

PAGEL®

SPEZIAL-BETON



PRODUCT INFORMATION



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Modern production guarantees high quality



For more than 25 years PAGEL® SPEZIAL BETON GmbH & Co. KG in Essen, Germany has influenced and played a major role in the development of grouts and special mortars. The PAGEL® GROUTING-SYSTEM has become a worldwide recognised system for grouting and our products like V1®, V12 and V13 are synonymous with the word "non-shrinking grout". A wide range of products together with an undeviating quality backed by a comprehensive customer service has earned PAGEL® its outstanding reputation for being able to provide a product and solution for factory and industrial machine foundations. Many years of this reputation and excellent quality has resulted in our being certified with the EN ISO 9001. With this, we research and develop newer and more innovative products in our state-of-the-art laboratory and continue to deliver to you high quality PAGEL® materials. Our range of grouts, speciality concretes, industrial floors, and resins increases the life of industrial assets, protects and maximises productivity and output of expensive equipment and machinery. Needless to say while your demands for quality materials are being served, our customer services will also fulfill your specific needs and requirements during construction by suggesting products, specifications and other technical services. After all, our customers believe, PAGEL® is a solid foundation to build on.

*...we produce great grout
- worldwide!*

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*) map-registry-no. / technical data-sheet no.

V1/50®

PAGEL-GROUT*

V1*/160

V1*/10

free flowing over 120 minutes
non-shrink
high early- and final strengths
frost- and salt resistant
oil-resistant
chloride-free
pumpable
ready to use
externally tested

Machinery
Anchorings
Turbines
Bridge bearings
Potable water equipment
Concrete structures
High storage areas
Pre-cast concrete parts
Rails
Industrial plants



	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²			Expansion Vol. %	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
V1/50®	0 – 5	20 – 120	49	60	70	90	7	8	10	+ 1,0	2000
V1*/160	0 – 16	> 100	51	60	70	91	7	8	10	+ 1,0	2100
V1*/10	0 – 1	5 – 30	43	50	60	87	6	8	10	+ 0,5	2000

PRE-MIXED GROUT

V14/10

PAGEL-PRE-MIXED GROUT*

V14/40

V14/80

plastic consistency
non-shrinking
high early- and final strengths

Struts
Rail bearings
Bearings/Bridge bearings
Concrete repairs



	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²			Expansion Vol. %	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
V14/10	0 – 1	10 – 30	35	50	57	69	5	6	9	+ 1,0	2000
V14/40	0 – 4	30 – 70	42	55	64	71	5	6	8	+ 1,0	2100
V14/80	0 – 8	50 – 100	43	55	65	74	6	7	8	+ 0,5	2000

CE* Additives used in these products have an "EG-Conformity Explanation" according to § 9 "Building Product Law Authorization". Thus the additives correspond to the regulations of the EN 934-2:2001-07.

Nearly all types of grouts are also available with cements of classes CEM III/A or CEM I HS/NA (free of C₃A),- however, the technical data may vary according to cement type.

PAGEL-BASALT-GROUTS*

heat resistant up to 400 °C (short duration)
non-shrinking
high early- and final strengths
high abrasion resistance
building material class A 1 (not inflammable)

High-temperature area
Machinery
Anchorings
Steel struts



V15/30

V15/50

V15/80

	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²			Expansion Vol. %	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
V15/30	0 – 3	30 – 50	42	70	80	93	7	8	11	+ 1,0	2000
V15/50	0 – 5	40 – 100	62	73	87	100	8	8	11	+ 1,0	2100
V15/80	0 – 8	50 – 120	47	65	85	105	7	8	11	+ 1,0	2100

STEEL FIBRE REINFORCED GROUT

PAGEL-STEEL FIBRE REINFORCED GROUT*

for heavy traffic
steel fibre reinforced
non-shrinking
extremely high strengths
good elasticity

Heavy Duty Areas
Crane rails
Construction parts
Presses
Foundations



V1A/40

V1A/80

V1A/160

	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²			Expansion Vol. %	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
V1A/40	0 – 4	40 – 70	47	66	78	92	5	6	7	+ 1,0	2000
V1A/80	0 – 8	60 – 120	52	68	83	93	5	6	8	+ 1,0	2100
V1A/160	0 – 16	>100	58	70	82	92	5	7	8	+ 0,5	2000

