



PAGEL®-FAST SETTING REPAIR-MORTAR

PROPERTIES

- is the permanent solution for quick **repair work** for concrete and mortar surfaces
- can be loaded after **2 hours** (and develops high early and final compressive strengths – it is **chloride and alumina free**)
- is cost effective by reducing closure times on concrete roads and pavements
- has good workability, high adhesive strength to cement based substrates and is highly resistant to abrasion
- is resistant to frost and dew-salt, water-impermeable, largely impervious to oil
- by modifying the water ratio a plastic to stiff consistency may be obtained – it is also supplied with steel fibre, basalt sand and various sizes of aggregate for different height applications
- is pre-mixed, only the addition of water for site use is necessary – no other primer systems are required

FIELDS OF APPLICATION

- **patching** concrete, screeding and plaster or stucco repairing holes, corners and cracks
- **grouting** masonry, floor and butt joints – laying materials (bricks, slabs, tiles etc.)
- **applying** binder layers and sprayed concrete
- **joining** prefabricated concrete components, old and new concrete
- **sealing** against water ingress by plastering, repairing and slurry sealing

Exposition category according to:
DIN 1045-2 / EN 206-1
PAGEL – RAPID REPAIR 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
R 20/02	•	• • • • •	• •		• •	•	•
R 20/05	•	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• •
R 20/20	•	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •
R 20/40	•	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •
R 20/80	•	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •

R 20/02^{US}

R 20/05^{US}

R 20/20^{US}

R 20/40^{US}

R 20/80^{US}



R 20/02-
R 20/80



R 20/40



PAGEL®-FAST SETTING REPAIR-MORTAR

R 20/02 US

R 20/05 US

R 20/20 US

R 20/40 US

R 20/80 US

TECHNICAL DATA

TYPE		R 20/02	R 20/05	R 20/20	R 20/40	R 20/80
grain size	inch	0–0.01	0–0.02	0–0.08	0–0.16	0–0.31
coating thickness	inch	0.02–0.2	0.08–0.24	0.2–1.57	0.79–1.97	1.18–3.94
amount of water	%	max. 18	14–16	11–12	11–12	11–12
consumption	lbs/ft ³	118.62	112.37	124.86	124.86	124.86
density of freshly mixed mortar	lbs/ft ³	134.22	131.10	139.22	137.35	139.22
compressive strength*	2 h	PSI	≥ 725	≥ 725	≥ 725	≥ 725
	4 h	PSI	≥ 870	≥ 1,450	≥ 1,450	≥ 1,450
	8 h	PSI	≥ 1,450	≥ 1,885	≥ 2,175	≥ 2,175
	1 d	PSI	≥ 2,175	≥ 2,900	≥ 3,625	≥ 3,625
	7 d	PSI	≥ 4,350	≥ 5,800	≥ 5,800	≥ 6,525
	28 d	PSI	≥ 7,250	≥ 7,250	≥ 7,975	≥ 7,975
adhesive strength	28 d	PSI	≥ 290	≥ 290	≥ 290	≥ 290

All test data are guide values only.

* DIN EN 196-1-compliant compressive strength testing
DIN EN 12390-3-compliant compressive strength testing

working time: approx. 15 min. (676 °F)
amount required: approx. 2000 kg per m³ or 2 kg per l
supplied in: 25-kg-bags

storage: dry
shelf-life: 6 months in sealed bags

PROCESSING

SUBSTRATE: Concrete surfaces have to be cleaned and must be free of loose and unsound material, dust, oil, grease etc. – also of residual corrosion. If necessary the surface can be cleaned by scabbling or sandblasting. The repair area must then be wetted with water until surface saturation is reached.

MIXING: Depending on consistency required, measure out most of the total water requirement and place in mixer. Add R20 pre-mixed mortar to rotating mixer and allow to mix for short period. Add remainder of the water and allow to mix for a further 5 minutes.

ADHESION PRIMER: After cleaning, coat any exposed reinforcing steel with R 20/20 or R 20/10 corrosion protection or EH3 EPOXY RESIN (two coats sprinkled with quartz sand). Make up R 20 or R 20/10 as a slurry using the maximum water volume specified; brush this slurry thoroughly into the surface.

PROCESSING: Apply the mortar in the desired consistency, and before the adhesion primer dries out spread, compact and smooth the material. Keep all tools wet.

CAUTION: Protect exposed surfaces against wind, draughts and premature water evaporation e.g. with film or O1 PAGEL-SURFACE-PROTECTION

CE				
0921				
PAGEL® SPEZIAL-BETON GmbH & Co. KG, D-45355 Essen				
find the printed batch number				
0921 – BPR – 2034				
EN 1504-3:2005				
R 20 PAGEL® - RAPID REPAIR MORTAR				
Mortar for statically and not statically relevant repairs (on the basis of hydraulic cement)				
Product name:	R 20/02	R 20/05	R 20/20	R 20/40 R 20/80
Class:	R3		R4	
Compressive strength:	≥ 25 MPa		≥ 45 MPa	
Chloridion content:	≤ 0.05 %		≤ 0.05 %	
Adhesion:	≥ 1.5 MPa		≥ 2.0 MPa	
Prevented shrinkage/swelling:	≥ 1.5 MPa		≥ 2.0 MPa	
Resistance to carbonation:	NPD		NPD	
Modulus of elasticity:	≥ 15 GPa		≥ 20 GPa	
Temperature variation tolerance:	NPD			
Grip:	NPD			
Thermal expansion coefficient:	NPD			
Capillary water absorption:	NPD			
Reaction to fire:	Class A1			
Hazardous Substance:	In accordance with EN 1504-3:2005, 5.4			

NPD: „No Performance Determined“

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