

# ESD CONTROL VINYL TILE INSTALLATION AND MAINTENANCE INSTRUCTIONS



## BEFORE INSTALLATION READ THIS DOCUMENT

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION, AS WELL AS CAUTIONS AND WARNINGS. PLEASE MAKE CERTAIN THESE INSTRUCTIONS ARE PLACED IN THE HANDS OF THE FLOOR OWNER. WARRANTY WILL BECOME EFFECTIVE ONLY IF THESE INSTRUCTIONS ARE FOLLOWED IN EVERY ASPECT. IN SITUATIONS WHEN A WARRANTY CLAIM IS DEEMED VALID BY VPI, VPI'S LIMITED WARRANTY LIMITS VPI'S LIABILITY TO REPAIR, REPLACEMENT, CREDIT OR OTHER, AT VPI'S OPTION, ON VPI FLOOR PRODUCTS FOR WHICH A CLAIM HAS BEEN MADE ACCORDING TO VPI'S CLAIM PROCEDURE. CLAIMS FOR SURFACE DEFECTS OR VARIATIONS IN COLOR OR PATTERN MUST BE MADE TO VPI PRIOR TO INSTALLATION OF THE MATERIAL. VPI RECOMMENDED ADHESIVES AND FINISHES MUST BE USED OR THE PRODUCT WARRANTY WILL BE VOID. FOR COMPLETE STATEMENT OF VPI'S EXCLUSIVE WARRANTY, CONTACT: VPI CUSTOMER SERVICE, [www.vpiflooring.com](http://www.vpiflooring.com) P.O. BOX 451, SHEBOYGAN, WI 53082-0451

\*\*\*REFER TO [www.vpiflooring.com](http://www.vpiflooring.com) FOR THE LATEST INSTALLATION AND MAINTENANCE INSTRUCTIONS. \*\*\*

Please note: In all cases, installations should comply with procedures outlined in ASTM Standards for installation, at a minimum. For procedures specific to VPI products, please refer to the instructions below or at [www.vpicorp.com/product-installation-maintenance](http://www.vpicorp.com/product-installation-maintenance), for the most up-to-date recommended installation techniques.

## PREPARATION OF SUBFLOOR

### SUB-FLOOR PREPARATION:

It is essential that the moisture test be performed on all concrete sub-floors regardless of the grade level or whether or not the concrete is freshly poured or is classified as an older slab. (It is important the pH levels are between 7 and 11 when using VPI 155 adhesive, and never exceed a pH of 10 when using VPI 165 adhesive). Moisture testing should be performed by **ASTM F-1869 Calcium Chloride Test** with moisture levels not to exceed five (5) pounds per twenty-four (24) hours per one thousand (1000) square feet.

**ASTM F-2170 in Situ Relative Humidity Test** should never have moisture levels when measured by this method, not to exceed eighty (80) percent.

**If the test results exceed the limitations, the installation should not proceed until the problem has been corrected.**

### ADHESIVE BOND TEST:

In addition to and not in lieu of the moisture test, perform the Adhesive Bond Test. In several locations throughout the area to receive the flooring, glue a 3' x 3' area of the flooring with the adhesive. Roll with a 150 LB. roller; allow to set for 72 hours. A sufficient amount of force should be required to remove the flooring. Take Notes of the process effects and clean up.

**These tests are required for VPI 155 and VPI 165 adhesive before a full Installation is done.**

**IMPORTANT: WITHOUT DATED DOCUMENTS SHOWING pH, RH, CALCIUM CHLORIDE AND BOND PERFORMANCE TEST RESULTS, NO WARRANTY CLAIM WILL BE ACCEPTED FOR CONSIDERATION.**

Additional information regarding the sub-floor installation and requirements can be found in ASTM F-710.

### CONCRETE, TERRAZZO, CERAMIC:

Sub-floors must be structurally sound, dry, clean, and free of dirt, dust, wax, grease, paint, polish, oil cutting compounds, sealers and all other materials that would interfere with a good adhesion. The floor surfaces must be smooth and flat with a maximum variation of 1/8" in 10 feet. All cracks, depressions, and imperfections must be repaired with a high-quality cementitious underlayment. All uncorrected sub-floor irregularities may telegraph through the VPI flooring and become visible on the surface of the finished installation.

