

KAUFMAN

PRODUCT
INFORMATION

KAUFMAN
PRODUCTS
INC.

3811 CURTIS
AVENUE

BALTIMORE,
MARYLAND
21226-1131

410-354-8600
800-637-6372
www.kaufmanproducts.net

CONCRETE SUBSTRATE PREPARATION

The correct surface preparation is the most critical part of any floor resurfacing, coating, bonded topping, or repair project. The desired adhesion to the substrate will not be obtained if the preparation does not leave the surface free of foreign matter, curing compounds, laitance, and weak surfaces. In addition, the surface must be roughened to a proper degree. Generally speaking, there should be a profile of at least 1/16"-1/8" between the low and high points of the concrete. Coarse aggregate should show. Please follow all aspects of the Guidelines #03732, selecting and *Specifying Concrete Surface Preparation for Sealers, Coatings and Polymer Overlays from The International Concrete Repair Institute (ICRI)*. Included in our catalog is a chart, provided by ICRI, to help in surface preparation decision making.

All concrete has a layer of dense laitance at the surface, that will reduce the penetration and subsequent adhesion of sealers, adhesive, topping and membranes. Concrete surfaces must be clean and sound. Remove laitance and all foreign matter as per ASTM D-4258 and D-4259. Waterblasting followed by shotblasting is the preferred method of preparation to provide a fractured aggregate profile. Sandblasting or shotblasting are also satisfactory individually, both captive and not.

Acid etching, according to ASTM D-4260 with a 15-20% muriatic acid solution can be used as an alternative. Wash acid and loose mortar off with high pressure water until slush is removed. Test with litmus paper to be sure acid is removed entirely. Final rinse with 1% ammonia solution is beneficial for final rinsing after acid.

Grinding is not recommended because it makes the surface smooth, which is opposite to the surface profile we are trying to achieve.

If compressed air is used on the surface, it must be fitted with an oil trap to produce oil free air. Never use sweeping compounds prior to application of products to a floor. They contain oils and waxes, which will contaminate the surface.

Chipping tools often leave particles that have been broken or fractured but not dislodged. These should be removed by high-pressure water or sandblasting.

ACI 503 contains information about a test procedure to determine if the surface is properly prepared. It is recommended to use that procedure to determine if you are down to solid concrete.

Oil and grease soaked surfaces make for very poor adhesion. Even if degreasers and cleaners are used, they usually only remove the surface oil, at best. Subsurface oil will work its way to the top, in time and destroy the bond of the subsequently applied material. Never apply a topping or mortar over a joint.

Products brought to a feather-edge are inherently weaker than if they are done properly. In addition, some products cannot be brought to a feather-edge. For this reason, we recommend that the concrete should be cut around the perimeter of the repair area with a concrete saw to provide a straight vertical butt joint of at least 1/4-1/2" deep at the edges.

For professional use only. Not for sale to or use by the general public.

LIMITED WARRANTY We warrant our products to be of good quality and will replace material proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, Kaufman Products, Inc makes no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products, and Kaufman Products, Inc shall have no other liability with respect thereto. User shall determine the suitability of the product or the intended use and assume all risks and liability in connection thereto. Our salesmen, distributors and their salesmen have no authority to change the printed recommendations concerning the use of our products.