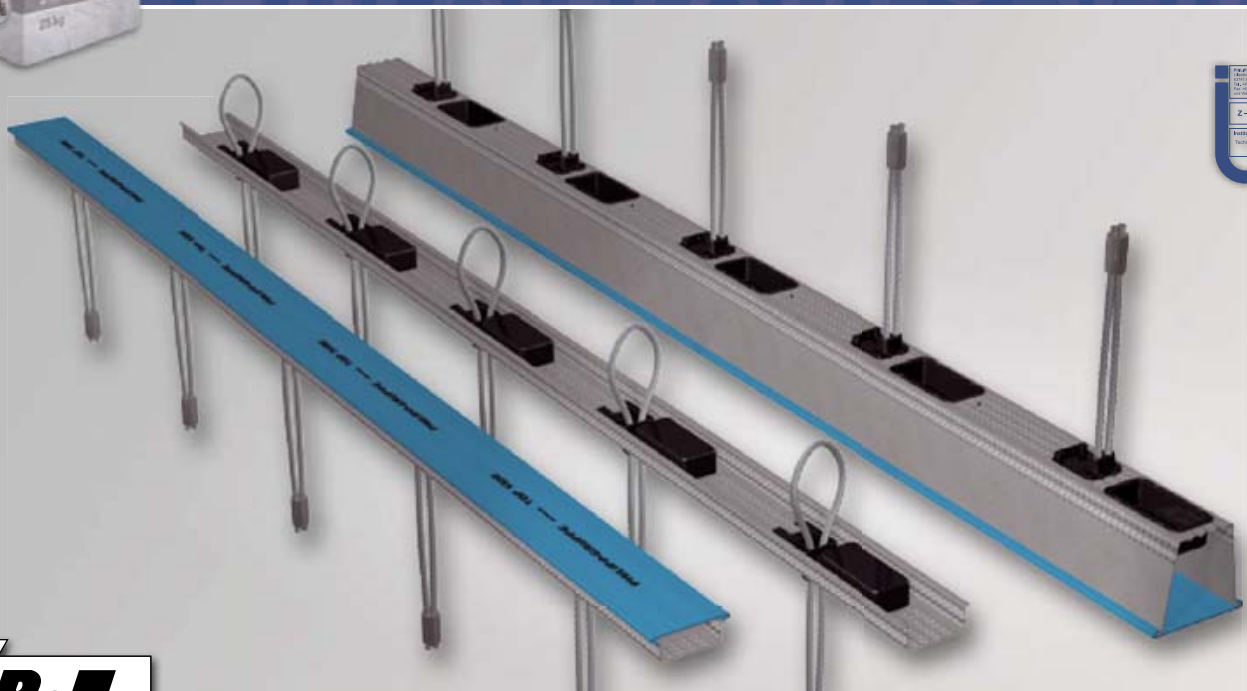


# PHILIPPGROUP



EuroGrout® Varix



VB3-V-015-de - 04/16



for the PHILIPP Power Duo System

Technical Data Sheet

## P&T EuroGrout® Varix (grouting mortar)

EuroGrout® Varix mortar is a ready-for-use dry mixture made of high quality cement (DIN 1164 / EN 197), of naturally round quarzitic aggregate (EN 12620) and approved concrete admixtures. EuroGrout® Varix is checked according to the DAfStb-Guideline (German committee for reinforced concrete „Guideline for production and usage of cement based pour concrete and grout“).

### Application

Varix creates with precast concrete elements and integrated, approved Power Duo rails a force-fit and permanent connection.

### Properties

The EuroGrout® Varix

- becomes a highly flowable mortar after water is added and closes concrete voids non-positively and self-leveling
- creates a high strength and has a high load capacity already after 24 hours (see following tables)
- is almost free of chrome according to Directive 2003/53/EC
- is resistant against frost, de-icing salt and sulphate, waterproof and free of chloride
- is non-combustible according to DIN 4102/EN 12501-1 class A1 and therefore can be taken in a mortar-mix used for fire protection



Following processing instructions are only for information. Please refer also to the information given in the Installation Instruction and the approval of the Power Duo system (Z-21.8-2066).

### Processing

#### 1. Pre-treatment

Before grouting the concrete surface has to be cleaned and watered until the water saturation is reached. Stagnant water must be removed. Cement slurry in the area to be grouted must be removed.

#### 2. Water consumption

Approx. 12 - 14 % water (3.0 - 3.5 litres) per 25 kg bag.

