

WATERPROOFING SMALL AND MEDIUM SURFACES WITH CEMENTITIOUS SYSTEMS

Waterproofing of balconies, slabs and roofs

APPLICATION DATA SHEET

Waterproofing small and medium surfaces with elastic cementitious systems:

1. Cleaning of the substrate;
2. preliminary checks.
3. Check and restoration of joints and connecting gutters
4. waterproofing
5. Tiling

1) CLEANING OF THE SUBSTRATE

The cleaning operations are aimed at the total elimination of inconsistent parts, which are detached and not equipped with sufficient mechanical characteristics, dust, grease, rust, release agents, paint and varnish, cement slurry and any other substance or material that may affect the adherence of subsequent coatings.

2) PRELIMINARY CHECKS

In the case of structures not intended for permanent contact with liquids (balconies, terraces and coverings), check:

- the correctness of the slopes (if appropriate, perform interventions aimed at correcting them);
- the presence and adequacy of floor water collection systems (which should be equipped with adequate leaf protection systems) and the suitability of the devices used to guarantee the disposal of water (if the balcony or terrace is bounded by walls, make through holes and place special drip bars);
- the absence of elements that could hinder the continuity of the subsequent waterproofing (which must be adequately turned up on the walls and / or perimeter walls), proceeding with the removal and / or lifting from the ground of each machine (splitters and other plant elements) and non-structural element (any metal flashings, skirting boards etc).

In the case of concrete substrates:

- Ensure that they are properly cured and structurally sound (the pull-off tensile strength of the concrete must be > 1.5 MPa).
- Check the presence and depth of any cortical degradation and proceed with an adequate restoring cycle.
- Any deep and extensive irregularities (segregation in concrete, overflow between the pourings, excessive roughness of not properly floated bottoms, etc.) must be previously skimmed.
- In the case of waterproofing newly constructed screeds and / or laid on old membranes, between 8 and 24 hours before the start of the waterproofing, proceed with priming by brush or roller with Kimicover FIX MV (consumption of 0.2 - 0.4 Kg / sqm) of the entire surface to be treated.

3) CHECK AND RESTORATION OF JOINTS AND CONNECTING GUTTERS

If, in the construction phase of the structure, an adequate network of static (connection and fraction) and dynamic (expansion, seismic) artificial joints, properly reported in any overlying coatings (screeds, flooring), has been created, proceed, if necessary, to restore the edges and / or replace any preformed system already applied in correspondence with the joints, if they are damaged.

In the case of natural joints, formed due to incorrect sizing / non-construction of joints:

- if they have a straight or pseudo-rectilinear course, open them with flex to guarantee a width of at least 5 mm;
- in case of widespread and irregular cracks, consult the Technical Office.

In the case of tiled substrates without joints but big

enough to necessitate them, it will be advisable to recreate the joints (making an incision with the grinder in correspondence of the grout lines):

- carefully checking any damage to the coating;
- making the joints on the areas that, depending on the roof frame, could tend to behave as dynamic joints.

The joints will be waterproofed by:

- placement of the closed cell polyethylene substrate Ethafoam as a foundation for the polyurethane sealant Tecnoseal 88 or Tecnoseal 130 in the case of joints larger than 5 mm;
- application of Kimicover JOINT and laying of the reinforcement mesh Kimitech 120 to be saturated with Kimicover DUO.

The contact points between the screed and the collection gutters should be treated by applying Kimicover JOINT P, turned up inside the drain.

On the self-adhesive membrane proceed with the laying of the reinforcement mesh Kimitech 120 to be saturated with Kimicover DUO.

The joints between the wall and the floor will be waterproofed by applying Kimicover JOINT and applying Kimicover DUO reinforced with Kimitech 120 mesh.

4) WATERPROOFING

On the clean and mechanically consistent surface to be waterproofed, apply the Kimicover FIX MV primer.

In the case of small surfaces, lay mesh Kimitech 350 and apply Kimicover DUO with a trowel (mixing ratio A:B=3:1) with a consumption of about 2 kg/m², making sure of soaking the reinforcement mesh.

In the case of medium surfaces, lay mesh Kimitech 350 and apply Kimicover DUO with a trowel (mixing ratio A:B=2:1) with a consumption of about 2,5 kg/m², making sure of soaking the reinforcement mesh.

Once the mortar has cured, however not earlier than 24 hours, lay a further coat of Kimicover DUO by trowel, with a consumption of about 1 Kg / m².

5) TILING

After a minimum of 7 days the coating will be glued by using powder adhesive for tiles Aderflex KR (refer to the Technical Data Sheet for material consumption).

POSSIBLE ALTERNATIVES

For small surfaces, as an alternative to Kimicover DUO it is possible to use: Kimicover UNO, one-component elastic cementitious waterproofing.