



Your Single Source For Innovative
Architectural Concrete Solutions

MAINTENANCE GUIDELINE

Custom Polishing Systems

Using proper procedures and products to clean and maintain Bomanite Custom Polishing Systems is critical in preserving their durability, slip resistance and aesthetic value.

What Creates Polished Concrete?

When polishing concrete, the surface is first ground (scratched) using coarse diamond impregnated tooling mounted on grinders, followed by several steps of finer and finer tooling until it achieves a high shine. Each step (coarseness of scratching diamond) must thoroughly scratch the concrete until the scratches are uniform throughout the slab and then the next step is begun. The concrete is thoroughly scratched with higher grits leaving smaller scratches and smoother concrete is developed until it reaches a point where light is reflected in a noticeably high shine.

What Dulls Polished Concrete?

Polished concrete is dulled just as it is polished...by small scratches. These scratches come from people's shoes, scratches from grocery cart wheels, scratches from office chairs, etc. This dulling process occurs over a long time period and is dependent upon the volume and type of traffic exposure. It is very common that isles and high traffic areas will dull before low traffic areas and it is common that areas subject to heavy wheel traffic will dull before foot traffic areas.

Scratches to your floor's finish can be avoided by placing felt pads on furniture legs to allow the furniture to be moved easily. The felt pads can also provide a sound-deadening barrier. Likewise, the use of large floor protectors under rolling chairs will help with localized wear under or adjacent to desks and reception areas. Use quality dirt-trapping, walk-off mats at all exterior doors to prevent dirt and sand from entering the building. Never place potted plants directly in contact with your floor, as the moisture trapped under the pot can cause discoloration or dulling of the finish. The plant pot should be set on a good quality tray that is on top of a breathable pad.

What Helps Protect Bomanite Polished Concrete from Staining?

As part of the polishing process, Bomanite Stabilizer Pro, a chemical concrete hardener is applied to the concrete surface. This hardener produces insoluble formations in the pores of the concrete, improving the density of the concrete at the surface which aids in the development of gloss and durability of the floor. Bomanite Stabilizer Pro also contains a silane additive that further improves the density and increases resistance to liquids. At the end of the polishing process Bomanite VitraFinish, a stain resistant treatment is applied. This film is a very thin, very hard protective layer that goes in and on to the polished surface. This treatment can be easily re-applied to restore the stain resistance as well as contribute to the gloss level of polished concrete. It is especially important for concrete exposed to hard wheel traffic or frequent spills.

What Causes Polished Concrete to Stain?

Concrete contains millions of small entrapped air bubbles and capillaries that when exposed draw liquids into the surface. Concrete is also prone to chemical attack and will deteriorate if exposed to acids. While the chemical and liquid resistance of the concrete is improved greatly through the polishing process, you still need to accept its limitations. Wipe up spills immediately using a neutral cleaner or water and a soft cloth — especially acid-based spills such as, tea, coffee or lemon juice. Penetrating spills, like red wine or oil, actually attach to the concrete pores and leave a dark or colored spot much like a dye would. Never use abrasive cleaners, acidic cleaners, household dust treatment, oil, detergents or furniture polish as these products may make the surface slick or dull the finish. Never use vinegar or ammonia and water as a cleaning solution as long-term use could potentially cloud the floor's finish. It is best to use an exclusive mop that has only come in contact with neutral cleaners and not other abrasive or aggressive cleaners.

Bomanite Custom Polishing Systems Suggested Maintenance Schedule

- **VitraFlor** – uncolored and polished concrete
- **Modena** – polished and engineered cementitious toppings
- **Patène Teres** – stained and polished concrete
- **Renaissance** – integrally colored and polished concrete
- **Belcolore** – color hardened and polished concrete

There are three critical factors in the proper maintenance of concrete floors:

- The use of specific chemicals and procedures designed for the particular surface.
- Correct application of the treatment products according to manufacturer's specifications.
- Routine cleaning and spot cleaning of incidental spills.

The referenced timing of product application and associated processes is only a guideline, as the specific maintenance required for any given surface depends on many factors, such as local environmental conditions and amount of use.

Everyday Maintenance

1. Dust mop floor with untreated dust mop.
2. Utilize Bomanite Floor Cleaner or equal Neutral Cleaner as a cleaning solution for incidental spills.

Weekly Maintenance

1. Dust mop floor with untreated dust mop.
2. Utilize Bomanite Floor Cleaner or equal Neutral Cleaner as a cleaning solution.
3. Scrub floor with cleaning solution using an automatic scrubber with soft scrub brushes or pads.

Monthly Maintenance

1. Dust mop floor with untreated dust mop.
2. Utilize Bomanite Floor Cleaner or equal Neutral Cleaner as a cleaning solution.
3. Scrub floor with cleaning solution using an automatic scrubber with soft scrub brushes or pads
4. Burnish floor with a propane powered high speed floor buffer equipped with diamond impregnated floor buffing pads; select the grit based on desired gloss of floor. Utilize 400 grit for a gloss floor or 1500 followed by 3000 grit for a high gloss floor.

Yearly Maintenance

1. Review the conditions of the polished floor for signs of permanent staining or loss of gloss.
2. Consult the Bomanite installer as to whether an application of stain resist is required.
3. Have a light application of a Bomanite stain resistant treatment applied if necessary.

Third party independent testing has verified Bomanite polished concrete floor surfaces with the National Floor Safety Institute "high traction" floor rating as per ANSI B101.1-2009. With an average test result greater than .70 (wet) Static Coefficient of Friction; correctly installed Bomanite Polished concrete flooring is very **slip resistant** in both wet and dry conditions.

As with any tile or hard surface floor, precautions must be taken when the floor is wet. Dry mop the damp area, provide caution signs, and fans as necessary to prevent slips and fall.

Bomanite Custom Polishing Systems installations are generally decorative or architectural in nature and as such have higher expectations associated with them. If the polished concrete application is functional in nature or in a light duty environment, then a reduction in burnishing and/or stain resistant treatments is likely acceptable.

Additional product information, technical bulletins and CSI formatted specifications are available online at www.bomanite.com or through one of our Bomanite Licensed Contractors. For additional assistance with specifications or technical issues, contact The Bomanite Company.