

FLUID MORTAR FOR ANCHORING REINFORCEMENT AND SEALING WORKS

#### 1. DESCRIPTION

**B-REPARA GROUT** is a one-component, compensated shrinkage mortar, made from mixed binders, siliceous aggregates, carefully selected limestone and additions such as synthetic resins, intended for anchoring and sealing works on concrete structures.

**B-REPARA GROUT** has high values of mechanical characteristics including fast-acting resistance, protects metal parts against corrosion due to alkaline pH, has excellent adhesion to materials such as concrete, mortar and steel.

For situations with large thicknesses this mortar is suitable for manual application by pouring.

#### 2. FIELD OF USE

Due to its granularity and fluidity, the *B-REPARA GROUT* is suitable for:

- precision anchoring of metallic elements (reinforcements, bolts, cables, etc.);
- sealing of precast concrete elements;
- levelling of surfaces and machine foundations;
- filling by pouring;
- filling cracks and cavities within concrete.

Due to its fluidity, B-REPARA GROUT should be applied in places with confined surfaces.

This product is EC certified according to the requirements of the following standards:

□ NP EN 1504-6 for the anchoring of steel reinforcement: in accordance with principle 4 defined in NP EN 1504-9.

To use **B-REPARA GROUT** in other fields of application, we advise you to consult our Technical Services beforehand.

#### 3. PRODUCT CHARACTERISTICS

Technical Requirement/Characteristics	Amount	Standard
Appearance/Colour	Grey powder	-
Granulometry	<3.5 mm	EN 1015-1
Mixing water	15.0 ± 1.0 %	EN 1015-3
Density	2000 ± 100 kg/m³	EN 1015-10
Theoretical consumption	20 kg/m²/cm	-
Reaction to fire	A1	EN 13501-1
Elasticity	≥ 15 GPa	EN 13412





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Compressive strength	≥ 5	MPa (24hours) O MPa (7days) 5 MPa (28days)	EN 1015-11
Flexing Resistance	≥ 10 Mpa		EN 1015-11
Layer thickness	30 mm minimum / 100 mm maximum		-
Technical Requirement/Characteristics	Amount	Required by NP EN 1504-6	Standard
	Principle 4, Method 4.2		
Initial resistance	Check	≤ 0.6 mm	EN 1881
Chloride Content	Check	≤ 0.05 %	EN 1015-17

#### 4. APPLICATION

# a) Preparation of surfaces

Surfaces must be free of dust, sand, releasing agents, crumbling or unstable materials, efflorescence, as well as any type of material that affects the normal conditions of adherence. All fragments of bolts, nails and other visible metal elements should be removed, as well as cement slurries, oils, grease, varnish, among others.

In cases where structures are reinforced, the reinforcement should be carefully treated, removing all materials that could reduce adhesion or cause corrosion, such as rust, calamine, chips, mortar or concrete residues, dust and other loose particles or deteriorating materials.

Generally, it is not necessary to apply a bonding primer to the concrete, as long as the base is well prepared and sufficiently rough. In this situation, the surface should be saturated with water, and the application of the repair mortar must begin when it is darkened and damp but without visible water.

When formwork is used, it must be of adequate strength and must be treated with release agents and properly sealed to avoid material loss.

## b) Mortar Preparation-

**B-REPARA GROUT** should be mixed in a clean container with the appropriate amount of water ( $\approx$  3.3 to 3.8 litres per 25 kg bag) in order to obtain a homogeneous paste without lumps.

The mortar can be mixed using a low speed electric drill (up to 600 rpm) for a minimum period of 3 minutes, or in a concrete mixer for a minimum period of 5 minutes.

## c) Application





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After mixing, **B-REPARA GROUT** is applied by pouring immediately after mixing, in order to take advantage of its fluidity. Excessively long distances between mixing and the application on site must be avoided, in order to prevent separation as a result of the transportation of the product.

It is advisable to apply *B-REPARA GROUT* on site as soon as possible. The product should be applied within 10 minutes of mixing.

**B-REPARA GROUT** allows applications between 30 mm and 100 mm thicknesses.

When filling under slabs (thinner thicknesses), a hole must be provided for the mortar to enter and another one for the exit, to facilitate the expulsion of air and ensure that the entire volume is perfectly filled. Filling should be facilitated by mechanically agitating the mixture.

#### d) Restrictions

**B-REPARA GROUT** must not be applied at ambient temperatures or lower than 5º C and higher than 30º C. Its setting time is 28 days.

Protect the material in its fresh and setting stages from adverse atmospheric conditions, such as heat, solar radiation, rain or intense wind, ice, among others, using appropriate methods.

### e) Complementary advice

- For filling the minimum diameter should be 30 mm;
- As a corrosion protection layer for reinforcements in reinforced concrete repair work and to improve the bond between steel and concrete, we recommend the use of **B-REPARA ESTRUTURAL ARM** (consult the product's technical sheet);
- The water in the mix must be free of any impurities (clay, organic material), preferably being of drinking quality.
- No grout should be applied that has started the process of setting. Do not add water to the mortar after it has been mixed;
- Do not add any other products to the mortar, **B-REPARA GROUT** should be applied as instructed in its original packaging.

# 5. PACKAGING AND VALIDITY

## **Packaging**

Plastic pallets of 60 x 25kg paper bags.

#### **Expiry**

12 months, provided the original packaging conditions remain unchanged and in storage conditions protected from extreme temperatures and damp.

#### **6. ASSOCIATED PRODUCTS**

B-REPARA range products.

#### 7. HYGIENE AND SAFETY





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# (DOES NOT PRECLUDE THE PRODUCT SAFETY DATA SHEET)

- Irritant to the eyes, respiratory system and skin
- May cause sensitivity in contact with the skin
- Do not inhale the dust;
- Avoid contact with the skin and eyes;
- In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice;
- Wear suitable protective clothing and gloves
- Keep out of the reach of children.



Since the conditions of application of our products are out of our control we cannot be held responsible for their incorrect use. It is the customer's responsibility to verify the suitability of the product for its intended purpose. In any case our liability is limited to the value of the goods provided by us. The information contained in this factsheet may be changed without notice. In case of doubt, and should you require further clarification, we recommend you contact our technical services.

The characteristics of the product, presented in point 3 of this Technical Sheet, refer to the results obtained in laboratory tests. Results that are obtained outside these conditions may be slightly different due to conditions that are not possible to control.

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