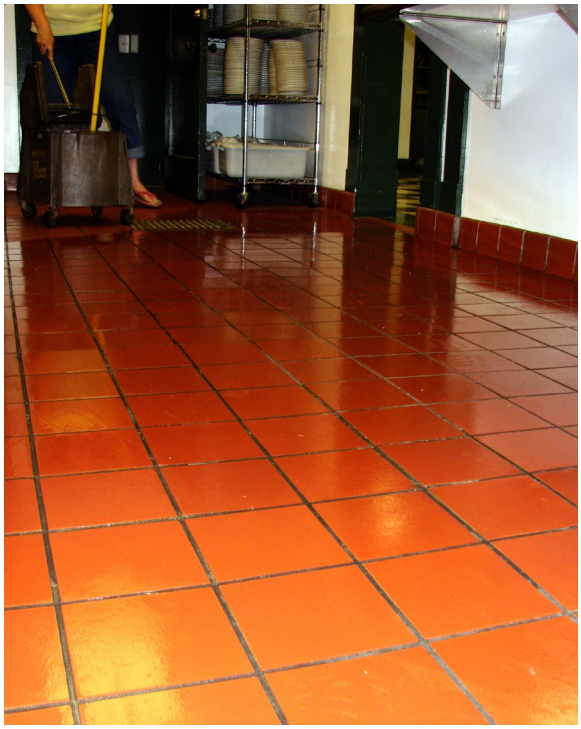
Multi-Clean®

Ceramic & Stone Floors
Method Bulletin 1430



Complete line of Multi-Clean® products and recommended procedures for maintaining natural stone and synthetic hard flooring.

Premier
StainLess
Phos-Clean
StoneShield
Millennium Q 64
Ultra Stripper
H.D. Hi-Foam
Super Clean Shine



©2018 Multi-Clean
All rights reserved

STOP - READ BEFORE PROCEEDING

This methods bulletin is to be used **only** by appropriately trained persons in conjunction with such training. **IMPROPER USE OR OPERATION OF THE MULTI-CLEAN (CHEMICALS OR EQUIPMENT) POSES RISK OF PHYSICAL INJURY OR PROPERTY DAMAGE.** Specific risks include, but are not limited to, burns, and imporper application of chemical products (e.g. wrong product, wrong product combinations, improper applicator use, and imporper curing.) Because successful and safe application is the responsibility and obligation of the trained applier, the manufacturer disclaims any and all warranties, express or implied, including warranties of **MERCHANTABILITY** or **FITNESS OF PURPOSE.** The manufacturer shall have no obligation except to replace repair, or pay for, in its sole discretetion, any chemical product or equipment shown to be defective.

No person has authority to waive these disclaimers or make any representations or warranties on behalf of the manufacturer, except in writing signed by the manufacturer.

If you have not had training with the particular product or equipment you intend to use, please call:

Multi-Clean at (651) 481-1900 to arrange training.

DO NOT USE THIS MULT-CLEAN SYSTEM OR ITS COMPONENT PRODUCTS WITHOUT APPROPRIATE TRAINING.

Hard surface flooring constitutes a wide array of mineral composed materials. Natural stone floors are a category of hard surface flooring that owes its properties and structure to the random forces of nature. Synthetic hard surface flooring are mineral composites produced and formed under controlled manufacturing procedures.

Many of the principle maintenance techniques and floorcare chemicals used in resilient floorcare programs can be carried over to hard surface flooring. One notable exception is that seals/finishes used for resilient floors may not always be suitable for all natural stone floors. Specialty seals designed specifically for marble and other natural stones are recommended.

Knowledge of the many types of hard surface flooring and the respective properties and limitations of each is the key to providing a viable maintenance program that protects and maintains the beauty of hard surface flooring with the most efficiency. The aim of this bulletin is to recommend the appropriate techniques, equipment and Multi-Clean products best suited for each class and type of hard surface flooring.

