Terrazzo Floor Maintenance

There are three types of binders used to anchor the marble chips or other aggregate that appear in your Terrazzo Floor. One is a Portland Cement type of product, the second product is referred to as a Polyacrylic modified Portland Cement includes an acrylic additive. The third being an Epoxy or Polyester system, often referred to as a resinous thin-set system. Although each system has the role of anchoring the aggregate into a hard composition once the topping has been placed, the treatment of each does vary. Terrazzo floors are known to have ease of maintenance, but should NOT be interpreted that NO CARE IS REQUIRED. Once you understand the care requirements in the early stages of a new Terrazzo floor, you not only avoid possible problems, you will soon recognize the economy of care and the aesthetic values of this product.

MAINTENANCE PRECAUTIONS:

Harsh cleaners and sealers can damage Terrazzo; thus, only materials that are known to be neutral with a pH Factor between 7 and 10 should be used when scrubbing or mopping your floors. Avoid all-purpose cleaners or soaps containing water soluble inorganic or crystallizing salts, harmful alkali or acids. These materials could prove harmful to your floors. Sweeping

compounds contain oil which is not only a fire hazard, but will penetrate and could permanently discolor your floor. Many of these compounds contain sand which is hard to sweep and could abrade your floor if not removed.

PORTLAND CEMENT-TYPE SYSTEMS:

The Terrazzo surface has a minimum of 70 % density of marble chip surface exposure. The marble chips have a very low porosity of absorption, thus the portion of this floor system that needs protection is the Portland Cement binder that has 30 % or less of surface exposure. This is why our specification required a penetrating solvent type sealer be applied to this surface

immediately following the final polishing, helping to inhibit the penetration of spilled materials upon initial contact with the Terrazzo floor; however spills must be cleaned up immediately in order to prevent stains caused by repeated or long term exposure. This seals off the minute pores in the binder.

Internal protection has been achieved, but since it is a penetrating liquid material, it is not expected to produce a sheen to the floor surface. Unless it has been specified otherwise, it is normal that the once the owner occupies the building he provides his own maintenance and will seal the surface that will result in the sheen desired.

A new Portland Cement Terrazzo floor initially may appear to be mottled in color, especially in darker colors. This is the normal characteristic of this product, as it is going through the curing process. This blotchy appearance will gradually disappear as you maintain your floor while the curing cycle runs its course.

RESINOUS TYPE TERRAZZO SYSTEMS (Epoxy and Polyester):

Since the matrix in these systems becomes a nonporous surface, no penetrating-type sealer is used on this type of floor. Only surface sealers, as mentioned in the contents of these instructions.

An often asked question, "How often must we sweep or scrub this floor?" This obviously would be dictated by the amount of foot traffic that moves across this floor daily. But, it is normal that daily dust mopping is a requirement in most public buildings. Daily dust mopping removes not only the dust but also the grit tracked into the building, the grit acts as an abrasive on your hard surface. As for scrubbing, normally a newly constructed building contains a considerable amount of construction air dust that will eventually deposit itself on the floors.

Initially, scrubbing should be considered twice weekly until the time when the construction dust no longer exists. Then wet mopping once a week should keep your floors in a clean appearance. Most owners want to see a high sheen on their floors.

There should be an understanding that safety in all buildings is a concern, thus a sealer must be water-based and normally in the acrylic family of maintenance products designed for Terrazzo use and have the classification by Underwriters Laboratories that it has slip resistance with a coefficient of friction rating of a minimum of 0.5 or higher.

It must be understood that solvent-based sealers have a tendency to not only discolor with age, but have a removal problem for the user, especially when wear patterns develop or discoloration dictates stripping from the surface.

We do recommend acrylic water-based sealers to be mopped on, in one or more coats, in accordance to the recommended instructions of the manufacturer. This can also be followed by an acrylic water-based finish for daily or weekly buffing if a high sheen is desired.

IT IS ESSENTIAL TO MAINTAIN A CLEAN APPEARANCE ON YOUR FLOOR. WATER, MOPS AND OTHER EQUIPMENT MUST BE CLEAN

CLEANING PROCEDURES

Your cleaning cycle should be regulated by the amount of foot traffic your floor receives. Neutral cleaners are designed to react only if solution of clean water and cleaner, mixed in accordance to the manufacturer instructions, is allowed to remain on the floor surface for several minutes. This provides the time necessary for the grime dissolving action to take place, before

removing 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 does not reabsorb in the floor.

There is another process that would produce a sheen without the application of sealers. As you clean your floors with the neutral cleaner/water solution, your final mop up picks up the majority of this cleaner, but still some remains on the surface. After several such procedures, the residue of cleaner will become buffable and result in a sheen by buffing after each washing. This method of achieving a sheen never requires the stripping action, thus, reducing your maintenance costs.

IT IS IMPORTANT THAT ANY SEALER OR DRESSING BE LISTED BY UNDERWRITERS LABORATORIES FOR SLIP RESISTANCE.

CUSTODIAN'S GUIDE TO THE PROPER MAINTENANCE OF TERRAZZO

FOLLOW THESE INSTRUCTIONS TO KEEP YOUR CLEAN AND LONG-LASTING

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

DAILY: SWEEP USING YARN-WICK BRUSH TREAT ED WITH SWEEPING COMPOUND. 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 before it dries with clean water. Allow to dry and buff with a dry brush. (For floors requiring a high luster, apply a thin coat of specially prepared finishing material and buff to bring up sheen.)

