

## PAGELASTIC SURFACE PROTECTION/COATING


### PROPERTIES

- a **polymer modified cement slurry** with high elastical characteristics
- **crack-bridging** for all surface-near stress fractures and areas with fine cracks <0.2 mm, even when having temperatures of -20 °C
- sufficiently firm, adhesive, non-ageing and waterproof for use as a sealant on buildings and to bridge cracks up to a maximum width of 0.2 mm
- **vapor-permeable**
- **stops the penetration of CO<sub>2</sub>** (carbonatizing)
- for reasons of its consistency it can be applied by **brush, steel scraper** or by **spraying** without any problems
- for colouring it is possible to paint-over with crack-bridging surface protection coating, for example **02DE** (according to TL/TP-OS/DII)
- meets the requirements of the test and supply regulations of ZTV – ING (Additional Technical Specifications in Construction Contracts and Guidelines for Civil Engineering Works) Part 3, section 4, OSDI and the guidelines of the German Committee on Steel Reinforced Concretes (DAfStb)/OS5b
- **company is certified according DIN EN ISO 9001:2008**

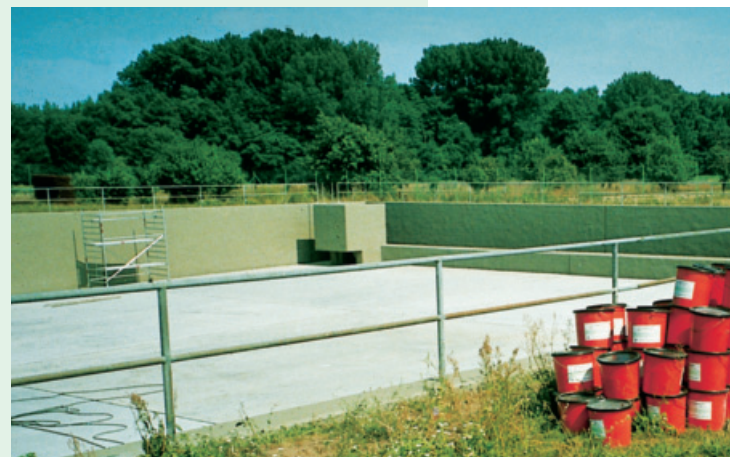
### FIELDS OF APPLICATION

- crack-bridging floor- and **wall-coating** suitable for substrates of concrete, mortar and masonry, not exposed to traffic
- provides protection against **penetration of thawing-salt** within the splashing zone
- **bridge supports** and crash barriers
- **balconies, terraces**, for sealing underneath tiles

D1

 1119-CPR-0717	
PAGEL SPEZIAL-BETON GMBH & CO.KG Wolfsbankring 9 45355 Essen, Germany 08 640100 EN 1504-2:2004 D1 PAGELASTIC Surface protection-coating	
Cross cutting	≤ GT 2
CO <sub>2</sub> -permeability	S <sub>D</sub> > 50 m
Water steam permeability	class I
Kapillary water absorption and water permeability	w < 0,1 kg/m <sup>2</sup> x h <sup>0,5</sup>
Resistance to temperature changes	≥ 0,8 (0,5) <sup>1)</sup> N/mm <sup>2</sup>
Crack bridging ability	B 2 (-20 °C)
Adhesion test for assessment of adhesive force	≥ 0,8 (0,5) <sup>1)</sup> N/mm <sup>2</sup>
Product fire behaviour	class E
Artificial weathering	no obvious defects

1) The value given in brackets is the smallest allowable value per reading



TECHNICAL DATA			
TYPE	dry mortar <b>COMPONENT A</b>	mixing liquid <b>COMPONENT B</b>	
appearance	powder	liquid	
colour	grey	milky-white	
packaging	20 kg (bag)	9 l (can)	
material basis	cement	polymer dispersion	
mixing ratio	pbw	1	0.45
MIXED MATERIAL			
density of freshly mixed water	kg/dm <sup>3</sup>	ca. 1.70	
colour		grey app. RAL color 7032	
vapour transfer resistant	m	< 4*	
CO <sub>2</sub> -resistance	m	> 200*	
compressive strength (28d)	N/mm <sup>2</sup>	> 0.8	
crack bridging	+20 °C	cw mm	0.4
-ability	-20 °C	cw mm	0.2
working temperature	°C	+ 8 – + 30	
working time	+10 °C	min.	app. 180
	+20 °C	min.	app. 120
	+30 °C	min.	app. 60
minimum layer thickness in 2 passes	mm	2	
consumption according ZTV-ING per m <sup>2</sup> app. kg per layer			
OS-DI	R <sub>t</sub> =0.2 mm	2.5	
	R <sub>t</sub> =0.5 mm	2.7	
	number of layers	2	
* equivalent airtightness having 2 mm strength coating			
pbw = part by weight			
cw = crack width			
All test data are guide values, proofed in our German manufacturing plants, - values from other manufacturing plants may vary.			

