

## Subject: Installation for Anti-Fatigue Smooth Top, Diamond Plate & Corrugated Floor Mats | Floor Runner Systems

The Purpose of an ESD protective floor mat is to provide an ESD conductive or dissipative material to:

- A. Remove from the operator any static charge.
- B. Provide an anti-fatigue surface that will not generate a Static Charge.

Smooth Top, Diamond Plate & Corrugated Anti-Fatigue Mats and Runners have a surface resistivity of less than  $10^6$  on Conductive and less than  $10^8$  on Dissipative materials, minimizing the generation of static and tribo-electric charges, and will dissipate a charge slow enough that a spark will not occur.

### General Guide Lines.

For Proper and safe grounding an ESD ground must be tied directly to and at the same potential as the building or "green wire" ground and the floor mats and runners, using a **grounding stud** and a **grounding cord** with a 1 Meg Ohm current limiting resistor installed.

### Groundable Point Installation.

- A. If the Mat/Runner is less than 10 linear feet in length; (1) grounding point will be adequate.
- B. If the Mat/Runner is greater than 10 linear feet (1) grounding point every 10 linear foot should be installed.
- C. If the Mat/Runner is "Seamed" at IT wide, double the amount of ground points indicated in the recommendations above.

### Installation:

There are several methods of installing ground cords Ground Zero Electrostatics, Inc. recommends a "push and clinch" stud (see figure 1.) This type of snap is designed for use on soft type mats such as **Smooth Top, Diamond Plate & Corrugated Anti-Fatigue Mats & Runners**, and are available from Ground Zero Electrostatics, Inc. Use Part Number: **HW101-E**

Figure 1.



To install center the prongs as required and apply pressure to the snap until the prongs come through the back of the mat, then clinch over the prongs to secure the snap.

There are a variety of ground cords available to fit the stud in **Fig. 1**, however we recommend Part Number: **FMGE-1-15-M**. This cord (**see figure 2.**) is installed by snapping into the 10mm snap and hard fixing to the common point ground as previously described.

Figure 2.

