# **DS-240**



# Fortified, fast setting, non-shrinking cementitious repair mortar







## **■ PROPERTIES**

Ready mixed, non-shrinking mortar that sets and cures fast. Its special formula contains corrosion inhibitor and silicate aggregates, stainless microspheres, as well as high strength polypropylene fibers and polymers. Just add water to create an easy to use mortar with exceptional fluidity and workability.

Classified PCC R4 as concrete repair product per EN 1504-3.

### ADVANTAGES

- Volume stability.
- Impressive surface hardness.
- High initial and final strength.
- Does not crack.
- Durable against time, moisture, and alkaline environments.
- Resistant to mechanical stresses (compression, impact, vibration)
- Bonds perfectly to concrete reinfor-cement bars (rebars) and protects them from corrosion.

### APPLICATIONS

DUROSTICK DS-240 is suitable for industrial floor repairs, restoration of manhole openings as well as

general road applications and special construction operations.

Due to its minimal shrinkage and unique mechanical strength, it is suitable for precision anchoring. Ideal for restoring columns and walls as repair jacket, enveloping the connecting reinforcing bars, by pouring it into the formwork.

It is recommended for quick repairs in projects demanding a rapid return to service, such as road projects, airport works etc.

### **USE**

### 1. Surface preparation

Application surfaces must be free of oils, loose sections, dust and they have to be sound. Soak the surfaces before application, without pooling any water on them.

### 2. Application

Empty 25kg of mortar into a clean container with 5.0lt of cool water. Mix with a low-rpm electric mixer or a cement mixer, until a lump free, homogeneous mass is created that is ready for use. The mixture remains workable for 60 minutes. Depending on the application, use it with a gauging trowel, an injection machine or by pouring it.

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.

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### **■ USEFUL TIP**

For column and wall repairs, add 100gr HYDROSTOP D-34 of DUROSTICK concrete plasticizer for every 2 bags of DS-240. It will increase the rheological properties of the mortar and reduce the need for vibrate.

#### **■ CLEANING**

Clean tools and equipment with water, immediately after use. The cured product can only be removed by mechanical means.

### **■ CONSUMPTION**

Approximately 17kg/m<sup>2</sup>/cm thick coat or 1.9kg mortar for filling 1lt of volume.

### **■ 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

Paper bag of 25kg on 1.200kg pallet

TECHNICAL SPECIFICATIONS (Measurement conditions 20°C and 50% R.H.)	
Form - Color	Cementitious mortar - Gray
■ Bulk density of dry mortar	1.48±0.05kg/lt
■ Bulk density of fresh mortar	2.30±0.05kg/lt
■ Maximum grain size	1.70mm
■ Application temperature	From +5°C to +35°C
■ Temperature resistance	From -30°C to +120°C
■ Water requirement	5.0lt water for 25kg mortar
■ Pot life	60 minutes
■ Shrinkage per ASTM C596	Negligible
Resistance to moisture and frost	Very good
■ Application thickness	On horizontal surfaces:1.5cm at a minimum, on vertical surfaces: from 1.5cm up to 8cm
■ Chloride ion content, per EN 1015-17	≤ 0.02%

PRODUCT PERFORMANCES	
Resistance to flexion, per EN 12190, to:	
• 28 days	≥ 8.00 N/mm²
Compression resistance, per EN 12190, to:	
• 48 hours	≥ 20.00 N/mm²
• 7 days	≥ 35.00 N/mm²
• 28 days	≥ 58.00 N/mm²
Adhesion to concrete per EN 1542	≥ 2.10 N/mm²
Elastic modulus per EN 13412	≥ 22 GPa
Carbonation resistance per EN 13295	Yes
Thermal compatibility expressed as adhesion to concrete, per EN 13687, after:	
• 50 freeze-thaw cycles	
• 30 storm cycles	≥ 2.00 N/mm <sup>2</sup>
• 30 dry heat cycles	
Capillary water absorption w per EN 13057	w ≤ 0.20kg.m <sup>-2</sup> .h <sup>-0,5</sup>
Reaction to fire	Class A1

Where 1 N/mm<sup>2</sup>=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

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