<b>packaging:</b>	component A:	20-kg-bags
	component B:	9-l-cans
<b>storage:</b>	Cool, dry, free from frost. Unopened in its original packaging.	
<b>shelf-life:</b>	<b>powder component:</b>	min. 12 month
	<b>liquid component:</b>	min. 12 month
<b>hazard class:</b>	no dangerous substance follow safety data sheet	
<b>giscode:</b>	ZP2	

The EU-limit for the VOC-yield of this product (cat. A/C) will be in ready-to-use condition: 75 g/l (2007) / 45 g/l (2010). This product is having in ready-to use condition <1 g/l VOC.

Attention should be paid to the details given in product application, layer-thicknesses, material consumption and material surcharge according appendix A and B of DIN V18026.

You will find certificates of compliance, EC-declarations of conformity and given details for the product application at [www.pagel.com](http://www.pagel.com).

## PROCESSING

**SUBSTRATE:** Clean and dry, remove loose and un-sound material, if necessary sandblast or grind the surface. Larger cavities in the substrate are filled using **M10 PAGEL-GROUT READY FOR USE (PCC)** or **MS20 PAGEL-REPAIR MORTAR PCC-SYSTEM:**

tearing strengths: (concrete):	>1.5 N/mm <sup>2</sup>
adhesion: (screeding compound):	>1.3 N/mm <sup>2</sup>

The surface must be wetted so it appears moist to dry when applying

**LEVELLING:** Rough and uneven concrete surfaces are levelled by using **MS05 PAGEL-PCC-SCREEDING-COMPOUND**. This procedure is not necessary on a smooth, even surface.

**MIXING:** Pour all of component B (liquid) into a clean vessel, add component A while stirring thoroughly. Mix with a slow revolving mixer (400 rpm) until the material is homogenous and lump-free, at least, however, for 5 minutes.  
Can be diluted with 1 to 2 % water depending on application.

**PROCESSING: D1** is to be applied evenly by using a brush or steel scraper. To reach an evenly structured surface use a soft brush.

**D1** can be easily injected (for example by using a Strobl-pump with screeding nozzle). Avoid puddles in the corners or in cavities. Smooth surfaces when having middle temperatures within 5 to 8 minutes. Watch dew point temperature.

Temperature of substrate, air and material must be at least +8 °C, max. +30 °C.

Apply 1.7–2.0 kg/m<sup>2</sup> per layer. Attention is to be paid that per process the minimum thickness of each layer is at least 1 mm.

Waiting time (having 20 °C):

• time to get dry:	approx.	3 hours
• resistant to rain:	after approx.	5 hours
• following layer <b>D1</b> :	after approx.	5 hours
• layer <b>O2DE</b> :	after approx.	24 hours

High humidity and low temperatures prolong the waiting times.

**CURING: D1** hardens under normal weather conditions without getting cracks or bubbles. If the material is exposed to strong sun or wind **D1** is to be protected to prevent early drying (for example by using a plastic foil). Is **D1** being coated with **O2DE PAGEL-SURFACE-PROTECTION** for reasons of colouring two coats of **O2DE** are to be applied when having a light shade.

The information provided in this leaflet, is supplied by our consulting service and is the end result of exhaustive research work and extensive experience. They are, however, without liability on our part, in particular with regard to third parties proprietary rights, and do not relieve the user of the responsibility for verifying that the products and processes are suitable for the intended application. The data presented was derived from tests under normal climate conditions according to DIN 50014 and mean average values and analysis. Deviations are possible when delivery takes place. Given that recommendations may differ from those shown in this leaflet written confirmation should be sought. It is the responsibility of the purchaser to ensure they have the latest leaflet issue and that its contents are current. Our customer service staff will be glad to provide assistance at any time. We appreciate the interest you have shown in our products. This technical data sheet supercedes previously issued information. Please find the latest leaflet issues at [www.pagel.com](http://www.pagel.com).



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