SIKATOP , 122 F REPARATION
SIKATOP , 122 F RAPIDE

(Accelerated formula 5°C to 15°C)

Pre-batched synthetic fibre-reinforced hydraulic mortar for repair of concretes

SIKATOP 122 F REPARATION is in compliance with NF standard P 18-840 as class 3 repair product on sawed surfaces.
SOCOTEC Technical inquiries CCT 15 and CCT 24.

Description

Pre-batched mortar consisting of:

Component A (emulsified resin).

Component B (cement and special fillers).

A grey thixotropic mortar is obtained after mixing.

General characteristics

Safe utilisation: pre-batched product

Ease of preparation and use

Strength increasing rapidly and high final mechanical strengths

Cohesion and limitation of the shrinkage effects improved by the presence of synthetic fibres

Very good adhesion on most substrates (concrete, mortar, stone, brick, …)

Waterproof

Not susceptible to freezing / thawing cycles and to de-icing salts

Provides an excellent protection to steels

Safe handling

Applications

Repair of chippings on posts, shells, balusters, acroters, bank beams, …

Repair joint lips, nosing of stairs, beam corners.

Finishing of facade dressings, bridge underside.

Masonry re-jointing.

Repair of concretes and protection of reinforcing bars in structures exposed to a marine environment or to de-icing salts.

Ph and Ch (mechanical) characteristics

A/B mixture proportion: 1/6 by weight

Particle size range: 0 to 1,6 mm

Fresh mortar density: about 2,1

Adhesion on concrete: > 3 MPa on a sawed surface (NF P 18.852)

Good resistance to repeated impact due to freezing / thawing cycles (NF P 18.857): no visible cracks, no loosening.

Mechanical strengths in MPa in compliance with standard EN 196.1:

Age / Test	1 day	2 days	28 days	Temperatures
Compression Bending	15 to 20 3,5 to 4,5	23 to 30 4,5 to 6	50 to 60 10 to 13	30°C
Compression Bending	10 to 15 2,5 to 4	20 to 30 6 to 8	45 to 60 12 to 14	20°C
Compression Bending	9 to 11 2 to 3	15 to 20 4 to 5,5	45 to 55 9 to 12	15°C
Compression Bending	5 to 6* 1 to 2*	12 to 14 3,5 to 4,5	45 to 55 9 to 12	10°C
Compression Bending	5 to 6* 1 to 2*	11 to 12* 3 to 4*	45 to 50 7 to 10	5°C

To obtain the above strengths in the short term, the use of SIKATOP 122 F RAPIDE is mandatory.

Packaging

SIKATOP 122 F REPARATION and SIKATOP 122 F RAPIDE

Carton holding 1 14-kg kit containing:

Component A (emulsified resin): 2-kg plastic can

Component B (cement and special fillers): 12-kg plastic bag

SIKATOP 122 F REPARATION

35-kg kit containing:

Component A (emulsified resin): 5-kg plastic can

Component B (cement and special fillers): 30-kg Kraft paper bags

Storage and shelf-life

The product stored away from freezing and in a dry place has a one-year shelf-life in an unopened packaging.

Consumption

It depends on the nature and roughness of the substrate, and on the thickness of the layer applied.

Filling a one-litre cavity needs about 2,1 kg of SIKATOP 122 F.

Certifications and official tests

SIKATOP 122 F REPARATION has been granted the right to bear the NF label as class 3 repair product (sawed surface).

CERILH – report No. 11711: accelerated carbonation test

CERILH – report No. 217: accelerated corrosion test

SOCOTEC technical inquiries:

CCT 15 “Repair – Prevention – Protection”

CCT 24 “Anchorings”

Instructions

Conditions for use

Application temperature (substrate and room)

	SIKATOP 122 F REPARATION	SIKATOP 122 F RAPIDE
Mini	+ 5°C	+ 5°C
Maxi	+ 35°C	+ 15°C

Implements

Traditional trowel, plastering trowel, expanded polystyrene, spraying equipment, low-speed electric or pneumatic agitator.

Substrate preparation

The substrate must be clean, sound and free of any loose particles . It must be free of traces of oil, grease, laitance, … It must have a surface cohesion of at least 1 MPa.

Brush or even better sand-blast the steels to remove the rust and then protect them with SIKA ARMATEC 108 corrosion inhibitor (technical data sheet No. 6.00).

The substrate must be wetted to refusal on the day before the application. It must be wetted again immediately before the application. Take care that there is no water dripping on the substrate and that there is no water film or puddle on its surface..

Mixture preparation

SIKATOP 122 F is delivered as a shop pre-batched kit. Pour component A (emulsified resin) in totality into a wide-opening clean container (bucket, full-opening can) and then gradually add component B (powder) in totality while mixing with an electric or pneumatic agitator rotating at a low speed (about 200 rpm).

Mixing can also be carried out in a vertical shaft mixer.

It must be carried on until a homogeneous, thixotropic mortar of a uniform colour is obtained.

Pot life

Temperatures	SIKATOP 122 F REPARATION	SIKATOP 122 F RAPIDE
5°C	2 h to 3 h	20 mn to 40 mn
10°C	1 h to 2 h	20 mn to 40 mn
15°C	1 h to 1 h 50	10 mn to 20 mn
20°C	60 mn	**not utilisable**
30°C	20 mn à 25 mn	**not utilisable**

Application

Apply with a traditional trowel or a plastering trowel using conventional methods. Resurface it as need be using the traditional trowel or expanded polystyrene as soon as the mortar starts to draw.

SIKATOP 122 F can also be applied mechanically by spraying. In such a case, use a Maco-Meudon SABLON S3 machine.

Limitations

SIKATOP 122 F REPARATION

If SIKATOP 122 F is applied at a temperature exceeding 30°C, is must be first stored in a temperate room so that the fresh mixture temperature be about 10 to 25°C.

SIKATOP 122 F REPARATION and SIKATOP 122 F RAPIDE

Minimum thickness: 5 mm/layer.

Maximum thickness: 50 mm/layer.

SIKATOP 122 F can withstand the rain within 6 hours after application at 2°+C.

Protection against drying

After they have been placed, SIKATOP 122 F mortars must be protected against sun, wind and freezing during hardening like any hydraulic mortar.

Setting time

Temperatures	SIKATOP 122 F REPARATION	SIKATOP 122 F RAPIDE
5°C	12 h to 14 h	3 h to 4 h
10°C	9 h to 10 h	2 h 30 to 3 h 30
15°C	6 h to 7 h	2 h to 3 h
20°C	4 h to 5 h	**not utilisable**
30°C	2 h 30 to 3 h 30	**not utilisable**

Important considerations

Same handling as for any cement mortar.

Clean the hands and the implements with water immediately after utilisation.

Consult data sheet on Minitel 3613, code SIKASECUR or on Internet http://www.sika.fr (free service).

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