**GYPSUM-BASED UNDERLAYMENT PRODUCTS SHOULD NOT BE USED.**

**No VPI WARRANTY covers a floor failure due to emission from sub-floor or sub-floor movement, expansion, contraction, or settlement caused by any environmental conditions.**

New concrete must be properly cured. A drying time of one month per inch of concrete is generally required after the slab is poured and protected from the weather. Lightweight aggregate concrete floors, flooring with steel or plastic pan construction, and floors poured over a permanent moisture barrier usually requires an extended drying time, if lightweight aggregate

concrete weights less than 90 pounds per cubic foot, a topping of regular concrete at least one inch thick is required. To expedite drying time, adequate heat and ventilation should be provided.

**Additional information with regards to these tests and results can be obtained through VPI's Technical Services Department.**

If concrete surface is exceptionally smooth, it should be acid etched with a 15% solution of muriatic acid/water before installing the floor. Neutralize the concrete after etching by rinsing with clear water to which a few ounces of ammonia has been added.

### CERAMIC TILE:

All ceramic tiles must be bonded securely to the substrate. Any loose tile must be removed. Clean existing ceramic tile using muriatic acid/water as directed. After floor has dried, apply a thin rich coat of Portland cementitious underlayment with a liquid latex binder to achieve a smooth surface.

### TERRAZZO FLOORS:

Inspect the terrazzo for any sealer or film on the surface. This must be removed before proceeding with the installation.

### RADIANT HEAT:

Tile may be installed on radiant-heated floors at 65°- 75°F, as the standard operating setting. The use of excessive radiant heat nearing the upper limit of 90° F. can impact the performance and the adhesion of your floor.

### WOOD FLOORS:

Tile may be installed over existing sound, suspended plywood floors of double construction. DO NOT install directly over wood strip or plank sub-floors.

### Prepare floors as followed:

1. Sub-floor must be solid, well nailed at the joints and free from flexibility. Missing or unsound boards must be replaced.
2. Install 1/4" underlayment grade or exterior grade plywood or 1/4" underlayment grade hardboard. If the floorboards are badly warped, use thicker plywood.
3. Fill all voids, cracks and seams with wood putty or equivalent fillers. Sand all irregularities, allowing any voids to remain may transfer through the tile and be visible on the surface of the new installation.

**Note:** Wood expansion or contraction will cause gapping, ridges, or possible loss of adhesion.

### VPI RECOMMENDS:

Any new concrete slabs on or below grade can be poured over a permanent moisture barrier consisting of a minimum six mil polyethylene film. Any concrete in contact with the earth or with less than 18" of cross-ventilated air space under it is considered to be on grade.

### RESILIENT FLOORING:

Do not install tile over any resilient floor covering on or below grade. Remove all the old floor covering and sand off all the adhesive. If a specific job condition necessitates the installation of the tile over resilient floor covering, use the following procedures:

1. Any floor covering must be sound and adhered tightly to the floor. Remove any loose or broken tiles and replace them with sound material or with a Portland cementitious underlayment with a liquid latex binder, which should also be used to level any floor irregularities and to fill any open seams.

# ESD CONTROL VINYL TILE

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

- Any texture or embossing in the original installation may transfer through the VPI tile and be visible on the surface of the new installation if not prepared properly.
- Thoroughly sand the surface with coarse sandpaper using an edge sander next to the walls and in spots where a regular sander may have skipped. Completely remove all the old sealers and waxes to ensure a proper bond.
- Thoroughly sweep, vacuum, and then damp mop the floor to remove any remaining dust and grit.

### WARNING:

Various government agencies have regulation governing the handling, removal and disposal of asbestos containing materials. If you intend to sand, remove, or dispose of an existing resilient floor covering, backing, lining felt, or adhesive you should be aware that these products may contain asbestos fibers. Sanding, removal, and the disposal of asbestos containing material can place fine particles of asbestos in the air. It has been determined that the inhalation of free airborne asbestos fibers may be injurious to your health. Fines may be assessed against persons violating these regulations.

