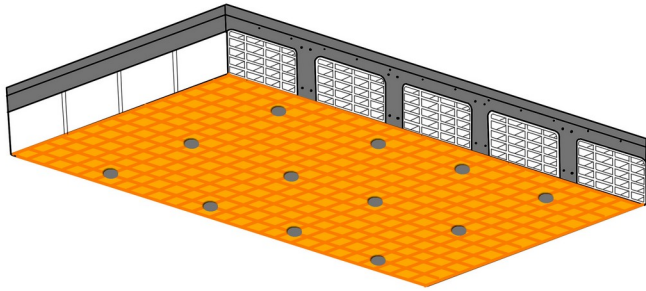


Safety and consolidating works for collapsing concrete/masonry slabs

LV103_SA_EN_R4-0619



APPLICATION DATA SHEET

Safety and consolidating works for collapsing concrete/masonry slabs, prior:

1. preparation of the surface;
2. protection and restoration of damaged concrete;
3. application of the anti-shatter mesh and dowel.

1) PREPARATION OF THE SURFACE

Remove plasters and possible false ceilings in the intrados of the floor to be consolidated and carefully remove the degraded and flaky concrete by mechanical scarification until you find a compact substrate.

Where the plasters are well adherent to the substrate and of good quality, and their removal involves the complete or partial demolition of the brick bases of the hollowcore slabs, it will be possible to evaluate the removal of the plaster only below the reinforced concrete joists.

The metal reinforcements in view must be freed of the concrete in contact with them by using a needle gun. Positioning of new collaborating metal reinforcement in case of noticeable oxidation of existing irons with a strong reduction of the section and grouting of the same with special epoxy resins.

Sandblasting or hydro-sandblasting of concrete and metal reinforcement. Wet the area to be treated to saturation and remove any stagnant water at the time of casting.

2) PROTECTION AND RESTORATION OF DAMAGED CONCRETE

Passivating mortar **Betonfix KIMIFER** will be used for the treatment of the reinforcing bars. The product will be applied by brush, respecting the consumption rates indicated in the Technical Data Sheet, on the reinforcement

to protect. Use reinforced concrete repair mortar **Betonfix FB** to regenerate the load-bearing elements of the slab.

3) APPLICATION OF THE ANTI-SHATTER MESH AND DOWEL

Apply a first uniform layer of two-component fiber-reinforced cement mortar **Betonfix AQM GG**, respecting the consumption prescribed in the Technical Data Sheet.

On the still-fresh mortar layer, place bi-directional fiberglass reinforcement mesh with anti-alkaline primer **Kimitech 550+**, fixing it to the load-bearing joists of the slab using **Kimitech ASF**: fixing consisting of a ϕ 50 mm disk and a four-sector PA6-nylon dowel and a galvanized steel screw with countersunk head and cross cut.

The application of the tile is as follows:

- Construction of an 8 mm diameter hole to a depth of 40 mm after positioning the Kimitech mesh;
- Insertion of the dowel by mechanical pressure;
- Positioning of the washer over the mesh;
- Inserting the screw inside the appropriate washer hole and screwing.

To fix the mesh laterally on the vertical walls, an angular element in galvanized or stainless steel can be used, after being drilled for the passage of the connection screws.

Cover of the mesh with a layer of two-component elastic cement-based mortar **Betonfix AQM GG**.

POSSIBLE ALTERNATIVES

It is possible to position the bi-directional fiberglass reinforcement mesh without applying the first layer of mortar, but subsequently providing for the soaking of the mesh in the mortar layer.

*As an alternative to mesh **Kimitech 550+**, fiberglass mesh **Kimitech WALLMESH HR** or **Kimitech WALLMESH MR** can be used. **Betonfix AQM GG** can be replaced with cement mortar, R3 according to UNI EN 1504-3, **Betonfix RCA**.*