

### PRODUCT DESCRIPTION

V1 / 30HF	Pagel Super High Strength Grout (0-3mm)
V1 / 60HF	Pagel Super High Strength Grout (0-6mm)
V1 / 0HF	Pagel Super High Strength Grout (0mm)

### AREAS OF APPLICATION

#### SUBSTRATE

Clean thoroughly, remove all loose and unsound material such as cement slurry etc using a grit or water jet blaster or similar until the underlying grain structure is reached. The underlying substrate must have sufficient pull-off strength (i.m. 1.5 N/mm<sup>2</sup>).

Remove all of the rust from any exposed reinforcement bars with a sandblaster (Sa 2 1/2 as specified under DIN EN ISO 12944-4). Wet the surface approx. 6–24 hours before grouting until capillary saturation.

#### FORMWORK

Attach in such a way that it is leak proof and robust. Seal around concrete base with, e.g. sand or dry mortar.

#### MIXING

The grout is supplied ready for use and only needs to be mixed with water. Measure out the quantity of water specified on the packaging and pour most of it into a clean and suitable mixing device (e.g. compulsory mixer). Add the dry mortar and mix for at least 3 minutes; add the remaining water and mix for another 2 minutes until it forms a uniform mass. Depending on the existing mixer longer mixing times may be required. Once the grout is ready mixed, apply immediately. If using a mixing and delivery pump and out-putting material continuously, we recommend installing an agitator downstream of the mixing and delivery pump to ensure that the material is properly mixed. If using a mixing and delivery pump such as: PABEC II; we recommend the agitator: Putzmeister Dynamat.

#### MIXING WATER

Drinking water quality

### GROUTING

The mixture must be poured from one side or corner only in one continuous pour. When grouting large areas, we recommend to pour the grout starting in the centre of the foundation plate, using a funnel or delivery house. On machine installations, cavities should be filled first (up to around just below the top edge) and then the base of the machine or similar.

### CAUTION

On completion of the grouting, exposed areas must be immediately protected from premature water evaporation for a period of 3-5 days (wind, drafts, direct sunlight).

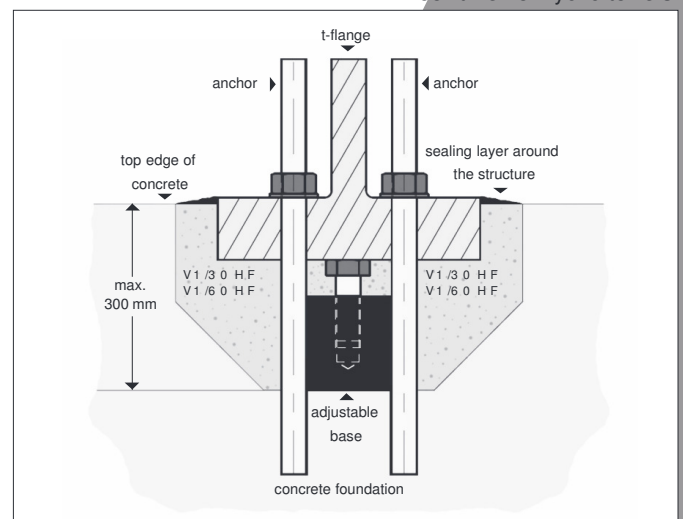
### METHODS THAT CAN BE USED TO PROTECT THE GROUT

Misting the grout with water, covering it with foil and strips of felt, thermal insulation or a material that retains moisture

### FIELDS OF APPLICATION

- Turbines, compressors
- Wind turbines, cast joints
- Portal and container transport systems V 1 / 0 H F : Lubemix for hoses

Jointfiller for hybrid towers



### **O1 PAGEL EVAPORATION PROTECTION**

When using O1 PAGEL EVAPORATION PROTECTION observe the information on the Technical Data Sheet O1 PAGEL EVAPORATION PROTECTION .

Temperature limits for application (substrate, air and grout temperature): +5 °C to +35 °C

Applying the concrete in low temperatures and using cold mixing water will delay the concrete's strength development, require that it is intensely mixed and will reduce its flowability. High temperatures speed it up.