**NOTE: VPI Resilient Floor Coverings and adhesives have never contained asbestos.**

### METAL DECKS:

Metal decking must be smooth, dry, clean, and free from dust, paint, asphalt, old adhesives, grease, oil, rust and other extraneous material. Level all surface irregularities with a Portland Cementitious liquid latex underlayment. Priming the metal surface will result in better adhesion. Lightly sand the surface for better adhesion.

### WORK BENCHES:

Tile can be applied to either wood or metal work bench surfaces. The bench surface must be smooth, dry, clean and free from paint, oil grease and other extraneous material. Metal surfaces should be lightly sanded for better adhesion.

Install tile in general accordance with the instructions under Adhesive Installation.

### OTHER TYPES OF INSTALLATION:

For recommended procedures on other types of installations not covered in these instructions, contact the manufacturer before installation commences.

### LOT NUMBERS:

Each production run of tile is assigned a lot number which appears on the carton label. Check lot numbers before installing the tile. Whenever possible, install the tile from the same lot number in a given room or area. When this is not possible, it is advisable to isolate the different lot numbers into separate areas. Because few rooms are perfect rectangles and the tile must be laid within a perfect rectangle, it is necessary to strike chalk lines at right angles to each other against which the tile can be laid.

### GROUNDING SET UP REQUIREMENTS:

Several acceptable methods are used to ground ESD Control Floors, depending on job conditions and/or personal preference. Two recommended procedures are described:

#### OPTION 1

Prior to installation of the static control flooring, the electrical contractor drops a wire (usually a #10 or #12 stranded) inside the wall from any convenient ground bus so that the wire emerges at the floor wall junction. A small hole is either cut into the drywall at this point or chipped out of the concrete floor. The copper (2" x 24") grounding strip provided by VPI is intertwined with the stranded copper wire. The connection of grounding strip and copper wire is pushed into the depression and conductive adhesive is liberally applied so that the connection is completely buried. Then the adhesive and the depression is filled to the level of the floor or wall. The balance of the grounding strip is then laid flat in conductive adhesive on the floor and covered with additional adhesive. The tile is then installed over the grounding strip.

#### OPTION 2

If there are exposed steel columns supporting the building, the ground connection may be made directly to the columns. The copper grounding strip is laid flat in the conductive adhesive on the floor allowing several inches to protrude at the junction next to the column. The grounding strip on the floor is covered with additional adhesive and Conductile or Statmate tile installed over it. A hole is drilled into the steel column an inch or two up from the floor. Tap the hole and secure the grounding strip using a simple machine screw and washer. Make sure all paint and foreign substances have been removed from the column to assure good metal contact. Cover the connection with an electrical box.

VPI provides sufficient copper strip to allow one ground connection every 2,000 square feet of installed tile. Copper strip grids under the tile are unnecessary since the conductive adhesive acts as a conductive plate beneath the tile.

### ADHESIVE APPLICATION TYPE:

**VPI 155 or VPI 165 is an integral component of the ESD control system. Use of non-VPI Conductive Adhesives will void VPI's Limited Warranty.**

### VPI 155 ADHESIVE:

VPI 155 Adhesive has superior bond strength on, or above or below grade applications where moisture may be a concern.

**CHARACTERISTICS:** VPI 155 Epoxy adhesive is different from other adhesives; it **does not** develop tackiness as it sets up. This makes it extremely important to roll the floor as recommended to avoid raised edges or adhesion problems.

**CLEAN UP:** Promptly clean any adhesive smudges from the flooring material's surface with water while the adhesive is still fresh/wet. Clean tools with water while the adhesive is still fresh/wet. Clean with mineral spirits once dried. Use caution with mineral spirits, which may be harmful to some materials. Do not smear adhesive. Use Original Soft Scrub™ (Paste) to remove remaining stains of wet or cured adhesive. During initial maintenance, dry buff these areas with a red pad on a low-speed buffer to restore the factory finish.

**SET-UP TIME:** About 30 minutes, do not spread more than you can install in that time. Appearance is glossy when first spread and dulls as it sets up. Maximum open time: 30 minutes. Exceeding the 30 minutes open time will lead to floor failures due to poor adhesion.

