

CONSTRUCTION OF ARCHITECTURAL FLOORING

Traditional and resin flooring

APPLICATION DATA SHEET

Creation of resin flooring and coverings for residential environments:

1. preparation of the support;
2. texture;
3. completion of operations

1) PREPARATION OF THE SUPPORT

The support, whatever it is, must have:

- mechanical strength not less than 25 MPa;
- cohesion not less than 1.5 MPa;
- roughness of at least ± 1 mm;
- correct flatness;
- humidity degree (measured with a hygrometer) of less than 4%
- absence of rising damp (it is possible to verify the presence of this phenomenon by spreading a sheet of polyethylene and gluing its edges, waiting for 24 hours and checking whether any phenomena of conduction have occurred).

At the time of application of the resin, the substrate must be free of:

- cement grout;
- non-adherent dust and materials;
- oil and grease stains, whatever their nature is;
- wax and paraffin
- previous resinous layers, if inadequate;
- traces of rubber (left, for example, by the wheels of forklifts);
- salt efflorescence.

All detached or inconsistent parts must be subjected to volumetric recovery and any cracks or fissures must be filled.

The substrate must be subjected to shot peening performed with a T26M type metal grit radiating machine and subsequent cleaning and hoovering.

If the support is chemically degraded, a milling action

capable of removing the contaminated cortical layer is recommended.

Provide for the restoration and sealing of joints, specifically:

- for cracks with irregular shape and widespread detachments it is advisable to proceed with cutting the joint with a double track to delimit a 20 cm area and opening with a pneumatic hammer of the entire 20 cm wide portion and depth sufficient to reach any old support.
- indicate the position of the old joints brought back into view or preparation of a separation element of thickness and width coinciding with the width and depth that the joint must have.
- application of two-component consolidating resin in water dispersion Kimicover FIX.
- remaking the missing parts of the joint with epoxy mortar prepared using Kimitech EP-IN solvent-free two-component fluid epoxy resin, loaded 1 to 10 with quartz aggregates Kimifill HM with a grain size of 0-2 mm.
- The intervention will be concluded by cutting the joints (or by removing the previously positioned spacer element) and then sealing them with a two-component self-leveling polyurethane sealant Tecnoseal 88 or a cartridge Tecnoseal 130. The sealant will be applied after positioning it in the Ethafoam closed-cell polyethylene support joint.

2) TEXTURE

FIRST PHASE

On the dry and dust-free support with vacuum cleaners, roller application of high-penetration two-component epoxy resin Kimicover FIX MV respecting a consumption of not less than 0.3 kg/m²;

Fresh installation of the Kimitech 350 mesh.

Once hardened (24 hours), apply a first coat of Kimifloor ECO-BASE mixed with 20% by weight of Kimifill 1F aggregates using a plastic spatula. Apply a thickness of approximately 1.5 mm. The application surface should not be too smooth: it is recommended to leave the marks of the spatula strokes visible. Consumption of approximately 1.7-2 Kg/m².

Wait for the product to cure. In particular, acrylic resins for flooring reach optimal resistance with curing, a process that requires more or less long times, dictated by the temperatures and the level of environmental humidity. If applied in an average thickness of 1 mm at a temperature of 20°C and with good ventilation, Kimifloor ECO BASE is dry in 24 hours. The hardening time is strongly influenced by thickness, absorption of the support, temperature and ventilation of the environment.

SECOND PHASE

the substrate must be sanded with a RTA BRUSHLESS type single-brush machine (HP 2.5 at 220 volts, working diameter 52 mm) with 100-150 grit sandpaper and subsequent cleaning and priming with Kimitech K60.

Fresh, application with a plastic spatula of Kimifloor ECO-BASE filled at 15% by weight with Kimifill 1F.

The application surface should not be too smooth: it is recommended to leave visible the marks of the spatula strokes. Create a thickness of about 1 mm, respecting a consumption of 1.2-1.5 Kg/m².

Wait for the product to cure.

THIRD PHASE

Sanding, vacuuming and subsequent priming with Kimitech K60; Fresh, apply Kimifloor ECO-BASE as is with a plastic spatula. The application surface should not be too smooth: it is recommended to leave the marks of the spatula strokes visible. Create a thickness of about 0.5 mm, respecting a consumption of 1.0-1.5 Kg/m². Wait for the product to cure.

3) COMPLETION OF OPERATIONS

Sand with a RTA BRUSHLESS type single-brush machine (HP 2.5 at 220 volts, working diameter 52 mm) with 180-220 grit sandpaper.

The aggregates added to the last coat of Kimifloor ECO-BASE, if the subsequent sanding is particularly vigorous, could be exposed, with the relative color.

Depending on the desired effect, sand to highlight them more or less markedly and vacuum.

Apply a coat of Kimifloor ECO-FINITURA single-component polyurethane resin with a rubber spatula (consumption of approximately 0.1 kg/m²/coat).

Wait at least 24, maximum 48 hours (if a period of time greater than 48 hours should pass, before applying the resin, sand and vacuum thoroughly) and apply a double coat of Kimifloor ECO FINITURA PLUS (consumption of approximately 0.05 Kg/m²/coat) spreading it with a microfiber roller (previously immersed for 4 days in a bucket of water with the addition of a little wax remover to eliminate fluff that could then appear on the finish).

Each subsequent coat must be applied after the previous layer has dried (minimum 24 hours) and without letting more than 48 hours pass (if a longer period of time passes, before applying the resin, sand and vacuum thoroughly).

Wait at least 1 week before putting the flooring into operation.