

PCI NANOFLOTT[®] FLEX

Universal pourable bed adhesive for industrial coverings, balconies, terraces especially for fully vitrified stone and tiles

Fields of application

- For indoor and outdoor use.
- For floors.
- To be applied as a pourable bed adhesive as well as non-sag thin bed adhesive.
- Void-free laying of large-format vitrified and fully vitrified tiles; also for coverings such as terracotta or terrazzo tiles.
- For balconies, terraces, underfloor heating as well as industrial areas subject to mechanical stress such as halls, rooms and corridors in industrial buildings, markets, institutional, administration and commercial buildings.
- To level uneven substrates prior to the installation of tiles.



PCI Nanoflott flex can be applied as pourable bed adhesive as well as regular thin-bed adhesive.

Features and benefits

- With unique binding agent combination incorporating the Nano technology. Efficient working for the operative – replaces the combined back-buttering floating method when used as a pourable bed adhesive, no back-buttering of tiles necessary.
- Plastic, pourable bed adhesive to be spread with a large notched trowel.
- Rapid strengthening, even at low temperatures.

- Deformable, compensates variations in temperature and tensions in the substrate.

Features and benefits

- Waterproof and frost resistant, to be used for ground level areas indoors and out.
- Levelling of uneven substrates and laying of tiles with back patterns in adhesive bed thicknesses from 1 to 10 mm.
- Also for use as regular thin bed adhesive by reducing the gauging water.
- Low in chromates according to TRGS 613.
- With official test certificates.
 - Test according to DIN EN 12004 classification C2FE and according to the flexmortar regulation issued by TU Munich
 - Official test certificates*, issued by TU Munich in combination with Building material class B1 (heavily inflammable building material according to DIN 4102)
- *Test principles to issue an official test certificate for tanking materials to be applied in liquid condition in combination with tile coverings.*

Packaging

25 kg PE lined heavy duty paper bag

Technical data material

| | |
|-----------------------|---|
| Material base | Cement mortar mix with additives. Does not contain asbestos or other mineral fibres. No injurious silica dust during the application. |
| Density of wet mortar | approx. 1.5 kg/litre |

PCI NANOFLOTT[®] FLEX

Labelling for

| | |
|--|---------------------------|
| Regulation for hazardous goods on roads | non hazardous |
| Regulation for hazardous substances | irritant, contains cement |
| <i>For further information refer to Health and Safety.</i> | |

Shelf life

12 months when stored in dry conditions, no permanent storage over +35°C.

Application data

| Consumption/Yield required notch size | Consumption per m ² | 25 kg PCI Nanoflott flex are sufficient for approx. |
|--|---|---|
| 6 mm (rectangular notch) | 2.2 kg | 11.4 m ² |
| 8 mm (rectangular notch) | 3.0 kg | 8.3 m ² |
| 10 mm (rectangular notch) | 3.6 kg | 6.9 m ² |
| 6/12 mm (pourable bed notch) | 2.8 kg | 8.9 m ² |
| 8/18 mm (pourable bed notch) | 4.2 kg | 6.0 m ² |
| 13/20 mm (pourable bed notch) | 5.7 kg | 4.4 m ² |
| PCI special notch size | 5.0 kg | 5.0 m ² |
| Mixing ratio as pourable bed mortar | 25 kg of powder (=1 bag) : 6.75 litre of water 1 kg of powder : 270 ml of water | |
| Mixing ratio as thin-bed mortar | 25 kg of powder (=1 bag) : 6.25 litre of water 1 kg of powder : 250 ml of water | |
| Thickness of adhesive bed | 1 to 10 mm | |
| Slake time | approx. 3 minutes | |
| Working temperature | +5°C to +25°C (substrate temperature) | |
| Working time* | approx. 3 hours | |
| Open time* | approx. 30 minutes | |
| Curing times* | - walkable after approx. 9 hours - groutable after approx. 9 hours - able to take foot traffic after approx. 2 days | |

* At +23°C and 50% relative humidity. Higher temperatures reduce, lower temperatures increase the times given.

Preparation of substrate

Minimum age of substrate:

- cementitious screed 28 days
- concrete 28 days.

The substrate must be dry, sound and free from oil and dust. Very absorbent cementitious substrates should be primed with PCI Gisogrund, diluted 1:1

with water. Ground anhydrite and/or gypsum based floated screeds and mastic asphalt screeds should be primed with undiluted PCI Gisogrund. Allow primer to dry. Cementitious screeds must not have a residual moisture content of more than 4%, anhydrite screeds not more than 0.5% (CM meter).

