

# Mortars

# ARGOTEC REPARACION R4

Concrete structural repair mortar





ARGOTEC REPARACIÓN R4 is a thixotropic polymer modified mortar (PCC), single-component, highstrength and non-shrink, for structural repair of concrete elements, formulated with a mixture of hydraulic binders, selected aggregates, polymers, corrosion inhibitors and fibres that provide excellent adhesion and mechanical properties.

#### **Presentation**

- Appearance: Powder
- Colour: Grey
- Weight (kg): 25
- Yield (kg/m<sup>2</sup>): 18 kg/m<sup>2</sup> y cm de espesor
- Performance in mm thickness (kg/m<sup>2</sup>): 1,8
- Product code: 350198

# **Technical Data**

Concept	Value	Standard
Mass per unit area (nominal) (kg/m²)	25	-
Capillary Absorption (kg/m²h0.5)	W2	-
Classification according to UNE EN 1504-3	R4 (PCC)	-
Thermal compatibility. Part I. (N/mm <sup>2</sup> )	2	-
Thermal conductivity declared (W/mK)	1	-
Chloride ion content (%)	0.05	-
Bulk density (kg/L)v ~ Value	$1,50 \pm 0,16$	-

Concept	Value	Standard
Fresh mass density (kg/L) ~ Value	$1,80 \pm 0,16$	-
Maximum thickness (mm)	30	-
Minimum thickness (mm)	10	-
Water vapour permeability (m)	Clase I	-
Reaction to fire	Al	-
Compacting resistence 24 hours (N/mm <sup>2</sup> )	≥ 15	-
Compacting resistence 28 days (N/mm <sup>2</sup> )	≥ 45	-
Compacting resistence 7 days (N/mm <sup>2</sup> )	≥ 30	-
Resistance to carbonation	Pasa	-
Retraction at 28 days (mm/m)	≤ 0,1	-
Hazardous substances	Ver HS	-
Application time (min)	30	-

# **Addtitional Technical Data**

Concept	Value	Standard
CO2 permeability	Clase III	-

## Scope

- Conservation and restoration of coats. Principle 7. Methods 7.1 and 7.2.
- Repair of prefabricated elements.
- Repair and regeneration of structural elements.
- Structural concrete reinforcement works. Principle 4. Method 4.4.
- Concrete repair work. Principle 3. Methods 3.1 and 3.3.
- Repair work on edges, cornices, balcony edges and roofs.

## **Advantages & Benefits**

- Outstanding Adhesion
- Excellent workability.
- Free of chlorides.
- Made of sulphur-resistant cement.
- Rapid development of resistance.
- Fast drying.
- No retraction.

- Thixotropic.
- Made with corrosion inhibitor.

#### **Descriptive Memory**

The repair of concrete elements will be carried out with ARGOTEC REPARACIÓN R4 mortar, from the Argos cement derivatives company, class R2 according to the UNE EN 1504-3 standard, in accordance with principle 3 (methods 3.1 and 3.3), principle 4 (method 4.4.) or principle 7 (methods 7.1. and 7.2.). The fixing substrate shall be sound, clean, free of friable parts, fully hardened and have completed its time of dimensional variation. The construction joints shall be respected.

#### Support

- Precast concrete elements.
- Concrete structures.

## Substrate preparation

- In any case, the specific requirements of EN 1504-10 must be taken into account.
- Metal elements, such as reinforcement, must be free of rust, dust, mortar residues or other materials that may impede adhesion or contribute to corrosion.
- Absorbent substrates must be wetted to saturation without puddling.
- The substrates must be clean and sound, free of grease, paint or other substances that would prevent proper adhesion.
- Very smooth substrates shall be mechanically treated to ensure proper adhesion of the mortar.
- A suitable adhesion primer shall be used on low-porosity surfaces.

# Instruction for Use

- Mix ARGOTEC REPARACIÓN R4 with 4.75 L of clean water per 25 kg bag, preferably by mechanical means, until a homogeneous, creamy, lump-free mixture is obtained.
- Apply the mortar manually with the trowel in thicknesses never less than 10 mm. nor more than 30 mm. pressing the mortar with the trowel on the substrate.
- The application time is approximately 30 minutes depending on the environmental conditions.

## Warning

- Do not apply when there is a risk of frost, rain, strong wind or direct sunlight.
- Do not apply below 5°C or above 30°C.
- Do not apply on plaster supports.
- Do not apply to plastic, wood, rubber, etc. surfaces.
- Protect the cool surface from direct sun, rain and especially draughts.

#### Handling, storage and preservation

• It is packaged in 25 kg multi-leaf paper bags with damp-proof sheets that allow it to be stored for 12 months in its original sealed packaging, safe from dampness.

# **Cleaning of Work Tools**

- Fresh product, with water
- Dry product, scratching

#### Notice

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