**TROWEL TYPE:** 1/32" x 1/16" x 1/32" U-Notched Trowel  
Never re-notch a trowel, the tines wear down reducing the amount of adhesive needed for a good adhesion to the product.

**SURFACE TYPE:** The Adhesive is good for Porous and Non-Porous areas.

**COVERAGE:** 185 - 245 sq. ft. per gal. depending on porosity of substrate, application style and environment. In applications demonstrating spread rates that are less than 185 SF, additional adhesive should be purchased as required. MVER<5LBS, RH ≤80%, pH of 7-11.

### VPI 155 TWO PART EPOXY ADHESIVE INSTALLATION INFORMATION:

- Prior to the installation, remove the cartons from the pallets, and place them on a flat floor surface with a room temperature between 65°F and 80°F degrees for a minimum of 48 hours.
- After acclimating, and prior to installation, wipe the back of the tile to remove any manufacturing residue or contaminants.
- "IMPORTANT" Before starting the installation and in order to reduce tile ledgering and gapping, the general conditions (ambient temperature, slab temperature) at the time of installation should match the planned operational general conditions.
- All sub-floors must be clean and dry, free of dust, dirt, wax, paint, grease, manufacturing residue or any other contaminants that might interfere with the adhesive bond.
- Cracks and uneven surfaces must be filled with an approved cementitious based patching compound.
- Pour Part B into Part A. Be sure to remove as much of Part B from the container as possible by placing cap on container and turning upside down to get any remaining material out. Material will flow into the cap. Mix in container provided only.
- ESD floors must be grounded every 2,000 sq ft or each area if less than 2,000 sq ft. **SEE GROUNDING SET UP REQUIREMENTS.**
- The adhesive should not be poured onto the floor until Parts A & B have been properly mixed together. Any unmixed portion applied to the sub-floor will not adhere and cause an adhesion floor failure.
- Mix the combined Parts A & B using a slow speed drill (200 RPM's) and mixing paddle. Mix for 3 minutes. Do not mix at high speeds. This could cause the adhesive to start the curing process and shorten the open time. Extended mixing may adversely affect the adhesive. Be sure to mix the entire contents of the can.

**CAUTION:** Adhesive will not cure if not properly mixed.

# ESD CONTROL VINYL TILE

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

9. After a complete mixing, IMMEDIATELY pour the entire adhesive on the subfloor and spread as soon as possible. DO NOT allow the mixed adhesive to remain in the container. Keeping the trowel at a 45° angle, spread the adhesive in 3-foot-wide sections as close to but not over your chalk lines. If you occasionally cross the line with your trowel, do be concerned. Any adhesive over the edges of the line must be scraped up before the next row is installed to avoid (ledging) or high edges.
10. Install tile immediately over the prepared epoxy adhesive surface within the 10-30 minute working window. It is essential that the specified trowel (1/32" x 1/16" x 1/32" U-notched trowel) and roller be used. If the trowel notches are too large, too much adhesive will be used. This will result in excessive adhesive seepage at the seams and will cause the tile to float and shift. Clean up after installation is then very difficult. In addition, the seams will be ledged making them very noticeable and dirt catchers as well. Any delay in rolling the tile due to excessive adhesive seepage, will result in poor adhesive transfer to the back of the tile and adhesion failure. If the trowel notches are worn or too short the adhesive will be spread too thin resulting in adhesion failures too.

### WORK OFF THE TILE WHEN EVER POSSIBLE.

When laying individual tile, do not slide the tile in place. The correct procedure is to place a corner of the tile in place next to the adjoining tile, carefully guiding it in the proper position to set it in place. When necessary to work on the tile, avoid shifting by using a kneeling board and by cutting the tile to butt tightly at all wall junctions. Roll and cross roll the tile with a 150 LB. sectional roller immediately after the tile is laid. Roll a second time one hour later. Inspect the floor for raised edges one hour after a second rolling, if necessary, roll a third time. Use hand roller in the areas that can't be reached with a larger roller.

