

Vinyl Composition Tile & Bio-Flooring Tile with Diamond 10® Technology

Maintenance Recommendations for Resilient Flooring

Following are guidelines for maintaining Armstrong Flooring's Vinyl Composition Tile (VCT) and Bio-Flooring tile with Diamond 10® Technology. They are based on general experience using established methods and cleaning materials. It is important that these guidelines are read carefully. Ultimately, local site conditions will determine what specific maintenance procedures and frequencies are needed. It is the responsibility of the maintenance provider to establish the maintenance program(s) that meet the demands of the space(s) and needs of the facility.

For best results, we recommend that Diamond 10® Technology products are used throughout a single installation. Installations combining Raffia-Stream™ with Diamond 10 Technology, Striations BBT™ with Diamond 10 Technology and Migrations® with Diamond 10 Technology and any other standard commercial tile require site specific maintenance instructions and are subject to warranty exclusion. Contact the Armstrong Flooring Techline with any further questions.

All resilient floor coverings require maintenance. How frequently the floors must be maintained depends largely on the factors described below. Following regular and well-planned maintenance programs protects the floor by reducing wear, preserves the floor's attractive appearance and ultimately increases its service life.

- **How to Determine/Tailor A Maintenance Program**

Before establishing a maintenance program, there are several factors which must be considered in order to determine the most appropriate, cost-effective methods to use. It is critical that the maintenance methods for each floor and area be chosen only after careful evaluation and regard to the following:

- **End User's Expectations**

What is considered an acceptable level of appearance by the owner, customers, staff or end-user? What is the desired gloss (high or low gloss)?

- **Type of Facility & Location of Flooring**

Entryways, lobbies, classrooms, checkout lines and pivot-point areas may require more frequent cleaning than lower traffic areas in other parts or upper levels of the building.

- **Volume and Type of Traffic and Soil**

Traffic types and volumes in entryways and corridors will vary greatly from those found in classrooms and checkout lines. Dirt and grit carried in from the outside can differ significantly from the soils and chemical spills found in a laboratory or emergency room.

- **Color/Design of Flooring**

Color and pattern can have a significant impact on a floor's appearance and, when properly chosen, may help mask soiling and staining. Mid-tones are better choices than light or dark colors. Busier/high contrast patterns will hide better than solid/monolithic ones.

- **Resources/Equipment/Chemicals/Personnel/Budget**

Are well-trained maintenance personnel available?

Are the appropriate pieces of equipment (scrubbers, buffers, mops, pads, etc.) available?

Are the appropriate chemicals available?

What is the budget?

- **Special Traffic/Footwear**

Areas subjected to frequent rolling loads provide a different environment than a children's play area or corridor in an elementary school.

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Preventive Care and Maintenance

Controlling grit and soil is crucial to prolonging the attractive appearance of any floor. Grit or soil is any material—including dirt, stones, sand and clay—that is deposited onto the floor by normal commercial traffic. The best way to control grit is by using appropriate and well-maintained walk-off mats. Studies over the years have shown that properly installed and properly maintained entrance matting systems significantly reduce the amount of soil and water tracked into the building. Less soil means reduced wear, longer appearance retention, increased service life and reduced maintenance costs.

Recommended walk-off mats should:

- Have a high-friction, open surface design to knock grit particles from the bottoms of shoes and then trap the particles.
- Be used at every entrance, inside and outside, should be at least as wide as the doorway and 8' to 12' long.
- Have a backing that won't stain the floor.
- Be cleaned regularly, vacuumed, shaken and/or hosed off frequently.

While walk-off mats will retain a substantial amount of this grit and soil, some will still find its way into the building. Regular vacuuming, sweeping and dust-mopping will help to further control this type of grit.

Furniture Rests (feet, glides, casters, etc.)

Proper selection and care of furniture rests is important in the maintenance and appearance retention of all types of floor coverings. Following are some guidelines to consider:

- The contact area should be large enough to distribute the load evenly without damaging the floor.
- The contact area should be smooth and flat to provide full contact and free of small protrusions, irregularities, roughness, depressions, mold lines, embedded dirt, and grit, etc.
- All edges should be slightly rounded to prevent damage if briefly turned on edge.
- Rests should be manufactured from non-staining materials.
- Rests should be properly maintained. Worn, damaged and missing furniture rests should be replaced.

