

INITIAL AND ONGOING MAINTENANCE PROCEDURES FOR CONDUCTIVE AND STATIC DISSIPATIVE ESD VINYL TILE AND SHEET FLOORING

NOTE: These procedures have been proven to restore the electrical performance and visual appearance of all types of solid ESD vinyl tile regardless of manufacturer. Contact StaticWorx to obtain a trial quantity of our proprietary chemicals and buffing pads for a test application over existing ESD vinyl flooring.

StaticWorx solid vinyl tile (SVT) is manufactured using automated processes. One of these automated processes is called “polishing.” Polishing is performed using an abrasive material similar to the rubbing compounds used to prepare the painted finish on automobiles. Since this process is performed in-line at the factory, it is common for the tile finish (gloss level) within a batch to vary slightly. In-factory polishing is not performed to provide a final finish; it is performed to seal and protect the surface of the newly manufactured tiles.

Keep in mind, any variation in shine does not mean that there is a deviation in color; it merely means that the tiles have been abraded and polished to lesser or greater degrees depending on the point at which they went through the factory polishing process (**figure 1**).

All new installations of solid vinyl tile need to be buffed per StaticWorx Initial Post-Installation Floor Maintenance guidelines in order to attain a consistent gloss level across the entire floor; this is particularly true with darker gray and blue-colored floor tiles. This procedure will both remove the factory finish and level off natural microscopic pores and valleys in the surface of the tile in order to achieve visual uniformity (**figure 2**).

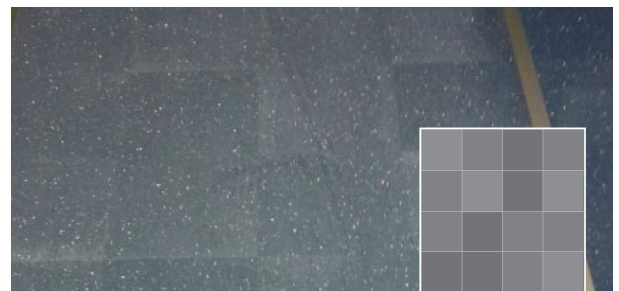


figure 1.
Gloss variation between tiles in newly installed floor.

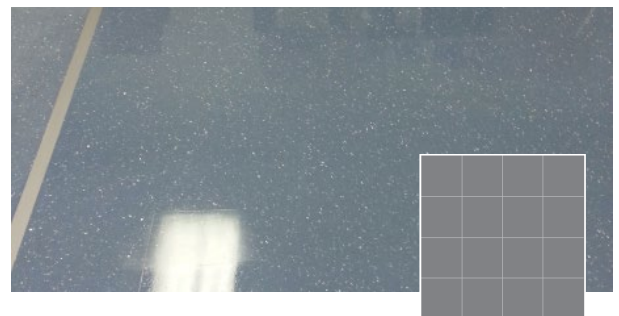


figure 2.
After buffing, a consistent gloss is achieved across the floor.

MAINTAINING YOUR AMERIWORX VINYL FLOOR

The amount and type of traffic — foot, forklift, pallet jacks, light, heavy, etc. — will determine the maintenance frequency and requirements of your StaticWorx vinyl floor. Maintenance of StaticWorx ESD vinyl tiles requires vacuuming/sweeping, washing, rinsing and buffing.

- Do not use a sweeping compound as these may contain oils.
- Do not use generic waxes, polishes and floor finishes on conductive or static dissipative vinyl tiles.
- Certain maintenance procedures require low speed power buffing machines operating below 375 rpm.
- Wash all ESD vinyl floors with neutral (approximate pH = 7) ESD floor cleaners only.
- Do not use an excessive amount of water.
- Do not use pads or brushes that have been used on standard waxed floors, as these will tend to cross contaminate and leave a non-conductive wax film that will compromise the dissipative properties of the floor.

PREVENTIVE MAINTENANCE (PM) REQUIREMENTS

In a typical EMS environment, StaticWorx tile cannot be damaged by lack of maintenance. However, tile can become deeply soiled if contaminants become embedded due to long-term abrasion without a routine cleaning program. Heavy soiling as well as staining can be removed (figure 3).

