

MicroTop

Methodology Statement

Product Name: MicroPave - MicroTop ThinTop Flooring

Procedures for MicroPave MicroTop Flooring Installation Methodology of work:

Concrete Preparation: In areas where **MicroPave** is to be installed it is essential to have a solid concrete/tile sub-base upon which the installation will be placed. The sub-base should be true to level with a cohesive surface that does not have any latency. The bonding process for the MicroPave product is dependent on the strength of the surface of the concrete sub-base. To avoid any de-lamination please observe the following guidelines:

General Recommendations:

- A. Sub-base Surface is to be dry, free of all contaminants, deleterious material and loose toppings.
- B. It is recommended that new concrete be cured for a minimum of 21 days before applying **MicroPave**. Depending on weather conditions and prevailing temperatures a humidity test should be performed to confirm slab dryness.
- C. Drains should be protected from contaminants and loose materials by placing a fabric lining or similar protection to collect waste.
- D. Only apply **MicroPave** to stable concrete/tile sub-base. The application of MicroPave onto a substandard base may result in coating failure or unsightly existing cracks showing through the new surface.
- E. Do not apply **MicroPave** to a surface which has been treated with hardeners of sodium sulfate, zinc sulfate or sodium silicate, as this may adversely effect adhesion.
- F. All previous coatings must be completely removed by sanding, sand blasting, scarifying or pressure washing. All latency, residues and loose materials must be removed prior to re-coating.
- G. Smooth surfaces should be sanded, sand blasted, scarified or acid etched at the rate of 1 part acid to 10-15 parts water.

Cracks (in Existing or new slabs):

All cracks must be cut along their line with an angle grinder or diamond tip saw and thoroughly cleaned with a high pressure water blaster at about 3000 psi pressure so as to remove all latency and deleterious material. The purpose of the cutting process is to open up the cracks to allow suitable bonding by the grout material. Note that all cracks, contraction joints and spalling can be subject to movement and on slab on grade situations can be a source of underground water release. Careful inspection of cracks should be carried out to determine the suitability of the surface for the application of **MicroPave**.

Concrete Slab Specifications:

Steel reinforcement: In general slabs on well compacted grade do not require steel re-enforcement. 6 mm steel reinforcement if required by design should be placed at maximum 30 cms on center where necessary.

Concrete Mix Design and placing: In areas where the slab upon which **MicroPave** is to be placed is below grade, adequate access wells and ventilation is required to allow the concrete to set. The concrete should have a minimum of 8 cm in thickness. The concrete mix should contain a minimum of 6 sacks (300 kgs.) of cement per cubic meter of concrete. The water content should be the minimum amount practical, and the slump should not exceed 100 mm. The concrete mix must not contain any admixture or additive that contains calcium chloride. During cold-weather concreting, a non chloride accelerator may be used. For additional protection against shrinkage cracks fibers could be optionally added to the concrete mix. Placing and finishing of the concrete should be as per ACI recommendations.

Finishing: The concrete surface may be hand trowelled to a level finish. The pours of the slab should remain open to receive the BondCrete bonding Coat prior to **MicroPave** installations. Power troweling on large jobs is acceptable provided the trowel marks are minimum.

Control Joints: Saw cuts using the proper concrete saws shall be performed according to ACI recommendations and at pre-determined distances. Timing for saw cutting depends on weather conditions and concrete hardness.

Curing & Sealing: The concrete surfaces must be washed and cured with clean water for a minimum of 7 days prior to drying. The slab should be thoroughly cured and dried prior to application of **MicroPave**. A protective Sealer, Wax or Polyurethane is recommended to protect the surface against dusting, UV deterioration and staining thereby making cleaning and maintenance easier. Access to the finished **MicroPave** slabs should be prohibited during a period of 24 - 48 hours after final coating application.

Installation over tiles: An epoxy primer with sprinkled sand particles may be required prior to installing **MicroPave** over mosaic or ceramic tiles. Ghosting of the tile joints may occur due to potential tile movement or difference in humidity between the tile and the grout lines. A thick bonding coarse with a fiberglass mesh may reduce the risk of this happening.