Furniture, appliances, equipment, etc., should be properly leveled so that all rests are fully and firmly on the floor at all times

Other Maintenance Tips for Best Results

- Newly installed flooring should not be exposed to rolling load traffic for at least 72 hours after installation to allow setting and drying of the adhesive.
- If it becomes necessary to move any heavy fixtures or appliances over the flooring on casters or dollies, the flooring should be protected with 1/4" or thicker plywood, hardboard or other underlayment panels. If other on-site work is continuing, consider using a protective covering such as plain, undyed Kraft paper to guard against damage to the new floor.
- Do not wet wash, machine scrub, or strip the floor for at least five days after installation. This is to prevent excess moisture from interfering with the adhesive bond and/or seam treatments.
- The use of aggressive strippers such as mop-on/mop-off, no-scrub and no-rinse strippers is not recommended on tile floors less than 2 years old because they may affect the adhesive bond.
- When performing wet maintenance, always use proper signage and prohibit traffic until the floor is completely dry.
- Do not use excessive amounts of liquid during maintenance.
- **Do not use brown or black pads, equivalent brushes or stiff-bristled, highly abrasive brushes on any Armstrong resilient flooring.**

Maintenance Recommendations for Resilient Flooring

Armstrong Flooring's Vinyl Composition Tile and BBT Bio-Flooring with Diamond 10® Technology is manufactured with a high performance, hydrophobic, diamond-infused, urethane finish that provides outstanding scratch, stain and scuff resistance, improved maintenance characteristics for the end-user.

A. Initial Maintenance, Immediately After Installation

1. Option One
 - Cover the entire floor with Ram Board® or equivalent temporary floor protective layer. Do not tape the Ram Board® to the newly installed Vinyl Composition Tile or BBT® Bio-Flooring with Diamond 10 Technology.
2. Option Two
 - Sweep, dust mop or vacuum the floor thoroughly to remove all loose dust, dirt, grit and debris. Remove any dried adhesive residue with a clean, white cloth dampened with mineral spirits, carefully following warnings on the container.
 - Damp mop the floor with a properly diluted neutral (pH 6 to 8) detergent solution such as Armstrong S-485 Commercial Floor Cleaner. Allow the floor to dry.
 - To promote polish adhesion, dry scrub the floor at a low speed (125-300 rpm) with a cleaner pad (3M™ blue or equal) or equivalent brush. Brushes will be more effective if the floor is damaged and/or not flat as they will be able to clean out the scratches, reach into low areas. Make multiple passes over the area.
 - Apply two coats recommended by the manufacturer of a high-quality commercial floor polish, such as Armstrong® S-480 Commercial Floor Polish.

B. Initial Maintenance, Preparation for Commercial Traffic

1. Mix a solution of sodium hydroxide-containing floor stripper such as Spartan Chemical Corporation's *Square One*®. Strippers should have a formulated sodium hydroxide (NaOH) concentration of 1% by weight or greater. Dilution rates should not exceed 1:4.

Recommended Floor Strippers Containing Sodium Hydroxide

| Manufacturer | Product |
|--------------------------|--|
| Spartan Chemical Company | Square One® |
| SealedAir | Bravo® Heavy Duty Stripper Pro Strip® Heavy Duty Stripper Attac® Floor Stripper Floor Science® Stripper |
| 3M™ | 3M™ Floor Stripper |
| Ecolab® | Bright Blast Floor Stripper |
| Betco Corporation | Geraldine Floor Stripper |

