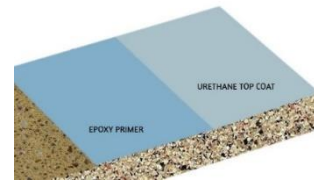


# CLEANING & Maintenance GUIDE of your PumaCRETE Floor

8.1.22



PumaCRETE floors are hard, impervious, non-absorbent and non-dusting. This ensures not only their durability, but ease of cleaning when a suitable cleaning program is used. ***The cleaning and maintenance of a PumaCRETE floor must be considered a vital and integral part of a building maintenance program.*** With proper maintenance, your PumaCRETE floor system should provide many years of useful service life.



Note: All PumaCRETE floors have proved to be both cleanable and sanitizable with regard to micro-organisms, and do not support the growth of bacteria.

## POST INSTALLATION

Immediately following new floor installation, your new floor may be subjected to types of usage, which are very different from those expected during normal service.

- Heavy rigging for replacement of, or any movement of heavy, cumbersome equipment

If your situation falls under the above condition, consider using one of the following temporary coverings:

- Polyethylene sheeting under fiber board (such as Ram Board \$.22/sf), w/ heavy duty tape on the seams.

**If other trades shall be working in the areas, including welding or other hot work, additional protection may be required such as:**

- Polyethylene sheeting under 3/16" hardboard (such as Masonite \$.50-.60/sf) or plywood, w/ hvy duty tape on the seams.

**For general construction traffic & spillage of paints, mastics, and sealants from other contractors /maintenance.**

- 6-mil plastic sheeting with builders' paper over top, with taped seams.

**Avoid early heavy usage:** particularly with rubber-wheeled vehicles. This will minimize the risk of dirt being embedded into the surface of the floor, before it reaches full hardness.

## CURING TIME (floor temperature @ 70 deg F.)

Note: The lower the room/floor temperature, the longer the cure time.

Full cure- foot traffic: 8-12 hrs (see notes below)

Full cure- for forklifts: 24 hrs (see notes below)

### **NOTES on CURING:**

- LOWER TEMPS:** double these time frames for floor temperature 60-70 deg F. Triple the time frame for 50-60 deg F.
- FASTER CURING:** may be achieved by use of optional 108-PumaSpartic top coat or lock-coat.
- CHEMICAL USE or SPILLAGE:** Avoid chemical use or spillage during first week, post installation. Premature exposure may cause permanent staining or discoloration.
- ABRASIVE CLEANING:** Do Not use abrasive cleaning methods during the first week, post installation.

## POST INSTALLATION

Immediately following new floor installation, your new floor may be subjected to types of usage, which are very different from those expected during normal service, such as:

- Heavy lifting equipment (forklifts, pallet jacks etc.)
- Movement of heavy, cumbersome equipment.
- Spillage of paints, mastics, and sealants from other contractors/maintenance.

**Because of this, it is important to consider using one of the following:**

- The installation of temporary covers of a plastic material; for example, polyethylene sheeting and 3/16" hardboard (Masonite). if other trades are to work in the area, tape the seams.
- Covering the area to be subjected to traffic and additional trades with plywood sheets with heavy duty tape at the seams.

- **The avoidance of early heavy usage**, particularly with rubber-wheeled vehicles. This will minimize the risk of dirt being embedded into the surface of the floor, before it reaches full hardness.

## **WHY CLEAN YOUR FLOOR?**

- Appearance:** Your floor will look its best when it is clean. By installing a polymeric floor in your facility, you are telling people that you care about your image. By instituting a scheduled cleaning program, the floor will continue to look and perform as it did when it was first installed.
- Service Life:** The lifetime of your floor will be extended with proper cleaning. In aggressive use areas, contaminants such as oil, dirt and grease work with water and bacteria to attack your floor. This can lead to damage of the floor.
- Safety:** No matter how aggressive the texture of your floor, if it is not cleaned properly, it can present a slip hazard. Emulsifying, rinsing and drying your floor properly will reduce the risk of a slip and fall incident.

## **INITIAL CLEANING**

New flooring should be cleaned within a few days after installation, with a mild detergent. If cleaning the floor prior to being put into its intended service, more aggressive cleaning chemicals than normal may be warranted. However, new flooring typically does not reach its full chemical cure after approximately 3-5 days. After this period, these should not damage the floor, but the use of strippers or cleaners containing **caustic alkalis, chlorinated hydrocarbon solvents, and CIP (clean in place) sanitizing chemicals SHOULD BE AVOIDED,** as they can bleach and discolor the floor surface.

## **ROUTINE CLEANING PROCESS**

PumaCRETE flooring is designed to be used in traffic areas that typically accumulate foreign matter. Because of this, the recommended maintenance schedule for most areas is once or twice daily cleaning and regular “touch-ups” for spills. Less frequent cleaning of these areas results in a buildup of foreign matter, which diminishes the appearance, safety and service life of the floor. The best way to clean an PumaCRETE floor system is to use a good cleaning product, and follow a six-step process.

1. **Sweeping** – always sweep the floor thoroughly before cleaning.
2. **Application** – Apply the cleaning product to the floor surface.
3. **Dwell Time** – Let the cleaning product stand on the surface to allow time to emulsify foreign material.
4. **Agitation** – Movement of the cleaning product with a piece of equipment on the floor surface to aid in the release of foreign material. A walk behind or riding automatic floor scrubber machine is usually cost effective for large areas.
5. **Removal** – Removing the cleaning product from the surface.
6. **Rinsing** – Rinsing the floor with clean water and removing the rinse water from the floor.

## **GENERAL CLEANING TIPS**

- When removing solution with a squeegee, use a soft, neoprene squeegee.
- **Do Not** use a water spray to remove cleaning solution from the floor because it will over-dilute the solution and cause grease and oil to fall back onto the floor.
- Never use a mop to clean a floor that is *greasy* or *oily*.