The photos in figure 3 illustrate a custodian's ability to remove contamination from AmeriWorx solid vinyl tile even with heavy stains, scratches and variations in appearance. The photos show:

1. High-traffic corridor in an electronics manufacturing facility; improperly maintained for several years.
2. Applying a standard, moderately aggressive degreasing agent. Buff with maroon pad, dry mop, rinse; allow to dry.
3. Buffing with StaticWorx Formula 20.20 surfacing emulsion using a natural pad. Once dry, apply spray buff compound with white pad for an added sheen (optional).
4. Floor's appearance is much improved within a matter of hours.

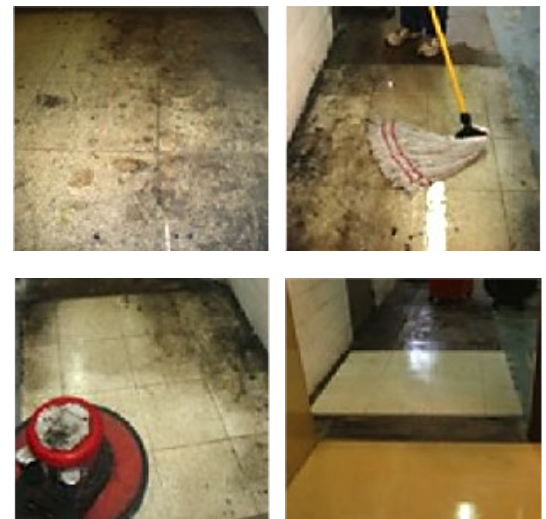


figure 3

You can use a more abrasive cleaning pad to remove resin/material from the surface of the tile then buff a glossy shine on the newly exposed tile surface.

The tile's original surface and gloss can be renewed at any time by following the StaticWorx Initial Post-Installation Floor Maintenance guidelines and implementing an ongoing multi-step maintenance program.

INITIAL POST-INSTALLATION FLOOR MAINTENANCE

NECESSARY TOOLS AND MATERIALS

- Single disc low speed commercial floor buffer – must operate <375 rpm
- Buffing pads: gray (for new/lightly soiled tile), maroon (for existing/heavily soiled tile), and natural (for spray buff application).
- Standard dry mop, dedicated mop (microfiber ideal)
- Single mop bucket with wringer, double-sided mop bucket with wringer
- StaticWorx-approved cleaning and buffing chemicals

INSTRUCTIONS

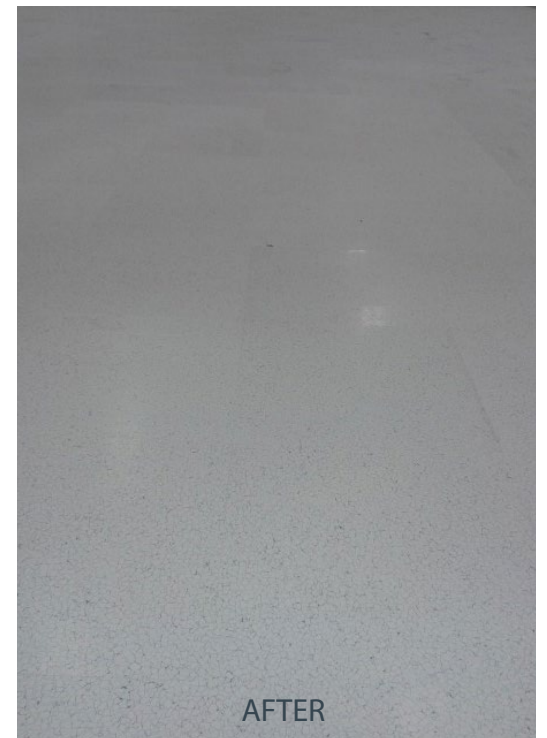
1. Allow the floor a minimum of 48 hours for the adhesive to set properly before performing any maintenance procedures.
2. Sweep and damp mop the floor to remove all loose dirt/grime (never use an oil treated mop).
3. Dilute Staticworx Eco Scrub Floor Degreaser (1 part degreaser : 10 parts water) with cool water and apply to the floor using a dedicated mop (microfiber is ideal). Apply liberally so the floor remains wet, but do not flood the floor. Allow the solution to sit for 4-5 minutes before moving on.
4. Scrub the floor at <375 rpm using a rotary swing buffer machine in conjunction with a gray Staticworx Initial Scrub Pad. Be sure to buff at least 5-6 passes per row of tile at a slow to moderate speed to unify the surface. Additional passes may be necessary, depending on the speed of each pass or on site conditions. . To enhance cleaning, place a floater pad (such as a standard red or white pad) underneath the Initial Scrub Pad before beginning the buffing process.
5. Remove the degreasing agent from the floor using a wet vacuum, auto scrubber, or a microfiber mop and a bucket. Rinse the floor with clean water and a clean wet mop to remove any remaining degreasing agent. Allow the floor to dry completely before moving on.





