

Repair of Cracks/Honey Combed Concrete by Multiguard In-depth System

1. Treatment of Honey Combed Concrete

1. Chip the loose concrete surface going deep till the sound surface is found.
2. Prepare the surface by wire brushing it and cleaning the same with water. Cleaning with water also makes surface water-saturated.
3. Prepare the Concrete Repair mortar, in dough consistency with mixing water with Premix RM-100.
4. Coat the saturated surface (In SSD Condition) with Multiguard In-depth Type A. While the surface is touch dry, repair the surface with concrete repair mortar as prepared in Point 3.
5. Level the surface to the desired finish with hand trowel.
6. If the depth of concrete repair is more than 1", develop the thickness 10mm at a time. If the depth of concrete repair is more than 2", add limestone aggregates, 10mm down size with Premix RM 100 at 25-50% by volume and repair the honeycombed surface.
7. Coat the repaired surface with Multiguard In-depth Type A.
8. Once the coating and repair mortar is dry, (after 12 to 24 hours) cure the surface for 4 to 5 days. Surface may be protected from direct sun by putting covering.

2. Construction Joints/Cold Joints/Cracks

1. Chip a 1" wide by 1.5" deep chase along the entire length of any existing cracks or joints.
2. Clean the surface/groove with clean water to remove all dust and loose concrete. If water is actively flowing through the cracks/joints/surface follow step 3. If no flowing water follow step 4.
3. Prepare a putty of PlugFast (fast setting plugging compound). Mix only enough material that can be placed in 1 minute. Press the putty into the chase beginning at one end of crack. Place one third of the depth of the chase with putty. Hold for 1 minute or until material is set.
4. Mix In-depth Type A or Type B (depending on pressure of the water) into putty consistency and fill 2/3 of the surface.
5. Fill the remaining groove with Multiguard In-depth Premix (MIM) after preparing to a putty consistency.
6. Prepare the slurry of Multiguard In-depth Type A and coat the surface.
7. Protect the application from rain, excessive wind and sunlight for 24 hours

Cure the surface for 5 days with clean water.

3. Miscellaneous Details

A. Pressure Release Pipe for Raft in the Basement

Keep at least one pressure release pipe in 500 ft² to 1000 ft² area, with pipe size of approx. 40mm dia, supported on PCC with bottom surface cut into 45 degree angle. The length of the pipe should be such that it is 1 ft above the leveled surface/flooring of the basement at the final stage.

Grout the pressure release pipes only after raft and retaining walls are constructed and full pressure thrust is exerted on the bottom surface of the raft. Raft shall be designed so that it can take load/pressure of the water, structurally, without cracking after waterproofing work is completed. The grouting slurry shall consist of MITA/MITB mixed into the cement and water at specified rate as per Multichem.