TOP FLOOR

Cementitious floor topping and overlay

DESCRIPTION

TOP FLOOR is a single-component, cementitious, fibro-reinforced topping. Typical applications include commercial, industrial and residential floors for both internal and external use. It can be used over plastic concrete (concrete in the final stages of setting) or over hardened (old) concrete, using IDEAL BOND primer.

PROPERTIES

- Easy application
- Can be applied over plastic, or hardened concrete
- Low maintenance costs
- Excellent as Stampable Overlay 10-20 mm
- Fork-lift truck resistant
- Frost and de-icer resistant
- High surface density
- Internal and external applications
- Properly sized and graded aggregate is strictly controlled to provide consistent finishing characteristics and uniformity

AREAS OF APPLICATION

TOP FLOOR is used for internal and external concrete floor installations requiring high wear resistance, such as:

- Commercial and industrial floors
- Food processing/storage, sewage and water treatment plants
- Hospitals, car parks, garages, schools, shopping centres and theatres
- Show rooms, pubs, shops

INSTALLATION

Mixing procedure for TOP FLOOR
TOP FLOOR should be mixed in a rotating drum concrete mixer. Mix 25kg of TOPFLOOR with approximately 4 litres of water. Start by putting half of the water into the mixer and adding all the TOP FLOOR. It should be mixed for 3 to 5 minutes while adding the rest of the water. Mix until a uniform consistency is achieved.

1) Technique for placement over hardened concrete using IDEAL BOND primer
The base concrete, min. 25 N/mm^2 grade must be pre-treated by scarifying and then high-pressure washing. The surface must be free from cracks, cement slurry, dust and loose particles, oils, grease and other contaminations, rough and open-pore. The surface strength has to be a minimum of 1.5 N/mm^2. Any cracks in the concrete substrate will have to be repaired before placement of the TOP FLOOR. If they are not repaired or their causes corrected, the TOP FLOOR will crack in the same place. The base concrete is to be pre-wetted 1 day prior to the installation, avoiding formation of any puddles.
Mix the primer IDEAL BOND. To a 25kg bag of IDEAL BOND add approx. 5-7 water, depending on the porosity of the concrete substrate, and stir for approx. 3 minutes with slow speed stirrer until a uniform, creamy consistency is achieved. Do not use over-moistened material. Afterwards brush the material with a hard

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street broom, to a thickness of approx. 1-2mm, on to the prepared sub-base. Coverage is usually 2 kg per m2. TOP FLOOR should be immediately applied while the primer IDEAL BOND is still wet. Check IDEAL BOND technical sheet for more information.
Place the mixed TOP FLOOR (see above for mixing procedure) on the surface of the concrete and screed it. Use normal concrete finishing methods to finish the surface of the TOP FLOOR. For best results, use a power trowel with float shoes to keep the topping open, allow proper water evaporation and minimise the danger of surface blisters. After the TOP FLOOR has stiffened further, it should be machine or hand trowelled to a blemish free finish. Care should be taken not to trowel-burn the surface.

2) Technique for placement over plastic concrete

NOTE: This technique is the most difficult to perfect. We recommend the application of TOP FLOOR on hardened concrete and suggest this method is only undertaken by experienced operatives.
SUBSTRATE CONCRETE REQUIREMENTS: The substrate concrete should be designed to develop a minimum of 25 N/mm^2 compressive strength. It must not contain chlorides, stearates or other substances which are corrosive. The air content of the substrate concrete should be 3% maximum and the slump shall not be greater than 125mm.
PLACEMENT OF SUBSTRATE CONCRETE: Pour the concrete and screed to the level allowing for the desired thickness of the TOP FLOOR. The surface should be brushed or roughly power trowelled using float shoes so the surface is rough and open. When the concrete can sustain the weight of the power float and/or the operators the application of the TOP FLOOR can begin. It is very important that you don't allow the concrete to form a "dry" crust\film.
A bonding agent is not recommended when TOP FLOOR is being placed on plastic concrete.
Place the mixed TOP FLOOR (see above for mixing procedure) on the surface of the concrete and screed it. Use normal concrete finishing methods to finish the surface of the TOP FLOOR. For best results, use a power trowel with float shoes to keep the topping open, allow proper water evaporation and minimise the danger of surface blisters. After the TOP FLOOR has stiffened further, it should be machine or hand trowelled to a blemish free finish. Care should be taken not to trowel-burn the surface.

