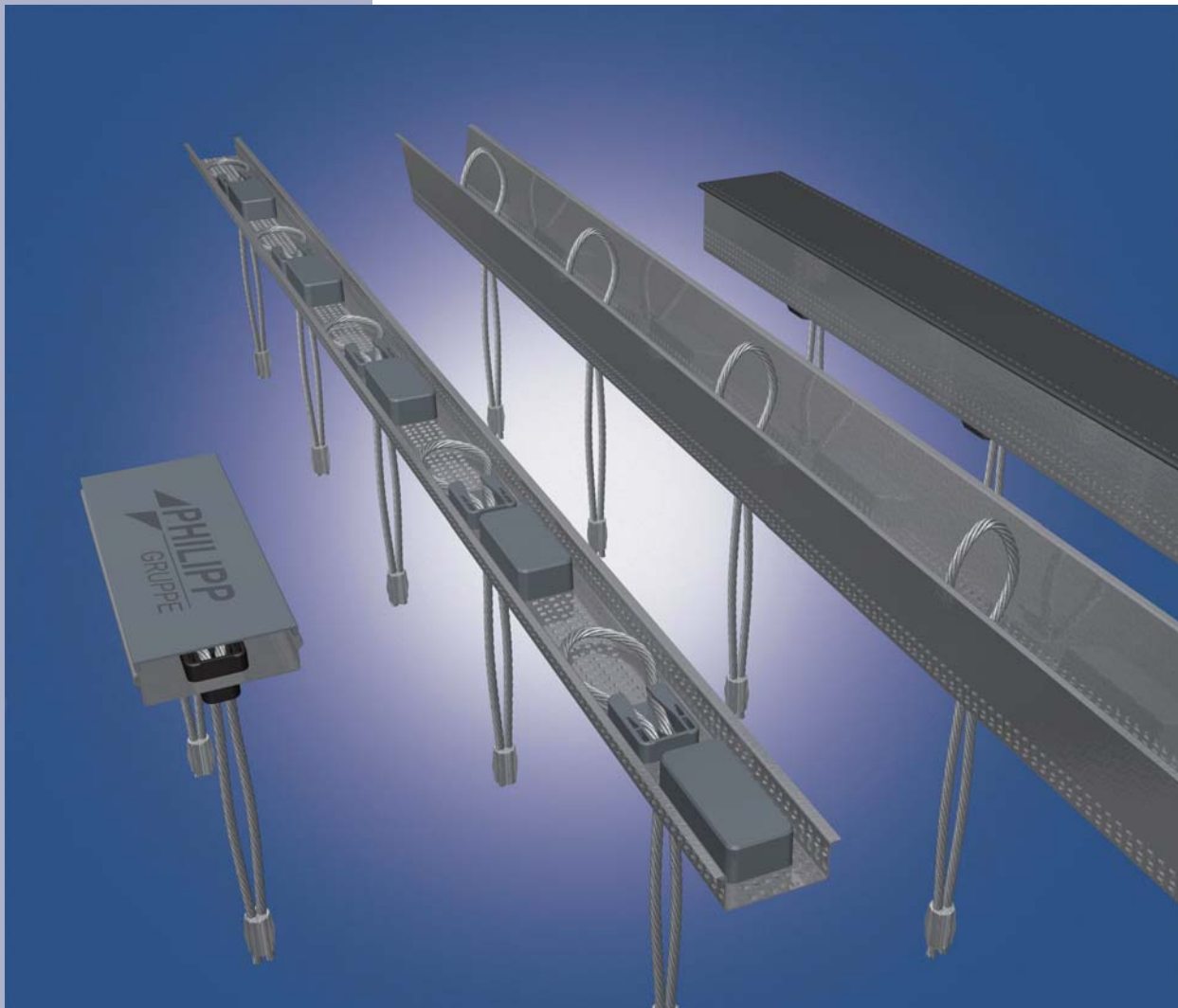




PHILIPP Grouting Mortar

Product Information

for the Power Duo-, Power Rail- and Power Box System



05/09 - EN

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The **PHILIPP Grouting Mortar** is a ready to use dry mixture made of high-quality cement (DIN1164/ENV197), round crystal aggregates (DIN4226-1) and approved concrete additives (Z-0921-BPR-2009).

Application

The **PHILIPP Grouting Mortar** generates a force and form fit connection of precast concrete units with integrated, approved connecting rails (Power Box, Power Rail and Power Duo System).

