Waterproofing drinking water tanks

[E3]_LV14_SA_EN_R4-1121

APPLICATION DATA SHEET
Waterproofing drinking water tanks prior:

1. preparation of the substrate;
2. waterproofing.

1) PREPARATION OF THE SUBSTRATE
Refer to the Application Data Sheet "Preparation of substrates to be waterproofed" (LV80**)** for what concerns the cleaning of the substrate; preliminary controls; preparation of the substrate; and control and restoration of joints and connecting gutters.

2) WATERPROOFING
On the surface to be waterproofed, clean, sound and wet, lay mesh **Kimitech 350**, overlapping the sheets for a 10 cm length.

Soak the mesh by applying, with a trowel, mortar **Betonfix 300**, mixed with 35% by weight of **Kimitech ELASTOFIX** with a mortar consumption of about 1,5 kg/m².

In order to prepare the mixture, stir the product for about 5 minutes with a cement mixer or, in case of small quantities, with drill and whisk. Add 3/4 of **Kimitech ELASTOFIX** and then, gradually, the remaining product until you get the right consistency. Once obtained a homogeneous mixture free of lumps, make it rest for 10 minutes.

After the curing of the first layer, not before 24 hours have passed, apply with a trowel a second layer of mortar **Betonfix 300** mixed with 35% by weight of **Kimitech ELASTOFIX** with a mortar consumption of about 2 kg/m².

In order to allow the correct curing of the mortar, in the case of procedures inside closed tanks, it is essential to ensure adequate forced ventilation (if the structure has 2 openings quite far from each other, typically, we suggest that you place a suction pipe at an opening, letting the air enter the other side. If there is only one opening, the suction pipe is placed into the tank, leaving the suction nozzle at the bottom of it, on the opposite side of the opening).

Before applying **Kimitech K40 AP bianco**, the two-component solvent-free nontoxic epoxy finishing certified for contact with drinking water, wait for the complete curing of the waterproofing coat (at least 7 days). In case of closed tank, ensure a proper air circulation with a cooling fan. The finishing coat can be applied with brush, roller, or airless gun. Follow the consumption rate indicated in the Technical Data Sheet.

Note
The basic legislative reference, still valid today, relating to materials intended to come into contact with drinking water is the Italian Ministerial Decree 1973. This latter decree indicates the verification methods (global and/or specific assignment) and the list of materials that may come into contact with drinking water (there are no cement products among the materials provided). A subsequent Ministerial Decree (174/04) allowed the use of cement products. But its provisions are "applicable to the materials making up the pipes, fittings, gaskets and accessories". However, there are manufacturers that promote the use of cementitious materials also for waterproofing tanks, taking advantage of the ambiguity provided by Article 1 of Ministerial Decree 174/04 (based on which it would seem that the standards refer to all fixed collection and water distribution systems). They do not ensure compliance with the law, and in the case of water pollution, there are criminal consequences for the designer, the applicator and the manufacturer.

POSSIBLE ALTERNATIVES
*As an alternative to **Kimtiech K40 AP White** it is possible to use **Kimitech K40 AP Yellow** two-component solvent-based epoxy yellow resin suitable for contact with drinking water.*