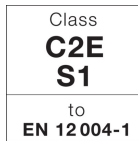
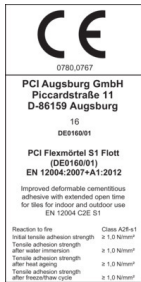


Flexible flowable adhesive

# PCI Flexmörtel<sup>®</sup> S1 Flott

especially for large-format floor tiles



All test certificates are available under [www.pci-augsburg.eu](http://www.pci-augsburg.eu)

## Fields of application

- For indoor and outdoor use.
- For floors.
- **For covering a cement screed/cementitious heated screed ≤ 4% CM.**
- For laying especially large-format floor tiles.
- For practically void-free laying of large-format vitrified tiles and fully-vitrified tiles; also for coverings with irregular surfaces such as terracotta or Terrazzo.
- 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 buildings, administration buildings and commercial buildings.
- For laying natural stones insensitive to staining.
- For leveling irregular substrates before tiling.



**Technically, a cement screed can be tiled over without any problems when the residual moisture level falls to 4% CM (measurement method) or lower.**

\*However, the generally accepted rules of technology in Germany currently call for a waiting time of 28 days. For legal reasons, the client must therefore be informed of this fact if tiles are to be laid less than 28 days after the screed has been installed and an agreement concerning a deviation from the generally accepted rules of technology must be concluded. Standard texts for the information to be provided and the agreement are available at [www.pci-augsburg.de](http://www.pci-augsburg.de)

## Features and benefits

- Non-sag properties, prevents heavy and large-format flagstones from sagging in the adhesive bed.
- Convenient workability, long processing time up to 3 hours.
- Fast setting time, floor covering can be grouted after approx. 6 hours.
- For leveling irregular substrates and for laying flagstones with a back pattern in a mortar bed from 1 to 15 mm.
- Flexible, compensates variations in temperature and movements in the substrate.

## PCI Flexmörtel® S1 Flott

- Waterproof and frost resistant, to be used for floor areas in the interior and exterior.
- Replaces the combined method (buttering-floating).
- Crystalline water binding.
- Low in chromates.
- Meets the requirements of C2E S1 in accordance with DIN EN 12004
  - the guideline "Flexible mortar" issued by Deutsche Bauchemie e.V. (German Building Chemicals Industry)
  - the test principles to issue an official test certificate for bonded waterproofing in combination with PCI bonded waterproofing such as PCI Lastogum, PCI Seccoral 1K, PCI Seccoral 2K Rapid, PCI Apoflex F/W and PCI Pecilastic W.
- With the addition of PCI Lastoflex, meets the C2E S2 classification according to DIN 12004 and 12002.

## Technical data

### Material

|                |                                                                                                                                     |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Material base  | Cement mortar mix with additives. Does not contain asbestos or other mineral fibers. No harmful silica dust during the application. |
| Shelf life     | min. 12 months; store dry, no permanent storage over +35°C                                                                          |
| Packaging size | 20 kg bag, stock no. 1049/5                                                                                                         |

### Application

|                                                  |                                                                        |
|--------------------------------------------------|------------------------------------------------------------------------|
| Processing temperature                           | +5 °C to +25 °C (substrate temperature)                                |
| Mixing ratio                                     |                                                                        |
| - 20 kg dry mortar (= 1 bag)                     | approx. 5.0 l water                                                    |
| - 1 kg dry mortar                                | approx. 250 ml water                                                   |
| - mixing with PCI Lastoflex                      | 20 kg PCI Flexmörtel S1 Flott<br>+ 4 kg PCI Lastoflex<br>+ 1.8 l water |
| Slake time                                       | approx. 3 minutes                                                      |
| Density of mixed material / fresh mortar density | approx. 1.5 g/cm³                                                      |
| Adhesive bed thickness                           | approx. 1 to 15 mm                                                     |
| Consumption / notch size                         |                                                                        |
| - 6 mm                                           | approx. 2.3 kg per m²                                                  |
| - 8 mm                                           | approx. 2.7 kg per m²                                                  |
| - 10 mm                                          | approx. 3.0 kg per m²                                                  |
| - 10/20 mm                                       | approx. 3.8 kg per m²                                                  |
| Yield / notch size                               | 20 kg bag covers                                                       |
| - 6 mm                                           | approx. 8.7 m²                                                         |
| - 8 mm                                           | approx. 7.4 m²                                                         |
| - 10 mm                                          | approx. 6.7 m²                                                         |
| - 10/20 mm                                       | approx. 5.3 m²                                                         |
| Processing time                                  | approx. 3 hours                                                        |
| Open time                                        | approx. 30 minutes                                                     |

|                           |                 |
|---------------------------|-----------------|
| Walkable after            | approx. 6 hours |
| Groutable after           | approx. 6 hours |
| Able to bear weight 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:
  - PCI Novoment M1 plus and PCI Novoment Z1: 24 hours
  - PCI Novoment M3 plus and/or PCI Novoment Z3: 3 days
  - cement screed ≤ 4% CM
  - concrete 3 months
- The substrate must be dry, free from oil and dust and able to bear weight. Prime very absorbent cementitious substrates with PCI Gisogrund, diluted 1 : 1 with water. Prime a rough-ground anhydrite screed, gypsum based floated screed and mastic asphalt screed with undiluted PCI Gisogrund. Use PCI Gisogrund Rapid to prime a cementitious and gypsum based substrate if time is a factor. Allow primer to dry. A cement screed must not have a residual moisture content in excess of 4%, an anhydrite screed not more than 0.5% (CM meter).

