

Multi-use white flexible tile adhesive
for all ceramic tiles

PCI Nanolight[®] White

Fields of application

- For indoor and outdoor use.
- For walls and floors.
- Colour white.
- For cementitious screeds, ground anhydrite and/or gypsum based floated screeds, concrete, precast concrete elements, aerated concrete, heated screeds, plaster boards, gypsum fibre boards, dry screeds, mastic asphalt (only indoors), insulation boards, plaster slabs, plaster, render, masonry, existing ceramic coverings and smooth, rigid wooden substrates, metal substrates (only indoors), firmly adhering PVC coverings.
- For all ceramic coverings laid in thin bed or medium bed: non-vitrified tiles, vitrified tiles, fully vitrified tiles, porcelain mosaic, glass mosaic, glass tiles, brick tiles and terracotta.
- For laying tiles on the supporting elements PCI Peditur made of high-resistance foam and on the impact sound insulation and separation board PCI Polysilent and/or PCI Polysilent plus.
- For laying tiles on bonded waterproofing such as PCI Lastogum (e.g. private bathrooms), PCI Seccoral (e.g. swimming pool and terraces)
- To repair and level uneven wall and floor surfaces (e.g. masonry, render, screed) prior to laying tiles and flags.

Features and benefits

- Unique light filler combination and Nano technology.
- High coverage due to use of special additives and a unique filler combination.
- Plastic and workable mortar which can be easily applied by trowel.
- Low shrinkage during the curing phase, the mortar can be applied up to a thickness of 15 mm in thin-bed and medium-bed method.
- Non sag, therefore easy and quick application.
- Deformable, compensates tensions in the substrate caused by variations in temperature.
- Low in chromates in compliance with Chromate VI Regulations.
- Corresponds to C2FTE acc. to EN 12004.
- Corresponds class S 1 acc. to EN 12002.

Technical data

Application/Characteristics of the mortar

Consumption	approx. 0.8 kg of dry powder/m ² and mm adhesive bed thickness	
Colour	white	
Coverage*	Consumption per m ² :	15 kg of PCI Nanolight White are sufficient for approx.
required notch size:		
- 4 mm	0.9 kg	16.6 m ²
- 6 mm	1.3 kg	11.5 m ²
- 8 mm	1.8 kg	8.3 m ²
- 10 mm	2.1 kg	7.1 m ²
Adhesive bed thickness	from 1 to 15 mm	
Working temperature	+5 °C to +25 °C	
Gauging water for		
1 kg powder	approx. 600 ml	
15 kg bag	approx. 9.0 ltr	
Slake time	approx. 3 minutes	
Working time**	approx. 90 minutes	
Open time**	approx. 30 minutes	
Curing times**		
(on low absorbent substrates)		
- walkable after	approx. 5 hours	
- groutable after	approx. 5 hours	
- able to take weight after	approx. 24 hours	
Temperature resistance	-30 °C to +80 °C	

Material

Material base dry mortar mix with special filler combination
 Labelling for

- regulation for hazardous goods on roads non hazardous
- regulation for hazardous substances irritant, contains cement

For further information see Health and Safety.

Shelf life min. 12 months when stored in dry conditions, no permanent storage over +30°C
 Packaging 15 kg PE lined heavy duty paper bag

* The surface structure of the substrate and the reverse profile of the used ceramic are also important factors, besides the tile size, for the consumption of mortar. The indications refer to the installation of slightly profiled non vitrified or vitrified tiles on render or cement screed. .

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

Preparation of substrate

The substrate must be sound, clean and fully cured and dry. Oil stains, bond inhibiting material and other residues must be thoroughly removed.

Minimum age of the substrate:

- PCI Novoment M1 plus and/or PCI Novoment Z1 screed: 24 hours
- PCI Novoment M3 plus and/or PCI Novoment Z3 screed: 3 days
- Cement screed: 28 days
- Concrete: 3 months

For the installation of ceramic tiles the substrate must be plumb and flush to comply with BS5385 Part 2. For the installation outdoors the substrate must have a slope of min. 1.5%. Prior to the installation substrate irregularities can be levelled with PCI Nanolight White (up to 15 mm) or alternatively with PCI Polycrret 5/20, PCI Pericret, PCI Periplan.

Level timber floors with PCI Periplan Extra before covering them.

Prime very absorbent cement based substrates and aerated concrete with PCI Primer G, diluted 1 : 1 with water. Anhydrite and/or gypsum based floated screeds as well as gypsum based substrates, and poured asphalt screeds inside of buildings with undiluted PCI Primer G. For Fast-Track priming use Gisofix NT

Old PVC coverings must firmly adhere to the substrate, any contamination such as grease etc. must be removed and primed with PCI Primer 303

Metallic substrates indoors such as steel or aluminium which are not exposed to moisture must be well supported and rigid. The substrate must be free from rust and grease. Prime metal with PCI Primer 303.