STEEL FIBRE REINFORCED BASALT GROUT

PAGEL-STEEL FIBRE REINFORCED BASALT GROUT*

for heavy traffic
steel fibre reinforced
non-shrinking
extremely high strengths
good elasticity
heat resistant up to 500 °C (short duration)

High-temperature areas
Heavy Duty Areas
Crane rails
Construction parts
Presses
Foundations



V1A15/30

V1A15/50

	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²			Expansion Vol. %	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
V1A15/30	0 – 3	40 – 60	47	66	84	110	7	8	11	+ 0,5	2100
V1A15/50	0 – 5	60 – 120	50	69	87	102	6	7	12	+ 0,5	2100

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V 2/10

PAGEL-QUICK-SETTING GROUT

V 2/40


load bearing after 2 hours (also at 5 °C)
free flowing
non-shrinking
ready to use
resistant to frost and dew salt
pumpable

Turbines
Anchoring, Fixatores
Machinery
Steel constructions
Bridge bearings
Rails
Struts



V 2/80

V 2/160

	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²				Expansion Vol. %	Consumption kg/m ³
			2 h	8 h	1 d	28 d	2 h	8 h	1 d	28 d		
												
V2/10	0 – 1	10 – 20	12	32	38	67	2	4	6	11	+ 0,5	2000
V2/40	0 – 4	20 – 60	15	32	40	67	2	4	7	10	+ 0,6	2000
V2/80	0 – 8	50 – 100	12	32	38	67	2	4	6	9	+ 0,5	2100
V2/160	0 – 16	>100	15	28	38	66	1	3	5	9	+ 0,4	2100

EXTREMELY FAST SETTING GROUT

VB3


PAGEL-EXTREMELY FAST SETTING GROUT

VB3/40

load bearing after 30 minutes (20 °C)
extremely high early strength
flowable and usable for boxing up
non-shrink
water resistant
resistant to frost and dew salt
VB3: flowable
VB3S: super fast
VB3P: plastic consistency

Manhole cover grouting
Drain covers
Pipe channels
Installation works
Columns and prefabricated members



	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²				Expansion Vol. %	Consumption kg/m ³
			0,5 h	1 h	1 d	28 d	0,5 h	1 h	1 d	28 d		
												
VB3	0 – 0,4	10 – 50	8	14	40	65	2	3	6	12	+ 0,4	1800
VB3/40	0 – 4	30 – 60	8	12	36	60	2	2	6	11	+ 0,4	2000
VB3S	0 – 0,4	10 – 50	8	14	40	65	2	3	6	12	+ 0,4	1800
VB3P	0 – 0,4	10 – 50	8	15	35	53	2	3	6	11	+ 0,4	1800

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PAGEL-ANCHOR GROUT

pumpable and injectable
free flowing
non-shrinking
high adhesive strength
mining approvals

E1: workable at 30 °C 60 min.

E1SF: plastic consistency

E2: after 2 h: 7 N/mm² Compr.

Mining and tunnel construction
Stabilization of subsoil
Filling of joints and cavities



E1

E1SF

E2

E3

	Grain size mm	Grouting height mm	Compressive strength N/mm ²				Bending strength N/mm ²			Expansion Vol. %	Consumption kg/m ³
			2 h	1 d	7 d	28 d	2 h	1 d	7 d		
E1*	0 – 0,4	to 20	–	44	60	68	–	6	7	+ 0,5	1650
E1SF*	0 – 0,4	to 20	–	23	47	58	–	4	6	+ 0,3	1750
E2	0 – 0,4	to 20	7	28	37	49	2	7	9	+ 1,0	1750

INJECTION GROUT**PAGEL-INJECTION GROUT**

E1F*	0 – 0,15	–	–	35	51	64	–	5	6	+ 0,5	1500
E2F	0 – 0,15	–	12	32	44	55	2	6	7	+ 0,5	1500

E1F

E2F

CE* Additives used in these products have an "EG-Conformity Explanation" according to § 9 "Building Product Law Authorization". Thus the additives correspond to the regulations of the EN 934-2:2001-07.

Nearly all types of grouts are also available with **cements of classes CEM III/A or CEM I HS/NA (free of C₃A)**, - however, the technical data may vary according to cement type.