6. The floor should appear as a uniform matte surface. Areas with excess variation in gloss should be re-addressed with the initial scrubbing procedure before proceeding. Lightly mist Staticworx Formula 20.20 onto the floor (spray on application) and buff it in at <math><375\text{ rpm}</math> using a Staticworx Natural Hair Pad. Work the solution in evenly with one initial pass of the buffer per row of tile to create a level surface. To avoid spotting, be sure to buff in any stray drips. As in step 4, buff 5-6 passes per row of tile to ensure a proper finish. Buff the solution until the floor is dry to the touch.
7. If desired, repeat step 6 once to optimize the finished appearance.

NOTE: Ongoing maintenance requirements will vary depending on the desired final gloss as well as various environmental conditions.



A TYPICAL MAINTENANCE SCHEDULE

DAILY MAINTENANCE

1. Sweep and/or dust mop the entire floor.
2. Wet or damp mop soiled areas, as needed, with a neutral ESD floor cleaner.

WEEKLY MAINTENANCE

1. Sweep and/or dust mop the entire floor.
2. Wet or damp mop soiled areas with a neutral ESD floor cleaner.
3. Restore traffic lanes using a low speed buffer or automatic scrubber with neutral ESD floor cleaner and a gray pad and buffing solution with either a white or beige pad.

MONTHLY/QUARTERLY/YEARLY MAINTENANCE

Perform the StaticWorx initial post-installation floor maintenance procedure, substituting the gray buffing pad with a more-aggressive maroon pad. Repeating steps 3-5 may be necessary in areas where tile is very heavily-soiled (prior to moving on to step 6).

NOTE ABOUT WAXES AND POLISHES: All ESD floor tile manufacturers state that solid ESD vinyl tile never requires waxes, polishes or finishes of any kind. This is true. The conductive properties are inside the tile itself; they are not derived from floor polishes and finishes.

However, there may be other reasons to consider the use of buffing compounds and finishes. AmeriWorx solid conductive vinyl tile can be maintained with only a pH neutral cleaner, water and a buffer. Depending on the level of shine and reflectivity desired, you may decide that the use of a spray buff provides an enhanced appearance.

Please contact StaticWorx before initiating a maintenance process or using any dissipative coatings or polishes of any kind.

TIPS

- Always test your technique in a small area first to ensure that the process and materials are used correctly.
- Avoid high-speed buffing if low-speed buffing creates a satisfactory finish.
- Never use conventional floor waxes on your StaticWorx ESD floor. These products will insulate your conductive floor and compromise the ESD capabilities of the tile. Conventional waxes can be removed and the floor can be restored to an ESD compliant state by using a wax stripping agent.
- StaticWorx Spray Buff and StaticWorx Coat-ZF should be applied in very high traffic areas or areas where a high level of shine is required. StaticWorx Coat ZF can be burnished.

OTHER MAINTENANCE CONCERNS

It is important to note that any cleaning solutions and residue must be thoroughly removed from the surface to ensure that electrical performance is obtained.

NOTE: Oil mops, oil sprays or oil containing sweeping compounds are not recommended for use on any ESD Vinyl tiles.

FLOOR PROTECTION: Floors must be protected against excessive static loads and abrasion during the movement of heavy machines, equipment etc. The removal of small metal domes from machine legs is always recommended. Plastic casters and glides of adequate size should also be used to protect the floor surface. Be sure to protect your floor using felt paper or reinstalling proper casters.

THROW RUGS: Some types of throw rugs are backed with latex that may stain resilient floors. Make certain that the rug supplier provides assurances that the rugs have a non-staining backing.

WARNING: The extremely high forces exerted by stiletto or high-heeled traffic (dynamic loads of 3,000 psi or more) may create visible indentations on resilient flooring. StaticWorx will not accept claims for damage caused by stiletto or high-heeled traffic.