

Ready-mixed, fast-setting screed mortar

PCI Novoment® M3 plus

for fast track cement screeds

PCI[®]
Für Bau-Profis



Fields of application

- For indoor and outdoor use, also for direct use.
- For areas which are exposed to permanent wetness.
- For fast track bonded screeds and screeds installed on an isolating or insulating layer.
- Suitable for heated screeds.
- As repair mortar for concrete floors and cementitious screeds.
- For layer thickness from 20 to 80 mm.

Features and benefits

- Can be tiled after approx. 3 days, walkable after approx. 1 day.
- Ready-to-mix mortar, no on-site mixing with sand required.
- Long processing time, can be worked with and smoothed for almost 1 hour despite of short curing time.
- Suitable for application by pump, even at higher temperatures.
- Temperature resistant from -30°C to +80°C, therefore suitable for balconies, terraces, garages, industrial floor coverings cleaned with superheated steam.
- Insensitive to moisture, therefore suitable for areas exposed to permanent wetness.
- Limited bending (suitability test to 6.2 DIN 18560-2), it is therefore possible to reduce layer thickness to 30 mm for screeds on insulation layer according to chart 1 (perpendicular load capacity $\leq 2 \text{ kN/m}^2$) or chart 2 (perpendicular load capacity, area load $\leq 3 \text{ kN/m}^2$), in case of heated screeds the pipes must be covered by a layer thickness of 30 mm.



Due to its properties, PCI Novoment M3 plus is also suitable to compensate the height of concrete steps.



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DE0036/02

PCI Novoment M3 plus
(DE0036/02)
EN 13813:2002

Cementitious screed material
EN 13813 CT-C25-F4-A12

Reaction to fire	A1
Release of corrosive substances	CT
Compressive strength	C25
Flexural strength	F4
Wear resistance	A12

A brand of

BASF

We create chemistry

Technical data

Material

Material base	special cement with admixtures and aggregates
Maximum grade	6 mm
Components	single component
Bulk density	approx. 1.9 g/cm ³
Consistency	powder
Colour	grey
Behaviour in fire	A1 fl
Strength to DIN EN 13892-2	
Compressive strength after 28 days	≥ 30 N/mm ²
Bending tensile strength after 28 days	≥ 5 N/mm ²
Storage	dry, no permanent storage over +30°C
Shelf life	min. 9 months
Packaging size	25 kg PE lined heavy duty paper bag stock no. 3888/9

Application

Consumption	approx. 20 kg/m ² and cm layer thickness
Quantity of gauging water/mixing ratio	approx. 2.1 litres of water + 25 kg of PCI Novoment M3 Plus
Layer thickness	
- minimum	approx. 20 mm for bonded screeds; approx. 30 mm for screeds on isolating or insulating layer
- maximum	approx. 80 mm
- for heated screeds	min. 30 mm to cover pipes
Processing temperature	+5°C to +25°C
Mixing tools	forced action mixer
Conveyance	pneumatic
Mortar consistency	stiff-creamy
Processing time*	approx. 60 minutes
Curing time*	
- walkable after	approx. 1 day
Can be covered with	
- ceramic tiles and flagstones after	approx. 3 days
- wall-to-wall carpet, parquet and vapour-tight coverings after	approx. 7 days (at max. 3.0 CM % residual moisture) The CM measuring is to be carried out according to the requirements for cement screeds in the manual issued by the CM meter producer!
Temperature resistance	-30°C to +80°C
Frost resistance	yes
Resistance to permanent wetness	yes

* Times are achieved when the temperatures of mortar, ambient air and substrate are approx. +23°C over the entire period and the relative humidity does not exceed 50%.
 See also "General information on the application of rapid setting cement screeds".

Preparation of substrate for bonded screeds to DIN 18560

- The substrate must be clean, structurally sound, free from grease, old paint and other residues. Remove heavy contamination mechanically, residues of oil and wax with PCI Entöler oil remover. Remove smoothed surfaces with a cement slurry on top by e.g. shotblasting (Blastrac). Prewet the prepared substrate at an early stage, keep damp, apply PCI Repahaft bonding agent and PCI Novoment M3 Plus screed mortar wet on wet.

Application procedure

The recommendations DIN 18560 and DIN 18353 are to be followed during the application of PCI Novoment M3 Plus.

1 Mixing

1.1 Mix larger quantities in a forced action mixer! Fill PCI Novoment M3 Plus in a forced action mixer and mix with water for approx. 1 minute while mixer is running until a stiff-creamy

consistency is produced. The amount of water required per 25 kg bag of PCI Novoment M3 Plus is about 2.1 litres.

