# DS-244 POWER MORTAR RESIN



Thixotropic, resinous and fiber-reinforced repair mortar for thicknesses of up to 6cm/coat



### PROPERTIES

High strength fiber-reinforced resin repair mortar. Contains stainless microspheres, synthetic resins, special additives and silica fume. Suitable for concrete repairs that require high strength. Classified PCC R4 as concrete repair product, per EN 1504-3.

### ADVANTAGES

•Exceptional adhesion to the substrate.

- •Volume stability.
- •Does not shrink
- · Minimizes the risk of crack formation
- · Highly thixotropic with outstanding workability
- Does not sag, even when it is applied to 6cm thick coats
- Resistant to moisture absorption
- Highly durable against intense temperature variations
- Does not require any improving additives
- Does not contain chlorides that cause damage
- Quick and easy application and finishing to impressive results

• Effective repair product for damaged concrete in building, bridge, and infrastructure applications.

#### APPLICATIONS

DS-244 POWER MORTAR RESIN is applied on horizontal and vertical surfaces, even on concrete roofs, without the need for any formwork (up to 6cm rep coat). Restores all construction imperfections of concrete elements.

### USE

#### 1. Surface preparation

The substrates must be free of any oils, loose materials; they have to be sound and soaked without any standing water.

#### 2. Application

Empty DS-244 in a clean container with cool water, at a ratio of 25kg mortar to 4.0-4.25lt of water (0.80-0.85lt for 5kg). Mix using a low-rpm drill with the proper mixing attachment, until a lump free, homogeneous mixture is created. Apply the mortar by either 'pressing' it with a gauging trowel or by using an injection machine, in thick-

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nesses of up to 6cm thick per coat. Where necessary, a second coat is applied before the previous one has fully cured, within 4-5 hours at 20°C. In any other case, the previous coat must be roughened by mechanical means (chisel, chipping gun etc.).

#### NOTES

When the steel reinforcement (rebar) is corroded, remove all the rust with RUST RE-MOVER, rinse thoroughly and once dry, apply DUROSTICK RUST FREE POWDER, the cementitious corrosion inhibitor for rebar protection
Curing time increases when the working temperature is low and decreases when it is higher
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 48 hours (especially during the summer months)

• After its full cure, the product is harmless to health and the environment.

#### CLEANING

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

#### CONSUMPTION

Approximately 18kg/m²/cm thick coat.

#### 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.

#### 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 pcs of 5kg each one Paper bag of 25kg on a 1,200kg pallet

	ATIONS (Measurement
conditions 20°C and 50% R.H.)	
Form - Color	Cementitious mortar - Gray
Toxic	No
Bulk density of dry	1.50±0.10kg/lt
mortar	5
Bulk density of fresh	2.20±0.10kg/lt
mortar	Ŭ
Maximum grain size	1.8mm
Application	From +5°C to +35°C
temperature	
Temperature	From -20°C to +80°C
resistance	
Water requirement	4.0lt water in 25kg mor-
	tar
Pot life	2 hours
Maximum application	6cm
thickness per coat	
Minimum application	5mm
thickness per coat	on in the second s
Chlorides content,	≤ 0.008%
per EN 1015-17	- 0.00070
PRODUCT PERFORMA	NCES
Flexural strength, per	
•28 days	≥ 9.00 N/mm2
Compressive strength,	
• 24 hours	≥ 30.0 N/mm2
• 7 days	≥ 45.0 N/mm2
• 28 days	≥ 60.0 N/mm2
Adhesion to con-	≥ 2.20 N/mm2
	2 2.20 N/IIII2
crete, per EN 1542 Modulus of elasticity,	≥ 25 GPa
per EN 13412	2 23 GFa
Resistance to	Yes
carbonation	res
	expressed as adhesion
to concrete, per EN 13	
	≥ 2,40 N/mm2
•50 freeze-thaw cy- cles•30 storm cy-	= 2,40 N/IIIIZ
cles•30 dry heat cy-	
cles	
Capillary water ab-	w ≤ 0.25kg.m-2.h-0.5
sorption w, per EN	w = 0.20kg.111-2.11-0.0
13057	
Reaction to fire, per	Euroclass A1
EN 13501-1	Luiuciass Al
Where 1N/mm2=1MPa	

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DUROSTICI ASPROPYRGOS ATHE GREEC 18	NS PC:193 00	
DoP No.: 132 EN 1504-3:2005		
DUROSTICK DS-244 POWER MORTAR RESIN Concrete repair product for structural repair PCC mortar (based on hydraulic cement, polymer modified)		
PCC mortar (based on hydraulic ce		
PCC mortar (based on hydraulic ce Compressive strength: Chloride ion content: Adhesive Bond: Thermal compatibility part 1: Carbonation resistance: Elastic modulus: Capillary absorption:		

#### **DUROSTICK S.A.**

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