MSO2

PAGEL-PCC-MORTAR

MS 20®

concrete-replacement-system according to ZTV-ING, ZTV-W easy to use suitable for processing on vertical and over-the-head-surfaces single component, sprayable vapor diffusionable reduces the penetration of CO₂ and moisture
MSO2: Corrosion protection and adhesion layer

Wall and ceiling areas and over-head work
 Tunnels
 Bridges
 Facades
 Parapets
 Reprofiling
 ZTV-ING-Application: PCC II
 ZTV-W LB291 listed
 Stress and strain classification according to DAfStb-RiLi-SIB: M2



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²				Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d	28 d		
MSO2	-	-	-	-	-	-	-	-	-	-	-	1850
MS20®	0 – 2	6 – 40	24	27	52	60	5	6	10	>2,0	2000	

PCC-I-MORTAR

MHO2

PAGEL-PCC-I-MORTAR

MH20

concrete-replacement-system according to ZTV-ING, ZTV-W easy to use, plastic-strengthened highly suitable for use on horizontal substrates ready to use, single component resistant to frost and dew salt applicable and loadable under dynamic stress
MHO2: Corrosion protection and adhesion layer

Leveling course for bridges, tunnels and car parks (underlinings and coatings)
 Concrete coatings,
 Concrete floor surfaces,
 Leveling of gradients
 Repairs of outbreaks
 ZTV ING application: PCC I
 ZTV W LB291 listed
 Stress and strain classification according to DAfStb-RiLi-SIB: M2



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²				Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d	28 d		
MHO2	-	-	-	-	-	-	-	-	-	-	-	1850
MH20	0 – 2	6 – 40	21	38	48	56	4	6	9	≥1,5	2000	
MH80	0 – 8	>30	31	45	59	68	4	8	8	≥1,5	2000	

PAGEL-PCC-SCREEDING COMPOUND

MS05

screeding compound areas (ZTV-ING; OS-C; OS-DII), very high stability and adhesive, single component, universally applicable, plastic-strengthened and ready for use, sprayable, vapor diffusable, resistant to frost and dew salt

Repair of pores, holes, cracks, floor and wall irregularities; Substrates for surface protection coatings; Equalising of concrete maintenance work; Coating of finished parts, masonry and concrete surfaces; Filling of pipe slits



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
MS05	0 – 0,5	0,5 – 6	15	23	35	50	3	5	9	≥ 1,5	2000

SPCC-SPRAY-MORTAR

PAGEL-SPCC-SPRAY-MORTAR

SP20

SPCC-Spraying areas according to ZTV-ING, ZTV-W suitable for both wet and dry spraying techniques tested with different spraying systems, single component, resistant to frost and dew salt, vapor diffusable, **MS02**: Corrosion protection

Bridges
Tunnels
Concrete containers
Wall- and seiling surfaces
Facades
Struts
Beams
Waterway constructions



SP40

SP10

SP10PF

	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
SP20	0 – 2	10 – 50	21	32	44	54	4	6	8	≥ 2	1950
SP40	0 – 4	20 – 100	22	32	53	59	4	6	8	≥ 2	2000
SP10	0 – 1	5 – 20	19	36	43	52	4	4	9	≥ 2	1950
SP10PF	0 – 0,6	5 – 30	14	25	38	47	4	6	8	≥ 2	1950

CONSTRUCTION-MORTAR

PAGEL-CONSTRUCTION-MORTAR

M3®

Concrete-Replacement-System according to PCC (DAfStb-Repair guideline), high carbonating resistance high bond performance hardening under dynamic stress and strain **MS02**: Corrosion protection and adhesion layer

Demand class M3
Struts
Plates
bars
Wall and floor surfaces



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
M3®	0 – 2	5 – 40	14	27	54	60	3	5	9	≥ 1,5	2000

Nearly all types of grouts are also available with cements of classes CEM III/A or CEM I HS/NA (free of C₃A), - however, the technical data may vary according to cement type.

U02

PAGEL-UNIVERSAL-MORTAR

U05

areas of concrete replacement
free of polymers, single component
resistant to frost and dew salt
building material class A1
(not inflammable)
sprayable
fire protection mortar

Wall and floor surface
Industrial floor
Store and ramp areas
Joints



U10

U40

U80

U160



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
U02	0 – 0,2	0,5 – 5	25	30	46	56	5	6	7	≥ 2	1900
U05	0 – 0,5	0,5 – 6	16	27	37	50	3	4	7	≥ 2	1900
U10	0 – 1	5 – 10	26	40	52	65	5	6	9	≥ 2	2000
U40	0 – 4	10 – 30	35	40	60	72	5	6	9	≥ 2	2000
U80	0 – 8	30 – 80	28	35	50	58	–	–	–	≥ 2	2100
U160	0 – 16	≥ 50	43	48	55	68	–	–	–	≥ 2	2100

