D-1



Brushable waterproofing mortar for walls, floors, basements and roofs





PROPERTIES

Brushable cementitious waterproofing mortar with excellent adhesion. It fully waterproofs surfaces due to its polymer and water repelling ingredients. D-1 of is suitable for positive (preventive exterior application) and negative (interior application for repair purposes) hydrostatic pressure applications. It is resistant to frost. It is water vapour permeable (breathable).

Classified as product for surface protection of concrete surfaces (c), per EN 1504-2 principle 2 MC (Moisture control), principle 5 PR (Physical resistance) and principle 8 IR (Increasing resistivity). The product has received an Environmental Product Declaration (EPD) following an assessment of the environmental impact of its life cycle. Registration number: S-P-13764, The International EPD[®] System.

APPLICATIONS

Apply on well soaked (carefully dampened) surfaces made of concrete elements, walls and floors. It waterproofs surfaces made of brick, concrete blocks and cement screeds as well as plaster and aircrete, etc. Ideal for the exterior waterproofing of basements and walls, prior to backfilling. Sealed surfaces with D-1 have to be protected by a drainage membrane (dimpled membrane). D-1 is ideal even for 'post backfilling' waterproofing of vertical or horizontal interior surfaces. It is necessary to remove the plaster with moisture, throughout the area, before the waterproofing. Excellent for waterproofing underground floors and ground level floors, protecting them from rising damp. It fully waterproofs water tanks, swimming and athletic pools, bathrooms and showers, as well as flower planters, air shafts and tunnels. Walls made of brick or concrete blocks must be waterproofed before applying the scratch coat of plaster. The product is

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also recommended for pitched concrete roofs before lining with clay roofing tiles, north facing walls and generally any mineral surface exposed to partial or continuous moisture.

USE

1. Surface preparation

Remove all wood wedges, polystyrene and sharp protrusions. Cut the snap ties and tie rods 2-3cm deep and coat them using RUST FREE POWDER (corrosion inhibitor). Seal the newly formed holes using D-55, DUROFIX, D-11 SUPER FAST or DS-247 of DUROSTICK. Continue by thoroughly cleaning all surfaces from loose materials, formwork oils and salts using the biodegradable cleaner BIOCLEAN INDUSTRIAL. Rinse thoroughly with plenty of water.

2. Application

DUROSTICK D-1 applies to meticulously soaked surfaces in 2-4 equal thickness crosswise coats of 1mm thick each one. Use an emulsion or a round chalk brush or a roller for emulsion paints, or even metal trowels. Empty the product in a clean container with cool water, at a mixing ratio of 25kg powder to 6.0-6.5lt water. Mix using a low-rpm drill equipped with the appropriate attachment (recommended), until a lump free, homogeneous mass is obtained. The mixture has to be thick enough so it does not drip from an emulsion brush or roller. The mixture remains workable for 60 minutes. Apply each additional coat approximately 2 hours after of the previous one, and while the previous one is still fresh. In case the product remains on the surface longer than 2 hours, resoak the surface. Protect the finish surface for the next 24-48 hours, after its application completion, from high temperatures by frequently soaking (dampening) it. Protect the surface from frost using polystyrene slabs.

NOTES

• If the substrates to be coated with DUROSTICK D-1 have hairline cracks or there is a need to protect them from natural or other types of vibrations (digging equipment working in adjacent locations), use an acrylic additive. Add the acrylic emulsion D-20 of DUROSTICK in the mixing water at a ratio of onepart water to one-part D-20, up to two parts water to every one-part D-20. Alternatively, use 5 parts water to one-part DUROMAX to ultimately increase the flexibility of the product, the surface resistance to abrasions, its adhesion and waterproofing as well. •D-1 should not be mixed with more water than specified.

CLEANING

Clean all tools with water, immediately after use.

CONSUMPTION

1.0-1.3kg/m²/mm thick coat.

LOAD	MINIMUM CONSUMPTION	MINIMUM TOTAL THICKNESS
Moisture	2.0kg/m² (2 coats)	Approximately 1.5mm
Water exerting min. pressure	3.0kg/m² (3 coats)	Approximately 2.0mm

STORAGE

•Paper bag 25kg: 12 months from the date of production.

•Plastic packaging 5kg: 18 months from the date of production.

Store in tightly closed packages, in dry and shaded places.

SAFETY DIRECTIONS

The product contains Portland cement. Before use, refer to the cautions on the product's package or the Safety Data Sheet.

PACKAGING

Carton box with 4 bags of 5kg each one Paper bag of 25kg on a 1,500kg pallet.

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TECHNICAL SPECIFICATIONS (Measurement conditions 20°C and 50% R.H.)			
Form - Color	Cementitious mortar - White, gray		
Bulk density of dry mortar	1.10±0.05kg/lt		
Bulk density of fresh mortar	1.60±0.05kg/lt		
Maximum grain size	0.6mm		
Water requirement	6.0lt of water in 25kg mortar		
Application temperature	From +5°C to +35°C		
Temperature resistance	From -30°C to +90°C		
Pot life	1 hour		
Application thickness	1mm/layer		
Foot traffic	After 3 hours		
Backfilling	After 3 days		
Water tightness per DIN 1048	Under water pressure of up to 7 Atm (kg/cm²)		

PRODUCT PERFORMANCES		
Abrasion resistance per EN ISO 2409	weight loss < 3000 mg	
■ Permeability to water vapour S _D , per EN ISO 7783-2	S _D ≤ 2m (class I , water vapour permeable)	
■ Capillary absorption and permeability to water w, per EN 1062-3	w ≤ 0.06kg/m².h ^{0.5}	
Adhesion strenght, per EN 1542	≥ 1.80 N/mm²	
Impact resistance, per EN ISO 6272-1	50Nm (class III)	
Reaction to fire	Class A1	

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