Natural Stone Floors

Marble	Onyx	Travertine
Granite	Slate	

Synthetic Hard Surface Flooring

Quarry tile	Ceramic tile	Mexican tile
Terrazzo	Pavers brick	Terra-Cotta
Porcelain tile		

Marble and Natural Stone

Properties of Marble Flooring

Marble is a natural stone flooring material made up primarily of calcium carbonate. Marble is an inherently soft, porous stone surface making it less than ideal as a flooring material. However, the unique, natural beauty of marble has made it a frequent choice for use in flooring applications.

Marble flooring comes in several surface finishes: polished, honed, and textured.

The methods recommended herein apply to polished and honed surfaces only. Textured surfaces (including flamed, bush-hammered, sandblasted, split-faced and chiseled) are not suited to the methods described.

The soft, porous nature of marble flooring requires that it be protected from wear/abrasion and staining/etching agents. Even the mild acids found in fruit juices can chemically etch marble flooring. Unprotected marble flooring will quickly begin to show wear patterns in high traffic areas due to its soft nature.

Natural Stone:

Multi-Clean StoneShield

Multi-Clean StoneShield is a seal/finish specifically designed to adhere to natural stone (especially marble) flooring and protect it from wear, destructive chemical agents and water. The StoneShield maintenance program eliminates the need to utilize costly, labor intensive restoration procedures to restore worn surfaces. The StoneShield program does not require highly specialized training and can be done by anyone familiar with resilient floorcare maintenance and procedures with only minor differences.

StoneShield Maintenance Program: Application:

1. Strip old finishes if necessary, using Ultra Stripper. *Caution:* Use the least aggressive pad possible. Red or blue is preferred. Do not use brown, black or any type of aggressive stripping pad to avoid damaging the marble.
2. Clean floor thoroughly by scrubbing with Century Maintenance Cleaner at 2 oz./gallon. Allow floor to dry.
3. Apply a thin coat of StoneShield using a clean, quality finish mop. Allow to dry 40-45 minutes. Longer dry times are necessary when humidity is high and/or temperature is low.
4. Burnish using a UHS machine with a white pad. Dust mop to remove dust.
5. Apply a second coat, allow to dry; burnish; dust mop. Repeat for additional coats.

   Note: A maximum of 3 coats is recommended per application. Normally 2 coats are sufficient.

Precautions:
Marble floors that have previously undergone restoration (Recrystallization or Revitrification) involving acidic materials or treated with silicone impregnators should be stripped and thoroughly rinsed. A test area should be applied in this situation before applying the product full-scale.

Routine Maintenance
- Use Century Maintenance Cleaner in an automatic scrubber at 2 oz./gallon daily.
- Dust mop frequently to remove abrasives and particles.
- Use walkoff mats at entryways to prevent tracking in of soils.

Burnishing
- Burnish using an UHS burnisher and an appropriate burnishing pad to restore the high gloss finish of StoneShield.
- R.S.B. can be used as a spray burnishing aid. Dilute 1:8 for spray burnishing. Dilute 1:3 for mop-on restoring. You may also use Energize Plus (RTU).

Scrub and Recoat
To apply new coats of StoneShield:
1. Scrub the floor with Century Maintenance Cleaner (4 oz./gal.) and a blue scrub pad. Rinse with plain water.
2. Apply a thin coat of StoneShield. After drying, burnish as described under Application.

Precautions:
1. Do not apply StoneShield immediately to newly installed marble flooring. Allow a minimum of 30 days after installation to insure proper cure of grouting, adhesives and acclimation of the marble to the surrounding environment.
2. StoneShield will dry slower when applied in high humidity (>70° R.H.) or applied to cool floors (<70°F). Additional time is required for drying when applied under these conditions.

Synthetic Hard Surfaces

Synthetic flooring surfaces generally have a predictable, uniform composition. Some of the key differences between the various types of synthetic hard surfaces are: porosity/ absorption, hardness and density.

TYPES:

Quarry tile	Ceramic tile	Terra-Cotta
Pavers brick	Mexican tile	Terrazzo
Porcelain tile		

Porous (unglazed) Synthetic Surfaces
Porous surfaces can usually be identified by their natural, unpolished appearance. Porous tiles are grouted into place using a concrete grout matrix. Terrazzo is a poured type of floor that usually uses concrete as a binding agent (occasionally, epoxy is used).

