

Alfa Kind DUET 1000

Two component flexible, polymer-modified, cementitious waterproof coating



Description

Alfa Kind DUET 1000 is a two component, flexible, polymer modified coating which waterproofs and protects with crack bridging properties. It is used on concrete, masonry, brick and some natural stone substrates. It has excellent adhesion characteristics and provides a seamless system which can be top-coated with rough surfaced tiles, pavers, paint, or other coatings.

Advantages

- Excellent barrier to carbon dioxide, chloride and sulphate ions
- Vapour permeable - No blistering of coating
- Easy to use – can be brush, roller applied
- Waterproof – resistant to 3 bar (positive side water pressure)
- Non toxic
- Flexible, with thermal expansion similar to concrete
- Excellent bond to concrete and masonry
- Crack bridging : 1-2 mm
- Weathering tolerant
- Bonds well to damp substrates without priming

Application Area

It is used for waterproofing and to protect atmospherically exposed reinforced concrete structures from attack by acid gases, chloride ions, oxygen and water. It is suitable for all types of structures including those in coastal environments, horizontal waterproofing, beneath masonry, external waterproofing of old and new buildings against ground moisture, humidity and pressured water.

Waterproofing beneath tiles

- Waterproofing beneath tiles in wet rooms, where water impermeability against long term and permanent water stagnation table is present i.e. in bath rooms, kitchens, shower rooms, on balconies and terraces.
- For waterproofing inside swimming pools The product can be used on concrete, brick and block work substrates and is equally suitable for new and existing structures. The product is designed to reface and even out variations in concrete and masonry surfaces and bridge shrinkage cracks. It provides a seamless, flexible waterproof coating suitable for water tanks, reservoirs, drainage culverts basements and roofs. The product provides a tough durable water resistant coating which can withstand light pedestrian traffic.

Standard Compliance

Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836, ASTM D412.

Technical Properties

Pot life	: 30 mins @ 30°C
Mixed density	: 1.68g/cc (brushable consistency)
Tensile strength (As per ASTM D 638)	: 0.84MPa (at 1.5mm thickness)
Colour	: Grey
Application temp	: Not less than 10°C
Adhesion to concrete	: Excellent
Toxicity	: Non-toxic
Static crack accommodation	: 1- 2 mm
Elongation	: Enough to bridge 1 - 2 mm wide cracks
Pull of adhesion strength	
On concrete surface @28 days	: 1.24 MPa

Instructions to use

Surface Preparation

The surface must be clean, sound and fine pored. It must be free from bond breaking materials such as grease, wax, laitance, dust, pockets, cracks and ridges. Alfa Kind DUET 1000 is suitable for smooth concrete, screed, mastic asphalt, plaster, gypsum board and masonry. Use suitable methods such as e.g. wire brushing, vacuuming, grinding, milling, shot blasting and water jetting to prepare the substrate dependent on its condition.

Details: Fillet cove, ledging corner - Form between masonry and foundation a fillet cove of 4 cm thick with pre-blended mortar or cement based mortars. Spalled surfaces or those containing large blow holes, cracks and other such defects should be repaired using repair mortars.

Mixing

Pour and mix approx. 2/3 of the Part B liquid component into a clean container having clean fresh water in the proportions shown below and add Alfa Kind DUET 1000 powder part A component whilst stirring until a lump free mass is achieved. Mixing time of 2 - 3 minutes is required. After that, add the remaining liquid component and stir until a uniform consistency is achieved. Alfa Kind DUET 1000 should be immediately used after mixing. Do not mix more material than can be consumed within the pot life. Keep stirring Alfa Kind DUET 1000 during the application.

Mixing Proportions

Alfa Kind DUET 1000	Brushable Application	
Components	Inds. Pack	Small Pack
Part A (Powder)	15kg	5kg
Part B (Liquid)	5kg	1.76kg
Water	3 liter	1 liter

Application

For best results, surfaces should be damp during application. Alfa Kind DUET 1000 can be applied by brush, roller or appropriate spray equipment. If larger thickness is required, it can be trowel applied.

At least two coats of Alfa Kind DUET 1000 are necessary. The applied thickness of the waterproofing must correspond with the required minimum thickness for the expected degree of waterproofing.

Apply second layer only when the first coat will not be damaged by further applications (at +20 °C after 4 hours at the earliest). Due to the possibility of crack formations avoid applied thicknesses greater than 2 kg/m² (= 1 mm dry film thickness) in one application. For protection of the Alfa Kind DUET 1000 waterproofing a tear resistant polypropylene fleece of 70 gsm may be embedded into the last layer. The application of Alfa Kind DUET 1000 should not be done if the temperature of the substrate is below 10°C. When applying Alfa Kind DUET 1000 on hot substrates i.e., over 30°C surface temperature, saturate the surface with water. Apply Alfa Kind DUET 1000 in 2 coats. The second coat of Alfa Kind DUET 1000 shall be applied as soon as the first coat has reached touch dry state. It is recommended that for general surfacing Alfa Kind DUET 1000 should be applied at a minimum thickness of 1mm. Areas subjected to moderate and heavy loads/hydrostatic pressure, minimum 2mm thickness coating is recommended with screed above.

Allow the Alfa Kind DUET 1000 coating to dry before covering with screed. Sprinkle coarse sand on wet surface of final coating for better adhesion of screed. A fleece reinforcement is recommended.

Average drying time is 4 to 6 hours at normal temperatures.

Cleaning

Alfa Kind DUET 1000 should be removed from tools and equipment with clean water immediately after use. Hardened material can only be removed mechanically.

Alfa Kind DUET 1000



Estimating Packaging

Small pack : 5kg (powder component) and 1.76 kg liquid polymer component combo pack

Industrial pack : 51kg (powder component) and 5 kg liquid polymer component combo pack

Coverage

This depends on the required consistency. The approximate coverage per pack at even consistency is as follows:

Consistency : Brush application

2 Coverage (15kg + 5kg pack) : 10 - 12m @1mm thickness

2 Coverage (5 + 1.76 pack) : 4 - 4.5m @1mm thickness

Actual coverage for the given surface should be determined by trials.

Shelf Life

Alfa Kind DUET 1000 has a shelf life of 12 months if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

Health & Safety Instructions

Alfa Kind DUET 1000 is non-toxic but alkaline in nature. Gloves and goggles should be worn. Any splashes to the skin or eyes should be washed off with clean water. In the event of prolonged irritation, seek medical advice. Use a dust mask while handling the powder.

Important note :

The products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst The company endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.



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