. 051 Floor Mat Grounding Cord to the connection point on the mat.
3. Connect the Art. 051 Floor Mat Grounding Cord to the Art. 054 Earth Bonding Plug.



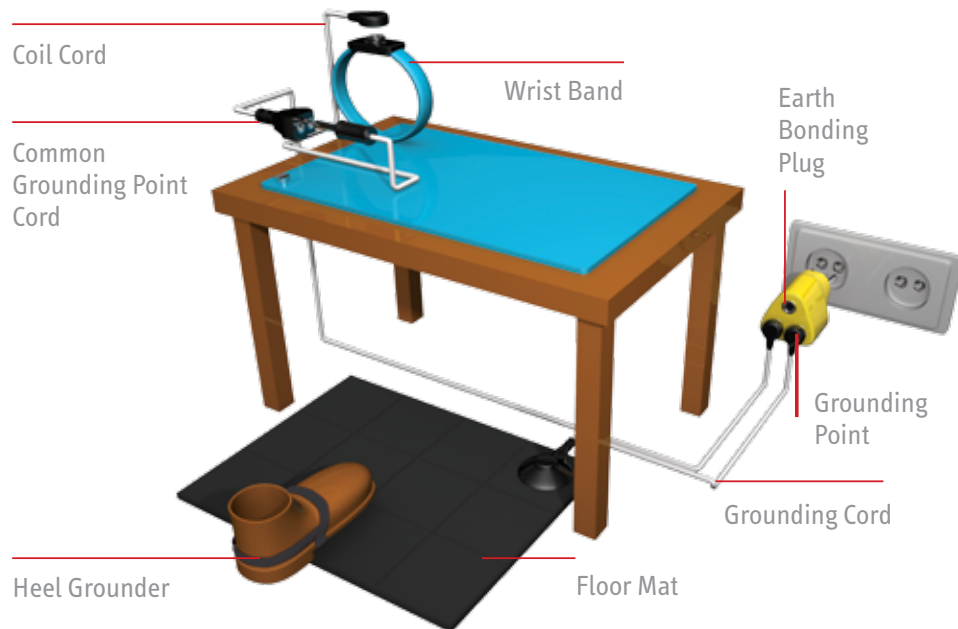
Fig. 1: 051SCP0200 Screw Connection Point



Fig 2: 051SFH0200 Female Socket



Fig 3: 051SFG0100 Ring Terminal



Installing Table Mats

Specialized line of ESD accessories ensure a static free workplace to protect employees and sensitive electrical equipment. Use these accessories to connect table work surface, employees and conductive material to a common grounding point. This creates a balance between all items and personnel to ensure static electricity will flow to ground in a controlled manner.

Art. 827 Anti-Stat POP™ Table mat

The 827 Anti-Stat POP™ is supplied with a standard connection point.

1. Lay the mat in position with grounding point located on the preferred working side of the user.
2. Connect the Art. 052 Common Grounding Point Cord to the Art. 054 Earth Bonding Plug.
3. Snap on the Art. 052 Common Grounding Point Cord to the table mat.

DO NOT CONNECT MULTIPLE TABLE MATS IN SERIES. This will increase the overall resistance and can limit the ability to properly dissipate and protect against static charges.

Installing ESD Accessories

Art. 052 Common Grounding Point Cord

A common grounding point connects two or more items to the same electrical potential. They are designed to provide earth for table mats and wrist straps. A common grounding point should be installed at each workstation.

Art. 056 Wrist Band

1. Snap the Art.053 Coil Cord to the Art. 056 Wrist Band connection point.
2. Insert the banana plug of the Art. 053 Coil Cord into the Art. 052 Common Grounding Point Cord.

DO NOT GROUND A WRIST STRAP THROUGH THE WORK SURFACE unless the total measured resistance is less than 10^8 Ohms/cm. Preferably wrist straps should be connected directly to the common grounding point.

Art. 055 Heel Grounder

A device for connecting a walking or standing person to ground by using a conductive rubber thread to provide the necessary electrical contact between the person and the floor mat.

1. Strap Heel Grounder around the shoe.
2. Ensure that the heel grounder is attached properly.

Cleaning

For optimum electrical performance, the mat should be cleaned regularly with a mild detergent or anti-static cleaner. Mat cleaner is recommended for static safe table and floor mats. Its non-abrasive formula leaves no film and is designed to enhance the static dissipative properties of ESD safe surfaces. Effectively removes flux residues, oil, finger marks and dirt.

DO NOT USE CLEANERS WITH SILICONE. This will build up a silicone coating on the mat which will cause the surface to become an insulator.

Manufacturer Warranty

Ergonomic Anti-Fatigue and Safety Matting

All Notrax® floor matting is manufactured of the highest quality material and workmanship. Superior Manufacturing Group Europe B.V. warrants that all Notrax® products will be supplied free from defects in material and manufacture. In the unlikely event of a Notrax® product being faulty, a full refund or replacement will be made based on manufacturer's discretion. In other words, if there is a defect, we will replace the mat.

Dependability and service of our products are guaranteed for one year from date of purchase under normal conditions of use. Buyer has the responsibility to determine the suitability of the product and assumes any liability in connection with such use. Seller shall not be liable for damages in excess of purchase price of product. Warranty does not apply to added bevelled nosing, splicing or seaming of mats.