



SEIREBETON F

Thixotropic fibre-reinforced structural repair mortar

Filling of hollows and cracks

Repair of concrete surfaces

High mechanical strength

Shrinkage compensated to avoid appearance of cracks

High thixotropy and workability

With added corrosion inhibitors. Suitable for preservation or restoration of passivating (Principle 7, method 7.1 and 7.2 of UNE-EN 1504-9)

"Increasing cover with additional mortar and replacing contaminated or carbonated concrete"

Application in thin and thick layers

Fineness and clear colour enables use without application of cosmetic finishing mortars

Reinforced with fibre

Chloride-free

Classified R3 according to UNE EN 1504-3



SEIRE PRODUCTS, S.L.

P.I. Albolleque, Sector III

C/Los Muchos, 34-36

19160 - Chiloeches (Guadalajara)

T. 34 949 366 953

seire@seire.net

SEIREBETON F

Thixotropic fibre-reinforced structural repair mortar

Product description:

Excellent substrate adherence.
Shrinkage compensated while drying, minimising appearance of cracks.
High short-term and long-term mechanical strength.
Contains corrosion inhibitors.
Applicable by hand and by spray.
Good abrasion resistance.
Allows thicknesses from 0.5 to 70 mm.
Fineness and clear colour means it can be used without application of cosmetic finishing mortars.

Applications:

Filling of hollows and cracks. Regularization of concrete and mortar surfaces.
Repair of concrete surfaces.
Filling joints between concrete sections, prefabricated parts, etc.
Repair of concrete construction parts.
Pillar spalling. Decorative finish for pillars.
Repair of structural elements: reinforced or pre-stressed concrete beams under static or dynamic loads and pillars, etc.
Performing patina finishes
Indoor and outdoor use.

Substrate Preparation:

The substrate surface may be dry or damp but it must be clean and free of dust, grease, oil, rust and generally free of any foreign element that might impair adhesion. Areas of contaminated or damaged concrete must be removed until a strong surface is exposed; cut the edges of the repair mechanically to about 5 mm depth minimum.
Clean exposed reinforcement mechanically to a minimum grade of Sa2½.
Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (for example expansion joints).

Primer:

The surface should be thoroughly wetted (especially in warmer climates) preferably 24 hours, and at least 2 hours, prior to application of SEIREBETON F. The surface should be damp and darkened but not dripping wet. Adhesion of SEIREBETON F can be improved (especially recommended for concrete surfaces with very low porosity) as follows:
Use a priming grout made up with the mortar itself and a mixture of water and SEIRELATEX (mixing ratio 1:1). Apply this grout or slurry using a brush.
Epoxy primer: use ADIPOX UNION 100 (see Technical Sheet) as bonding interphase for SEIREBETON F.
SEIREBETON F should be applied on the primers wet on wet. Do not allow the bonding interphase to dry completely before applying.

Mixture:

Pour 3 3/4 - 4 1/2 litres of water per bag of 25 kg (4 parts powder to 1 part water by volume) into the mixer or

container to be used. Slowly pour the powder over the liquid while mixing; keep stirring until a fine and smooth paste is obtained.

Mechanical mixing is recommended using either a concrete mixer or agitator.

Its high thixotropy means that a greater amount of water can be added to obtain the consistency necessary for application of a fine patina finish.

If Pot-Life is exceeded the mixed product loses its characteristics and should be disposed of.

Method of application:

SEIREBETON F can be applied by hand, with a trowel or by spray. Apply the freshly mixed product directly on the damp surface or primer while still wet.

Apply the desired thickness (0.5 to 70 mm) using a trowel or rule over pre-made screed.

A zero-thickness layer prior to application of the required thickness of material, wet on wet, improves adhesion and final cohesion of the mortar.

If a second coat is required, apply before the previous layer has hardened

The product finish, using a damp sponge and a metal trowel or trowel, may be carried out when the mortar starts to harden (at that point, the mortar behaves like plastic).

Recommendations:

If necessary, protect the fresh mortar from early dehydration due to excessive heat or frost using standard methods (polyethylene film, curing agents, wet burlap,...)

Limitations:

Do not use SEIREBETON F where ambient and/or substrate temperatures are less than 5°C or higher than 30°C.

Consumption:

Aprox. 1.5kg of powder/m²/mm.

Cleaning of tools and equipment:

SEIREBETON F can be cleaned immediately after use with water. If the product is allowed to harden, it will have to be removed mechanically.

Residues/spillages:

Residues from spills and empty containers must be handled in accordance with local regulations.
See product safety sheet for further information.

Storage:

SEIREBETON F can be stored for up to 12 months in its original unopened packaging. The product should be stored in a dry place between +5°C and +30°C.

Precautions:

Contains cement; causes irritation to eyes and skin. Keep out of reach of children. Avoid contact with eyes and skin. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention.

Use appropriate gloves. Once dry, the product is physiologically and ecologically neutral.

Technical data

(based on tests conducted in our laboratory according to current regulations)

Appearance:	Grey powder
Mixing ratio:	Aprox. 3.75 to 4 1/2 l. of water: 25 kg. of powder, equivalent to 1 vol. of water: 4 vols powder
Mortar density (wet):	Aprox. 1.7 kg/l
Yield:	Aprox. 1.5 kg of powder per m ² and mm.
Workability time (20°C)	Aprox. 1 hour
Compressive strength	Aprox. 41 N/mm ²
Flexural strength	Aprox. 9.3 N/mm ²
Packaging	25 kg bag
Storage:	Approx. 12 months in a dry place and in original unopened packaging.



SEIRE PRODUCTS SL.
C/ Los Muchos P.I. Albolleque Sector III
19160 Chiloeches- Guadalajara
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EN 1504-3:2006

SEIREBETON F
Modified polymer cement mortar (PCC)
for structural repair of concrete structures
EN 1504-3: R3

Compressive Strength:	<i>class R3</i>
Chloride ion content:	$\leq 0.05 \%$
Adhesion:	$\geq 2.0 \text{ Mpa}$
Controlled retraction/expansion:	$\geq 2.0 \text{ MPa}$
Carbonation resistance:	<i>Resistant</i>
Elastic modulus:	$\geq 20 \text{ GPa}$
Thermal compatibility part 1: Freeze and thaw cycles with de-icing salt immersion	$\geq 2.0 \text{ MPa}$
Capillary absorption:	$\leq 0.5 \text{ kg/(m}^2\cdot\text{h}^{0.5})$
Reaction to fire:	<i>A1</i>
Hazardous substances:	<i>Complies with 5.4 of EN 1504-3</i>

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