

5.4 Products for plastering & repairs

DUROSTICK D-55

Resin and fiber reinforced repairing cementitious mortar with rust inhibitor, for 2-20mm per coat

PROPERTIES

Repair mortar with high mechanical strengths, for coats of 2-20mm/coat. It does not require any formwork for vertical applications.

The corrosion inhibitor in its composition prevents the oxidation of the concrete rebars.

It has strong adhesion to the substrate, and excellent workability, resistance to moisture and frost while it eliminates bursting.

Classified as concrete repair product, in PCC R3 category, per EN 1504-3.

APPLICATIONS

D-55 of DUROSTICK is ideal for repairing cracks in floors, walls and to cover manufacturing defects created during and after pouring concrete.

It restores damaged concrete fascias of balconies, columns and beam corners. This damage could occur from the oxidation of their steel reinforcement, from weathering or even impact.

It is highly recommended and created for repair works in tunnels and canals, for creating coving on roofs, before applying waterproofers, as well as to cover and repair weathered sections around frames and /or marble saddles.

USE

1. Surface preparation

All cementitious substrates have to be free from loose materials, dust and formwork oils. They have to be thoroughly soaked as well.

When the substrate is unsound, prime it with either the micromolar stabilizer AQUAFIX, the acrylic emulsion D-20 or the DUROSTOP of DUROSTICK.

When dealing with rusted rebars,

remove the rust and coat the steel surface with the corrosion inhibitor, RUST FREE POWDER.

Alternatively, prime with NATURAL RED LEAD or METAL PRIMER of DUROSTICK.

2. Application

Empty the cement mortar, D-55 in a clean container with water, at a ratio of 25kg D-55 to 5.5lt of water (1.1lt to 5kg) and mix with a low rpm electric mixer or a cement mixer.

The mixture remains workable for 2 hours.

Apply it by 'pressing' with a gauging trowel or by injecting, in thicknesses of up to 20 mm/coat.

Where applying a second coat over an existing, fully cured one, the surface has to be roughened/scabbled to achieve proper adhesion.

NOTES

When D-55 is mixed with improving resins, such as DUROMAX, replace 10% of the mixing water with the resin. Alternatively, use DUROSTOP or D-20 of DUROSTICK, and replace 20-30% of the mixing water with the resin. This procedure increases adhesion and water tightness, flexibility and reduces shrinkage.

Protect the finish surface from frost and high temperatures.

Soak the new surfaces periodically, at least for the next 24 hours.

STORAGE

•**25kg Paper bag with valve:** 12 months from production date.

•**5kg Plastic bag:**

18 months from production date

Store in the factory sealed packages, in dry and shaded places.



TECHNICAL SPECIFICATIONS (Measurement conditions 20°C and 50% R.H.)

Form - Color	Cementitious mortar - Gray
Toxic	No
Bulk density of dry mortar	1.40 ± 0.05 kg/lt
Bulk density of fresh mortar	1.80 ± 0.05 kg/lt
Maximum grain size	1.3 mm
Water requirement	5.5 lt water in 25 kg mortar
Application temperature	From +5°C to +35°C
Temperature resistance	From -20°C to +80°C
Pot life	2 hours
Maximum application thickness	2 cm
Chlorides content, per EN 1015-17:	< 0.05%

MECHANICAL STRENGTHS

Flexural strength, per EN 12190, after:	
• 28 days	5.00 ± 1.00 N/mm ²
Compressive strength, per EN 12190, after:	
• 48 hours	15.00 ± 2.00 N/mm ²
• 7 days	20.50 ± 1.00 N/mm ²
• 28 days	30.00 ± 1.00 N/mm ²
Adhesion to concrete, per EN 1542	≥ 1.70 N/mm ²
Modulus of elasticity, per EN 13412	≥ 15.50 GPa
Resistance to carbonation	Yes
Adhesion after 50 freeze-thaw cycles, per EN 13687-1	≥ 1.60 N/mm ²
Capillary water absorption w, per EN 13057	w ≤ 0.5 kg/m ² .h ^{0.5}

CONSUMPTION

Approximately 15kg/m²/cm thick coat.

CLEANING

Clean all tools with water, immediately after use.

SAFETY DIRECTIONS

The product contains Portland cement. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

NOTE

After hardening, the product is harmless to health and the environment.

PACKAGING

Carton box with 4 bags of 5kg each one

Paper bag of 25kg on 1,500kg pallet