

D-55



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



EPD®

■ 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.

The product has received an Environmental Product Declaration (EPD) following an assessment of the environmental impact of its life cycle.

Registration number: S-P-13770,

The International EPD® System.

■ 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 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

The technical specifications and directions of use contained in this technical data sheet are the results of the knowledge and experience of the company's research and development department, as well as from the real-life applications of the product. The recommendations and suggestions regarding the use of the products are made without guarantee since the respective conditions during their application are beyond the control of the company. For this reason, it is the user's responsibility to make sure that the product is suitable for the intended application as well as the application conditions of the project.

D-55



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

stabilizer, AQUAFIX of DUROSTICK. Application: Empty D-55 in a clean container with cool water, at a ratio of 25kg mortar to 5.5lt of water. 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 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).

■ CLEANING

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

■ CONSUMPTION

Approximately 15kg/m²/cm thick coat.

■ STORAGE

Store in the factory sealed packages, in dry and shaded places, for 12 months from production date.

■ SAFETY DIRECTIONS

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

■ PACKAGING

Carton box with 4 bags of 5kg each one on 720kg pallet
Paper bag of 25kg on 1,500kg pallet.

TECHNICAL SPECIFICATIONS

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

■ Form - Color	Cementitious mortar - Gray
■ 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
■ Chloride ion content, per EN 1015-17	≤ 0.09%

D-55



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

PRODUCT PERFORMANCES	
■ Flexural strength, per EN 12190, after:	
• 28 days	≥ 4.00 N/mm ²
■ Compressive strength, per EN 12190, in:	
• 48 hours	≥ 10.00 N/mm ²
• 7 days	≥ 18.00 N/mm ²
• 28 days	≥ 28.00 N/mm ²
■ Adhesive bond per EN 1542	≥ 1.70 N/mm ²
■ Elastic modulus per EN 13412	≥ 15.50 GPa
■ Carbonation resistance per EN 13295	Yes
■ Thermal compatibility expressed as concrete adhesion, per EN 13687, after:	
• 50 freeze-thaw cycles, • 30 storm cycles, 30 dry heat cycles:	≥ 1.50 N/mm ²
■ Capillary absorption, per EN 13057	$w \leq 0.50 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0.5}$
■ Reaction to fire	Class A1

NOTE: 1N/mm²=1Mpa.

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
THESSALONIKI: INDUSTRIAL PARK-SINDOS, S.B. 44,
 STREET, DA 10, GR: 570 22,
 Tel: +30 2310 795 797, +30 2310 797 365,
 Fax: +30 2310 797 367
 Email: info@durostick.com

The technical specifications and directions of use contained in this technical data sheet are the results of the knowledge and experience of the company's research and development department, as well as from the real-life applications of the product. The recommendations and suggestions regarding the use of the products are made without guarantee since the respective conditions during their application are beyond the control of the company. For this reason, it is the user's responsibility to make sure that the product is suitable for the intended application as well as the application conditions of the project.