## **IN-USE CLEANING**

Specialized floor cleaning equipment is widely available, as the variety of cleaning chemicals and bactericides/sterilants used with it. Both **401-HF, 401-ECO** and **401-HFB** urethane concrete systems have good all around chemical resistance. However, if additional stain resistance is required, a lock-coat/top-coat of **108-pumaSPARTIC or 109-pumaLAC (novolac) epoxy** may improve stain resistance for specific chemicals, and especially if **CIP** (clean in place) sanitizing chemicals are used. Check with our technical support team for further advice.

## **FLOOR CLEANING EQUIPMENT** \*Preferred for medium to rough texture floors

- \* **Auto Floor Scrubber:** Ensure the brushes are in good shape. Use nylon non-abrasive medium flex bristle brush.
- \* **Rotary Floor Machine (floor buffer) Auto Floor Scrubber:** Use nylon non-abrasive medium flex bristle brush.

- \* **Hi Pressure Water Hose:** rinse down
- Manual Deck Brush:** medium to stiff plastic bristles (effective in small areas where buildup has occurred).
- Broom or dust mop** (for general debris cleaning on smooth floors).
- Mop/Bucket** (for smooth or very light texture floors) *CAUTION: never use a mop to clean a floor that is greasy or oily.*
- Soft Neoprene Rubber Squeegee** (for removing water from smooth or very light texture floors)

**When selecting equipment consider the following criteria:**

- Relate the method to the "soil" type; what is suitable for wet "soil" in a meat preparation area may not be suitable for dry "soil" in a bakery.
- Relate the method, and frequency, of cleaning to the *risk status* of the area; all methods may be suitable in a finished goods warehouse but not in a high risk area such as chilled-food preparation.
- Methods suitable **outside of production hours may not** be appropriate **during production**; be aware of the risk of aerosol generation.

**Cleaning-equipment manufacturers**

They have specialized knowledge, and offer practical demonstrations of equipment. You are advised to consult them. The list below is not exhaustive but it's provided as a guide:

**Advance/Nilfisk, Tennant Co., Hoover, Henkel, Ecolab, Electrolux Equipment Supplies.**

*(Similar equipment from other manufacturers may be equally suitable).*

**CLEANERS** ( including bactericides )

The variety of cleaning chemicals and bactericides/sterilants available is extensive, and making the appropriate selections can be confusing. The correct choice of chemicals is important and you are strongly advised to seek specialist advice. The following companies will be able to offer advice on the selection of appropriate cleaning chemicals in relation to "soil" types including the possible removal of black rubber tire marking. This listing is by no means complete and consultation with other reputable suppliers is recommended.

- **CLEANING CHEMICALS:** Simple Green; (**Industrial Suppliers:** ECOLAB, ZEP, DELTA, TENANT CO)
- **EXTRA HEAVY CLEANER for STUBBORN STAIN REMOVAL and CLEANING:** [SIMONIZ 969](#)

*If you have trouble finding appropriate cleaning supplies, contact us, to help find a representative in your area.*

**CLEANERS**

**General Cleaning Needs:** A mild cleaner such as [Simple Green](#) or [Spic and Span](#) are suitable.

**Cleaning Oil Stains:** [SIMONIZ 969](#) cleaner is a highly alkaline floor cleaner designed to remove machine and crude oil from concrete.

**STAINS**

Should staining occur, attempt removal first with a mild solution, progressing to stronger cleaners until the stain disappears. It is always a good idea to wear eye protection when working with chemicals. Residue from a spill that has dried can be removed with a plastic tool (take care not to scratch the surface). Then use a mild detergent to remove the stain.

**PLASTICIZERS MARKS**

Plasticizer marks, which are sometimes referred to as shadows, are permanent marks left in floor coatings. These marks are caused by chemicals called plasticizers, that are used in the manufacturing of rubber wheels. After the wheels are in contact with the floor for a period of time, the plasticizers can seep into the floor coating, leaving dark spots on the floor. While these marks cannot be removed, they can be hidden by sanding and recoating the floor. The best method of preventing the problem of plasticizer marks is to prevent them in the first place.... if possible, use non-marking tires (often white in color) on material handling equipment.

**TIRE MARKS - MATERIAL HANDLING EQUIPMENT & VEHICLE/AIRCRAFT TIRES**

Use of non-marking lift truck tires are highly recommended, in order to prevent black tire marks, embedded into the new floor. Black tire marks may be removed with a good cleaner; however, they require a great deal of cleaning to remove, once embedded into the finish (see plasticizer marks section, above).

## **SCRATCHES AND GOUGES**

Heavy machinery, pallets or sharp objects should not be slid or scraped along the floor. This can result in severe damage. However, our 300/400 series systems at ¼ inch thickness have increased resistance to this type of abuse.

## **MAINTENANCE & REPAIR**

Even the most meticulously-cleaned PUMA-CRETE urethane concrete floors may suffer damage to its integrity by some unforeseen incident in the workplace, which could result in a consequential risk of bacteriological build-up in cracks etc. If this situation arises, the damaged floor should be repaired without delay. You may consult our technical support department, which has the in-depth knowledge of the remedial techniques that will restore the integrity of the floor.

## **REPAIR KITS**

We stock repair kits, if needed, which may be used to easily perform minor repairs such as cracks, chips, holes, and small areas.

## **RECOATING**

After several years, a re-application of the topcoat will restore the finish to new like condition.

## **SAFETY & SLIP RESISTANCE**

**No matter how aggressive the texture of your floor, if it is not cleaned properly, it can present a slip hazard. Emulsifying and rinsing your floor properly will reduce the risk of a slip and fall incident.**