QUICK-REPAIR-MORTAR

R20/02

PAGEL-QUICK-REPAIR-MORTAR

R20/05

areas of quick repair
load bearing after 2 hours
(even at 5 °C)
good adhesion
chloride free
easy application

Concrete and mortar surfaces
Self-leveling floors
Stairs
Industrial floors



R20/10

R20/20

R20/40

R20/80

	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			2 h	4 h	1 d	7 d	1 d	3 d	28 d		
R20/02	0 – 0,2	0,5 – 5	4	6	14	30	2	4	6	≥ 2	1900
R20/05	0 – 0,5	2 – 6	12	16	25	41	4	5	7	≥ 2	1800
R20/10	0 – 1	3 – 20	8	11	17	41	4	5	8	≥ 2	1900
R20/20	0 – 2	6 – 30	9	11	20	47	4	5	9	≥ 2	2000
R20/40	0 – 4	20 – 50	12	15	25	46	4	5	8	≥ 2	2000
R20/80	0 – 8	30 – 100	9	12	23	39	3	4	7	≥ 2	2000

PAGEL-READY-FOR-USE-MORTAR - DRINKING WATER AREA

areas for drinking water fulfilled „Drinking water recommendation“ (KTW) corresponds to DVGW W270 and W347 resistant to frost and dew salt sprayable water impermeable

Drinking water areas Wall and floor surface of tanks, canals, dams Waterpipes Sewage plants



TW05

TW10

TW20

TW40

	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
TW05	0 – 0,5	2 – 6	16	25	35	45	3	4	7	≥ 2	1700
TW10	0 – 1	5 – 10	25	38	45	60	5	6	9	≥ 2	1800
TW20	0 – 2	10 – 30	25	40	48	55	4	5	8	≥ 2	1850
TW40	0 – 4	20 – 40	28	42	55	66	4	5	9	≥ 2	1850

CHANNEL-MORTAR

PAGEL-CHANNEL-MORTAR

Channel and waste water range high resistance against strong chemical attack resistant to sulfate attack (industry) and ammonium attack (agriculture) sprayable plastic-strengthened water impermeable

Channel pipes Sewage plants Waste water collecting tank



KA05

KA20

	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/m ³
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
KA05	0 – 0,5	2 – 5	12	28	45	61	3	5	9	≥ 1,5	2000
KA20	0 – 2	6 – 40	10	36	46	66	2	3	9	≥ 2	2000

Nearly all types of grouts are also available with cements of classes CEM III/A or CEM I HS/NA (free of C₃A), - however, the technical data may vary according to cement type.


O2A

PAGEL-HYDROPHOBATION

Impregnation
according to OS-A-/OS-B and/or
OS-1/OS-2
cream like, solvent-free, alkali-steadily
ready for use
high penetration depth
prevents surface protection coatings
from getting damp underneath
unique application
small consumption

Concrete and cement mortar surfaces
Façades
Bridges



	Appli- cations number	Layer thickness mm	Adhesive- strength N/mm ²	Application temperatur °C	Application time Min.	Consumption kg/m ²
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O2A	1	-	-	+8 - +40	unlimited	0,2
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PROTECTION PAINT


O2C

PAGEL-PROTECTION PAINT

according to OS-C-/OS-B- and/or
OS-4/OS-2
applicable to moist-damp or dry
surfaces
short waiting periods
vapor diffusable
free of solvents
different RAL-colours

Bridges
Concrete facades
Curing agent
Tunnels
Dams
Container



	Appli- cations number	Layer thickness mm	Adhesive- strength N/mm ²	Application temperatur °C	Application time Min.	Consumption (1 application) kg/m ²
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O2C	2	0,12 - 0,36	≥ 1,8	+8 - +40	unlimited	0,24 - 0,29
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PROTECTION COATING


O2DE

PAGEL-PROTECTION COATING

according to OS-DII- bzw. OS-5A
crack bridging (even at -20 °C)
high elasticity
vapor diffusable
free of solvents
different RAL-colours

Bridges
Concrete and mortar surfaces
Tunnels
Areas of fine cracks



	Appli- cations number	Layer thickness mm	Adhesive- strength N/mm ²	Application temperatur °C	Application time Min.	Consumption (1 application) kg/m ²
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O2DE	3	0,33 - 2,66	≥ 1,8	+8 - +40	unlimited	0,34 - 0,37
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PAGELASTIC