Maintenance Recommendations for Resilient Flooring

- Cordon off areas to be scrubbed.
 - Use proper signage and prohibit traffic until restorative maintenance procedures are completed.
 - Apply liberal amounts of solution uniformly on floor with mop.
 - If polish is on the floor, let stripping solution soak for the appropriate amount of time recommended by the stripper manufacturer. If polish is not on the floor it is not necessary to allow the stripping solution to soak.
 - Keep areas to be stripped wet. Rewet if necessary.
2. Thoroughly machine scrub the floor (300 rpm or less) with a scrubbing pad (3M™ blue or equal) or equivalent scrub brush to break up the polish film. **Do not allow stripping solution to dry on the floor.**
 3. Remove dirty stripping solution with a wet vacuum or mop. **TIP: Drizzling fresh, clean rinse water onto the dirty stripping solution will assist with more thorough removal.**
 4. Thoroughly rinse the entire floor with fresh, clean water. Remove rinse water and allow the floor to dry completely.
 5. Apply at least 3 coats of a high-quality commercial floor polish, such as Armstrong® S-480 Commercial Floor Polish.

B. Daily / Regular Maintenance

1. Sweep, dust mop or vacuum the floor daily to remove dust, dirt, grit and debris that can damage the floor and become ground into the surface.
2. Spot mop as needed. Any spills should be cleaned up immediately.
3. Damp mopping of the floor should be performed on a regular or daily basis, depending upon traffic and soil levels in the space. Use a properly diluted neutral detergent solution such as Armstrong® S-485 Commercial Floor Cleaner.

C. Periodic Maintenance

1. When needed, after sweeping, dust mopping or vacuuming, machine scrub the floor with a properly diluted neutral detergent solution such as Armstrong® S-485 Commercial Floor Cleaner and the appropriate scrubbing pad (3M™red or equal for light scrub, 3M™ blue or equal for a deep scrub) or equivalent brush.
2. Thoroughly rinse the entire floor with fresh, clean water. Remove rinse water and allow the floor to dry completely.
3. Additional coats of floor polish may be applied at this time. If there is sufficient base of polish remaining (3 coats), buff, spray buff or burnish to restore gloss.

NOTE: If at some point it becomes necessary to remove polish build-up by stripping the floor. The use of high-quality maintenance products such as Armstrong Flooring commercial floor care products and adherence to a well-planned maintenance program will greatly reduce or perhaps eliminate the need for stripping. Should stripping become necessary, follow the procedures outlined below. Sodium hydroxide-containing stripper is not necessary for this procedure.

Restorative Maintenance – Stripping of Existing Floor Finish/Polish

1. Mix stripping solution to the appropriate dilution, depending on floor finish build-up.
 - Cordon off areas to be stripped.
 - Use proper signage and prohibit traffic until restorative maintenance procedures are completed.
 - Apply liberal amounts of solution uniformly on floor with mop.
 - Let stripping solution soak for the appropriate amount of time recommended by the stripper manufacturer.
 - Keep areas to be stripped wet. Rewet if necessary.
2. Machine scrub the floor (300 rpm or less) with a scrubbing pad (3M™ blue or equal) or equivalent scrub brush to break up the polish film. **Do not allow stripping solution to dry on the floor.**
3. Remove dirty stripping solution with a wet vacuum or mop. **TIP: Drizzling fresh, clean rinse water onto the dirty stripping solution will assist with more thorough removal.**
4. Thoroughly rinse the entire floor with fresh, clean water. Remove rinse water and allow the floor to dry completely.
5. Apply at least 3 coats of a high-quality commercial floor polish, such as Armstrong® S-480 Commercial Floor Polish.

If scratch whitening occurs, we recommend the following restorative procedure to remove the white appearance of scratches from damaged areas in dark colors:

Prepare the area

Remove polish from the area by stripping the floor with a commercial floor stripping solution and a brush equal to a 3M™ blue pad.

For Small Areas

- a. Using a clean cloth rub mineral oil into the scratch. Allow to soak (30-40 mins)
- b. Carefully apply heat gently using a heat gun or hair dryer. Wipe off excess mineral oil. Clean the area with a neutral detergent solution to remove slip hazard.

For Larger Areas

- a. Using a clean cloth rub mineral oil into the scratches. Allow to soak (30-40 mins). Wipe off excess
- b. Buff area using <600rpm swing polisher and red pad or <1700 rpm straight line polisher and white pad (e.g. 3M topline pad). Clean the area with a neutral detergent solution to remove slip hazard

Polish the floor

Apply polish to the floor using a polish applicator.