



TO: MAINTENANCE ENGINEERS AND CUSTODIANS

RE CARING FOR YOUR ROBBINS MAPLE FLOOR

It is your responsibility to care for and maintain your new maple sports floor.

It is essential that you take necessary measures to assure the proper care and preservation of your floors. Maintaining proper conditions within your building after work is completed is essential to assure the trouble-free life of your floor.

To protect your investment and to assure that your floor provides lasting satisfaction and the performance that you expect, we recommend:

ROUTINE MAINTAINANCE

Floor Stains, gum and shoe marks

Floor stains can be avoided by wiping spillage from the surface immediately. Staining occurs when spills are absorbed into the finish. Gum can be removed by freezing and scraping it off with a plastic putty knife. Shoe marks should be removed with approved* floor cleaner.

Daily

Daily sweeping with a properly treated dust mop* will keep the floor surface free from dust, grit and abrasive particles. Keep all walk off mats clean.

Monthly

Remove foreign debris and clean entire floor with approved floor cleaner*.

Annually

Robbins recommends that your maple floor should be screened and re-coated with a new coat of finish at least once a year. Properly abrade and tack-clean the floor as recommended by the finish manufacturer prior to applying finish.

Approved Maintenance Products*

Contact your flooring contractor to determine the brand and type of finish used on your floor. You should contact the finish manufacturer for detailed maintenance products and procedures. When oil based finishes are used, spot cleaning with 100% virgin mineral spirits may be performed for hard to remove dirt and stains. Recycled mineral spirits can contain any number of contaminates, based on where they may have been used; when recycled it is impossible to remove all foreign materials in the liquid. When using 100% virgin mineral spirits you should allow it to flash off a minimum of one hour, no less, depending on conditions (humidity).



GENERAL CARE

Temperature, Humidity and Ventilation

Be sure that your HVAC system is operating to provide a temperature range of 55-80 degrees and 35-55% relative humidity. Ventilation equipment should be available for year-round use. Humidity and Ventilation are critical considerations for your new wood floor. 35-55% relative humidity is normally required for long trouble-free life. If humidity rises to over 55%, prompt air circulation should be initiated by opening interior doors and windows and by activating the ventilating system. However do not draw warm, moist air in from outdoors, as excessive humidity will cause wood to expand. Summer months are especially critical. Inspect your wood floors regularly. If necessary, turn on the heating system. If less than 35% humidity level persists, use humidification to prevent excessive dryness and possible wood shrinkage. Maple flooring, being a solid wood product, is hygroscopic material. It will expand and contract as it absorbs and releases moisture. It will change dimensionally until it reaches equilibrium with the surrounding environment. This is an uncontrollable, yet natural characteristic of solid wood flooring. Excessive expansion and shrinkage issues that may result do to environmental conditions are not the responsibility of Robbins or the installer and are not covered under warranty.

Excessive Tightening

When excessive tightening of the floor becomes noticeable, reduce the wood moisture content. Lowering relative humidity and providing airflow can assist this.

Excessive Cracks

When unusually wide cracks begin to appear, increase the relative humidity in the room.

Keep Water off the Floor Surface

Avoid exposure to water from tracking during periods of inclement weather by the use of walk off mats at all entrances. Windows and doors should be closed during rainy weather. All leaks must be corrected immediately. *Machine scrubbing or power machines that induce water under pressure should not be used. This is a critical point since industry warranties exclude damage due to moisture.*

Prevent Exposure to Moisture

Any evidence of dampness within your building should be called to the attention of your architects and engineers. Interior drains and down spouts should be properly insulated to prevent the development of excessive condensation moisture. Exterior drains and downspouts should be kept clear and flow away from the building. All exterior doors should have watertight thresholds.

Expansion Joints

Expansion joints around the perimeter of your floor, at columns, or inserts, should never be blocked or obstructed.

Anchoring Bleachers

No fixtures, equipment or bleachers should be lagged through wood floors into concrete without first cutting wood away from lag bases and making provisions for expansion in the floor system.

If you have any questions about the installation, cares, or refinishing of your floor, consult your Robbins authorized flooring contractor. For technical or any other questions, contact Robbins @ 1-800-543-1913 or visit our web site at www.robbinsfloor.com



Taking Care of Your MFMA Maple Sports Floor

☛ Wood is naturally porous and can absorb and release moisture.

