311 Smith Industrial Blvd., Dalton, GA 30722-1447 Revised 1/2010

Tandus
EXPECT INNOVATION

Form #009

power(shield) INSTALLATION INSTRUCTIONS

power(shield) is intended for the remediation of Moisture Vapor Emissions up to 10lbs, In-Situ Relative Humidity up to 90%, and pH up to 9 in concrete flooring substrates. This product is not intended for spot remediation. A full installation of power(shield) is required for the remediation of areas with moisture and/or pH issues.

Moisture and pH testing should be performed according to the relevant ASTM Standards. ASTM F-1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride is used to determine the moisture vapor emission rate (MVER) of the concrete, ASTM F-2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes is used to determine the percentage of relative humidity of the concrete at 40% of the depth of the concrete slab, and ASTM F-710-05 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring is used to determine the surface pH of the concrete. Testing must be performed according to the referenced ASTM Standards and the results of these tests must be provided to Tandus prior to the installation of power(shield) in order to qualify for limited warranty coverage.

power(shield) is manufactured in 75-foot roll length minimums, untrimmed, with a minimum width of 72 inches. The approximate weight of a roll of power(shield) is 120 lbs. including packaging. Tandus Seam Weld 54 is required to chemically weld all side and end seams to assure moisture impermeability. The Gundlach Glue 2™ application system, part number 5CS (red tip), should be used to apply the 54 Seam weld to both sides of the power(shield).

For installation over existing multi-purpose adhesive or cut-back (asphaltic adhesive), the floor should be scraped as clean as possible to minimize any residue of the old adhesive. Pressure sensitive adhesive that has been contaminated by plasticizer migration should also be scraped to remove as much of that existing adhesive as possible. Pressure sensitive adhesive that is not contaminated, or compromised by dust, dirt, or debris can be used to adhere the power(shield) to the flooring substrate.

On new or existing concrete, Tandus C-14, C-EX Adhesive or XL Brands Quantum PS Pressure Sensitive Spray Adhesive can be applied in a very thin coverage onto the concrete to secure the power(shield) during the installation process. The purpose of the adhesive layer is to provide sufficient tack to facilitate double cutting seams. Therefore, the coverage should be 2 to 3 times the amount specified on the adhesive container. Care should be taken to assure that there is no overspray on other interior finishes. The large canister weighs 35lbs and the coverage as specified on the container is 350 to 380 square yards. Consult Tandus Technical Services for other acceptable alternative adhesives.

The installation process is simple and following these steps will assure a successful power(shield) installation:

- Prepare the floor as described above to remove any non-compatible adhesive leaving only minimal residue. Skim coat as necessary.
- The flooring substrate should be free of dust, dirt, debris, or any other substance that would impair adhesion. Debris that is not removed can telegraph through the power(shield) once applied to the floor so the floor should be level and smooth under the power(shield).
- Remove the plastic wrap from the rolls of power(shield) and then roll the product onto the flooring substrate covering the entire surface requiring moisture or pH remediation.
- Overlap the breadths of power(shield) a minimum of one to one and a half inches along the length of the side seams and at all end seams. The seams must be overlapped adequately to allow them to be double cut.
- Fold back the power(shield) at the side seams approximately half the width of the 72 inch breadths of material and at all end seams to the extent that it is possible to avoid shifting or moving the product during this process.
- Apply C-14, C-EX or if a more permanent bond to the floor is desired, apply XL Brands Quantum Spray Adhesive on the exposed areas where the power(shield) is folded back.
- Allow the adhesive to dry in accordance with the instructions found on the adhesive container and lay the power(shield) into the application of adhesive.
- Fold back the other half of the power(shield) at the side seams and the end seams to the point where the first application of adhesive is visible. The adhesive applied to the floor in those areas will help to prevent movement or shifting of the product.
- At that point both side seams and end seams should be overlapped one to one and a half inches. If the initial untrimmed power(shield) exceeds 72 inches the overlap may be wider at the side seams.
- Using a Tandus Double Cutter cut cleanly though both layers of power(shield) at the side and end seams. If the bottom layer of power(shield) is not cut completely through, use a utility knife to cut through the remainder of the product as cleanly as possible.
- Remove the cut pieces of power(shield) along the seams so that the two cut edges at the side and end seams fit flush and tight, but are neither gapped nor compressed at the seam.
- Using the Tandus C-54 Seam Weld and a Gundlach number 5CS Glue 2 Applicator Nozzle and bottle apply the 54 Seam Weld along both sides of the edge of the power(shield).
- The applicator bottle will apply a bead of 54 Seam Weld along both edges and between the two cut edges of the power(shield).

- There will be some overlap of the 54 Seam Weld onto the surface of the power(shield). Take a 2 inch metal putty knife and run it down the length of the seams to spread the 54 Seam Weld evenly along the surface of the power(shield) at the seams, and to press the 54 Seam Weld between the two cut edges. This needs to be done immediately after the application of 54 Seam Weld before it begins to dry. This insures a moisture impermeable seam.
- 54 Seam Weld usage will be approximately half the lineal ft. indicated on the C-54 adhesive label (approximate linear foot coverage for power(shield) will be 450 feet).
- Once the Seam Weld has dried for a minimum of one hour, the power(shield) is ready for installation of the floor covering.
- In areas that require water based seam sealers, please use C-XL seam sealer in place of 54 Seam Weld and follow the same application instruction. The only exception is the dry time from the C-XL application to the floor covering application, which is a minimum of 18 hours open time. Installation prior to this time will result in weak seam integrity and/or faulty seams, which can cause failure of the moisture suppression system.

Note: These instructions do not cover all possible installation conditions. They are intended for general information on the application of power(shield). For more specific instructions, or for flooring substrates or issues not covered within these instructions please contact Tandus Field Technical Services at 1-800-241-4902.