



# Grounding for ESD Static Control Floor Tile

Several acceptable methods are used to ground static control flooring depending on the job conditions and personal preference of the contractor. The three most widely used procedures are described below. See page 2 for a grounding method diagram.

## GROUNDING THE COPPER STRIP INTO THE ADHESIVE CONDUCTIVE PLATE

First attach the copper grounding strip (provided by Mohawk Group with the flooring) to the conductive adhesive by laying the copper strip into the wet adhesive, at this time the conductive adhesive is spread on the floor creating a conductive plate that dissipates the static and extends through out the entire area. Envelop the copper strip with additional adhesive, and then place the tile over the copper grounding strip. Leave approximately 10 to 12 inches of copper grounding strip exposed so it can be attach to the designated floor grounding point. Be sure that this area gets rolled so there is a good bond between the copper grounding strip, Conductive Force or Dissipative Force tile and the adhesive. The other end of the copper grounding strip will then be attached to the selected supplied grounding point.

## GROUNDING TO A CIRCUIT GROUND

Before beginning installation of static control flooring the electrical contractor will need to install a ground wire. Specifically, a no.10 or 12 grounding wire is installed to a convenient grounding point such as a wall outlet. Then the ground wire is fed inside the wall to the designated grounding point where the baseboard meets the floor. The electrician will label the wire after the wire is through a small hole in the drywall at the floor line. From there it can be easily attached to the copper ground strip. The exposed end of the copper-grounding strip (provided by Mohawk Group with the flooring) is then attached using a copper electrical screw, washers, and nut. The screw and nut are tightened to create a good connection. The ground wire connections of the two copper leads are then pushed into the hole in the wall along with the excess wire and copper grounding strip. When this is complete the baseboard or wall base can be installed to complete the aesthetics of the area.

## NATURAL EARTH GROUND

If the floor is being installed on grade or below grade a copper-grounding rod can be driven into the ground creating an earth ground for the conductive adhesive plate. The 4 or 6 ft. rod is driven into the ground until only 2 or 3 inches of the rod remains exposed from the floor. The exposed end of the copper-grounding strip (provided by Mohawk Group with the flooring) is secured to the rod using a grounding clamp this is usually provided with the grounding rod. If necessary, a No.10 or 12 wire can be attached to the grounding rod and run to the location where the copper grounding strip is located. The copper ground strip and the wire can be secured with a grounding screw and nut to complete the connection.

## EARTH GROUND

If the building has exposed steel support columns, then take the end of the copper grounding strip from the conductive adhesive and directly ground the copper end to one or more of the columns as low as possible to the floor. Bonding the copper grounding strip (provided by Mohawk Group) to the conductive adhesive and ESD tile as described in paragraph one will complete the grounding connection. Attach the opposite end of the copper grounding strip directly to the support column with an electrical grounding screw or use a good grounding clamp and connectors. Drill a hole in the column and screw the copper grounding strip directly to the column, or mount a grounding clamp to the column and clamp the copper grounding strip to the column.

## GROUNDING OUTLETS

It is recommended to have 1 grounding strip connection every 2,000 – 2,500 square feet of installed ESD tile. The conductive adhesive acts as a conductive path for static dissipation.



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