## Application procedure

**1** Fill gauging water (see Technical Data/Application) in a clean mixing bucket. Add PCI Flexmörtel S1 Flott and mix to a creamy, lump-free consistency using a suitable basket mixer (e.g. from Collomix).

**2** Leave to stand for approx. 3 minutes and re-mix briefly.

### 3 Tile fixing

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

## Grouting

### Cementitious joint grouts/epoxy resin joint grout

|                                                        | Non-vitrified tiles | Vitrified tiles | Fully-vitrified tiles | Glass tiles/<br>glass mosaic    |
|--------------------------------------------------------|---------------------|-----------------|-----------------------|---------------------------------|
| <b>PCI Nanofug</b><br>from 1 mm                        | ++                  | ++              | +                     | +                               |
| <b>PCI Nanofug Premium</b><br>1 to 10 mm               | ++                  | ++              | ++                    | ++                              |
| <b>PCI Flexfug</b><br>2 to 10 mm                       | O                   | ++              | ++                    | too coarse for glass tiles<br>O |
| <b>PCI Durafug NT</b><br>1 to 20 mm                    | +                   | +               | +                     | O                               |
| <b>PCI Durapox Premium</b><br>1 to 20 mm (epoxy resin) | ++                  | ++              | ++                    | ++                              |

++ to be recommended    + suitable    O suitable to a limited extent

### Elastic joints

- The standards issued by Zentralverband des Deutschen Baugewerbes (Central Association of the German Building Industry) are valid for the arrangement of joints.
- Seal movement joints, corner joints (floor/wall) and connection joints (fixtures/tiles, wood/tiles) with the elastic joint sealant PCI Silcofug E or PCI Silcoferm S.

### Please note

- Do not apply PCI Flexmörtel S1 Flott at substrate temperatures below +5 °C and above +25 °C and in hot weather and strong wind.
- The open time is reduced in case of absorbent substrates (recommendation: priming with PCI Gisogrund, diluted 1 : 1 with water).
- **Technically, a cement screed can be tiled over without any problems when the residual moisture level falls to 4% CM (measurement method) or lower.** However, the generally accepted rules of technology in Germany currently call for a waiting time of 28 days. For legal reasons, the client must therefore be informed of this fact if tiles are to be laid less than 28 days after the screed has been installed and an agreement concerning a deviation from the generally accepted rules of technology must be concluded. Standard texts for the information to be provided and the agreement are available at [www.pci-augsburg.de](http://www.pci-augsburg.de).
- When using PCI Flexmörtel S1 Flott on a heated cement screed, the heating can be put into regular operation 7 days after tile laying.
- We recommend to fix wall tiles with PCI Flexmörtel S1.
- Use PCI Flexmörtel Premium for laying tiles outdoors.
- In case of large-format flagstones (edge length > 50 cm or area > 0.25 m<sup>2</sup>), it might be necessary to apply a scratch coat to the reverse of the tile due to an irregular substrate or tile.
- Suitable for laying XXL formats, e.g. 1 m x 2.50 m on walls. To do this, PCI Flexmörtel S1 Flott is applied to the back of the tile. The tile is then fixed to the wall and supported by wedges, if necessary.
- Never add water or dry powder to reconstitute a PCI Flexmörtel S1 Flott mix which has already begun to set.
- Void-free bedding of tiles/flagstones requires an adhesive bed of sufficient height. The required mixing ratio must be followed. The size of the notched trowel is dependent on tile format and irregularities in the substrate (we recommend to produce a test area).
- Suitable tools are available from e.g. Collomix GmbH, Horchstr. 2, 85080 Gaimersheim/Germany, [www.collomix.de](http://www.collomix.de).
- Clean tools and mixing buckets with water immediately after use. The cured product can only be removed by mechanical scraping.
- Shelf life: min. 12 months; store dry, no permanent storage over +35 °C.

### Declaration of Performance

The Declaration of Performance can be downloaded as pdf file under [www.pci-augsburg.eu/dop](http://www.pci-augsburg.eu/dop).

## Information on the safe use

PCI Flexmörtel S1 Flott contains cement:

Causes serious eye damage. Causes skin irritation. May cause respiratory irritation.

Keep out of reach of children. Wear protective gloves (e.g. cotton gloves soaked in nitrile) and eye/face protection. Avoid breathing dust. 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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Take off contaminated clothing and wash it before reuse. The product is non-flammable. No special fire precautions are therefore required.

Water hazard class: 1 (self-rating)

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

You find more information on disposal on the Internet at <https://www.pci-augsburg.eu/en/services/disposal-instructions-en/packaging>. Do not allow product to enter drains, waterways or soil. Only recycle packaging that is completely empty.

Hardened material residues can be disposed of as household waste. Dispose of product residues that have not hardened in the pollutant collection.

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**This version will become invalid immediately upon the publication of a later version; you will always find the latest version on the Internet at [www.pci-augsburg.de](http://www.pci-augsburg.de).**

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