If the humidity in your facility rises, your wood floor will absorb that moisture, causing it to expand. If the humidity falls, your wood floor will release moisture, causing it to shrink.

☛ Many installations include expansion voids around the perimeter and around columns or

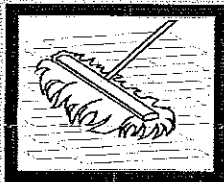
floor inserts, plus expansion joints built into the floor surface.

These features permit natural, normal expansion and contraction without damage to the floor. Too much moisture causes abnormal expansion which can lead to cupping or buckling of your floor.

In abnormally dry conditions the wood will contract, leaving separations between flooring strips.

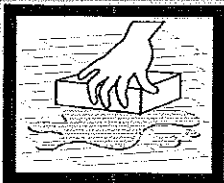
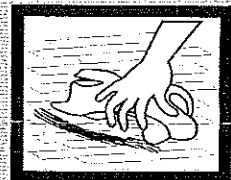


Six Steps For Proper Daily Maintenance:



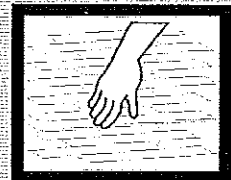
- 1. SWEEP THE FLOOR DAILY** with a properly treated dust mop. If the floor is used heavily, sweep it up to three times per day.

- 4. REMOVE HEEL MARKS** using an *approved* floor cleaner applied with a soft cloth or a dust mop. Contact your floor finish manufacturer for approved cleaning products.



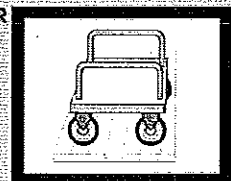
- 2. WIPE UP SPILLS** and any moisture on the floor surface.

- 5. INSPECT FLOOR FOR TIGHTENING OR SHRINKAGE.** During wet weather, check for water leakage around doors and windows. Remove debris from expansion voids.



- 3. MAKE SURE THE HEATING/VENTILATING/AIR CONDITIONING SYSTEM IS FUNCTIONING PROPERLY** and set to maintain indoor relative humidities between 35% and

- 6. ALWAYS PROTECT THE FLOOR** when moving heavy portable equipment or lifts. Ensure portable equipment does **NOT** have crowned wheels or wheels that include center ridges remaining from the molding process. These types of wheels can create very significant point loads.



50% year round. In areas of consistently high or low outside humidity, a 15% fluctuation will not adversely affect the maple.

Never Do the Following:

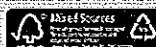
- 1. NEVER** shut down the ventilation system in your facility for a prolonged period of time.
- 2. NEVER** use household cleaning products or procedures. They can be harmful to the floor finish and to the wood and may also leave floors sticky or slippery, and potentially harmful to athletes. Your MFMA finish manufacturer will recommend the proper cleaning and maintenance materials for your MFMA sports floor.

- 3. NEVER** clean your MFMA floor using scrubbing machinery or power scrubbers that use water under pressure. Water is your floor's worst enemy!
- 4. NEVER** attempt to modify or repair your MFMA sports floor without first consulting your MFMA sport floor contractor.

DIRECT ALL QUESTIONS ABOUT YOUR MFMA MAPLE SPORTS FLOOR TO YOUR MFMA SPORT FLOOR CONTRACTOR.



Maple Flooring Manufacturers Association
111 Deer Lake Road, Suite 100
Deerfield, IL 60015 USA
41-833-550-9128, Fax: 41-842-480-9287
E-mail: info@mfma.com



Installation Company: _____

Warnings

Power Scrubbers

Never use power scrubbers or automatic floor cleaning machines that disperse water on the floor (especially water under pressure). The use of scrubber machines will void the warranty on your floor. Power scrubbers were designed for other surfaces such as terrazzo and vinyl floors. The chemicals typically used in these machines are too aggressive for wood and finishes. Even the softest brushes will scratch and dull the finish. The machine's liquid and scrubbing action can cup the floor, and pull paint and finish from the wood.


Floor Covers and Mats

Gym floor covers should never be used on a freshly finished floor until at least three weeks after the last coat of finish has been applied. For complete curing, the finish surface must be exposed to oxygen in the ambient air. Covering the floor during this process would deny the finish of oxygen needed to complete the reaction. This may result in a partially cured coating with poor physical properties. Also, it is imperative that the floor be cleaned before the cover is laid. Otherwise, any grit or dust on the floor will mar the floor when the cover is walked on or when any loads are moved on the floor. Covers should not be taped to the floors. The adhesive in most tapes will attack the finish and result in delamination. Dirt, sand, and grit will dull and accelerate the wear of the finish. Removing any sand or grit will extend the life of the floor. Place floor mats or rugs at all entryways, bathroom exits, or other high traffic areas to remove excessive dirt or moisture. Spills or liquids on the floor should be wiped up immediately.

