CREATION OF ARMOURED RESIN FLOORING

Traditional and resin flooring

APPLICATION DATA SHEET

Armored resin industrial flooring, through the following application phases:

1. preparation of the support;
2. laying epoxy screed.
3. Priming
4. painting

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) LAYING EPOXY SCREED

Casting of Kimitech EP-IN two-component epoxy resin loaded with Kimifill HM spheroidal quartz aggregates with a resin: aggregate ratio of 1:10, to be spread with a minimum thickness of 5 mm and finished by smoothing with a manual or mechanical trowel.

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3) PRIMING

Roller application of Kimicover FIX two-component epoxy resin.
Between 24 and 48 hours after applying the primer, in the case of damp surfaces in internal environments where it is necessary to create a real thick vapor barrier, apply the three-component self-leveling water-based epoxy cement system Kimitech ECA or the water-based thixotropic system Kimitech ECF, in a maximum thickness of 3 mm. Provide for the interposition of the Kimitech 350 fiberglass mesh.

4) PAINTING OR MULTILAYER FLOORING

Proceed with the painting of the screed by applying Kimitech HLA unfilled self-leveling epoxy resin, or by creating a multi-layer flooring by spreading with a notched trowel Kimitech HLA mixed with 50% or 100% Kimifill 0.1-0.3 quartz sand for a thickness of approximately 1.5 mm with an epoxy resin consumption of 2 kg/m².

5) FINAL PAINTING

Final protective varnish to be applied in two coats Kimifloor ECO-FINITURA PLUS spreading it with a microfibre 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 be seen on the finish).

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