The high porosity of concrete and with the porousness of the tiles requires these types of floors be protected from staining and discoloration. This often creates the greatest challenge in maintaining synthetic hard surface flooring.

Non-Porous (glazed/polished) Surfaces
Non-porous surfaces usually have a polished, glossy appearance which is a result of a special hardening (glazing) process. These surfaces are virtually non-porous and therefore are not suited for application of seals. All porcelain and ceramic tiles fall into the non-porous tile category.

The key challenge in maintaining non-porous floors is routine maintenance with emphasis on cleaning and protecting the porous grouting. Both options #2 and #3 are suited for non-porous floors.

Option #1:
Porous Surfaces Only
Seal/Finish Method for Protection

In many situations, customers want to create a "showplace effect" by applying seals and finishes to unglazed tile floors. With the correct products, the dull, flat appearance of porous floors can be transformed into high gloss, maintainable floors that resist dirt, stains, and wear. For terrazzo floors, option #1 is the only method recommended.

Sealing Hard Surfaces:
Multi-Clean StainLess

StainLess provides a semi-permanent, protective barrier that blocks stains from penetrating into porous tile surfaces and grouting. It provides a basecoat for which any Multi-Clean finish may be applied.

For restroom floors, StainLess is best used alone as a seal (no finish). StainLess is not dulled or discolored by urine like other seals and finishes. StainLess will help prevent floor deterioration and odors caused by urine penetrating into porous flooring.

Instructions:

1. For new floors, allow 30 days for grout to fully cure before sealing.
2. If necessary, strip existing seal/finishes off the floor. Rinse thoroughly after stripping.
3. If the floor is unsealed, a thorough scrubbing with Blue Blazes at 4 oz. per gallon is recommended followed by a water rinse.
4. Apply 2 coats of StainLess with a clean finish mop or wax applicator. Allow 60 minutes drying time between coats.

Finishing Synthetic Hard Surfaces:
Multi-Clean Finishes

Any Multi-Clean finish may be applied to provide a maintainable surface that gives the wet look appearance for high profile floors. Apply 2 or more coats over StainLess.

Caution: The seal/finish method is only recommended for porous tile surfaces. Glazed tile surfaces are hardened and practically non-porous. The surfaces do not require seal/finish protection, nor will seals be capable of gaining adequate adhesion to these surfaces.

Option #2:
Porous and Non-Porous Tiles
Clean Shine Method

Super Clean Shine is a mop-on cleaner and protectant for synthetic hard flooring that is grouted into place. The special protectant prevents staining of grouting and of porous tiles from oily type stains. Super Clean Shine leaves an invisible protection that seals porous flooring and maintains the natural appearance of the flooring.

Super Clean Shine is recommended for commercial applications such as restaurants, dining rooms, decorative floors, fast food restaurants, etc. It is not intended for kitchen floors where heavy grease levels require a degreaser.

Instructions:
Clean Shine Maintenance Program

1. Initially, use Super Clean Shine at 8 oz./gallon to establish protection. Simply damp mop the floor. Do not use automatic scrubbing equipment.
2. For routine cleaning, damp mop with Super Clean Shine at 4 oz. per gallon to maintain protection. No other cleaners are needed or recommended for use with Super Clean Shine.

Special Note About Kitchen Floors

Unglazed quarry tile is a frequent flooring choice for use in commercial and institutional kitchens. The seal/finish method or the Super Clean Shine method is not recommended. Kitchen floors are best maintained with frequent scrubbing with a Multi-Clean degreaser to remove oil and grease accumulation in order to maintain a highly slip resistant surface.

Formula 305, Formula 340, and HD Hi-Foam are USDA authorized degreasers for use on kitchen floors.

When scrubbing grouted floors, a nylon scrub grit brush should be used instead of a floor pad. The bristles of brushes are capable of reaching the grouting and loosening embedded soils.

Option #3:
Grouted Tile Floors

Routine Maintenance

The most efficient method for routine cleaning of porous and non-porous surfaces is scrubbing with an effective all-purpose cleaner. Multi-Clean's Double-O-Seven cleaner is particularly effective for deep cleaing grouted tile.

