

TECHNICAL BULLETIN #G-19

8/13

(Formerly TB#53)

RE-ANCHORING A TERRAZZO FLOOR SYSTEM

The terrazzo industry has successfully used the following procedure to repair the delamination of directly bonded Portland cement terrazzo toppings from the substrate by the injection method.

During the past several years, this industry has learned new methods for the correction of loss of bond in isolated, small areas. When this procedure is considered, it is best to evaluate the percentage of areas to be re-anchored. If the areas are large, re-anchoring may not be the best choice due to the costs involved. This injection system is designed for smaller, isolated areas of delamination.

EXECUTION

Drill a series 1/4-3/8 inch holes spaced about 8 inches apart over the distressed area. The depth of the hole should penetrate the substrate slab approximately 1/2 to 1 inch. Once the hole has been drilled, it is essential to clean all debris from these holes with air pressure. Low viscosity epoxy or polyurea products designed for this purpose are generally used to achieve the necessary penetration. Fill all voids where the separation has occurred, using approximately 5 to 10 lbs. of pressure. (There are several types of suitable materials/techniques/equipment; check with NTMA member suppliers.)

While injecting the epoxy into the holes, it is necessary to check the surrounding holes to make sure they are filling up with this epoxy mix. If no epoxy appears in a hole, change the location of the injection to an adjacent hole. Fill all holes to kinch from the terrazzo surface, leaving this space for the insertion of a marble chip to disguise the repair. Place weights on the terrazzo surface to effectively compress the topping to the epoxy inserted for several hours per manufacturer's instructions. The use of TapCons "self fasteners" are also useful to most positively "clamp" down the loose terrazzo until the polymer bonding agent has set.

After cure of bonding agent, remove the weights or screws and place the marble chip in the holes using an epoxy matrix that matches the original floor color. The chips should be slightly above the adjacent terrazzo surface to allow for some sanding or grinding to smooth the repair areas.

If this work is done neatly and leaves a clean surface while the epoxy is fluid, it will reduce the effort when the patch is sanded.

When the re-anchoring process is completed according to instructions, the floor system will give the owners the expected longevity of terrazzo but still sound hollow when it is tapped with a solid tool. The degree of the hollow sound will depend on the gravity flow of the epoxy blend liquid as it seeks any openings that exist at the junction of where the loss of bond occurred.

General Disclaimer: The information provided in the Technical Bulletin is for general informational purposes only. Each project and individual application are unique. All information is provided in good faith: However, NTMA makes no representations or warranties of any kind, express or implied, regarding the accuracy, adequacy, validity, reliability, or completeness of any information provided herein.