



## PAGEL®-READY-FOR-USE-MORTAR DRINKING WATER SECTOR

### PROPERTIES

- **ready for use mortar** on cement basis
- in respect of water behaviour meets the demands on container materials specified in the "Plastic Drinking Water Recommendations" of the Bundesgesundheitsamt (Federal Health Service)
- corresponds to **Working Sheets W 270 and W347 from DVGW** and is also suitable for use in the drinking water sector in a microbiological respect as well
- promotes neither microbial growth nor does it have any bactericidal or fungicidal properties
- **economical**, problem-free and time-saving
- can be used on **vertical and horizontal surfaces** and can also be coated by the **wet and dry spraying processes**
- reduces the penetration of CO<sub>2</sub>, checks corrosion, is capable of vapor diffusion and is resistant to frost and dew-salt
- is mixed only with water – for coatings TW10 PAGEL-READY-FOR-USE-MORTAR is brushed in as **adhesion bridge**
- is subject to our own **constant controlling** in accordance with the recognized standards and guidelines. The production is certified in accordance with **ISO 9001**.
- The TW40-series consists of the following products:
  - TW05 0–0.5 mm (primer)
  - TW10 0–1.0 mm (adhesion layer + fine mortar)
  - TW20 0–2.0 mm (spray mortar)
  - TW40 0–4.0 mm (mortar)

<b>CE</b> 0921			
PAGEL® SPEZIAL-BETON GmbH & Co. KG, D-45355 Essen find the printed batch number			
TW10 and TW40 EN 13813 CT C60 F10 A9 TW20 EN 13813 CT C60 F7 A9			
U10, U20, U40, U80, U160 PAGEL-UNIVERSAL MORTAR Cement based screed			
<b>Product name</b>	TW10	TW20	TW40
Reaction to fire	All		
Compressive strength	C60	C50	C60
Bending strength	F10	F7	F10
Release of corrosive substances	CT		
Water permeability	NPD		
Wear resistance	A9		
Sound insulation	NPD		
Sound absorption	NPD		
Thermal insulation	NPD		
Resistance to chemicals	NPD		

NPD: „No Performance Determined“

### FIELDS OF APPLICATION

- **coating** of wall and floor areas in the drinking water sector
- **repair** of concrete, plaster and composites
- **drinking water containers**, pipes, purification plant

- TW05
- TW10
- TW20
- TW40

Assigning to expositioncategory according to:  
DIN 1045-2 / EN 206-1 / ZTV-W219  
PAGEL – READY-FOR-USE-MORTAR

	XO 1	XC 1 2 3	XD 1 2 3	XS 1 2 3	XF 1 2 3 4	XA 1 2 3	XM 1 2 3
TW05	•	• • •	•	•	•	•	•
TW10	•	• • •	• • •	• • •	• • •	• •	•
TW20	•	• • •	• • •	• • •	• • •	• •	•
TW40	•	• • •	• • •	• • •	• • •	• •	•



TW10- TW40 <b>CE</b> 0921 PAGEL Spezial-Beton Wolfsanring 9 45355 Essen find the printed batch number 0921-BPR-2034 EN 1504-3	TW10- TW40 <b>CE</b> PAGEL Spezial-Beton Wolfsanring 9 45355 Essen find the printed batch number CT C60 F10 A9 EN 13813	TW20 <b>CE</b> PAGEL Spezial-Beton Wolfsanring 9 45355 Essen find the printed batch number CT C50 F7 A9 EN 13813
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TWO5