Special attention needs to be paid to grouted tile floors. The porous grout can be a collecting area for soils and a breeding ground for bacteria, mold and algae, producing a discoloration of the grout. The Minuteman Porta-Scrub, with its counter rotating cylindrical brishes, is the ideal machine to simply and effectively clean grouted tile floors. ***On grouted floors, brushes are more effective because the bristles dig down and reach the surface of the recessed grout for more effective cleaning.***

Restrooms should be regularly damp mop cleaning with Millennium Q 64 which is a multi-purpose germicidal cleaner that attacks odor causing bacteria frequently found in restrooms. Use Millennium Q 64 at 1 part to 64 parts water (2 oz./ gal.).

Restoration

Floors that have become extremely dirty, stained, or discolored require an intensive restorative cleaning. The process involves two steps: Cleaning with an agressive cleaner/ stripper and the use of an acidic grout brightner.

1. Apply Ultra Stripper (diluted 1:8) to floor. Agressively scrub then pickup the solution with a wet dry vacuum so the surface is dry.
2. Apply PHOS-Clean directly on floor (do not dilute). Spread with applicator squeegee uniformly over floor. After 10 minutes agressively scrub the floor and pickup solution with wet dry vacuum. Flood rinse the floor with plain water, pickup rinse solution with wet dry vacuum.

Protection

After a grouted tile floor is thourougly cleaned it should be sealed.

Hard Surface Flooring Recommendations

TYPE	PROPERTIES	PRIMARY PROBLEMS	TREATMENT PROTECTION/
Marble/Travertine/Onyx	Soft, Porous	Wear, Deterioration, Stains	StoneShield
Granite	Hard, Porous	Stains	StoneShield
Slate	Soft, Porous	Wear, Stains	StoneShield
Terrazzo	Hard, Porous	Soiling/Stains	Option 1*
Quarry Tile	Hard, Porous	Soiling/Stains	Options 1*, 2 or 3
Mexican Tile	Hard, Very Porous	Soiling/Stains	Options 1*, 2 or 3
Terra-Cotta	Hard, Porous	Soiling/Stains	Options 1*, 2 or 3
Brick	Hard, Porous	Soiling/Stains	Options 1*, 2 or 3
Porcelain	Hard, Non-Porous	Grout Soiling/Staining	Options 2 or 3
Ceramic	Hard, Non-Porous	Grout Soiling/Staining	Options 2 or 3
*Option #1 for porous, unglazed surfaces only.			

The PROVEN Multi-Clean Method for Floor Care

CENTURY MAINTENANCE CLEANER
Neutral cleaner for daily floor maintenance. Will not damage natural stone or dull floor finish.

SUPER CLEAN SHINE
Combination cleaner/protective treatment for quarry and other hard tile floors. Used with a damp mop for daily maintenance, it cleans floors and protects porous tile and grout from oily stains.

STAMPEDE STRIPPER
Non-ammoniated stripper for complete and easy removal of old seals and finishes.

H.D. HI-FOAM
Water-based high foaming cleaner/degreaser designed to perform difficult cleaning jobs. Effective against petroleum, animal and vegetable based greases.

FORMULA 305
Low foaming industrial strength cleaner/degreaser removes greasy and oily deposits. Excellent for use in automatic scrubbers.

ULTRA STRIPPER
Heavy duty stripper removes floor finish and deep cleans grouted tile floors.

Millennium Q 64
One-step cleaner/disinfectant for use in lavatories, showers, locker rooms and other areas where cleaning, disinfecting and deodorizing are needed.

R.S.B.
High gloss finish maintainer designed to enhance burnishing. Can be applied by mop or trigger sprayer.

ENERGIZE PLUS
Ready to use, high gloss spray refinisher.

STONESHIELD
High gloss protective coating for marble and other natural stone floors. Easily burnishable for consistent high gloss.

PHOS-CLEAN
A mild phosphoric acid tile and bowl cleaner formulated to remove hard water scale and soap scum.



Multi-Clean®

600 Cardigan Road,
Shoreview, Minnesota 55126
Phone: 651-481-1900
Fax: 651-481-9987
www.multi-clean.com