

# BASALT GROUT

## V15/30 BASALT GROUT V15/50 BASALT GROUT

### TEST CERTIFICATES AND SUPPORTING DOCUMENTS

- › Factory production control acc. to DIN EN 1504-6
- › Company certification acc. to DIN EN ISO 9001:2015

### PROPERTIES

- › Aggregates of basalt sand and basalt grit
- › Heat resistant up to 400 °C (short duration)
- › Special formulations with steel fibres available (stainless steel fibres in the event of temperature loads)
- › High flowability
- › Controlled swelling with a frictional bond between concrete foundation and machine base plate
- › High early and final strength
- › Complies with the requirements of building material class A1 (non-combustible) as specified under decision 2000/605/EC of the European Commission dated September 26, 2000 (published in the official journal L258)

### AREAS OF APPLICATION

- › Iron and steel works as well as mines
- › Machines and anchorings
- › Steel columns
- › Turbines, generators, compressors
- › Diesel engines and other power equipment operating under heavy vibration
- › Paper plants, chemical plants and refineries
- › Crane runway rail bearings
- › Container railway tracks

#### MOISTURE CLASSES BASED ON CONCRETE CORROSION FROM ALKALI-SILICIC ACID REACTIONS

| Moisture class | WO | WF | WA | WS |
|----------------|----|----|----|----|
| <b>V15</b>     | •  | •  | •  | •  |

The aggregates in PAGEL®'s products comply with the requirements of alkali sensitivity class E1 from non-hazardous sources specified under DIN EN 12620.

#### EXPOSURE CLASS ALLOCATION ACC. TO: DIN EN 206-1 / DIN 1045-2

|               | XO   | XC   | XD  | XS   | XF   | XA   | XM  |
|---------------|------|------|-----|------|------|------|-----|
|               | 1234 | 123  | 123 | 1234 | 1234 | 123* | 123 |
| <b>V15/30</b> | •    | •••• | ••• | •••  | •••  | •••  | •   |
| <b>V15/50</b> | •    | •••• | ••• | •••  | •••  | •••  | •   |

\* Having sulfate attack up to 600 mg/l  
With protective measures according to DIN 1045-2

## TECHNICAL DATA

| TYPE                            |                        | V15/30* | V15/50** |
|---------------------------------|------------------------|---------|----------|
| Grain size                      | mm                     | 0-3     | 0-5      |
| Undergrouting height            | mm                     | 30-50   | 40-100   |
| Amount of water                 | max. %                 | 12      | 12       |
| Consumption approx.             | kg/m <sup>3</sup>      | 2,100   | 2,200    |
| Fresh mortar raw density        | kg/m <sup>3</sup>      | 2,400   | 2,450    |
| Processing time approx. + 20 °C | min                    | 30      | 30       |
| Slump flow                      | 5 min mm               | ≥ 550   | n. d.    |
| Measure of extension            | 5 min mm               | n. d.   | ≥ 500    |
| Swelling                        | 24 h Vol.-%            | ≥ 0.1   | ≥ 0.1    |
| Compressive strength*           | 1 d N/mm <sup>2</sup>  | ≥ 40    | ≥ 40     |
|                                 | 7 d N/mm <sup>2</sup>  | ≥ 60    | ≥ 60     |
|                                 | 28 d N/mm <sup>2</sup> | ≥ 75    | ≥ 75     |
| Bending tensile strength**      | 1 d N/mm <sup>2</sup>  | ≥ 5     | ≥ 5      |
|                                 | 7 d N/mm <sup>2</sup>  | ≥ 7     | ≥ 7      |
|                                 | 28 d N/mm <sup>2</sup> | ≥ 8     | ≥ 8      |

\* Testing of bending tensile and compressive strength in accordance with DIN EN 196-1

\*\* Concrete compressive strength tested as specified by DIN EN 12390-3; Concrete bending tensile strength tested as specified by DIN EN 12390-5

n. d. = not determined

**Note:** All fresh and solid mortars are tested at 20 °C ± 2 °C. Higher or lower temperatures result in deviating properties of fresh respectively solid mortars and test results. Depending on the temperature, the consistency can be adapted with a slight reduction of the mixing water.

**Storage:** 12 months. Cool, dry, free from frost. Unopened in its original container.

**Delivery form:** 25-kg bag, Euro pallet 1,000 kg

**Hazard class:** Non-hazardous material, observe information on packaging.

**GISCODE:** ZP1

### PAGEL® PRODUCT COMPOSITION:

Cement: acc. to DIN EN 197-1  
 Aggregate: acc. to DIN EN 12620  
 Additions: acc. to DIN EN 450, general building inspection approval (abZ), DIN EN 13263 (fly ash, microsilica, etc.)  
 Admixtures: acc. to DIN EN 934-4

## PROCESSING

### SUBSTRATE PREPARATION:

Remove loose and unsound material such as cement slurry and dirt etc. using suitable methods, e.g. shot-blasting or similar until the underlying solid grain structure has been exposed. A sufficient average tear strength (≥ 1.5 N/mm<sup>2</sup>, KEW ≥ 1.0 N/mm<sup>2</sup>) must be ensured.

### Prewetting:

Prewet the concrete substrate to capillary saturation for approx. 6-24 hours.

### Reinforcing steel:

Blast all rust off exposed reinforcement bars until the underlying metal has been exposed acc. to purity grade Sa 2 ½ in accordance with DIN EN ISO 12944-4.

### Non-iron metals:

Cement and cement-bound building materials may cause non-iron-metals in the transitional area of the contact surface (e.g. aluminium, copper, zinc) to loosen.

Please contact us for technical advice.

### MIXING:

The dry mortar is supplied ready to use and only needs to be mixed with water. Fill the specified amount of water apart from a residual amount 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 at least another 2 minutes until it forms a homogeneous mass.

### 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 filling hose. Cavities should be filled first (up to around just below the top edge) and then the machine plate or similar.

**Temperature range:** + 5 °C to + 35 °C

**Mixing water:** Drinking water quality

### FOLLOW-UP TREATMENT:

Exposed grout areas must be protected from premature water evaporation (from wind, draughts, direct exposure to sun, etc.) immediately on completion of the work for a period of 3-5 days.

### Suitable curing methods:

Water spray, foil covers with jute sheets, thermofoils or moisture-retaining covering sheets, **01** EVAPORATION PROTECTION.

The technical data sheet must be observed when using **01** EVAPORATION PROTECTION.