### DISCARD WORN TROWELS

Please note that using unapproved adhesive will void any Exclusive VPI Warranty. Consult instructions for proper subfloor requirements before opening any adhesive. Open time, working time and cure time will be longer at lower temperatures, and will shorten at higher temperatures. Ensure that the installation is well lit to allow effective examination of the tile installed. If flash coving is desired, see special instruction under Flash Coving.

### ADHESIVE APPLICATION TYPE:

**VPI 155 or VPI 165 is an integral component of the EDS control system. The use of a non-VPI Conductive Adhesives will void VPI's Limited Warranty.**

### VPI 165 ADHESIVE:

Specially formulated so that it contains no solvents emitting zero VOC's. This adhesive is designed to permanently install VPI Conductive and Statmate Static Controlled Flooring only.

**CHARACTERISTICS:** One-part acrylic adhesive should dry to the touch. 45-minute set up time. This makes it extremely important to roll the floor as recommended to avoid raised edges.

**CLEAN UP:** Soapy water followed by mineral spirits. Do not apply solvent directly to the tile. Use moist cloth with mineral spirits.

**SET UP TIME:** About 45 minutes. Do not spread more than you can install in that time.

**TROWEL TYPE:** 1/16" x 1/16" Square Notched Trowel. Never Re-Notch a trowel, the tines wear down reducing the amount of adhesive needed for a good adhesion of product.

**SURFACE TYPE:** Porous floor, once troweled, the adhesive should be allowed to sit (flash off) for 5-10 minutes before placing tiles on the adhesive.

Non-Porous floor, allow the adhesive to dry to the touch so that there is little or no transfer of adhesive to the fingers. Maximum open time: 45 minutes. Exceeding the 45 minutes open time will lead to floor failures due to poor adhesion.

**COVERAGE: 90 - 135 sq. ft. per gallon depending on substrate porosity, application style and environment. In applications demonstrating spread rates that are less than 135 SF, additional adhesive should be purchased as required.**  
**MVER 5LBS or less, RH ≤ 85%, pH of 7 - 11**

### VPI 165 ONE PART ACRYLIC ADHESIVE INSTALLATION INFORMATION:

- 1A. Before the beginning of the installation, remove cartons from the pallets, and place on a flat floor surface at 70 degrees or at the expected temperature of operation for a minimum of 48 hours.

- 1B. After acclimation, and prior to installation, wipe the back of the tile to remove any manufacturing residue or contaminants.
- 1C. "IMPORTANT" Before starting the installation and in order to reduce tile ledging and gapping, the general conditions (ambient temperature, slab temperature) at the time of installation should match the planned operational general conditions.
2. All sub-floors must be clean and dry, free of dust, dirt, wax, paint, grease, manufacturing residue or any other contaminants that might interfere with the adhesive bond.
3. Cracks and uneven surfaces must be filled with an approved cement based patching compound.
4. Using mixing paddles provided or mixing paddles on an electric drill to carefully stir.
5. ESD floors must be grounded every 2,000 square feet or each area if less than 2,000 SQ. FT. **SEE GROUNDING SET UP REQUIREMENTS.**
6. Use a 150 LB three sectional flooring roller, roll and cross roll the tile immediately after it has been installed, and then repeat approximately 1 hour later. Use a hand roller in those areas that cannot be reached by the larger roller.
7. Lay out the field so that the last section ends at least 6" from the wall to allow space for use of the router and the hot air welding tool around the room perimeter.

### SEAMLESS INSTALLATION:

Conductile and Statmate are available in 36 x 36 or 24 x 24-inch tiles. Square edge or pre-grooved, for seamless installations. The 36" x 36" or 24" x 24" sections are installed in essentially the same manner as described under Adhesive Installation information.

- 1a. Dry cut all cove pieces to fit as described under FLASH COVING, and install them. Roll thoroughly with a hand roller.
- 1b. Install the field, making sure to install copper grounding strips at the designated grounding connections. Make sure that the tile is rolled and cross rolled with the proper sectional roller.
- 1c. Using scrap tile set the router height to half the thickness (.060). You need to router in one direction and center the groove over the seam. Use Chamfering plane to router the cove pieces where a router cannot be operated.
2. Preheat the hot air welding tool. Use the 4mm welding nozzle. Weld the bead into the groove. Trial weld on scrap tile to adjust the bead melt and flow. Beginners use a lower heat, more experienced higher heats for faster production.
3. Trim all seams in one direction, repeat the routing, welding, and trim procedure on all seams running in the other direction.
4. While seamless installations are usually flash coved, tip set cove base or other treatments may be used at the floor-wall junction. In these instances, use a chamfering plane to finish the groove closest to the wall where the router cannot be operated.

