



NATIONAL TERRAZZO & MOSAIC ASSOCIATION

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TECHNICAL BULLETIN #S-19

8/13

(Formerly TB #46)

MOTTLED APPEARANCE OF A CEMENT TERRAZZO FLOOR

It is not always possible to produce a terrazzo floor with an overall uniform color. This is due to various reasons, most of which are beyond the control of the terrazzo contractor.

Due to the characteristics and chemistry of the terrazzo composition, a certain curing period must take place after installation before the true color will be realized. This cure period will vary from job to job, depending on the job location, substrate, and atmospheric conditions.

It should be recognized that terrazzo and the under-bed are products created at the job site by blending several ingredients, including coarse sand, marble chips, Portland cement and water. When the under-bed is properly mixed and spread to an established level, it provides the support for the terrazzo topping which is 1/2 inch in thickness. This topping consists of Portland cement blended with marble chips and water to form a dense paste. During the installation and execution of the topping, all excess cement and water is extracted by a compaction method of rolling the surface with steel rollers. Once installed, one of the several recommended methods of retarding the cure is employed.

When the initial grinding and polishing takes place to expose the aggregate and finish the floor system, water is used to lubricate the process. Once the polishing is completed, it is essential to protect the floor surface from spills and stains during the balance of the construction period. A penetrating sealer designed especially for terrazzo should be applied.

This sealer does not only protect the finished terrazzo surface from construction abuse, but it also acts as a retarder that prevents rapid dissipation of the moisture used in the installation process.

This sealer will penetrate the terrazzo surface, but occasionally not uniformly. This is due to the variation of the porosity of the terrazzo. Thus, this penetrating sealer is not intended to produce a uniform finish on the surface. To achieve a uniform sheen to this floor, it is necessary to apply a surface water-based sealer. A solvent-based sealer is not recommended initially on a cement terrazzo floor system, as it is a non-breathing material. It prevents the moisture from moving upwards, thereby trapping the moisture. To escape, the trapped moisture must move laterally under the sealer to the weakest junction in the terrazzo system, which is the divider strip area.

This slow cure will result in a structural sound system, but the surface will initially have a mottled appearance. There may be a pattern of darker color at the strip lines compared to the center of the panel. Once this floor system is allowed to completely cure, it will reach a uniform color.

To speed up the cure, it may be necessary to remove the solvent-based sealer and allow the terrazzo surface moisture to dissipate vertically. A solvent-based sealer cannot usually be removed by stripping with a chemical. The only means of removal is polishing the entire surface.

Allowing the surface to remain open for as long as possible will produce a more uniform appearance.

In the initial year after installation, only water-based sealers should be applied to this floor. In the second year and beyond, a solvent-based sealer may be considered.

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