D1

according to OS-DI- bzw. OS-5B
 high elasticity
 crack bridging (even at -20 °C)
 vapor diffusable
 two-components
 water impermeable

Bridges
 Concrete and mortar surfaces
 Tunnels
 Areas of fine cracks
 Balconies, terraces, bathrooms
 Below tiles and all water retaining structures



	Appli- cations number	Layer thickness mm	Adhesive- strength N/mm ²	Application temperatur °C	Application time Min.	Consumption (1 application) kg/m ²
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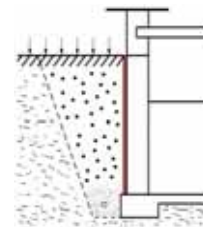
D1	2	2	≥ 0,8	+8 - +30	120	2,5 - 2,7
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PAGEL-SEAL-SLURRY

C1

rigidly
 single-component
 pump- and sprayable
 easy to use

Sealing of earthcontacting construction units,
 Wet and damp rooms



	Appli- cations number	Layer thickness mm	Adhesive- strength N/mm ²	Application temperatur °C	Application time Min.	Consumption (2-3 application) kg/m ²
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C1	2 - 3	2 - 3	≥ 1,5	+8 - +30	45 - 60	3,5 - 5,25
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PAGEL-CEMENT-SUSPENSION - INJECTION-GROUT

ZS10

ZL10

areas of crack and cavities
 according to ZTV-RISS
 bonding of concrete
 single component
 high penetration
 low viscosity, free flowing
 cement based, non shrink

Crack injection
 Bonding of concrete surfaces
 Filling of cavities
 Concrete and masonry



	Grain size µm	width of cracks mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consum- tion g/l
			1 d	3 d	7 d	28 d	2 d	7 d	28 d		
ZS10	< 16	> 0,2	23	27	38	43	2	3	5	≥ 2,0	1180
ZL10	< 40	> 0,8	28	30	35	41	3	4	5	≥ 2,0	1220

P1

PAGEL-INTERSPERSING SOIL

"group of hard materials" class M
heavy load range
shock and abrasion resistant
heavy load bearing
rust-free ferrous granulate

Rolling and steel plants
Industrial halls
Storage halls



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Abrasion cm ³ 50 cm ²	Consumption kg/m ²
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
			P1	0 - 3	3	58	77	93	102		

HARD MATERIAL GRANULATE

P11

PAGEL-INTERSPERSING SOIL

P12

"group of hard materials" class A
resistant to friction
close surface structure
mineral hard material granulates

Industrial halls
Workshops
Storage halls
Ramps



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Abrasion cm ³ 50 cm ²	Consumption kg/m ²
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
			P11	0 - 4	10	35	43	65	90		
P12	0 - 5	10	32	44	58	95	6	8	11	2,7	14
P13	0 - 4	10	33	42	55	85	6	7	10	2,8	14

INDUSTRIAL FLOOR / ADHESION LAYER

PH10

PAGEL-INDUSTRIAL FLOORS - ADHESION LAYER

PH10/15

for mineral industrial soil coatings
low water cement value
serves in addition as corrosion protection
PH10/15: Basalt addition

Bonding layer for:
Industrial soil coatings
Industrial floorings
Concrete undergrounds



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Abrasion cm ³ 50 cm ²	Consumption kg/m ²
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
			PH10	0 - 1	-	-	-	-	-		
PH10/15	0 - 2	-	-	-	-	-	-	-	2,4	2 - 4	

PAGEL-FERROUS GRANULATE FLOORING

P2FE

"group of hard materials" class M
 shock and wear resistant
 ready for use
 cement-based
 sprayable

Ramps
 Workshops
 Industrial halls
 Sintering channel



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Abrasion cm ³ 50 cm ²	Consumption kg/m ²
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
P2FE	0 – 3	10 – 40	59	75	100	122	6	9	11	2,4	10 mm

HARD MATERIAL SCREED

PAGEL-HARD MATERIAL FLOORING

P22

"group of hard materials" class A
 shock and wear resistant
 ready for use
 cement-based
 sprayable

Ramps
 Workshops
 Industrial halls
 Sintering channel



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Abrasion cm ³ 50 cm ²	Consumption kg/m ²
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
P22	0 – 4	20 – 40	34	60	63	82	6	8	10	6,0	20

STEEL-FIBRE SCREED

PAGEL-STEEL-FIBRE FLOORING

P3A

though elasticity
 ready for use
 shock and wear resistant
P3A/15: Basalt aggregate
 heatproof, shortterm
 up to 500°C

Rolling and steel plants
 Tank workshops
 Industrial halls
 High temperature areas (**P3A/15**)



P3A/15

	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Abrasion cm ³ 50 cm ²	Consumption kg/m ²
			1 d	3 d	7 d	28 d	1 d	3 d	28 d		
P3A	0 – 8	20 – 80	50	58	82	94	6	7	8	3,1	22
P3A/15	0 – 5	20 – 80	50	56	87	103	8	10	13	3,0	25

EH1

PAGEL-EPOXY - RESIN

EH114

EH115

priming
sealing
solidification
adhesion layer
cover sealing

EH1
low viscosity
high penetration
multi purpose unit

dry surface

EH114
fast setting
reacting from +5 °C

low temperatures

EH115
high bonding on moist
subsoil

moist subsoil



	Appli- cation number	Layer thickness mm	Compo- nents	Application temperatur °C	Application time Min.	Consump- tion g/m ²
EH1	1	-	2	+8 - +30	ca. 45	250 - 500
EH114	1	-	2	+5 - +20	ca. 20	250 - 500
EH115	1	-	2	+8 - +30	ca. 45	250 - 500

COATING

EH120

PAGEL-EPOXY - COATING

EH130

EH136

solvent-free
high density
self leveling
weather-proof
abrasion resistant
water-friendly

EH120 THIN COATING
Epoxy based
self leveling, high build coating
pigmented, with aggregate

EH130 FINAL COATING
final resin coating
Coating for concrete and screed underground
pigmented, without aggregate

EH136 SURFACE PROTECTION
Evaporation protection for concrete and mortar
surfaces
transparent or pigmented



	Appli- cation number	Layer thickness mm	Compo- nents	Application temperatur °C	Application time Min.	Consump- tion g/m ²
EH120	1	1 - 5	2	+10 - +30	ca. 45	ca. 1,4
EH130	1	-	2	+10 - +30	ca. 45	0,3 - 0,8
EH136	1	-	2	+10 - +30	ca. 60	0,2 - 0,5

PAGEL-EPOXY - MORTAR

easy to use
abrasion resistant
water impermeable
three-components
(resin/hardener/sand)

EH2 BOXING UP MORTAR

Struts
Bridge bearing
pigmented

EH192 MORTAR

Industrial hall, storage halls, garages,
repair places, transparent



EH2

EH192

	Appli- cation number	Layer thickness mm	Compo- nents	Application temperatur °C	Application time Min.	Consump- tion g/m ²
EH2	1	2 - 40	3	+10 - +30	20 - 40	ca. 2,0
EH192	1	2 - 30	3	+10 - +30	20 - 40	ca. 2,0

INJECTION

PAGEL-INJECTION-RESIN

solvent-free
low viscously
high compressive and
bonding strength
permanent connection
sea water and waste
water impermeable
high adhesive force
passive behaviour
against steel thixotrop

EH145 INJECTION-RESIN

bonds fire cracks, hard, low viscosity
2-component epoxy-resin

PU245 INJECTION-RESIN

flexible crack-filling
2-component polyurethane-resin

PU246 INJECTION-FOAM

foam developing, without solvents,
blocks water penetration
2-component polyurethane-resin

PU1 ADHESIVE-RESIN

non sag
high bonding strength, seals crack before filling,
2-component polyurethane-resin



EH145

PU245

PU246

PU1

	Appli- cation number	Layer thickness mm	Compo- nents	Application temperatur °C	Application time Min.	Consump- tion kg/l
EH145	1	-	2	+10 - +30	20 - 75	1,1
PU245	1	-	2	+5 - +30	35 - 70	1,1
PU246	1	-	2	+5 - +30	10 - 45	1,2
PU1	1	-	2	+10 - +30	8 - 20	0,7 /lfdm

O1

PAGEL-CURING MEMBRANE

protects surfaces against premature water evaporation
 provides for slower draining of the concrete, screed and mortar,
 forms water vapour-close film
 prevents crack formation

Concrete and mortar surfaces
 Cement of screeds
 Concrete blocks and finished units
 dams and heavy structures



	Appli- cation number	Layer thickness mm	Barrier- coefficient %	Application temperatur °C	Application time Min.	Consump- tion g/m ²
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O1	1	-	85	+5 - +30	-	200
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BONDING ADDITIVE

M1K

PAGEL-BONDING ADDITIVE

dispersion with high bonding strength
 improves bending strength
 smooth application
 surface protection

Bonding-primer
 self-leveling floor
 Mortar
 Concrete



	Appli- cation number	Layer thickness mm	Adhesive strength N/mm ²	Application temperatur °C	Application time Min.	Consump- tion kg/m ²
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M1K	-	-	≥ 3,0	+5 - +30	-	0,2 - 1,0
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PAGEL-QUICK-REPAIR MORTAR

B 1

areas of installation
easy to use
quick setting
load bearing
ready for use
waterproof
B1: 5 min.