TW10

TW20

TW40

## TECHNICAL DATA

TYPE		TWO5	TW10	TW20	TW40
<b>fields of application</b>		screeding compound	adhesion-layer	spray-mortar	mortar
<b>coating thickness</b>	mm	2-6	5-10	10-30	20-40
<b>grain size</b>	mm	0-0.5	0-1.0	0-2.0	0-4.0
<b>amount of water</b>	%	14-16	11-13	11-13	10-12
<b>density of freshly mixed mortar</b>	kg/dm <sup>3</sup>	2.18	2.18	2.15	2.15
<b>compressive strength*</b>	24 h	N/mm <sup>2</sup>	≥ 15	≥ 25	≥ 25
	7 d	N/mm <sup>2</sup>	≥ 35	≥ 45	≥ 45
	28 d	N/mm <sup>2</sup>	≥ 45	≥ 55	≥ 55
<b>abrasion strength</b>	7 d	N/mm <sup>2</sup>	≥ 1.5	≥ 2.0	≥ 2.0
<b>E-Modul (static)</b>	56 d	N/mm <sup>2</sup>	≥ 15.000	≥ 20.000	≥ 20.000
<b>consumption</b>	kg/dm <sup>3</sup>	1.7	1.8	1.85	1.85

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:** dry  
**shelf-life:** 9 months in sealed bags  
**hazard class:** no dangerous substance  
 follow safety data sheet

**types of Cement:** Other types of cement can also be supplied although the technical properties are changed as a result. If you have any queries, please get in touch with our Customer Services.

## PROCESSING

**SUBSTRATE:** Thoroughly clean, remove loose and adhesion-checking parts as well as cement slurry by high-pressure-water blasting or such like down to the loadbearing grain structure, sufficient abrasion resistance must be guaranteed (mean > 1.5 N/mm<sup>2</sup>). Pre-wet to saturation. Remove rust from exposed concrete steel and coat without gaps with TWO5 PAGEL-SCREEDING COMPOUND as corrosion protection.

**MIXING:** Apart from a residual quantity, pour water into the forced-circulation mixer. Add dry mortar and mix for approx. 3 minutes. Add the rest of the water and mix for a further 2 minutes.

**ADHESION BRIDGE:** Mix TW10 PAGEL-READY-TO-USE-MORTAR as adhesion bridge in small quantities with a maximum 13 % water as slurry and brush into the substrate pore-deep. When using the spray process, no adhesion bridge of all TW mortars is required.

**PROCESSING:** Apply TW40 in plastic consistency in the not yet set adhesion primer, disperse and smooth. If using the spray process, seek special technical advice if required.

**CAUTION:** Protect surfaces against wind, draughts and premature water evaporation e.g. with film.

CE				
0921				
PAGEL® SPEZIAL-BETON GmbH & Co. KG, D-45355 Essen				
find the printed batch number				
0921 - BPR - 2034				
EN 1504-3:2005				
TW PAGEL® - READY-FOR-USE-MORTAR				
Mortar for statically and not statically relevant repairs				
(on the basis of hydraulic cement)				
Product name:	TWO5	TW10	TW20	TW40
Class:	R3	R4	R4	R4
Compressive strength:	≥ 25 MPa	≥ 25 MPa	≥ 45 MPa	≥ 45 MPa
Chloridion content:	≤ 0,05 %	≤ 0,05 %	≤ 0,05 %	≤ 0,05 %
Adhesion:	≥ 1,5 MPa	≥ 1,5 MPa	≥ 2,0 MPa	≥ 2,0 MPa
Prevented shrinkage/swelling:	≥ 1,5 MPa	≥ 1,5 MPa	≥ 2,0 MPa	≥ 2,0 MPa
Resistance to carbonation:	NPD	requirements passed	requirements passed	requirements passed
Modulus of elasticity:	≥ 15 GPa	≥ 15 GPa	≥ 20 GPa	≥ 20 GPa
Temperature variation tolerance:		NPD	NPD	NPD
Grip:		NPD	NPD	NPD
Thermal expansion coefficient:		NPD	NPD	NPD
Capillary water absorption:		NPD	NPD	NPD
Reaction to fire:		Class A 1	Class A 1	Class A 1
Hazardous Substance:		In accordance with EN 1504-3:2005, 5.4	In accordance with EN 1504-3:2005, 5.4	In accordance with EN 1504-3:2005, 5.4

NPD: „No Performance Determined“

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# PAGEL®

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