

## VB3 PAGEL®-RAPID SET GROUT

### PROPERTIES

- **extremely early-high-strength and shrinkage-free grout and assembly mortar-** cement based
- after **just 30 minutes** achieves sufficient compressive strength (8 N/mm<sup>2</sup> at 20 °C) for early loading
- can be used universally for assembly, repair and grouting work
- **does not shrink**, bonds in a force-locking manner, adheres to the substrate
- **water-impermeable**, largely impervious to oil, resistant to frost and dew-salt
- can be applied **without any problems**, is mixed only with water and has a processing time of 10-15 minutes
- as a result of short assembly times attains high **economy** and saves costs – if used for traffic applications, only brief interruptions are necessary
- is monitored in accordance with the recognized standards and guidelines in force. The production is certified in accordance with **ISO 9001**.
- **is supplied as a system** and consists of the following products:
  - VB 3/4O 0–4 mm
  - VB 3/P 0–0.4 mm plastic consistency
  - VB 3/S 0–0.4 mmsuperfast

### FIELDS OF APPLICATION

- **drain cover** frame grouting
- **repair** of concrete damage, kerbstones, stair-steps
- **grouting** of supports and finished parts



# VB3 PAGEL®-RAPID SET-GROUT

## TECHNICAL DATA

| TYP                     |                    | VB3               | VB3   | VB3   | VB3   |    |
|-------------------------|--------------------|-------------------|-------|-------|-------|----|
|                         |                    |                   | /40   | /S    | /P    |    |
| Grain                   | mm                 | 0-0,4             | 0-4,0 | 0-0,4 | 0-0,4 |    |
| Grouting height         | mm                 | 10-50             | 30-60 | 10-50 | 10-50 |    |
| Quantity of water       | %                  | 18                | 15    | 18    | 15    |    |
| Consumption             | kg/dm <sup>3</sup> | 1,8               | 2,0   | 1,8   | 1,8   |    |
| Processing time 20 °C   | Min.               | 10                | 10    | 10-15 | 10-15 |    |
| Measure of flow (Rinne) | cm                 | 70                | 68    | 65    | 16,5  |    |
| Expansion               | %                  | + 0,4             | + 1,0 | + 0,5 | + 0,4 |    |
| Compressive strength    | 30 min             | N/mm <sup>2</sup> | 4     | 9     | 10    | 9  |
|                         | 1 h                | N/mm <sup>2</sup> | 18    | 13    | 14    | 15 |
|                         | 2 h                | N/mm <sup>2</sup> | 20    | 18    | 20    | 18 |
|                         | 4 h                | N/mm <sup>2</sup> | 23    | 18    | 23    | 19 |
|                         | 6 h                | N/mm <sup>2</sup> | 24    | 19    | 25    | 19 |
|                         | 8 h                | N/mm <sup>2</sup> | 25    | 20    | 25    | 20 |
|                         | 24 h               | N/mm <sup>2</sup> | 30    | 25    | 25    | 25 |
|                         | 7 d                | N/mm <sup>2</sup> | 40    | 30    | 30    | 35 |
|                         | 28 d               | N/mm <sup>2</sup> | 50    | 40    | 43    | 50 |
| Bending strength        | 30 min             | N/mm <sup>2</sup> | 2     | 1     | 2     | 1  |
|                         | 1 h                | N/mm <sup>2</sup> | 3     | 2     | 2     | 2  |
|                         | 2 h                | N/mm <sup>2</sup> | 3     | 2     | 3     | 2  |
|                         | 4 h                | N/mm <sup>2</sup> | 3     | 2     | 3     | 2  |
|                         | 6 h                | N/mm <sup>2</sup> | 3     | 2     | 3     | 3  |
|                         | 8 h                | N/mm <sup>2</sup> | 4     | 3     | 3     | 3  |
|                         | 24 h               | N/mm <sup>2</sup> | 5     | 4     | 5     | 3  |
|                         | 7 d                | N/mm <sup>2</sup> | 6     | 4     | 5     | 4  |
|                         | 28 d               | N/mm <sup>2</sup> | 8     | 5     | 7     | 6  |

All test data are values derived under normal climate conditions. 23/50-2

- Supplied in:** 25-kg-bag  
**Storage:** dry  
**Shelf-life:** 9 months in sealed bags  
**Hazard class:** observe 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 service

## PROCESSING

**SUBSTRATE:** Clean thoroughly. Remove loose and adhesion-restricting parts and cement slurry by high-pressure water jets or other equipment down to the load-bearing grain structure. Approximately 6 hours before grouting pre-wet to saturation.

**FORMWORK:** Fix well and with stability, carefully seal on the foundation concrete with sand or dry mortar.

**MIXING:** The mortar is ready-for-use and only has to be mixed with water. 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. The grouting process should proceed directly.

**WATER:** 25 kg VB3 + 5.0 to 6.0 l water

**GROUTING:** The grouting process is to be carried out only from one side or corner and, if possible, without interruption. For large-area processes we recommend, possibly proceeding from the middle of the plate, that you grout with funnel and corresponding tube. First grout the anchor holes (up to the top edge of the anchor hole) and then the machine plate or such like. Processing time: approx. 15 minutes (20 °C).

**GROUTING HEIGHT:** up to 50 mm  
for drain cover applications

**CAUTION:** Exposed surfaces are to be protected against wind, draughts and premature water evaporation e.g. with film or O1 PAGEL-SURFACE-PROTECTION. The grouting edge should be no wider than approx. 50 mm. In the event of frost, please get in contact with us; lower temperatures delay the development of strength and reduce flow, higher temperatures accelerate these; colder preparation water interferes with flow.

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).



# PAGEL®

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VB3

VB3/40

VB3/S