www.superbeton.su
(495) 648-52-04

PAGEL®

PAGEL®-CONSTRUCTION MORTAR

ACCORDING TO RILI-SIB

M 3®

PROPERTIES

- PCC Repairing System to **preserve the stability** of concrete components according to RiLi-SIB, part 2, for application within **the fields of stress and strain classification** M 2 **and** M 3
- **corresponds to the building material classification B2** according to DIN 4102-2
- **optimal creep behaviour** when loaded
- **excellent suitability** for applying on **vertical surfaces and overhead**
- **allows vapour diffusion** and is **resistant to frost and dew-salt**
- **plastic-modified** and ready-for-use, needs only be mixed with water
- **highly resistant to carbonating**, is impervious to water, to the greatest possible extent dense to oil, slows down corrosion, resistant to saponification
- is monitored in accordance with the standards and guidelines in force and production is certified in accordance with **ISO 9001**
- **is being delivered as a system** and consists of the following products:

M SO2 PAGEL-CORROSION-PROTECTION AND ADHESION-LAYER

M 3® PAGEL-CONSTRUCTION-MORTAR (0–2,0 mm)

FIELDS OF APPLICATION

- **coating and repairing** of bridges, tunnels and concrete buildings
- **filling of defects** in the concrete base according to the examples of use tab. 4.1 of the RiLi-SIB, part 2, version 10/01
- **repairing of used areas** underneath layers of bridges and in multi-storey car parks
- **repairing** of bridge underside views, retaining walls, abutments, façades and balconies
- in case of repairing plates **in building constructions** these can be **used immediately**

Exposition category according to:
DIN 1045-2 / EN 206-1
PAGEL – CONSTRUCTION-MORTAR

	XO	XC	XD	XS	XF	XA	XM
	0	1 2 3 4	1 2 3	1 2 3	1 2 3 4	1 2 3	1 2 3
M 3	•	• • • •	• • •	• • •	• • • •	• •	•

PAGEL-Spezial-Beton GmbH & Co. KG
Werk: II/Dorsten
03/2334/02-159-145
Polymer Institut

CE
0921
PAGEL Spezial-Beton
Wolfsbankring 9
45355 Essen
0921-BPR-2023
EN 1504-3

PAGEL®-CONSTRUCTION-MORTAR ACCORDING TO RILI-SIB

M 3®

TECHNICAL DATA

TYPE			M 3®
Grain size		mm	0–2
Coating thickness		mm	5–40
Layer thickness in outbreaks		mm	6–100
Amount of water		%	12
Consumption		kg/dm³	2.00
Workability		min.	app. 60
Slump (with 16 stroke impacts)		cm	16
Compressive strength* (DIN 1164)	24 h	N/mm²	≥ 20
	7 d	N/mm²	≥ 45
	28 d	N/mm²	≥ 55
Bending strength	24 h	N/mm²	≥ 4
	7 d	N/mm²	≥ 6
	28 d	N/mm²	≥ 8
Fresh mortar cross density		kg/dm³	2.200
Dry mortar cross density		kg/dm³	2.019
E-module (static)	28 d	N/mm²	26,000
Bond performance			
Bond stress	t_h	kp/cm²	1.195
Reference bond stress	t	kp/cm²	0.669
Reference bond stress	80 %t	kp/cm²	0.535
Creep behavior			
Final creep measure	ϵ_∞		0.00619
Final creep number	φ_∞		1.465
Final creep load	ϵ_{el}		0.00496

All test data are guide values, proofed in our German manufacturing plants, - values from other manufacturing plants may vary.

* DIN EN 196-1-compliant compressive strength testing

Supplied in: 25 kg bags
Storage: 9 months, dry, closed bags
Hazard class: no dangerous goods, please examine the material safety data sheet
GISCODE: ZP1

CE
0921
PAGEL® SPEZIAL-BETON GmbH & Co. KG, D-45355 Essen
find the printed batch number
0921 – BPR – 2034
EN 1504-3:2005
M 3® PAGEL® - CONSTRUCTION-MORTAR
Mortar for statically and not statically relevant repairs
(on the basis of hydraulic cement)

Compressive strength	Class R4
Chloridion content	≤ 0.05 %
Adhesion	≥ 2.0 MPa
Prevented shrinkage/swelling	≥ 2.0 MPa
Resistance to carbonation	NPD
Modulus of elasticity	≥ 20 GPa
Temperature variation tolerance	NPD
Grip	NPD
Thermal expansion coefficient	NPD
Capillary water absorption	NPD
Reaction to fire	Class E
Hazardous Substance	In accordance with EN 1504-3:2005, 5.4

NPD: „No Performance Determined"

PROCESSING

SUBSTRATE: Clean thoroughly, free of loose and unsound material, remove any cement slurry by means of hydraulic water-blasting or similar till carrying capacity of grain structure is reached. Sufficient adhesion must be granted. (i.m. > 1,5 N/mm²). Prior to grouting the surface must be soaked for at least 6 hours till saturation. Remove rust from exposed concrete steel (degree of purity Sa 2 to Sa 2 1/2 and coat twice without gaps with M S O 2 PAGEL-CORROSION PROTECTION.

MIXING: The mortar is ready-for-use and only has to be mixed with water. Pour water (max. 3,0 l per 25 kg = 12 % each bag) into the compulsory type mixer except for a residual quantity, add dry mortar and mix for approx.
3 minutes; add the rest of the water and mix for a further 2 minutes till a lump-free consistency is reached.

ADHESION-LAYER: Mix M S O 2 PAGEL-A D H E S I O N-L A Y E R in small quantities with the maximum specified quantity of water as slurry and brush into the substrate pore-deep (according to technical leaflet).

PROCESSING: Apply M 3 PAGEL-CON-S T R U C T I O N-M O R T A R into the not yet set solid compacting adhesion-layer, distribute and smooth.

CURING: Protect the surface against premature evaporation as soon as possible, latest after starting of setting process, by keeping the same damp, for example by using a water-fognozzle, plastic sheet or hessian. Time of curing: 3 days minimum.

Temperature: Can be applied at temperatures of between +5°C and +35 °C, low temperatures and cold mixing water will delay strength development and reduce flowability, while high temperatures accelerate these processes.

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