

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. The corrosion inhibitor in its composition prevents the oxidation of the concrete rebars. Classified PCC R3 as concrete repair product, per EN 1504-3.

ADVANTAGES

- It has strong adhesion to the substrate
- Excellent workability
- Does not sag in thickness of up to 2cm, even on vertical applications
- Does not show any cracks
- Resistant to moisture and frost
- High mechanical strength.

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 constructing coving mortars for roofs, before applying waterproofers, as well as to cover and repair weathered sections around frames and /or marble saddles.

USE

1. Surface preparation

The substrate must be free of dust, oils and loose materials. Before the application, thoroughly soak the substrate or prime using the micromolar stabilizer, AQUAFIX of DUROSTICK.

2. Application

Empty D-55 in a clean container with cool water, at a ratio of 25kg mortar to 5.5lt of water (1.1lt to 5kg). Mix using a low-rpm drill with the proper mixing attachment, until a lump free, homogeneous mixture is created. The mixture remains workable for 2 hours. Apply the mortar by either 'pressing' it with a gauging trowel or by using an injection machine, in thicknesses of up to 20mm thick per coat. Where applying a second coat over an existing, fully cured one, the surface has

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to be roughened/scabbled to achieve proper adhesion, with the appropriate mechanical means (chisel, chipping gun etc.).

NOTES

- When the steel reinforcement (rebar) is corroded, remove all the rust with RUST REMOVER of DUROSTICK and apply DUROSTICK RUST FREE POWDER the cementitious corrosion inhibitor for rebar protection
- Adding DUROSTICK D-20 in the mixing water at a ratio of 1:3 or DUROMAX at a ratio of 1:6, increases its flexibility and watertightness, but also changes its setting time
- Do not add any water if the mixture has started to cure• Protect the final surface with wet burlap or occasional soaking for the next 24 hours (especially in the summer months)
- After its full cure, the product is harmless to health and the environment.

CLEANING

Clean all tools with water, immediately after use. When cured, clean only by mechanical means.

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.

CONSUMPTION

Approximately 15kg/m²/cm thick coat.

SAFETY DIRECTIONS

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

PACKAGING

Carton box with 4 bags of 5kg each one on 900kg pallet

Paper bag of 25kg on 1,500kg pallet

TECHNICAL SPECIFICATIONS (<i>Measurement conditions 20°C and 50% R.H.</i>)	
Form - Color	Cementitious mortar - Gray
Toxic	No
Bulk density of dry mortar	1.40±0.05kg/lt
Bulk density of fresh mortar	1.80±0.05kg/lt
Maximum grain size	1.3mm
Water requirement	5.5lt water in 25kg mortar
Application temperature	From +5°C to +35°C
Temperature resistance	From -20°C to +80°C
Pot life	2 hours
Maximum application thickness	2cm
Chlorides content, per EN 1015-17:	≤ 0.009%
PRODUCT PERFORMANCES	
Flexural strength, per EN 12190, after:	
• 28 days	≥ 4.00 N/mm ²
Compressive strength, per EN 12190, after:	
• 48 hours	≥ 10.00 N/mm ²
• 7 days	≥ 18.00 N/mm ²
• 28 days	≥ 28.00 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
Thermal compatibility expressed as adhesion to concrete, per EN 13687, after:	
•50 freeze-thaw cycles •30 storm cycles •30 dry heat cycles	≥ 1.50 N/mm ²
Capillary water absorption w, per EN 13057	w ≤ 0.50kg.m-2.h-0,5
Reaction to fire, per EN 13501-1	Euroclass A1
Where 1N/mm ² =1MPa	

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CE	
DUROSTICK S.A. ASPROPYRGOS ATHENS PC:193 00 GREECE 11	
DoP No.: 035 EN 1504-3:2005	
DUROSTICK D-55 Concrete repair product for structural repair PCC mortar (based on hydraulic cement, polymer modified)	
Compressive strength:	class R3
Chloride ion content:	≤ 0.05%
Adhesive Bond:	≥ 1.50 MPa
Thermal compatibility part 1:	≥ 1.50 MPa
Carbonation resistance:	Passes
Elastic modulus:	≥ 15 GPa
Capillary absorption:	≤ 0.5 kg·m ⁻² ·h ^{0.5}
Dangerous substances:	comply with 5.4
Reaction to fire:	Euroclass A1

DUROSTICK S.A.

MANUFACTURING OF ADHESIVES, PAINTS & MORTARS

ATHENS: ASPROPYRGOS, ATTICA, GR: 193 00, Tel:

+30 211 60 03 500-599, +30 210 55 16 500, +30 210 55

98 350, Fax: +30 210 55 99 612

THESSALONIK: INDUSTRIAL PARK-SINDOS, S.B. 44,

STREET, DA 0, GR: 570 22, Tel: +30 2310 795 797, +30

2310 797 365, Fax: +30 2310 797 367

E-mail: info@durostick.com

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