### PRE-GROOVED SECTIONS:

- A. Take care to minimize adhesive seepage at the seams. Any adhesive allowed to remain in the grooves could prevent the vinyl bead and flooring from fusing together properly.
- B. After the adhesive has set up overnight, use the chamfering plane to remove all excess adhesive that may have seeped into the grooves.
- C. Weld and trim all seams in one direction only.
- D. Use the chamfering plane to open each cross seam.
- E. Weld and trim all remaining seams.

### FLASH COVING:

Coving tile up the wall eliminates accumulation of dirt and bacteria at the floor wall junction. This procedure can be used with either Conventional or Seamless installations. The following steps are recommended:

- A. Install cove cap inside and outside corners. Then install a suitable cove cap strip (either metal or plastic) around the entire room. Exercise care so that the top of the cove caps are at the same level. Use either flat headed nails or contact bond adhesive to fasten corners and cove cap strips.
- B. Place a cove stick at floor-wall junction to support the tile at the bend. Radius of cove stick should be at least 7/8" and must have the same radius as the metal corners.
- C. When installing 12" x 12" tiles, lay out the field so it ends approximately 6" from the wall. When 24" x 24" or 36" x 36" sections are used, the field can be laid out so that the last section ends at any distance that is greater than



# ESD CONTROL VINYL TILE

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

6" from the wall. The distance from the edge of the field to the cove cap strip must be less than the width of the coved pieces since variation in the floor and wall will always necessitate cutting the coved pieces so that a tight fit can be achieved.

- D. Install the field in accordance with the procedures listed under either VPI 155 adhesive or VPI 165 Adhesive Installation Instructions.
- E. Dry cut cove stick pieces to fit. Remove pieces and apply adhesive to the exposed floor and wall. Install the pieces rolling by hand. If #155 VPI Adhesive is used, trowel as large an area as practical to avoid repeated mixing of adhesive batches.
- F. Masking Tape and a heat gun are needed to form each bend up the wall.
- G. Dry fit all the pieces and tape in place until the tiles are cooled and hold their shape.
- H. Take the formed tiles out or tip them forward.
- I. Use 1-part conductive adhesive on the walls and a small hand trowel 1/16 x 1/16 x 1/16 flats to spread the adhesive.
- J. Installing them in the same order keeping in mind that the main floor will still need to be grounded according to the grounding instruction.
- K. Insert the top of the tile into the cove cap strip and sliding the bottom in place to meet the finished floor.
- L. Hand rolling the tiles will improve the adhesion to the floor and wall.
- M. Adjust and wipe any excessive adhesive from the flash cove tile using a moist cloth.
- N. See pictures and detailed install at [www.vpiflooring.com](http://www.vpiflooring.com) how to flash cove.

### REQUIRED INITIAL ESD MAINTENANCE & ONGOING MAINTENANCE OPTIONS

#### **A. IMPORTANT INITIAL FLOOR MAINTENANCE:**

Important: Initial maintenance is required to assure proper electrical performance and good visual appearance. However please note:

- 1. Allow the floor 48 hours for the adhesive to set properly before performing any maintenance procedures.
- 2. VPI only approves the following initial maintenance methods and procedures. Other unapproved methods and procedures may cause suboptimal electrical performance and/or poor visual appearance.
- 3. Never, at any time, buff VPI Tile in excess of 375 RPM.
- 4. Floors become slippery when wet and care must be taken. For instance, appropriate barriers to wet areas and "warning / caution" placards should be used in all instances.