The floors in this building have been professionally finished with PotoPlaz by:

Anderson Ladd
430 Industrial Blvd
Minneapolis, MN 55413
800-433-9128

Please call for recoats, floor inspections, or to order maintenance products.
You can also visit www.hardwoodcleaner.com.



POTOPLAZ

Gym Floor Maintenance

General Maintenance

Temperature and Humidity

Temperature should be kept between 55 - 75° F. Humidity level should be kept between 35% - 50% to insure minimal wood movement. Avoid shutting down the HVAC system for any length of time as this could result in drastic fluctuations in temperature and humidity. These fluctuations can lead to board swelling or shrinking, gaps in the floor, chipping at the board edges, cupping and crowning, etc.

PoloPlaz Hardwood Floor Cleaner for Daily Cleaning

Dry mop the floor daily to eliminate buildup of dust. As needed, tack floor with PoloPlaz Hardwood Floor Cleaner to remove perspiration, oils, spills, and scuffs from foot traffic. Do not use dust mop treatments or floor cleaners that contain wax, paraffin, silicone, and mineral oil. Do not use pretreated dust mops. Use of these products can cause adhesion problems when recoating the floor.

Periodic Deep Cleaning

PoloPlaz TieTack for Periodic Deep Cleaning

Use the Tie Tack Cleaning System for periodic deep cleaning and to reduce spreading contaminants during the annual resurfacing of your gym floor.

1. In bucket, mix 3 parts water and 1 part Tie Tack (2:1 may be necessary for heavily soiled floors). Dip untreated cotton towels in solution and wring towels before placing flat on floor.
2. Place push broom on towel one foot from leading edge and fold leading edge over the top of push broom. Push towel $\frac{1}{4}$ the length of floor. Then lift and move push broom back on towel about six inches so that only a clean portion of the towel is on top or behind the broom bristles. Repeat procedure at each $\frac{1}{4}$ of the floor.
3. Repeat the process until there is not a clean edge on the towel. At that point turn the towel over and continue.
4. When towel becomes dirty or dry, replace with new clean towel. Never dip dirty towel in clean solution. Continue cleaning with fresh towels until entire floor is tacked. If floor still appears dirty it may be necessary to tack the floor again with the Tie Tack solution.

Accidents and Spills

Grease Spots

To remove grease, tar, or oil, wipe with a cloth dampened with PoloPlaz Hardwood Floor Cleaner, then follow by buffing with a clean, dry cloth.

Food, Water, or Pet spots

If accident is recent, wipe up area immediately with a dry cloth. Wipe area with PoloPlaz Hardwood Floor Cleaner followed by buffing with a clean, dry cloth. If the spot has already dried, spray area directly with Hardwood Floor Cleaner and allow to sit for a few seconds. Wipe up excess and repeat until stain is gone. Finish by buffing with a clean dry cloth.