PCI NANOFLOTT[®] FLEX

Application procedure

1. Place gauging water (see Technical Data/Application) in a clean mixing container. Add PCI Nanoflott flex and mix with a suitable basket mixer (e.g. from Collomix) to a plastic, lump-free consistency.
2. Leave to stand for approx. 3 minutes and re-mix briefly.
3. Installation of tiles
 - 3.1 Pourable bed method

Pour PCI Nanoflott flex onto the substrate, a section at a time. Apply a scratch coat. Comb setting bed onto the wet scratch coat with a medium bed trowel, pourable bed notched trowel or other suitable notched trowel

Application procedure

Which guarantees void-free tiling. Spread only as much adhesive as can be covered with tiles within the open time. Check open time by touching the adhesive bed with your fingertip. Place tiles or stone into the adhesive bed in a twist and slide motion to ensure complete bedding. Check the suitability of the notch size and/or full bedding by picking up a newly laid tile.

3.2 Thin bed method

First apply a thin scratch coat to the substrate with the straight edge of the trowel. Then comb adhesive onto the first scratch coat with a notched trowel, if possible in one direction. Spread only as much adhesive as can be covered with tiles within the open time. Check open time by touching the adhesive bed with your fingertip. Place tiles or stone into the adhesive bed in a twist and slide motion and align its surface and joints.

Grouting

Joint width from 1 mm repellent to water and dirt

PCI Nanofug Colour

| | |
|--------------------|--------------------|
| no. 02 Bahamabeige | no. 21 Grey |
| no. 11 Jasmin | no. 23 Light Grey |
| no. 12 Anemone | no. 31 Cement Grey |
| no. 16 Silver Grey | no. 40 Black |
| no. 19 Basalt | no. 43 Pergamon |
| no. 20 White | |

Grouting Elastic joints

- The standards issued by the Central Association of the German Building Industry are valid for the layout of joints.
- Movement joints, corner joints (floor/wall) and connection joints (fixtures/tiles, wood/tiles) should be sealed with the elastic PCI Silcoferm S.

Note

- Do not apply PCI Nanoflott flex at substrate temperatures below +5°C and above +25°C as well as under exposure to extreme heat and strong wind.
- The open time is reduced in case of absorbent substrates (recommendation: priming with PCI Gisogrund, diluted 1 : 1 with water).
- Wall tiling should be done with PCI Nanolight.
- Never add water or dry powder to reconstitute a PCI Nanoflott flex mix which has already begun to set.
- Void-free bedding of tiles requires sufficient thickness of the adhesive bed. The required mixing ratio must be followed. The size of the notched trowel is dependent on the tile format and the irregularities of the substrate (trial laying).
- For secure and mainly void-free laying of tiles we recommend to use a special trowel available from PCI.

PCI NANOFLOTT[®] FLEX

- Suitable tools are available from e.g. Collomix GmbH, Horchstr. 2, 85080 Gaimersheim/Germany, www.collomix.de.
- Clean tools and mixing vessels with water immediately after use; once the product has cured it can only be removed by mechanical means.
- Shelf life: min. 12 months when stored in dry conditions, no permanent storage over +35°C.

Nano technology

For years PCI Augsburg GmbH has been intensively engaged in the research of Nano structures in cementitious products and we have a variety of Analytical possibilities and methods. By means of structural examinations from the very first minute of cement curing the formation of Nano structures can be observed and affected. The combination of various kinds of cement and the specific formulation, e.g. with high quality polymers, light fillers and additives leads to improved and new characteristics of the product.

Health and safety

PCI Nanoflott flex contains cement. Contact with moisture or gauging water sets off an alkaline reaction skin irritations and/or caustic burns to mucous membranes (e.g. eyes). Risk of serious damage to eyes, therefore avoid contact with eyes and prolonged contact with skin. In case of contact with eyes thoroughly rinse with plenty of water and consult a doctor. In case of contact with skin change contaminated clothing immediately and wash skin with plenty of soap and water. Wear appropriate protective gloves (e.g. cotton gloves soaked in nitrile). If ingested seek prompt medical attention. Keep out of reach of children. Low in chromates according to TRGS 613. *For further information refer to the PCI Material Safety Data Sheets.*

10/2006 BASF_CC-UAE

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

BASF Construction Chemicals UAE LLC

P.O. Box 37127, Dubai, UAE

Tel: +971 4 8090800

www.basf-cc.ae

Fax: +971 4 8851002

e-mail: marketingcc.mideast@basf.com



Certificate No.
963680



Certificate No.
945787



Certificate No.
772556