Wooden boards must be at least 25 mm thick when applied to floors and at least 19mm when applied to walls. The boards must be screwed to the substructure at a distance between screws of max. 30cm. The perimeter joint must be at least 8 mm wide. The butt joints of the boards must be glued.

Prime wooden boards in dry areas with PCI Primer 303, or with PCI Primer when exposed to moisture, and waterproof with PCI Lastogum X as per moisture sensitive backgrounds.

Allow primers to dry.

Newly-laid heated and unheated cement screeds must not have a residual moisture content of more than 4%, anhydrite and/or gypsum based screeds not more than 0.5% (measured with a CM meter) prior to tiling.

Application procedure

Mixing of mortar

1 Place gauging water (see table) into a clean container and add powder while mixing with a suitable paddle attached to an electric drill until a plastic, lump-free mortar is achieved.

2 Leave PCI Nanolight White to stand for approx. 3 minutes, then remix briefly.

Levelling irregularities in the substrate

1 The mortar can be applied by steel or plastic float.

2 The levelling mortar can be tiled on after approx. 2 hours for walls and approx. 24 hours for floors.

Laying tiles

- Apply a thin scratch coat to the substrate using the straight edge of the trowel.
- Comb mortar onto the wet scratch coat with the notched edge of the trowel, in one direction if possible. Apply only as much mortar as can be covered with tiles during the open time. Check the open time by touching the mortar with your fingertip.
- Lay tiles into the adhesive bed with a twist and slide motion and adjust to correct position.

Elastic joints

- Movement joints, corner joints (floor/wall) and connection joints (fixtures/tiles, wood/tiles) should be sealed with the elastic joint sealant PCI Silcoferm UW or PCI Silcoferm S.

Please note

- Do not apply at temperatures below +5°C and above +25°C and under extreme hot and windy conditions.
- For the installation on existing ceramics outdoors or when exposed to permanent water (swimming pools) apply the bonding agent PCI Polyhaft and let it cure.
- When laying tiles the valid BS 5385 regulations should be followed.
- The manufacturers' instructions must be followed for preparation of gypsum and gypsum based substrates.
- The open time of the adhesive may be reduced on very absorbent substrates, prime with PCI Primer or PCI Gisofix NT).
- Never add water or dry powder to reconstitute a PCI Nanolight White mix which has already begun to set.
- When laying fully vitrified floor tiles outdoors use either PCI Nanolight White in the combined backbuttering method or the pourable flooring mortars PCI Floorfast 20 Rapid
- When laying mosaic in swimming pools or outdoors it is recommended to modify PCI Nanolight White with PCI Seccoral 2K liquid component (mixing ratio: 4.5 kg of PCI Seccoral 2K liquid component + 4.5 ltr of water + 15 kg of PCI Nanolight White).
- When laying glass mosaic in swimming pools only front-sided paper-faced glass mosaic should be used.

- After laying mosaic tiles it is necessary to rake joints clean to a uniform depth to ensure proper, stainfree grouting afterwards. This also applies to front-sided paper-faced mosaic.
- When laying tiles on facades please follow the BS 5385 Part 2 „Outer claddings“.
- Any adhesive tools and tiles should be cleaned with water immediately after use; once the product has cured it can only be removed by mechanical means.
- Use the natural stone adhesives PCI Carralight, PCI Carrafloft or PCI Carrament when laying natural stone.
- Store in dry conditions, no permanent storage over +30°C. Open bags must be closed immediately after use.

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 examining the crystal structures of cement curing from the very first minute the formation of Nano structures in the hardened cement paste 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 Nanolight White contains cement. Contact with moisture or gauging water sets off an alkaline reaction which may cause skin irritation 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 immediately 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 suitable protective gloves (e.g. cotton gloves soaked in nitrile). Keep out of reach of children. If ingested seek prompt medical attention and show packaging or label. Low in chromates according to TRGS 613.

For further information refer to the PCI Material Safety Data Sheet.

BASF Construction Chemicals (UK) Ltd
Albany House, Swinton Hall Road,
Swinton, Manchester,
M27 4DT, England.
Tel: + 44 (0) 161 794 7411
Fax: + 44 (0) 161 727 8547
E-mail: pci.uk@basf.com
Website: pci.uk.com

In view of widely varying site conditions this data sheet is meant to provide general application guidelines only. Any recommendation or information issued by us constitutes a preliminary and accessory contractual obligation only. Users must satisfy themselves regarding the applicability of the content to their own particular requirements. Please contact our Advisory Service for special requirements. Liability is accepted for incomplete or incorrect particulars in our information material only in the event of intent or gross negligence, without prejudice to claims under product liability laws. All transactions are subject to our Terms of Sale and Supply. Any subsequent publication supersedes this edition. **Edition December 2006.**