

## Use with ESD Coatings, All United SCP Vinyl Tiles, Sheet Goods & Carpeting

**OVERVIEW:** All ESD flooring must be grounded to allow the electrostatic charges to flow to ground. The following method provides a secure connection via easy attachment of your ESD flooring system to AC electrical ground. Our ESD Flooring requires 2 ground connections for the first 3,000 square feet and one additional ground for every 3,000 square feet thereafter (exceeding this amount will not raise the conductivity of your flooring systems). We use aluminum foil rather than copper because it does not tarnish. Copper foil is available from United if required. For More options on grounding including attachment of foil without changing plastic face plate to metal please click the [EXTENDED VERSION OF THIS DOCUMENT](#).

**MOST COMMON METHOD (requires replacing plastic faceplate with one made of metal):**

**1)** Locate AC power outlet. Remove electrical face plate cover (typically plastic). Starting at the outlet cutout (on the drywall) run a piece of our 2" wide [aluminum foil ground tape](#) down wall and onto clean dust free concrete (or other flooring substrate) about 2 or 3 inches. Note: for a great looking attachment cut any wall base, peel back base and run strip behind re-glued base.

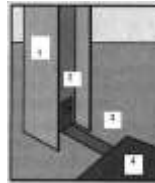


**2)** Run another aluminum foil strip (approximately 6" to 12" long) over this 2" or 3" piece that you've placed on the floor. Run this strip parallel to the wall and adhere to the flooring substrate (concrete, VCT, or another type of approved subfloor). Please see figure 1.

**3)** Replace the plastic AC electrical face plate cover with a metal face plate cover making sure metal face plate cover contacts the aluminum strip. Your floor is now grounded. The ground foil on the wall may be painted if desired.



**4) Alternate Method A:** Copper ground rods are often used in Military and Munitions environments and are not typical (nor normally recommended) for electronic manufacturing. Simply remove oxidation from rod, wrap tape as shown, clean up ground by installing aluminum pad, clean oxidation from pad and coat with paint or trowel over with conductive adhesives. Add a clamp that connects the ground rod and the outside of the ground tape for best results.



**5) Alternate Method B:** In this sketch a steel column (1) is used as an attachment point (2) for the aluminum ground foil (3) for subsequent application of ESD flooring adhesive or coatings (4).

Remove rust and paint from steel column via grinding off an area of about 1.5 inches. Cover this area with the aluminum tape and run the foil down the column and onto the pre-cleaned concrete. Run another piece of foil (6 to 12 inches long) over this strip and parallel with the column. onto concrete and coat or trowel adhesive. Best connection is made by center punching the top surface of the aluminum into the clean steel of the column.

**6) For Coatings:** Lightly sand the foil on the floor with 320 grit emery paper or course scotch bright. Remove abrasive residue with a clean piece of paper towel. Apply the coatings over this strip.

**7) For Glue Down Tiles and Sheet Vinyl:** Cover the foil that has been applied to the subfloor with the conductive adhesive, place the tile or sheet vinyl over this adhesive and ground strip and roll with a 100 pound vinyl roller.

**8) For Interlocking Tiles:** [See product instructions for full details.](#)

**9) For ESD Carpet Tile:** Cover the foil that has been applied to the subfloor with the conductive adhesive, place the carpet tile over the adhesive and ground strip and roll with a 100 pound vinyl roller.

Document History:
3/9/2006: Initial release
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