#### 3. Mixing

EuroGrout® Varix should be mixed in a compulsory mixer or with a slow moving stirrer in a mortar barrel. First, put 4/5 of the water amount into the mixer. Then add the mortar, after a short mixing time of just 2 minutes fill in the remaining water. Furthermore mix another two minutes until a homogeneous consistency is reached.

Mixing time: approx. 4-6 minutes.

Processing time: 60 minutes at +20°C.

### 4. Instructions for grouting

- The area to be grouted has to be sealed at the outer side completely and tightly. A smooth and non-sucking formwork material eases the later removing and results in clean edges.
- The grouting overlap should not exceed 50 mm.
- Varix can be poured or pumped.
- When processing with a mixing pump, please note that a batch mixer must be used because of the opening period of the mortar. The use of machines, distances, lengths and cross-sections of mortar hoses must be checked carefully before.
- Grouting should not be done at temperatures below +5°C respectively above +30°C without additional measures.

### 5. Post-treatment

Freshly grouted, free-standing zones must be protected against fast drying (e.g. keep it moist) for 3-5 days.

### Grain sizes of the mortar

- Grain size 0 - 5 mm

### Consumption

25 kg dry mortar results in 12.5 litres grouting mortar. For 1.0 m<sup>3</sup> about 2.000 kg dry mortar is needed.

### Storage

Dry and direct sunlight has to be avoided. The mortar should be used within 12 months (date of manufacture is given on the bag).

### Packaging

25 kg paper/PE-bags with 42 × 25 kg = 1.050 kg per euro-pallet

## EuroGrout® Varix

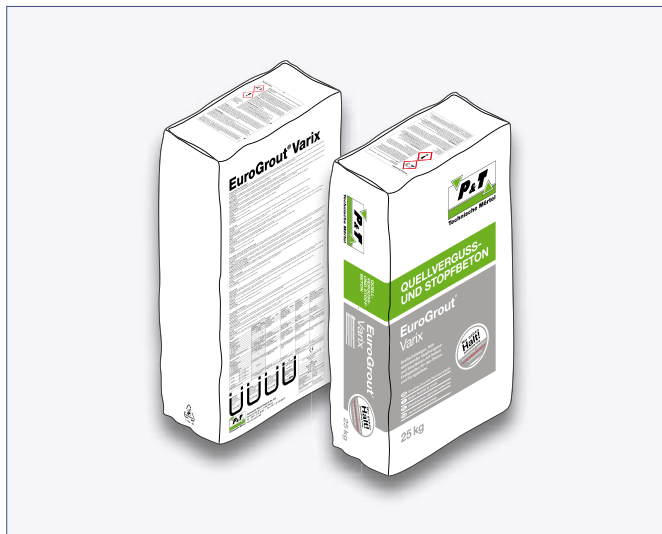
### Exposure classes acc. to DIN EN 206-1 / DIN 1045-2

XO	XC				XD			XS			XF				XA			XM ①			
0	1	2	3	4	1	2	3	1	2	3	1	2	3	4	1	2	3	1	2	3	
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① = excluded from DAfStB regulation

② = additional measures required (epoxy resin coating)

Class of shrinkage	Class of early strength	Class of compression strength	Slump-/ flow diameter class
SKVB II	A	C ≥ 55/67	a2



### Technical data

#### Compression strength

Days	[N/mm <sup>2</sup> ]
1	45
7	70
28	85

#### Bending tensile strength

Days	[N/mm <sup>2</sup> ]
1	7.0
7	10.0
28	11.0

#### Swelling measure

Swelling measure ≥ 0,8 % after 24 hours

Please refer to the approval and Installation Instruction of the Power Duo System. These can be found at [www.philipp-group.de](http://www.philipp-group.de) or are available on request.



EuroGrout® Varix is supplied by:

#### P&T Technische Mörtel GmbH & Co. KG

Abt. Auftragsbearbeitung  
Bataverstraße 84  
41462 Neuss, Germany

#### Contact:

Tel.: +49 (0) 2131 / 56 69-0  
Fax: +49 (0) 2131 / 56 69-22  
[www.eurogrout.de](http://www.eurogrout.de)



The product specific technical data given in this sheet are based on laboratory values. All data were determined at an application temperature of +20° C. Please note that the values can vary slightly in the application. Colours given correspond to an optical sample. Variations of the shade of colour cannot be excluded. We recommend to test the suitability of the product in advance to the actual application. With the publication of this edition previous technical data sheets are invalid.

Notes:

