



Installation of ElectraFloor ESD Sheet Vinyl and Tiles

Material Overview: ElectraFloor ESD vinyl sheet goods consist of materials designed with specific electrical conductivity. This conductivity is what provides the static control properties. Installation of Anti-Static or esd conductive sheet vinyl is similar to standard (non-ESD) vinyl sheet goods with several important differences. Pay particular attention to section three and seven of this document. An overview of the differences between anti-static and standard Vinyl sheet good installations is listed for your convenience.

A: The following conductive adhesives are approved for use with Polyflor static dissipative and conductive esd sheet vinyl: [UZIN KE 2000 SL](#)

B: Grounding an ESD floor is fast, clean and simple. Utilizing the most advance conductive adhesives make things simple (it is more a matter of grounding the *adhesive*). Please visit the following link for full details: [How to electrically ground ESD Flooring](#)

C: Proper spread rate of adhesive is critical, proper trowel dimensions and rolling parameters must be used (see section 7).

D: The adhesives used with our vinyl static control flooring may be of slightly lower bonding strength than standard vinyl adhesives, as such proper use of recommended rolling procedures, adhesive usage, adhesive spread rate and coverage must be utilized, see section 7.)

E: Static control vinyl sheet flooring can be installed by using the double drop method (see section 7) when installing on hard troweled concrete or substrates that are somewhat non-porous. Laying the material into wet adhesive is acceptable and recommended for porous substrates

F: Static control vinyl rolls must be conditioned and relaxed prior to installation, (see section 3) and temperature in room must be maintained in the standard plant operating range 72 hours before, during and after the installation.

Site and Material Preparation:

1) Perform calcium chloride moisture emission testing on concrete floors regardless of the age or grade level of the concrete. Testing shall be performed around the perimeter of the room and any area where concrete moisture emissions is evident. Uzin KE 2000 SL conductive adhesive is fully warranted to moisture emissions as high as 5 lbs. per 1000 sq. /ft. in a 24 hour period (contact United prior to install if your testing confirms moisture emissions over our 5 lb. limit).

Perform concrete PH Testing. If the PH is greater than 9, it must be neutralized, contact United for recommendations. Testing results and a diagram of testing locations shall be submitted to United prior to installation of ESD flooring if the results exceed the limitations we specify.

2) Upon receipt of rolls, check that colors correspond to those on the purchase order, that quantities are correct and dye lots are consistent. Any material installed with visual defects will not be considered legitimate claim as it pertains to labor cost. Rolls of material should be stored upright. Insure that all equipment and trades have completed their work and removed their equipment and materials prior to installation.



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3) Maintain building temperature, flooring and adhesive at a minimum of 68 degrees F for a Period of 72 hours prior to, during and after installation of static control sheet vinyl. Sheet vinyl must be relaxed prior to installation. Remove factory wrappers from rolls; unroll vinyl sheets (these may be smoothly placed on top of each other for faster relaxation). Allow material to flatten for a period of 72 hours in a warm to hot environment prior to installation.

4) Remove all debris, sweep or vacuum entire floor area. Subfloors must be dry, clean and free from dust, paint, oil, grease, curing agents, parting compounds, surface hardeners, sealers solvents, old adhesives and any other extraneous materials. Substrate must be smooth and flat with a maximum variation of 1/8 'in 10 feet. Cracks and any irregular surfaces must be patched and leveled using a Portland cement underlayment with a liquid latex binder. Gypsum-based underlayment should not be used. Excessive subfloor irregularities may telegraph through the static control vinyl and may be visible on the surface of the finished installation.

5) Remove sealers, contaminants and roughen concrete using a diamond grinder or DiamoBrush. Fill all voids in concrete (including expansion joints) using a Portland based concrete patching compound such as Mapei Plani-Patch. Remove dust using an auto scrubber if needed.

