

Alcret 121 Feinmörtel

PCC mortar for concrete repairs



AREAS OF APPLICATION

Synthetically modified, cement bound premixed dry mortar as concrete replacement for the reprofiling of accessible, impassable and dynamically stressed, horizontal and vertical concrete surfaces and other concrete components in need of repair with approval according to ZTV-ING, TL/TP BE-PCC, application PCC I and PCC II.

PRODUCT PROPERTIES

- High resistance to carbonation
- Fibre reinforced
- Easy preparation by adding water
- Good workability
- Wet-spraying process can be used
- Resistance to frost and deicing salts
- Ensured product quality due to self and external monitoring
- Tested in connection with Alcret 110 corrosion protection as a repair system according to the ZTV-ING (Additional Technical Terms of Contract and Guidelines for Civil Engineering Works)
- Can be used in layer thicknesses from 6 - 40 mm, max. grain size 2 mm
- When constructing bonded screeds layer thickness of 15 – 40 mm
- Complies with class M3 mortar according to RiLI-SIB (Protection and Repair of Concrete Components)
- Meets the requirements of EN 1504-3: Relevant structural and non-structural repairs

TECHNICAL DATA

Binder base	Synthetically modified cement mortar
Apparent density of green mortar	approx. 2,2 kg/dm ³
Compressive strength	28 d approx. 56,0 N/mm ²
Flexural strength	28 d approx. 9,7 N/mm ²
Pull-off strength	28 d > 2,0 N/mm ²

Static modulus of elasticity approx. 29.000N/mm²

APPLICATION INSTRUCTIONS

Substrate pre-treatment	<p>The substrate must be stable, clean and free of all loose particles, dust, oil and other substances with a separating effect.</p> <p>The required tensile strength of the substrate's surface must be $\geq 1.5 \text{ N/mm}^2$ on average, smallest single value 1.0 N/mm^2.</p> <p>Pre-wet substrate. Make sure that it is matt-moist but not waterlogged.</p> <p>Pretreat rebar with Alcret 110 corrosion protection according to factory specifications. Work Alcret 110 corrosion protection as a bonding bridge into damaged areas on concrete surfaces in advance in the case of manual application of the mortar. Then, integrate coarse mortar into the bonding bridge wet-on-wet. A bonding bridge is not required when using the wet-spraying process.</p>
Mixing	<p>25 kg in approx. 3,0 l of water</p> <p>Pour the measured amount of water into a container except for a remaining amount .</p> <p>Sprinkle the material little by little into the water while continuously stirring and mix for approx. 3 minutes.</p> <p>Compulsory mixers or slow running twin paddle mixer (max. of 400 rpm). Mixing by hand is not permitted.</p> <p>Add the remaining water as necessary and mix for another two minutes until obtaining a homogenous mortar.</p> <p>A repeated addition of water to already mixed material is not permitted.</p>
Application	<p>Apply the material ready for use with suitable tools to the fresh, matt-moist bonding bridge Alcret 110 corrosion protection firmly compressed.</p> <p>One or multilayer application is possible.</p> <p>In the case of multilayer application, the previous layer must have started to set but not be dry. If the previous layer is completely dry, it must be pre-wet.</p> <p>For a sealed surface, swipe Alcret 121 fine mortar smooth after application and then, wipe down using a wooden or plastic float.</p> <p>No longer stir or work on set material or material in the process of setting.</p> <p>Alcret 121 fine mortar can be applied using the wet-spraying process (e.g. PFT N2V).</p> <p>Prevent quick drying as a result of direct sunlight, high temperatures and/or draught by means of suitable finishing treatment or measures..</p>
Consumption	<p>Dry mortar approx. $2 \text{ kg}/(\text{m}^2\text{mm})$</p> <p>Determine the precise material requirements by means of a trial coating on the object.</p>
Layer thickness	<p>min. of 6 to max. of 40 mm</p> <p>Greater layer thicknesses possible by working with multilayers.</p> <p>Observe the additional requirements of the applicable rules!</p>
Information about the weather	<p>The material and substrate temperatures as well as the temperature of the circulating air cannot fall below $+5 \text{ }^\circ\text{C}$ or exceed $+35 \text{ }^\circ\text{C}$ during application and</p>

drying.

Workable time At +5 °C: approx. 70 min
 At +20 °C: approx. 60 min
 At +35 °C: approx. 30 min

Interval time when reworking

with Alcret 121

after 4 h

with Alcret 130

after 1 2 h at 5 °C (OS-C)
 after 6h at 23 °C (OS-C)
 after 4 h at 30 °C (OS-C)
 after 5 d (OS-DII)

Can be walked on

after 36 h at 5 °C
 after 24 h at 23 °C
 after 24 h at 30 °C

Cleaning of tools In a fresh state with water.

STORAGE

Shelf life in original sealed packaging of at least 12 months when kept cool, dry and protected against frost.

PACKAGING INFORMATION

Colour Cement grey
 Packaging unit Paper sack approx. 25 kg net

OTHER INFORMATION

Information on safety The information provided in the current safety data sheet applies.

Transportation Not a hazardous material

Labelling in accordance with DIN
 EN 13813

CT-C40-F7:

Reaction to fire

NPD*

Release of corrosive substances:

CT



FASSADENKOMPETENZ

Water permeability:	NPD*
Wear resistance:	NPD*
Compressive strength:	C40
Bending tensile strength:	F7
Impact resistance:	NPD*
Impact sound:	NPD*
Sound absorption:	NPD*
Heat insulation:	NPD*

NPD* = No Performance Determined

Giscode

ZP1 cement-based products, low in chromate

alsecco GmbH
Kupferstraße 50
D-36208 Wildeck
Phone 03 69 22 / 88-0
Fax 03 69 22 / 88-330
Internet: www.alsecco.de

The above information is based on many years of experience and tests and is provided by us to the best of our knowledge. Such information applies in addition to our application guidelines. However, we cannot accept any responsibility for the correctness of our recommendations on account of wide variety of substrates and of on-site conditions and applications which are outside our control. Any recommendations provided by our employees and deviating from these documents must be given in writing. We reserve right to make any changes on account of technical progress or building regulations. Your technical advisor will be pleased to provide the relevant product data sheets.