Fillings of e.g. anchorages
Repair of water break-throughs
filling of holes
Sealings
Assembly
filler for plugholes



	Grain size mm	Layer thickness mm	Compressive strength N/mm ²				Bending strength N/mm ²			Adhesive strength N/mm ²	Consumption kg/dm ³
			1 h	2 h	1 d	7 d	1 d	3 d	28 d		
B1	-	-	6	6	10	50	-	-	-	-	2

CONSTRUCTION AND TILE ADHESIVE

PAGEL-CONSTRUCTION AND TILE ADHESIVE

R 34

high bond strength and good flexibility
multi-purpose use
water- / frost resistant
R34W: white
R34S: fast setting

Wall and floor areas
solid foam
Isolation- and protection covering



R 34W

R 34S

	Appli- cation number	Layer thickness mm	Adhesive strength N/mm ²	Application temperatur °C	Application time Min.	Consump- tion kg/m ²
R34	1	1 - 3	≥ 1,5	+5 - +30	45	2,0
R34W	1	1 - 3	≥ 1,5	+5 - +30	45	2,0
R34S	1	1 - 3	≥ 1,5	+5 - +30	20	2,0

PAGEL CONCRETE REPAIR SYSTEMS

ZTV-SIB 90 LIST OF BUILDING RULES PART A/2 / RiLi-SIB / ZTV-W

Appli- cation	System application and product name	Test- certificate no.	Agreement- certifikat no.	Expiry- date
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PCC/SPCC-MORTAR-SYSTEMS

PCC I	MHO2	CORROSION PROTECTION AND ADHESION LAYER	MKB MHB			
	MH20	PCC-I-MORTAR (0 – 2 mm)	WM	P VII.1/25202/8	01/2188-1-50	31.03.06
	MH80	PCC-I-MORTAR (0 – 8 mm)	WM	P 2141/01-110	01/2141-01-110-93	17.09.05
PCC II	MSO2	CORROSION PROTECTION AND ADHESION LAYER	MKB MHB	P VII.1/25203/6	00/2188-45	20.03.09
	MS 20	PCC-MORTAR (0 – 2 mm)	WM			
	MSO5	PCC-SCREEDING COMPOUND	FS			
PCCII/M3	PAGEL CONSTRUCTION-MORTAR					
	MHO2	CORROSION PROTECTION AND ADHESION LAYER	MKB MHB			
	M3	CONSTRUKTION-MORTAR (0 – 2 mm)	WM	P 2334/02-159	03/2334/02-159-145	03.12.07
SPCC	<u>WET- and DRY-spraying</u>			P 2255/00-91	00/2255/00-71-67	31.08.05
	MSO2	CORROSION PROTECTION	MKB			
	SP20	SPCC-MORTAR (0 – 2 mm)	WM			
	<u>DRY-spraying</u>			P 2551/01-130	01/2551/01-130-122	09.12.06
	MSO2	CORROSION PROTECTION	MKB			
	SP40	SPCC-MORTAR (0 – 4 mm)	WM			

