

## Thermo-acoustic lightening layers

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### APPLICATION DATA SHEET

Thermo-acoustic lightening layers created through:

1. preparation of the substrate;
2. creation of the lightening layer.

#### 1) PREPARATION OF THE SUBSTRATE

Perfectly clean the surface eliminating flimsy parts, grease, old paints and pressure wash. In the case of non-adherent screeds, cover the substrate with a waterproof sheet (PVC, bituminous sheath) to prevent any rising damp, while in the case of adherent screeds, apply the screed on the bonding bridge made with **Betonfix MC**.

#### 2) CREATION OF THE LIGHTENING LAYER

Lay the lightening layer, adjusting the thicknesses with normal aluminum or wood rods, considering that the useful application time is 60 minutes. The screed will be made with thermal NHY-based mortar **Tectoria TERMOFIX**. The minimum thickness of the screed must be 2 cm with a minimum consumption of material of 12 kg/m<sup>2</sup>, but ideal insulation is normally obtained with thicknesses of 3-5 cm. In localized thickness reductions at the passages of pipes or ducts, the screed must be reinforced with metal mesh.

Regardless of the thickness and type of contact with the substrate (adherent or not), it is essential to space the screeds from the vertical construction elements (walls, columns, parapets ...) with desolidization joints (a separation element as soft as cardboard, polyethylene, expanded polystyrene, etc. with a thickness of 1 cm) to allow differential movements due also to settlements, vibrations and accidental movements.

The distance between the network of fractioning and expansion joints of the screeds is calculated by imposing the balance between resisting forces and the agents generated by the hygrometric shrinkage in the casting curing phase and due to expansions and contractions from thermal excursion during the whole cycle of life.

For the creation of the joints we recommend the use of special preformed elements: for example modular profiles consisting of a profile with an enlarged base and profiles that fit inside the base module up to the desired height (this type of profiles also acts as a formwork, because the widened wings of the base module facilitate its positioning

at height).

It is necessary to make any joints present in the supporting structure on which the screed is made and reproduce them, as the original position and width, in the entire thickness of the screed and in all subsequent applications.

In the case of covering screeds, the perimeter construction of the connecting cove between the wall and the floor with a vertically recessed formation of suitable height, after at least 10 days from the construction of the screed, proceed to the thorough cleaning of the surface both vertical (for a height of about 20 cm) and horizontal with total elimination of dust, flimsy parts and any material that could compromise the good anchoring of the subsequent acrylic elastomeric waterproofing, to be carried out on a bonding bridge of **Betonfix 300** mixed with **Kimitech ELASTOFIX**.