Characteristics

- After addition of water the mortar becomes a high flowable swelling mortar, which closes the hollow spaces in a form fit and self leveling way.
- Creates high compression strength.
- Is consistent against frost, de-icing salt, crude oil and is waterproof.
- According to DIN4102/EN 13501-1 this mortar is fire class A1, inflammable and therewith suitable for fire resistant filling.
- This mortar complies with European standards.
- Has a low water-cement value.
- Is suitable for inner and outer joints.

Aggregate size of **PHILIPP Grouting Mortar**:

- aggregate size 0-4mm

Processing



The following processing instructions are only for your information. Please pay attention to the installation instruction of the **PHILIPP Power Duo System** as well as the approval.

1. Preparation

The **PHILIPP Grouting Mortar** is ready to use. Only water must be added. Before grouting the surface must be cleaned thoroughly and pre-wetted. Stagnant water and cement slurry must be removed. The capillary pinholes must be open.

2. Water Amount

Max. 12% water. That means ca. 3.0l water for each 25kg.

3. Mixing

PHILIPP Grouting Mortar shall be mixed in a mortar bin using a compulsory mixer with a slow stirrer. At first only 2/3 of the water amount is put into the mortar bin. After mixing this water amount the remaining water amount can be added.

Mixing time: ca. 4-6 minutes.

Processing time: 60 minutes at 20°C.

4. Advice

- During grouting, air must be able to escape. Careful compactions can prevent trapped air.
- **PHILIPP Grouting Mortar** is not to processing without additional measures at temperatures under +5°C and above +30°C.
- The maximum filling height is 3.75m. Otherwise the joint must be filled in layers.

5. Post treatment

It should be prevented that **PHILIPP Grouting Mortar** dries up too fast for at least three days after application. Appropriate procedure includes covering with plastic sheets, wet tissues or irrigation.

Consumption

25kg dry mortar result in 13l **PHILIPP Grouting Mortar**.

Storage

Please avoid dry and direct solar radiation. It is suggested to consume the mortar within 12 months.

Delivery form

25kg paper/PE bags

The **PHILIPP Grouting Mortar** is an approved mortar. Certificates are available.

PHILIPP GROUTING MORTAR PRODUCT INFORMATION



Exposure class 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	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

① = excluded from StafStB regulation

② = additional procedures required

Shrinkage class	Early strength	Compression class	Flow slump / horizontal slump class
SKVM II	B	C ≥ 50/60	f3



Please pay attention to the approvals and the installation instructions of the **PHILIPP Power Box**, **PHILIPP Power Rail** and **PHILIPP Power Duo System**. These documents are available at our homepage www.philipp-group.de or on request.



Technical Data

Compression strength	
Days	[N/mm ²]
1 Day	44
3 Days	55
7 Days	70
28 Days	80

Bending tensile strength	
Days	[N/mm ²]
1 Day	5.8
3 Days	8.0
7 Days	10.0
28 Days	10.0

Flow measure
> 55 cm after 5 minutes

Horizontal slump
> 48 cm after 5 minutes

Swelling measure
Swelling measure > 01% after 24 hour.

PHILIPP Thixo Mortar can be ordered at:

PHILIPP GmbH
Tel.: +49 (0) 6021 / 40 27-300



P&T, Technische Mörtel GmbH

Abt. Auftragsbearbeitung
Bataverstraße 84
41462 Neuss



Tel.: +49 (0) 2131 / 56 69-0
Fax: +49 (0) 2131 / 56 69-22

The information of this data sheet, consultancy and other suggestions are based on research work and experience. These datas are non-binding and does not release the user to check the products for its purpose. All details are guide values and are determined at 20°C.

Ropes

- ▲ wire rope slings
- ▲ crane and forest ropes
- ▲ wire, hemp and polyamide ropes
- ▲ hoisting and special ropes
- ▲ polypropylene ropes
- ▲ rope connections



Lifting, attachment and lashing equipment

- ▲ load restraint systems
- ▲ RUD sling chains
- ▲ load suspension devices
- ▲ round slings, sling bands and lifting equipment
- ▲ rope and chain accessories
- ▲ lifting beams



Transport and mounting systems for prefabricated units

- ▲ transport anchors
- ▲ spherical-head anchor system
- ▲ fixing sockets
- ▲ connecting technique



Hydraulic, pneumatics and conveyor technique

- ▲ hydraulic units and components
- ▲ pneumatic, connector systems and accessories
- ▲ Hoses, fittings and accessories
- ▲ machines, tools, machinery systems and accessories

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