

ESD Static Control Flooring Installation Guide

Surface Preparation:

Milamar 1200 CS ESD Epoxy Flooring System may be installed only on clean, sound substrates. For concrete substrates the concrete must be cured a minimum of 28 days. All laitance, coatings, oils, grease and unsound concrete must be removed in the preparation process. After all required patching is completed, the concrete must be acid etched, diamond ground or brush-blasted to provide a surface profile the texture of 100 grit sandpaper. This is required for maximum adhesion of the ESD floor system.

Moisture Testing:

All concrete substrates should be moisture tested using a Calcium Chloride Test and following ASTM D-1869 Guidelines. The test results should not exceed 5 lbs./ 1,000 SF/ 24 Hours for installation of the floor system. If the moisture testing exceeds the limits, a Moisture Vapor Remediation System will be required. Call Technical Services for recommendations.

Primer Coat:

Mix the 1200 CS Primer, Part A and Part B, for 2 minutes with a low speed jiffy mixer or equivalent. Do not whip air into the primer when mixing by pulling the paddle out of the material or mixing at high speed. Pour the entire mix on the floor in a continuous ribbon. Level the mixture with a flat squeegee and back-roll with a medium nap roller to remove the squeegee marks. Check the application thickness with a wet mil gauge. Application rate is 6 wet mils or an application rate of 250 SF/gallon. Allow to cure.

Grounding Strips:

Copper grounding strips should be installed per the Milamar ESD Grounding Instructions. This requires that as a minimum you must install one strip for every 1,000 SF of floor, however it is recommended that there be a minimum of two (2) grounding strips per room. The copper grounding strips must be attached to a ground. Please review the document "Grounding ESD Static Control Flooring" by Milamar Coatings, LLC.

Ground Plane:

Mix the 1200 CS Ground Plane, Part A and Part B, for 2 minutes with a low speed jiffy mixer or equivalent. Do not whip air into the ground plane when mixing by pulling the paddle out of the material or mixing at high speed. Pour the entire mix on the floor in a continuous ribbon. Level the mixture with a flat squeegee and

back-roll with a medium nap roller to remove the squeegee marks. Check the application thickness with a wet mil gauge. <u>Application rate is 5 wet mils or an application rate of 320 SF/gallon</u>. Allow to cure.

ESD Topcoat:

Mix the 1200 CS Topcoat, Part A and Part B, for 2 minutes with a low speed jiffy mixer or equivalent. Do not whip air into the ground plane when mixing by pulling the paddle out of the material or mixing at high speed. Pour the entire mix on the floor in a continuous ribbon. Level the mixture with a flat squeegee and back-roll with a medium nap roller to remove the squeegee marks. Check the application thickness with a wet mil gauge. <u>Application rate is 6 wet mils or an application rate of 266 SF/gallon</u>. Allow to cure.

Cure Time:

Allow overnight cure between coats. The 1200 CS ESD will harden to foot traffic in 18-24 hours at 75 degrees. Maximum chemical resistance is not reached until 96 hours of cure at 75 degrees.

The application rates, or mil thicknesses, are critical in this application. The final testing of the finished floor requires that these mil thicknesses are maintained. Additonal thickness may cause an insulating value and make the floor system test outside the normal parameters.