NOTE: ALLOW YOUR NEUTRAL CLEANER, ONCE APPLIED TO THE TERRAZZO SURFACE, TIME TO REACT AS DESIGNED TO LOOSEN FOREIGN MATTERS. SEVERAL MINUTES SHOULD BE ADEQUATE, BUT DO NOT ALLOW SOLUTION TO DRY ON THE SURFACE.

ANNUALLY: STRIP ALL OLD DRESSING AND SEALER. RESEAL CLEAN FLOOR. If the floor becomes

dull or unsightly do not attempt to refinish or restore it by sanding or grinding. This requires professional attention.

USE ONLY: Specialized products produced to insure proper maintenance of your Terrazzo floors. Many suppliers serving the Terrazzo trade with products of proven reliability are members of the NTMA.

For any further information or brand names of Maintenance Products contact your local Terrazzo Contractor or the Executive Director at the National Terrazzo and Mosaic Association, Inc.

DO'S AND DON'TS FOR TERRAZZO FLOOR CARE

HELPFUL TIPS FOR TERRAZZO MAINTENANCE: Your Terrazzo floor has a minimum of 70 % marble chip density on the surface. It has been ground and polished and sealed with a penetrating solvent-based Terrazzo sealer. This protects your surface from stains, but it is essential that no spillage should be ignored and allowed to soak and dry into the floor. Good

housekeeping procedures require that your floor remain clean. With proper maintenance procedures, your Terrazzo floor should give you ease of maintenance and a lifetime of performance, not to mention the aesthetics. Before you commence with a maintenance program or purchase materials, it is best to understand this flooring system by reading available details of care from your Terrazzo Contractor or this Association.

DO'S

DO ask your 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 a minimum of 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, dependent on the amount of foot traffic, should keep your floor clean in appearance. Always rinse your floors well to prevent a build-up of residue of cleaner that could become slippery.

DO seal your floors with a water-based acrylic sealer in accordance to the manufacturer's instructions. Normally a new floor requires two of more coats, which should provide a good sheen for a period of 45 to 60 days, before it would need additional coats. Sealer should be classified by Underwriters Laboratories, that is slip resistant with a rating of a minimum of 0.5 or higher.

DO use maintenance products designed 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 solution to dr on surface.

DON'TS

DON'T use purely surface waxes, or good for everything seal ers. Employment of such can result in a slippery surface.

DON'T use all purpose cleaners of soaps containing water soluble inorganic or crystallizing salts, harmful alkali or acids. Use of such products could prove harmful to your Terrazzo floor.

DON'T use cheap cleaners or sealers as the majority of your maintenance costs is labor.

DON'T try miracle cleaners or sealers on your floor without getting an opinion on such products from your local Terrazzo (contractor or this Association.

NOTE: IN THE EVENT THAT YOUR FLOORS GET BADLY SOILED. CONSULT WITH SOMEONE FROM THIS TRADE

To digress further, a soap is a combination of fatty acid oils and alkaline materials. Detergents, on the other hand, are synthetic products that act in the same general manner as soap, but are most often more effective in their performance. Some of the most popular chemicals used for cleaning Terrazzo are soap rather than a detergent. The makers of these popular soaps have cleverly made their product neutral, but have balanced the alkaline component in such a way that it does not completely react to all of the fatty oils. This is much like the TV ad in which the daughter asks "Mom, where is the bath oil?" and the Mother replies that it is in the soap. When these soaps are used on a floor, they leave a thin film of this un-reacted fatty oil, which will shine when the floor is buffed after it is dry.

The problem of clouding is created when this film entraps and reacts with the residue of free lime on the floor, causing insoluble calcium scum. Repeating the cleaning procedures with the same materials only adds to the condition. Applying a primer, sealer or wax on top will lock in the scum under a transparent shield. This makes everything worse, for the sealing film must then be removed to expose the source of the problem for corrective treatment. This situation can be prevented or minimized by thorough cleansing of the floor with proper chemicals before any sealer of other film or scum forming surface treatments are used. Nonionic neutral detergents will thoroughly clean a floor without reacting to or combining with any free lime deposit or residue. The preceding relates to preparation of a floor for delivery to the owner, but long range maintenance programs with this type of film-forming soap also have limitations. The oily film never really hardens, so it will continue to trap dust and dirt. The cumulative effect of continuing use of such a material will cause even the most immaculate floor to become dull and lifeless. Detergents leave no oily film or residue to accumulate dirt. Your material suppliers should be able to help you distinguish between soap and detergents. For further information, contact The.

This bulletin addresses the most asked question that we hear:

"Why doesn't my new cement Terrazzo floor have the sheen and luster like my neighbor's?" "Mine looks spotty and dull!"

We should first state that yes, there will be a significant difference in appearance between a new floor and one that had been given time to age. Chances are, if this owner were to ask his neighbor, he would relate the same experience when his floor was newly installed. Terrazzo, like fine wine, gets better with age. While your Terrazzo floor lacks the beauty you expected initially, you can rest assured that with the natural cure and the passing of time, your floor will soon have the luster and beauty that Terrazzo is known for. To further explain why this occurs, we offer the following information. Moisture is added to the Terrazzo products in the composition, curing, grinding, grouting and polishing stages. Structurally, with this much moisture, you can be assured of a quality installation, however, you can also expect the water to dissipate and escape through the finished surface. Here again, however, it is necessary to retard this moisture evaporation. Therefore, the Terrazzo must be sealed with a penetrating-type sealer. This further increases the time that it takes for the system to cure. Each passing day, with normal maintenance the aesthetics of your Terrazzo floor will increase. Obviously, this requires your patience, but you can be assured that the results will be rewarding,