6) The Architect may have provided a drawing showing the direction in which the material should be laid. In this case lay the sheet as directed. If the Architect has left this to the discretion of the flooring installers, layout your installation as you would for standard non ESD Vinyl paying attention to where seams will fall and avoiding such occurrences as seams in the middle of doorways.

7) Trowel and Roller Method of Adhesive Transfer:

A: It is essential that the specified trowel be used! If the trowel notches are too large too much adhesive will be applied. This will result in excessive adhesive seepage at the seams and also will cause the Vinyl to "float" and shift. In addition, excessive adhesive will make clean up difficult. Excessive adhesive should be immediately cleaned from Vinyl with warm water. Do not use Acetone. If you delay in rolling the Vinyl because of excessive seepage, adhesive will not be properly transferred to the backing of the Vinyl causing both a loss in Conductivity and lowered adhesion. If the notches are too small, too little adhesive will be used resulting in lowered conductivity and/or lowered adhesion. As this adhesive contains carbon fiber trowel wear will be noticeably increased. Worn trowels should be immediately discarded when proper spread rate becomes impaired.

Trowel Size: A 23/80 V Notch trowel blade is included with each pail of UZIN KE 2000 SL adhesive. This blade should be changed with each fresh pail. This blade is slipped into a specialty [Wolff Brand Adhesive Trowel Handle](#) (available from United SCP). Keep trowel blades free of carbon fiber buildup during use. Typical Coverage: 120 to 150 square feet per gallon for Vinyl.



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B: Anti-static (static control) sheet goods may also be installed by using the double drop method (recommended for non-porous substrates). Spread and trowel adhesive, lay vinyl sheet into wet adhesive and roll (see c), then fold vinyl sheet back and leave until adhesive becomes slightly tacky to the touch. Once proper adhesive tack takes place vinyl sheet should be accurately re-laid, ensuring vinyl does not twist or develop trapped air bubbles. Tack time will vary depending on ambient humidity conditions in your environment. Our ESD sheet vinyl may be placed into wet adhesive on porous substrates.

C: It is important that the proper weight roller be used! The floor is rolled to flatten the adhesive ridges left by the trowel and to transfer a uniform amount of adhesive to the backing of the Vinyl Sheet Goods.

Roller Weight: 100 to 150 Pound

8) Heat Welding: Allow floor to cure for a minimum of 48 hours prior to heat welding seams. Heat weld in accordance with standard high grade composition vinyl flooring practices.

Installers Checklist

- Conduct Calcium Chloride moisture test, insure that the results do not that of the selected conductive adhesive. Test for pH levels insure that the pH of concrete substrate does not exceed 9.
- Perform bond strength test using standard installation parameters.
- Permanent HVAC system must be turned on and set to a minimum of 68° F for a minimum of 72 hours prior to, during and after installation. With maximum environmental temperature not to exceed 100° F. Acclimatize material to installation area for a minimum of 24 hours prior to installation.
- Relax vinyl sheets prior to installation
- Use only approved conductive adhesive.
- Inspect material visually prior to installation! Any material installed with visual defects will not be considered legitimate claim as it pertains to labor cost. Make sure that the tiles or rolls are all from the same batch numbers as indicated on the cartons and containers.
- Do not allow heavy equipment on the newly installed floor for a minimum period of 72 hours. Normal foot traffic may be allowed after a period of 24 hours in most environments.

Maintenance / Post Install Cleanup: Damp mop with a dilute solution of ElectraClean and water. Maintenance is dependent on the nature and intensity of traffic and the specific requirements of the end user. Remove abrasives by sweeping on a regular basis. Damp mop with warm water and ElectraClean as needed. A clean floor insures consistent electrical performance. ElectraFloor is supplied with a low glare mat finish. If your needs require a high shine consider the use or our [ElectraGlaze](#) static control floor finish. This esd floor finish greatly reduces scuffing and provides a slip resistant high shine as applied. For ULTIMATE luster this anti-static floor finish may be high speed polished.

Reviewed for accuracy and revised for Uzin Adhesive: 08/08/16