1.2 Single bags of PCI Novoment M3 Plus can also be mixed in a suitable bucket (e.g. hobbock) with a basket stirrer attached to an electric drill. Fill adequate amount of gauging water in the bucket, add PCI Novoment M3

Plus and mix to a stiff-creamy consistency.

2 Application

Spread mortar using a shovel, finishing trowel or surface scraper, compact, scrape off with a browning rod, rub down with a wooden board and smooth if necessary. Protect newly applied screed from rapid drying.

General information on the production of fast setting cement screeds

The mix must be of a stiff-creamy consistency! The screed does not achieve the appropriate strength if the consistency is too soft and/or contains too much water. This might result in shrinkage cracks and bulges. The equilibrium moisture will not be reached until later. The strength and low residual moisture level important for laying

subsequent coverings are dependent on the following factors:

1. Compaction of fresh mortar

Insufficient compaction of green screed mortars results in low strength.

2. Temperature and humidity

Curing and drying times may considerably increase at low application and substrate temperatures or high

humidity (compared with the times at +20°C). The relative humidity should not exceed 70% during the curing process. In principle, the residual moisture should be checked before laying vapour-tight floor coverings.

3. Layer thickness

The required screed thickness must be in accordance with DIN 18560.

Information on the application as heated screed

- Application details to DIN 18560-2 and DIN EN 1264-4.

Preheating phase:

A PCI Novoment M3 Plus screed can be heated after 3 days. Initial preheating takes place at a temperature of +25°C to be maintained for 3 days. The maximum flow temperature is set and maintained for another 4 days. Then the heating system is switched off. Ensure

adequate air supply and ventilation during the heating and cooling phase. Avoid draught! Do not allow the room temperature to drop below +15°C and the temperature of the screed surface to fall below +18°C. The heating contractor must draw up a report on the initial heating operation and subsequent commissioning. The report must be handed over to those concerned and

must contain the following information:

1. Data on the pre-heating operation with respective flow temperatures.
2. Maximum flow temperature attained.
3. Operating condition and outside temperature at the time of handing over.
4. Date of commissioning.

A screed heated up this way can be covered with a wide variety of top coverings.

Please note

- Do not apply PCI Novoment M3 Plus screeds at substrate temperatures below +5°C and above +25°C.
- The general guidelines for cement screeds must be observed. The fast-curing properties of PCI Novoment M3 Plus must be taken into consideration.
- Use only whole bags of PCI Novoment M3 Plus.
- PCI Novoment M3 Plus must not be mixed with cement, fast-setting bonding agents, ready-mixed screeds, dry mortars, as well as fibres, admixtures or additives and/or blended with aggregate mixes.
- Apply PCI Novoment M3 Plus within approx. 60 minutes (at approx. +23°C) after mixing. Higher temperatures reduce, lower temperatures increase the time given.
- Never add water or fresh PCI Novoment M3 Plus to reconstitute a mortar mix which has already begun to set.
- Uncovered screeds prepared for further covering absorb moisture at unfavourable climatic conditions (e.g. high humidity). The residual moisture in the screed can be reduced by taking appropriate measures (e.g. air dehumidification).
- We recommend to cover the installation with construction foil until walkable for the application outdoors where early exposure to rain is expected or in strong wind.
- Clean tools and mixing buckets with water immediately after use, the cured product can no longer be cleaned with water.

Declaration of Performance

The Declaration of Performance can be downloaded as pdf file under www.pci-augsburg.eu/dop.

Information on the safe use

PCI Novoment M3 Plus contains cement:
Causes serious eye damage. Causes skin irritation.
Keep out of reach of children. Wear protective gloves (e.g. cotton gloves soaked in nitrile) and eye/face protection. IF IN EYES: Rinse cautiously

with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. IF ON SKIN: Wash with plenty of soap and water and put skin cream on (pH value approx. 5.5). IF SKIN IRRITATION OCCURS: Get medical advice/attention.

The product is non-flammable. No special fire precautions are therefore required.

Giscode ZP 1

For further information: see PCI Material Safety Data Sheet.

Services for architects and designers

Consultations at the workplace, supplementary information, testing certificates and sample descriptions can

be requested from professional advisors and at the company headquarters.

Disposal of emptied PCI sales packaging

PCI participates in an area-wide waste disposal system for sales packaging completely emptied. DSD – Duales System Deutschland (Dual System Germany, contract number 1357509) is

our partner for waste disposal. PCI sales packaging completely emptied can be disposed of via DSD in accordance with the symbol printed on the packaging.



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zertifiziertes Qualitätsmanagementssystem

In view of widely varying site conditions and fields of application of our products this technical data sheet is meant to provide general application guidelines only. This information is based on our present knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical help-line for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with PCI and possible resulting damages are in the sole responsibility of the customer. All descriptions,

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German edition January 2017; the latest edition is always available on the Internet under www.pci-augsburg.de