#### **PROTRUDING GROUT**

Do not exceed the specified 50 mm when allowing grout to protrude and observe the structural specifications. When grouting dynamically stressed and prestressed base plates and machine foundations that are subject to high compression strengths at the edges, the grout should ideally be applied to be flush with the bearing plate, provided with a 45° edge using formwork or cut off flush with the bearing plate before it has set. This will prevent any stresses from becoming superimposed on one another and from becoming annihilated (observe static and structural specifications).

#### **NON-IRON METALS**

Cement and cementitious building materials may cause non-iron-metals (e.g. aluminium, copper, zinc) to loosen or come off where they are tied in. Please contact us for technical advice.

#### **PAGEL-GROUT CEMENT DIN EN 197-1**

**compliant Aggregates:**  
EN 12620 compliant

**Additives:**  
EN 450, AbZ, EN13263  
compliant (quick ash,  
microsilica etc.)

**Additional substances:**  
DIN EN 934-4 compliant



TECHNICAL DATA				
TYPE		V 1 / 3 0 H F	V 1 / 6 0 H F	V 1 / 0 H F
grain size	mm	0-3	0-6	0
coating thickness	mm	30-300	40-400	-
amount of water	% max.	9	9	20
consumption (dry mortar)	app. kg/dm <sup>3</sup>	2.30	2.30	1.836
density of freshly mixed mortar	app. kg/dm <sup>3</sup>	2.45	2.45	-
working time	20 °C app. min	60	60	60
slump flow	5 min cm	55	-	30
	30 min cm	45	-	-
slump	5 min cm	60	60	60
	30 min cm	52	52	52
expansion	24 h Vol. %	+ 0.1	+ 0.1	+ 0.3
compressive strength*	24 h N/mm <sup>2</sup>	70	70	60
	7 d N/mm <sup>2</sup>	90	90	85
	28 d N/mm <sup>2</sup>	130	115	100
	56 d N/mm <sup>2</sup>	135	120	-
	91 d N/mm <sup>2</sup>	135	120	-

All test data are guide values, proofed in our German manufacturing plants. - values from other manufacturing plants may vary.  
\* Grout compressive strength tested as specified by DIN EN 196-1; Concrete compressive strength tested as specified by DIN EN 12390-3 V1/30HF; Correl. compressive strength factor: Prism compression strength 40 x 40 x 160 mm : Cube compression strength 150 mm<sup>3</sup> = 0.98



All of the test values provided correspond to DAFstb VeBMR – Directive  
Tests of fresh and hardened grout at 20°C ± 2°C, storage of the test pieces after 24 hours until the strength test in water at 20°C ± 2°C. Higher or lower temperatures result in deviating properties and test results of the fresh/hardened grout. Depending on the temperature the consistency can be adapted by a slight reduction of the mixing water.

### STORAGE

12 months. Cool, dry, free from frost. Unopened in its original packaging.

### PACKAGING

20-kg bag, euro-pallet 960 kg, 1000-kg-Big-Bag

### HAZARD CLASS

no dangerous substance follow safety data sheet

### GISCODE

ZP1



Exposure class according to:

DIN 1045-2 and EN 206-1

### PAGEL – SUPER HIGH STRENGTH GROUT

	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
V 1 / 3 0 H F	•	••••	•••	•••	••••	••	•
V 1 / 6 0 H F	•	••••	•••	•••	••••	••	•

Moisture classes in reference to concrete corrosion caused by alkaline silica reactions				
moisture class	WO	WF	WA	WS
	dry	damp	damp • external alkali supply	damp • external alkali supply • strong dynamic  stress
V 1 / 3 0 H F	•	•	•	•
V 1 / 6 0 H F	•	•	•	•

All of the aggregates used in PAGEL products are obtained from safe sources and correspond with the alkali sensitivity class E1 as specified under DIN EN 12620.

Classification according to DAfStb VeBMR - Directive Product:  
PAGEL - GROUT

	V 1 / 3 0 H F	V 1 / 6 0 H F
flowability class	f1	a2
shrinkage class	SKVM 0	SKVB 0
early strength class	A	A
compressive strength class	C100/115	C100/115

CE	
0921	
PAGEL SPEZIAL-BETON GMBH & CO. KG Wolfsbankring 9 45355 Essen, Germany	
11 110931 EN 1504-6:2006 V1/30HF PAGEL Super high strength grout Anchoring product	
Pull-out	≤ 0.6 mm
Chloride ion content	≤ 0.05 %
Reaction to fire	A1

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