3) Techniques for Placement as Stampable Overlay using IDEAL BOND primer

The base concrete, min. 25 N/mm^2 grade must be pre-treated by scarifying and then high-pressure washing. The surface must be free from cracks, cement slurry, dust and loose particles, oils, grease and other contaminations, rough and open-pore. The surface strength has to be a minimum of 1.5 N/mm^2. Any cracks in the concrete substrate will have to be repaired before placement of the TOP FLOOR. If they are not repaired or their causes corrected, the TOP FLOOR will crack in the same place. The base concrete is to be pre-wetted 1 day prior to the installation, avoiding formation of any puddles.
Mix the primer IDEAL BOND. To a 25kg bag of IDEAL BOND add approx. 5-7 water, depending on the porosity of the concrete substrate, and stir for approx. 3 minutes with slow speed stirrer until a uniform, creamy consistency is achieved. Do not use over-moistened material. Afterwards brush the material with a hard street broom on to the prepared sub-base to a thickness of approx. 1-2mm,. Coverage is usually around 2 kg per m2. The mixed TOP FLOOR (see above for mixing procedure) should be immediately applied while the primer IDEAL BOND is still wet. Check IDEAL BOND technical sheet for more information.
During installation, use a power trowel with float shoes to keep the topping open, allow for water evaporation and minimise the danger of surface blisters.

Stamping

While the TOP FLOOR is still wet it is possible to apply a light coat of IDEAL WORK COLOUR HARDENER. Work the surface with the Aluminium Bull Float as usual. Before stamping the surface apply a light coat of IDEAL WORK POWDER RELEASE AGENT which can be of a different colour from the colour hardener if an antique effect is desired. Alternatively the same colour powder release agent can be used or IDEAL WORK LIQUID RELEASE AGENT can be brushed onto the stamping mats.

Washing and Sealing

When the floor is clean and washed, it is recommended to apply 2 coats of IDEAL SEALER REGULAR.

Joints placement.

Joints in the base concrete and TOP FLOOR must coincide. Joints placed in the TOP FLOOR must pass through its full thickness and into the base concrete to the depth and spacing required by ACI 302. After curing for 30 days, fill the joints with IDEAL FLEX-PU.

IMPORTANT: Curing

Wet cure TOP FLOOR for a minimum of five days. A curing compound can also be used. For a perfect curing process in the next 48-72 hours from the TOP FLOOR placement, we recommend laying some Membrane DPM (or canvas) wet with water.

CONSUMPTION

Typical application depth for TOP FLOOR range from 10 - 20mm, the minimum recommended is 8mm.
For a topping 10mm thick, approximately 22kg of TOP FLOOR per m².

IDEAL BOND Primer: Coverage is usually 2 kg per m².

Processing temperature: > 5°C < 25°C

PACKAGING

TOP FLOOR is sold in 25 Kg bags. It contains cement. Bags are to be stored in a cool, dry place to prevent water contamination. Shelf life is a minimum of 6 months if kept in the factory sealed bags.
The absolute quality of the material used and the high standard of packaging allow IDEAL WORK products to be produced, packaged and delivered in perfect condition, without contamination or compromise. IDEAL WORK cannot be responsible for any damage or contamination which occurs during transportation.

SUGGESTIONS AND WARNINGS

Please read data sheets of the products IDEAL BOND , COLOUR HARDENER, POWDER RELEASE AGENT, LIQUID RELEASE AGENT, L&M CURE, IDEAL SEALER, and IDEAL FLEX-PU before use.

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