#### **Initial Deep Scrub**

- 1. To start the required deep scrub cleaning process, sweep or dust mop the floor to remove any large debris. **Note:** Never use oil base treated dust mops.
- 2. Dilute VPI Deep Scrub Cleaner (1 part Cleaner : 10 parts water) or 13 oz./gal. with cool clean water and apply liberally to the area to be deep scrubbed.
- 3. Using the VPI Maroon Deep Scrub Pad, agitate floor thoroughly with a low-speed rotary machine or automatic scrubber. To enhance cleaning, place a "floater pad", such as a VPI Surface Cleaning pad (Natural in color, with black strands), between the VPI Deep Scrub Pad (Maroon in color) and the low-speed rotary machine head, before beginning the scrubbing process. At least 5 passes are required to properly deep scrub the floor – though more may be necessary depending on machine speed and site conditions. Make sure the floor remains very wet with solution.
- 4. Pick up the solution with a wet vacuum, automatic scrubber, or a mop and bucket.
- 5. Rinse the floor with clear water only as many times as necessary to bring the pH level down to 7.0 (Neutral) by testing using pH paper and/or test strips. (**Note:** If rinsing is not thorough, the residual chemicals will soften new finish when applied, diminishing its durability).
- 6. Allow the floor to dry completely before starting the surface cleaning process and/or applying floor finish to the floor.

**If using optional Flex Shield finish for Static Dissipative Tile, skip to Optional Flex Shield Finish Section**

#### **Initial Surface Cleaning**

- 1. Place the VPI Surface Cleaning Pad (natural in color, with black strands) onto a low-speed floor machine.
- 2. Mist VPI Surface Cleaner, using the mist setting on a trigger sprayer, over the area to be cleaned. With the low-speed machine, use the initial pass to evenly distribute the cleaner over the intended area to be surface cleaned (about 10' x 10' at a time) – then begin the buffing action.
- 3. Buff the area using an even back and forth motion. Approximately 5 passes per row should properly clean the surface but take extra passes to assure complete surface uniformity. Continue the process until the surface of the entire area has been cleaned and is visually acceptable.
- 4. If desired, repeating the Surface Cleaning process a second time will maximize cleaning and optimize appearance.

**OPTIONAL FLEX SHIELD FINISH IS FOR STATIC DISSIPATIVE TILE ONLY. NOT FOR CONDUCTIVE TILE. IF USING FLEX SHIELD ON STATIC DISSIPATIVE, SKIP INITIAL SURFACE CLEANING STEPS**

- 1. Ensure floor is dry and clean of debris
- 2. Saturate a clean rayon mop with SD Flex Shield, wring out excess to where the finish is not dripping from the mop head. Apply to the floor in a figure eight pattern. Work away from the starting point to ensure an exit point remains. DO NOT EXCEED 2 coats.
- 3. After the last coat, wait 6 hours before any light traffic, 12 hours before regular traffic, 72 hours before any wet maintenance, buffing, and heavy equipment and floor truck traffic.

### **B. OPTIONAL/RECOMMENDED ON-GOING FLOOR CARE**

**Important: On-Going Periodic Maintenance is required to assure proper electrical performance and good visual appearance. However please note:**

- VPI only approves the following on-going / periodic maintenance methods and procedures. Other unapproved methods and procedures may cause suboptimal electrical performance and/or poor visual appearance.
- Frequency of maintenance can be daily or on a periodic basis depending on visual requirements, traffic and other site specific environmental conditions.
- Never, at any time, buff VPI Tile in excess of 375 RPM.
- Floors become slippery when wet and care must be taken. For instance, appropriate barriers to wet areas and "warning / caution" placards should be used in all instances.

#### **Approved On-Going / Periodic Maintenance Procedures**

- Sweep or dust mop the floor to remove any large debris. Never use oil base treated dust mops.
- Option 1: use a neutral PH cleaner (found at most floor maintenance wholesalers). Damp mop or auto scrub using a generic red pad. Rinse as necessary and then allow to dry.
- Option 2: follow the initial ESD maintenance instructions to reset your floor to make it "look like new."

### **D. HOW TO PURCHASE VPI ESD MAINTENANCE PRODUCTS**

The primary maintenance products listed herein are available from your local authorized VPI Distributor. (Please note that Maintenance buffing pads are available in 17 or 20 inch sizes).

**For additional information please call VPI Technical Services at 800-874-4240**