CONCRETE PROTECTION-SYSTEM

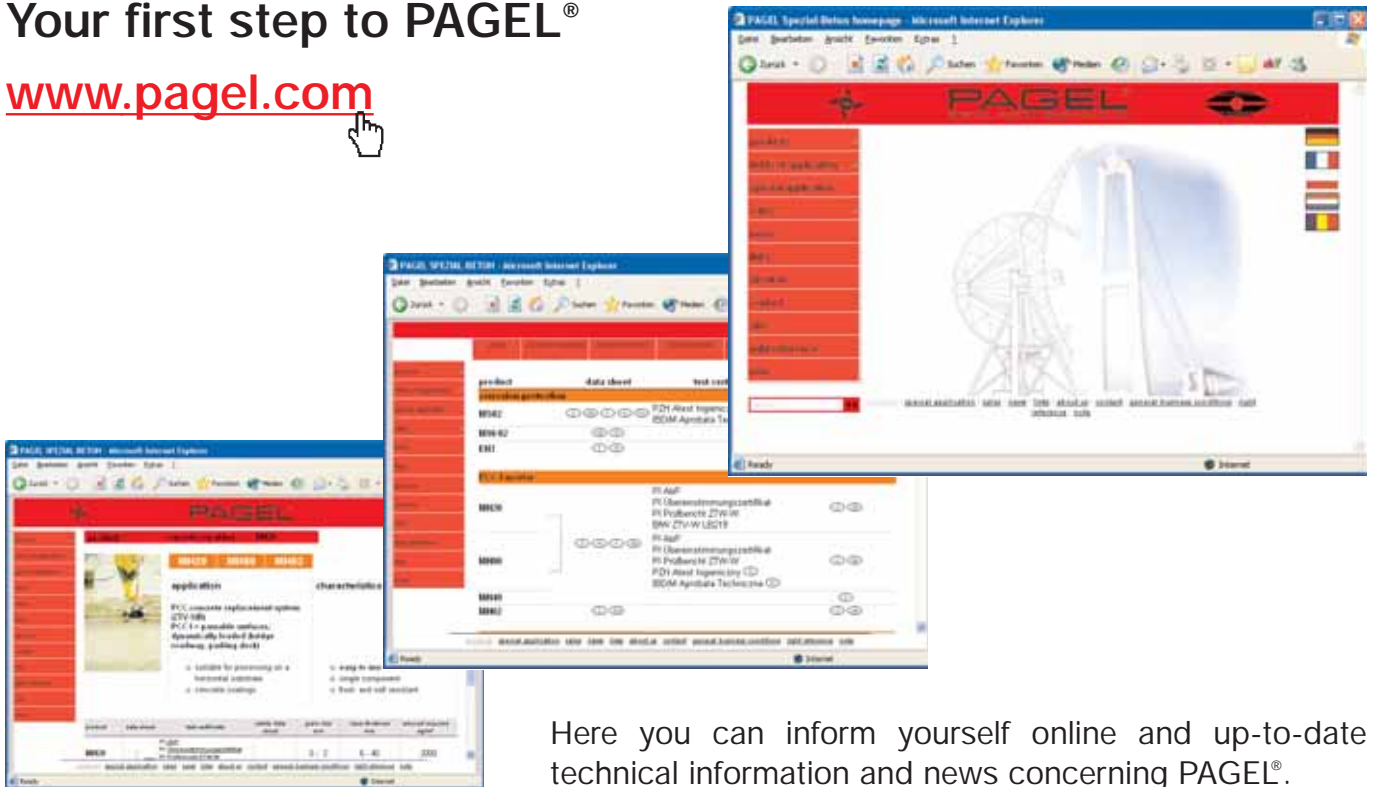
OS-A	O2A	HYDROPHOBATION	H	P 1860/99-10	00/1860/99-10-46	24.08.09
OS-B	O2A	HYDROPHOBATION	H	P 1860/99-34	00/1860/99-34-47	26.10.09
	O2C	PROTECTION PAINT	OS			
OS-C	MSO5	PCC-SCREEDING COMPOUND	FS	P 1860/99-35	00/1860/99-35-48	26.10.09
	O2C	PROTECTION PAINT	OS			
OS-DI	D1	PAGELASTIC	OS	P 2333/00-99	00/2333/00-99-69	24.09.05
OS-DII	MSO5	PCC-SCREEDING COMPOUND	FS	P 1860/99-36	00/1860/99-36-49	26.10.09
	O2DE	PROTECTION COATING	OS			

ZTV - W

SPCC	SP20	SPCC-MORTAR	WM	2936		08.2005
PCC	MS 20	PCC-MORTAR (0 – 2 mm)	WM	2936		03.2008
	MH20	PCC-MORTAR (0 – 2 mm)	WM	2936		03.2006
	MH80	PCC-MORTAR (0 – 8 mm)	WM	2936		09.2005
		PAGEL CONSTRUCTION-MORTAR				
	MHO2	CORROSION PROTECTION AND ADHESION LAYER	MKB MHB			
	M3	CONSTRUKTION-MORTAR (0 – 2 mm)	WM	P 2334/02-159	03/2334/02-159-145	03.12.07

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The data presented was derived from tests under normal climate conditions according to DIN 50014 and mean average values and analysis.

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