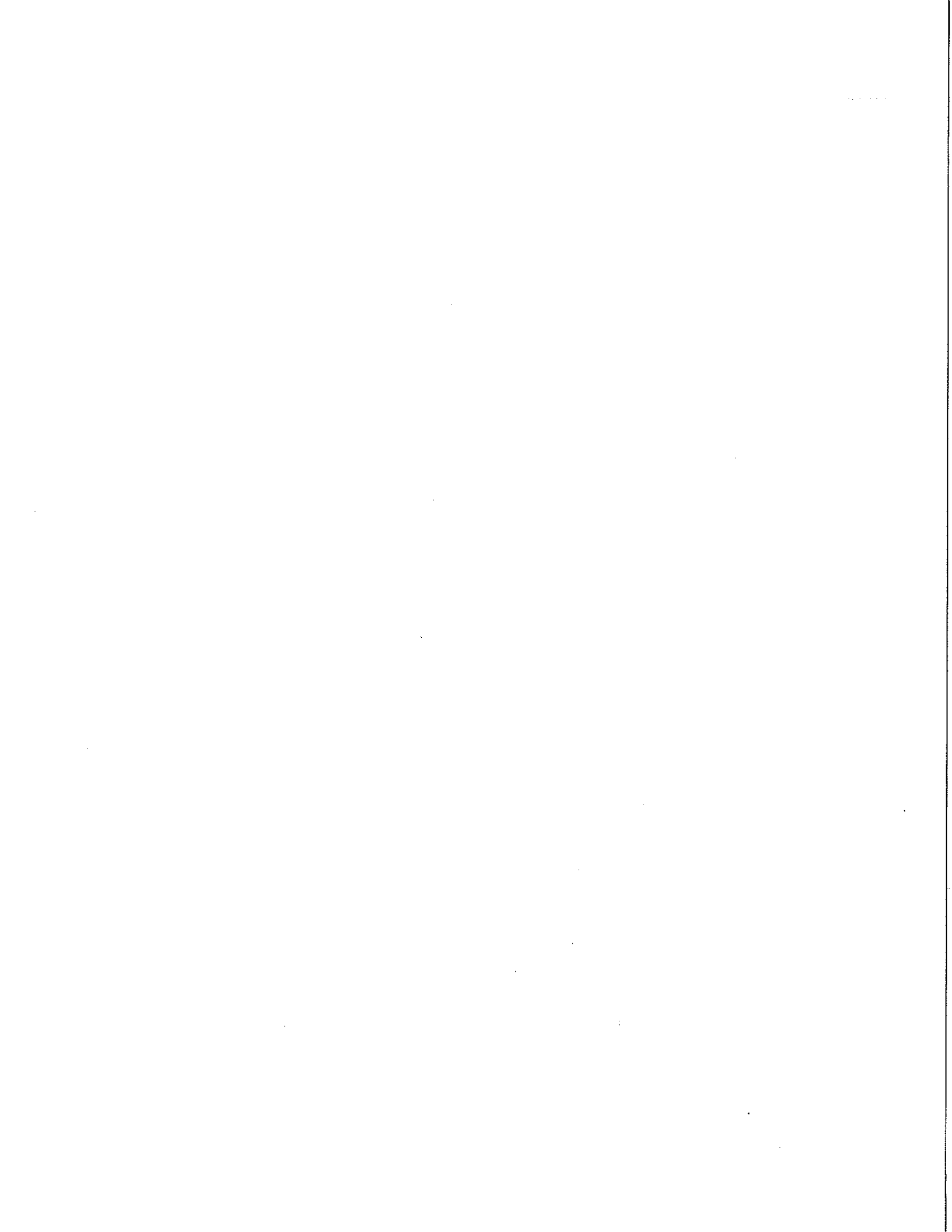
Wax Deposits or Chewing Gum

Apply crushed ice, contained in a plastic bag, until material is brittle enough to crumble off the floor surface. Remove remainder using a cloth dampened in Hardwood Floor Cleaner and then buff with a clean, dry cloth.

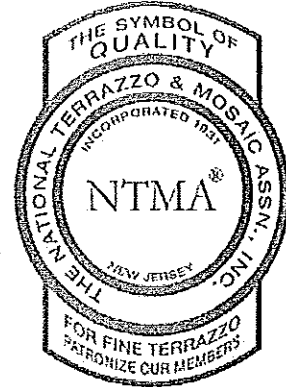
Scratches and Dents

Light scratches that may occur in the finish can be lightly sanded or screened, then retouched with PoloPlaz finish. This procedure should be done by your hardwood professional. Protect your floor from gouging, denting, or marring by never allowing heavy carts, scissor lifts, cleats, high heels, or any other object with a high psi point load.





The Care of Terrazzo



www.ntma.com
(800) 323-9736

- TERRAZZO FLOORS
- OWNER'S GUIDE FOR THE SUGGESTED MAINTENANCE OF TERRAZZO
- CUSTODIAN'S GUIDE TO THE PROPER MAINTENANCE OF TERRAZZO
- DO'S - FOR TERRAZZO FLOOR CARE

Terrazzo floors have *ease of maintenance*, but this does not mean that **NO CARE IS REQUIRED**. Once you understand the care requirements in the early stages of a new terrazzo floor, you lessen possible problems, and recognize the economy of care and the aesthetic values of this product. **NTMA terrazzo flooring specifications highly recommends a sealer applied to this surface immediately following the final polishing.**

Sealers help inhibit the penetration of spilled materials upon initial contact with the terrazzo floor. Spills must be cleaned up immediately in order to prevent stains caused by repeated or long term exposure. Even standing water can eventually dissolve some sealers.

