

# **TERRAZZO FLOOR CARE MANUAL**

South Bend International Airport (SBN), owned and operated by the St. Joseph County Airport Authority (SJCAA), has large areas of epoxy resin terrazzo that require detailed and consistent maintenance in accordance with the procedures outlined within this manual and with industry standards.

Epoxy resin is the type of binder used to anchor the aggregate and is fundamentally non-porous. Approved sealers assist in protecting the aggregates and normally enhance aesthetics.

### **Maintenance Precautions**

Harsh cleaners and sealers can damage terrazzo. Only materials that are neutral pH should be used when scrubbing or mopping floors. Sealers should achieve a slip resistance coefficient of friction rating applicable to code. Water-based sealers are recommended and to be applied in accordance with the instructions of the sealer manufacturer.

Always keep rinse water, mops, and pails clean.

Only use approved products on floors. All products must be reviewed and approved by SJCAA.

Do not allow the neutral cleaner solution to dry on the surface.

Do not use purely surface waxes, which can result in a slippery surface.

Do not use all-purpose cleaners. Do not use soaps containing water soluble inorganic or crystallizing salts, harmful alkali, or acids. Use of such products could prove harmful to terrazzo floor.

To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils, and other contaminants off the floor surface.

Do not use acidic cleaners, cleaners that contain citrus, 2-butoxyethanol, amine base cleaners, isopropyl alcohol, solvent base cleaners, degreasers or non-neutral cleaners.

Do not use spray buff products or chemical dust mop treatments.

### **Dust Mop Procedures (Constantly)**

Dust, dirt, and other grit can lead to scratching of the finish. Floors shall be dry dust mopped to pick up dust, dirt, and debris. Use a dry Doodlebuster, Easy Trap Duster, or similar dust mop. Clean dust mops regularly to prevent debris from scratching the floor. Approved sprays may be added to the dust mop to facilitate pick-up.

### **Neutral Cleaner Procedures (When Needed, At Least Daily)**

1. Floors shall be damp mopped using neutral cleaner and a ride-on scrubbing machine. Use tan ScotchBrite Clean and Shine circular pads and 3A 3M Neutral Cleaner (or equivalent approved cleaner). Ensure the solution is applied evenly and lightly.
  - a. Solution is distributed from the 3M dispensers in the custodial closets in the terminal and concourse. The solution is dispensed per the ratio of 1/3 ounce of chemical to 1 gallon of water.
2. Use a wet mop with a neutral cleaner solution in areas that cannot be accessed by the ride-on scrubbing machine.
  - a. The mop must be cleaned, and the water must be changed often.
3. Handwork stubborn stains and scuff marks with neutral cleaner diluted in warm water.
4. Remove any buildup if too much cleaner is applied by mopping with clean water. Too much neutral cleaner can damage floors.

Neutral cleaners are designed to react only in solution with clean water, mixed in accordance to the manufacturer's instructions, and allowed to remain on the floor surface for several minutes. This provides the necessary time for the grime-dissolving action to take place. Allow your neutral cleaner, once applied to the terrazzo surface, time to react. It is designed to loosen foreign matter. Several minutes should be adequate, but do not allow the solution to dry on the surface. It is important to keep the floor wet during this entire cleaning process, so the dirt and cleaning residue does not dry on the surface.

### **Burnishing (Every Two Weeks)**

1. Dust mop to remove all dust, dirt, and debris.
2. Apply neutral cleaner in the proper dilution ratio with water in an even and thin coat over the surface.
3. Rotate between 3M Tan Burnish Pads (3400) and Purple Diamond Plus pads each burnish cycle (the pad may be updated and will be determined by the protector).
  - a. Tan Clean and Shine pads used during neutral cleaning are not the same as the tan burnish pads. The burnish pads are slightly darker in color.
  - b. When installing the pads on the ride-along machine and global push-behind machine ensure the proper size pad is used. One 20in disk is used on the global machine and two 13in disks are used on the Karcher Ride-On Scrubber machine, for example.
4. Move the burnisher slowly to ensure an even polish.
5. Make six passes over the surface with the burnisher.

Periodically check the thickness of the cleaning pads on the burnisher. When the colored portion of the pad wears down and about 1-2 cm is left on that side, flip the pad over to use the other side. Use another pad once both sides are worn.

### **Protector Application**

Stone police/protector should be applied when the terrazzo does not respond to burnishing. This is to be completed on both an as-needed basis and once every 6 months. On areas where the sheen becomes dull, the protector can be applied to revive the shine of the floors. The pad type, protector, and application process may vary and must be approved by the airport.

1. Dust mop to remove all dust, dirt, and debris.
2. Wet scrub the floor with the burnisher using the neutral cleaner and water solution and Purple Diamond Plus pads. Make six passes over the surface with the burnisher. Ensure the floor is dry before proceeding.
3. Apply a thin, even coating of stone protector to the floor. Ensure the product is sprayed on lightly in a mist form using the backpack/mop tool. Spread protector with a mop to ensure an even coat is applied. Make sure that all drips or heavy areas are addressed while applying. Proper coating thickness should not have any milky appearance to it. Treat the application like you are applying a product and then trying to wipe it off.
4. Wait fifteen minutes for the protector to dry. It must be dry to the touch before it is walked on or further processed.
5. Burnish for a minimum of six passes using a Purple Diamond Plus pad.
6. Dust mop to remove all dust, dirt, and debris.
7. Apply another thin, even coating of product to the floor following the same process used above.
8. Allow the coating to dry and burnish for a minimum of 6 passes using Purple Diamond Plus pads

### **Deep Clean/Restore Process**

***This process is only to be performed if/when directed by SJCAA personnel.***

Always wet vacuum and mop before moving to the next series of Trizact Diamond HX Discs. This is to ensure that any abrasive that may have come loose during the previous step is removed from the floor and does not remain to cause scratching during the next step. Failure to remove slurry between steps can also cause excessive wear of discs used in the following steps.

1. Strip all old finishes from the floor (follow the finish manufacturer's recommended procedure).
2. Allow the floor to dry thoroughly.
3. If the flooring is rough to the touch or has pronounced scratching, wet the floor and scrub with Trizact Diamond HX Gold Disc using a burnisher. Complete a minimum of six passes. If gold pads are not needed, skip to step 6. In order to use gold pads, SCJCAA must approve.

4. Use the floor squeegee to move away the slurry and ensure that the floor has a consistent appearance (scratches and pitting have been removed). If the floor does not have a consistent and uniform appearance, complete another six passes.
5. Wet vacuum and mop the floor to remove all slurry and dust.
6. Wet the floor and scrub with Trizact Diamond HX Red Disc and complete a minimum of 6 passes.
  - a. If Trizact Diamond HX Gold Discs have been used, only 4 passes with the red discs may be required.
7. Use the floor squeegee to move away the slurry and ensure that the floor has a consistent appearance (scratches and pitting have been removed). If the floor does not have a consistent appearance, complete another six passes.
8. Wet the floor and scrub with Trizact Diamond HX Blue Disc, fine grade and complete a minimum of 6 passes.
9. Use the floor squeegee to move away the slurry and ensure that the floor has a consistent appearance (scratches and pitting have been removed). If the floor does not have a consistent appearance, complete another six passes.
10. Wet vacuum and mop to remove all slurry and dust.
11. Burnish the floor with a Purple Diamond Floor Pad Plus using a minimum of six passes. No water should be used during this process.