Builda-Flex 400

We Create Better Future

Flexible Cementitious Waterproofing Coating

Description:

BUILD FLEX 400 is a two component acrylic modified cementitious waterproofing coating composed of high qualitycement, graded aggregates, hydrophobic additives and specially formulated polymeric liquid compound. It can be applied on concrete, bricks, cement plasters, masonry etc.

Advantages:

- Flexible and can accommodate cracks
- Easy to use-can be brush, spray or trowel applied
- Polymer rich, improves adhesion and mechanical strength
- Bonds to green or damp concrete
- Withstands high hydrostatic pressure
- Breathable, water vapour permeable
- Excellent protection against carbon dioxide, chloride ions and water
- Nontoxic, suitable for contact with potable water tanks

Uses:

General applications of **BUILD FLEX 400** include

- Internal waterproofing on both old and new surfaces against ground moisture, humidity, pressure water
- Waterproofing for potable water storage tanks swimming pools and water reservoirs, canals
- Wet area waterproofing for bathrooms, kitchens, balconies, terraces prior to floor tiling
- Waterproofing of below grade structures like retaining walls, basements and foundations
- Can be applied in maintenance on top of existing ceramic or marble flooring as waterproofing coating prior to fixing new tiles

Technical properties (at 25^{0}C/50% R.H)

Applicable Standards:	DIN1048,ASTM D412,ASTM C836-95
Basis-2 Comp	Comp. A- Cementitious dry mix powder blend Comp. B –co polymer dispersion
Color	Grey
Mixed density	2 Kg/Liter
Applicable temp	+5^{0}C - + 35^{0}C
Workability	approx. 40-60 minutes
Recoating interval	approx. 1.5-4.0 hours depending on climate condition
Elongation (ASTM D412)	approx. 20%
Tensile strength (ASTM D412)	> 1 N/mm^2
Crack bridging (ASTM c 836-95)	> 0.5 mm
Water permeability (EN 123 90)	Nil at 5 bar Pressure
Pull off strength 28 days over concrete surface (ASTM D4541-2002)	>1.0 N/mm^2
Resistances to positive:	
Water pressure at film thickness 1.5-2.0 mm (DIN 1048)	5 bar (50m head of water)
Exposure to:	
Pedestrian traffic	after 24 hours
Pressure water	after 7 Days
Setting of tiles	after 24 hours

- Properties are based on laboratory-controlled tests

Instruction for use:

Surface preparation:

All surfaces which are to receive the coating must be free from oil, grease, wax, dirt curing compounds or any other contaminant that could impair adhesion. Laitance should be removed by light sweep blasting or hydro-jetting. Mechanical wire brushing can be suitable for small areas. Spalled concrete should be cut back to sound concrete and repaired using **BUILDA REP FIBER.**
Shrinkages and non-moving structural cracks less than 0.3mm shall be filled with a pre-treatment strip of **BUILD FLEX 400** directly bridging over the crack. Static crack wider than 0.3mm shall be repaired by chiseling the crack into a V shape to a depth and width of 25mm followed by the application of suitable **BUIDA REP** repair products. In corners and right angle bends, a 45^0 coving fillet shall be made using **BUILDA REP FIBER**.

Priming:

Priming is not normally required on good quality concrete substrates. However, all cementitious surface should be thoroughly soaked constantly to a saturated but surface dry condition prior to application of **BUILDA FLEX 400**. Do not apply the coating when substrate is wet.

Mixing:

The liquid (Comp. B) should be poured into the plastic pail the powder bag (Comp. A) is gradually added to the liquid whilst mixing with spiral paddle fitted to a variable speed drill. Mix constantly for minimum 3-4 minutes at 300-400 rpm, moving the paddle around the drum until a lump free slurry is obtained.

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شركة كيماويات البناء للصناعة

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Application:

Apply the mixture with a spatula or a brush in at least two coats, with a thickness of not more than 1.0mm per coat. Care must be taken to fill the imperfections such as blow holes during application. The first coat must preferably be applied by brush. It must be applied intensively to provide a closed surface and a saturation coverage. (Consumption approx. 1.9 Kg/m^2 for 1mm thickness). Allow the first coat to cure for a minimum of 4 hours at 25 ^{0}c /50% R.H i.e. till the coating surface is firm and un markable to touch.
The second coat should also be applied at a wet film thickness of 1mm. Pre-dampening of the surface is not necessary before the application of second coat. Finish in one-direction for a neat appearance. On surfaces that are exposed to movements and deformation or where cracks are expected, reinforcing glass fiber mesh should be bedded into the first coat while still wet. Immediately after placing, apply a further thin coat of **BUILDA FLEX 400** to 'wet' out the mesh. Allow to set before applying the second coat.

Curing and protection:

Surface treated with **BUILD FLEX 400** must be kept damp and be protected from drying action of direct sunlight for a minimum period of 3 days.

Equipment Care:

All tools and equipment should be cleaned immediately after use, with water. Cured material can only be removed mechanically.

Coverage:

Approx.2 Kg per sq. meter at 1 mm dry film thickness, depending on the surface conditions

Packaging:

BUILDA FLEX 400 is supplied as

	25 kg kit
Comp. A (powder)	20 kg
Comp. B (liquid)	5 liter

Storage:

The kits kept in tightly closed packing and in sheltered and dry place maintains its characteristics for 12 months.

Health and Safety:

BUILDA FLEX 400 can be harmful to skin as it contains cement powder which may release alkalis when mixed with water.
During application wear appropriate protective clothing, goggles, gloves, and respiratory equipment if necessary.
In case of contact with skin, rinse with water and again wash thoroughly with soap and water.
In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.
If ingested, obtain medical attention immediately.
Do not induce vomiting.
For details refer to product safety data sheet.

Important Note:

The information contained herein is to the best of our knowledge true and accurate and is given in good faith, based on practical experience and applied testing Site or application – specific conditions may vary from those described here and thus the correct and successful use of the product is beyond our sphere of influence. If in doubt, the user should therefore first carry out sufficient tests to ensure the product is suitable. Legal liability cannot be accepted, either solely based on the content of this information sheet or any verbal advice given.
All **IBCF** Datasheets are updated on regular basis. It is the user's responsibility to obtain the latest version.

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