



PAGEL®-CONSTRUCTION MORTAR

ACCORDING TO RILI-SIB

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 M2 and M3**
- **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:

MSO2 PAGEL-
CORROSION-PROTECTION
AND ADHESION-LAYER

M3® 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**

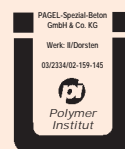
Exposition category according to:

DIN 1045-2 / EN 206-1

PAGEL – CONSTRUCTION-MORTAR

	XO 0	XC 1 2 3 4	XD 1 2 3	XS 1 2 3	XF 1 2 3 4	XA 1 2 3	XM 1 2 3
M3	•	• • • •	• • •	• • •	• • • •	• •	•

M3®



TECHNICAL DATA			
TYPE	M3®		
Grain size	mm	0–2	
Coating thickness	mm	5–40	
Layer thickness in outbreaks	mm	6–100	
Amount of water	%	12	
Consumption	kg/dm ³	2.00	
Workability	min.	app. 60	
Slump (with 16 stroke impacts)	cm	16	
Compressive strength* (DIN 1164)	24 h	N/mm ²	≥ 20
	7 d	N/mm ²	≥ 45
	28 d	N/mm ²	≥ 55
Bending strength	24 h	N/mm ²	≥ 4
	7 d	N/mm ²	≥ 6
	28 d	N/mm ²	≥ 8
Fresh mortar cross density	kg/dm ³	2.200	
Dry mortar cross density	kg/dm ³	2.019	
E-module (static)	28 d	N/mm ²	26,000
Bond performance			
Bond stress	t _h	kp/cm ²	1.195
Reference bond stress	t	kp/cm ²	0.669
Reference bond stress	80 % t	kp/cm ²	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	
M3* 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 MSO2 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 MSO2 PAGEL-ADHESION-LAYER 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 M3 PAGEL-CONSTRUCTION-MORTAR 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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