

BETONTOP

Pre-blended, fibre-reinforced concentrate admixture for overlay concrete flooring (2,5-6 cm)

DESCRIPTION

BETONTOP is an innovative product, specifically designed as an overlay for concrete flooring.

BETONTOP is composed of a special fibre-strengthened mixture, based on siliceous aggregates, special workability aids, shrink compensating agents and efflorescence inhibitors.

This special concentrated formulation makes it possible to add the cement directly on site, thereby providing some immediate advantages:

- The material can be used for much longer as it is non-reactive
- Shipment costs are reduced
- It is possible to use local aggregate and sand. Lower costs and lower impact for the environment.

MAIN APPLICATIONS

- Concrete flooring Restoration, inside and outside
- Overlay stamped Concrete (2,5-6 cm)
- Industrial Flooring
- Decorative concrete flooring

MIXTURE PROPERTIES

- Excellent workability, similar to standard concrete
- Higher freeze/thaw resistance
- Higher compressive and flexural strength
- High-abrasion resistance
- The special formulation is designed to work with reduced water: cement ratio, so improving durability
- Flexibility of the process makes both large and small projects economic
- Homogeneous results
- Other additives are not needed
- Easy to use

TECHNICAL INFORMATION

Description	Standard	Value
Concrete adhesion with Ideal Bond	UNI EN 1542	2,00 N\mm ²
Slump (using Tech-data mixing ratio)	UNI EN 206	S3
Apparent volumetric mass of wet mortar	UNI EN 1235/6	2.350 kg\m ³
Compression strength 1 day	UNI EN 12390/3	13 Mpa
Compression strength 7 days	UNI EN 12390/3	31,7 Mpa
Compression strength 28 days	UNI EN 12390/3	43,7 Mpa
Flexural Strength after 28 gg	UNI EN 12390/5	5,5 Mpa
Hydraulic shrinkage after 7 gg	UNI EN 6555	120 µn\m
Hydraulic shrinkage after 28 gg	UNI EN 6555	300 µn\m

The technical data of the tests may vary if the aggregates, or the type of cement or water-cement ratio are changed.

SURFACE PREPARATION

The concrete base must have a compressive strength of at least 25 N/mm², and the surface must be prepared by previous etching, milling, grit blasting or high-pressure washing etc. The surface to receive BETONTOP must be free of all dirt, stains, oils, adhesives, previous sealers and other contaminants. All cracks should be repaired so as to avoid transference through the topping, and the surface left uniform and rough or porous.

Good preparation of the substrate is essential. The surface strength (Pull-Test) of the surface must be at least 1.5 N/mm².

All surfaces must be thoroughly washed and cleaned one day before the placement of the BETONTOP topping. They must be clear of any standing water, although they can still remain damp when IDEAL-BOND is applied, in order to limit water absorption from the bonding material by a dry substrate.

IDEAL-BOND MIXTURE

To a 25kg bag of IDEAL-BOND, add approximately 6-7 litres of water and mix for approximately 3 minutes with a low-speed mixing drill, until a suitable plastic consistency is established. Do not use excessively wet material. Apply IDEAL-BOND by means of a hard-bristle broom. Recommended thickness is 1-2 mm to a surface which must not be excessively wet.

After placing the IDEAL-BOND, apply BETONTOP topping immediately "fresh on fresh", before the primer has an opportunity to dry out. If IDEAL-BOND dries too rapidly, it will be necessary to apply a further coat of the product.

CONSUMPTION

BETONTOP can be mixed directly in the mixer with cement, sand and aggregates. Basic proportions are:

1 Part BETONTOP
 1 Part Sand 0-6 mm
 2 Parts Cement
 7 Parts Aggregate 5-15 mm (the size can varies depending on the thickness of the floor)

Quantities are expressed in Kg.

When mixing, first add 50% of the aggregates, followed by 50% of the water, then the BETONTOP, then the cement, sand, then finally the remainder of the aggregates and water.

We recommend a maximum 0.48 water/cement ratio, so add maximum 22-24 liters of water per 50 kg of cement.

This formulation may vary depending on the aggregate particle size, the performance sought and the requirements of the site and client. Consult IDEAL WORK if there are any doubts. The aggregates must be washed and cleaned.

The approximate material consumption for a thickness of 1 cm, based on standard formulation should be obtained from:

BETONTOP		2 Kg per sqm / 10 mm thick
CEMENT		4 Kg per sqm / 10 mm thick
SAND	0-6 mm	2 Kg per sqm / 10 mm thick
AGGREGATES	5-15 mm	14 Kg per sqm/ 10 mm thick

We recommend working with a minimum thickness of 2,5 cm.

Working temperature: higher than 5°C but lower than 28°C

JOINTS and CURING

In the case of over placement “fresh on hardened” working, the existing joints must be mirrored through to the new surface. Joints must be cut as soon as possible, to avoid risk of plastic shrinkage cracking.

Wet cure BETONTOP for a minimum of 3 days. For a perfect curing process in the next 48-72 hours from the BETONTOP placement, we recommend laying some Membrane DPM (or canvas) wet with water. A curing compound can also be used (example L&M CURE).

RELATED PRODUCTS

- IW-EC
- Cement-Scud Sacrificial protective gel

Please, see Technical data sheets

PACKAGING

The product is sold in 25kg bags and needs to be stored in a dry place. Shelf life: minimally 12 months from purchase.

The absolute quality of the material used and the high standard of packaging, in secure plastic containers, allow IDEAL WORK materials 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 IDEAL-BOND before use.

If the aggregates are really dry, wet them before mixing with BETONTOP, sand and cement.

IMPORTANT:

All information contained in this data-sheet is based on the best practical and laboratory expertise. The customer is responsible for checking the product is suitable for use. The producer does not accept any responsibility arising from wrong applications. We recommend testing the products on small surfaces before use. This data-sheet replaces and annuls the previous ones. Data might be changed anytime. We also remind you that Ideal Work products are for professional use and Ideal Work provides customers with training opportunities upon request. Whoever uses these products without authorisation, shall take full personal responsibility and at their own risk.

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