As most sealers are low solids liquid material, they do not normally produce a high gloss sheen appearance to the floor surface. When a building is eventually occupied, the terrazzo temporary sealer can be stripped and the surface may be retreated as implemented by ownership. The eventual degree of gloss is determined by the particular products selected and the recommended application process.

TAKE THE NECESSARY TIME TO LEARN WHICH TERRAZZO SYSTEM YOU ARE MAINTAINING

There are three types of binders used to anchor marble chips or other aggregate in your terrazzo floor. Originally, and still used, is a Portland cement product; next a polyacrylate modified cement. The most common matrix today is epoxy resin. All Terrazzo Systems contain marble or other types of aggregates materials that have surface exposure. Marble aggregates have a low porosity of absorption. Others aggregates types may have little or no porosity.

Portland Cement Systems: The portion of this floor system that most benefits from primary protection is the Portland cement binder. Sealers will also assist protecting the marble chips or other aggregates.

Epoxy Resin Systems: The binder for this terrazzo system is fundamentally non-porous. Sealers assist protecting the aggregates and normally enhance aesthetics.

Although each system has the role of anchoring the aggregate into the topping, maintenance procedures are essentially common to all terrazzo installations.

OWNER'S GUIDE FOR THE MAINTENANCE OF TERRAZZO

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 most commonly recommended and utilized today. Mop on, in one or more coats, in accordance with the instructions of the manufacturer. This can also be followed by a water based finish (dressing) for daily or weekly buffing if a high sheen is desired.

CLEANING PROCEDURES: Neutral cleaners are designed to react only in solution with clean water, mixed in accordance to the manufacturer 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. Then rinse the dirt-laden solution from the surface by squeegee, vacuum or mopping. Rinse with ample clean water. 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.

FQA "How often must we sweep or scrub this floor?" is answered by the amount of traffic that moves across the floor daily. Daily dust mopping is a requirement in most public buildings. Daily dust mopping removes both the dust and the grit tracked into the building.

CUSTODIAN'S GUIDE TO THE PROPER MAINTENANCE OF TERRAZZO

FOLLOWING THE INSTRUCTIONS TO KEEP YOUR TERRAZZO FLOOR CLEAN AND LONG-LASTING, THESE ARE NOMINALLY MINIMUM MAINTENANCE SUGGESTIONS:

DAILY: DUST MOP Hand work stubborn stains and scuff marks with neutral cleaner diluted in warm water.

WEEKLY: DAMP MOP LIGHTLY SOILED FLOORS WITH NEUTRAL CLEANER Heavily soiled floors should be scrubbed with a mechanical buffing machine and neutral cleaner. Mop up residue with clean water before it dries. Allow to dry and buff with a dry brush.

NOTE: 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 SOLUTION TO DRY ON THE SURFACE.

AS REQUIRED: Strip all old sealer and any finish coats. Reseal clean floor.

CAUTION: Before deviation from the instructions, contact your local Terrazzo Contractor for advice. ALWAYS KEEP RINSE WATER, MOPS & PAILS CLEAN!

DO'S and DON'T'S FOR MAINTENANCE OF TERRAZZO FLOORING

DO ask the installing Terrazzo Contractor to recommend the proper neutral cleaner and sealers to be used on your floor.

DO dust mop your floors daily, this not only picks up the dust, but also the grit tracked into your building. The grit acts as an abrasive on your hard surface floor.

DO scrub your floors approximately once or twice a week, where a new terrazzo floor has been installed for the initial two to three months, as the construction dust is still in the air, and will eventually be deposited on your floor. After this period, once per week, depending on the amount of foot traffic, keep your floor clean in appearance. Always rinse your floors well to prevent a build-up of cleaner residue.

DO seal your floors with a water-based sealer in accordance to the manufacturer's instructions. Normally, a new floor requires two or more coats, which provide a good sheen for a period of 45 to 60 days, before needing additional coats.

DO use maintenance products designed specifically for terrazzo.

DO allow your neutral cleaner, once applied to the terrazzo surface, time to react as designed to loosen foreign matter. Several minutes should be adequate, but **DO NOT** allow the solution to dry on surface.

DO NOT use surface waxes or all-purpose sealers

DO NOT use all purpose cleaners containing water soluble inorganic or crystallizing salts, harmful alkali, or acids.

