

# **PCI CM 117**

# Flexible adhesive

Thin-bed mortar for laying ceramic tiles and slabs











- ► For indoor and outdoor use
- ► Easy processing
- ► Also on heated screeds
- ► For fully vitrified tiles
- ▶ Long open time

# FIELDS OF APPLICATION

For laying:

- Ceramic tiles and slabs made from non-vitrified and vitrified material
- Fully vitrified tiles in indoor applications
- Construction boards and installation boards

Thin-bed and medium-bed procedures.

For indoor and outdoor use.

For residential and commercial applications on:

- Heated screeds, dry screeds and calcium sulphate screeds (anhydrite and anhydrite flowable screeds)
- Mastic asphalt screeds (indoors)
- Plaster substrates
- Concrete and lightweight concrete (minimum age: six months)
- Plasterboard and fiberboard

For repair and leveling work at irregularities of up to about 10 mm prior to tile laying.

Tested as a component of bonded waterproofing systems with PCI CL 51 and PCI Seccoral 1K.

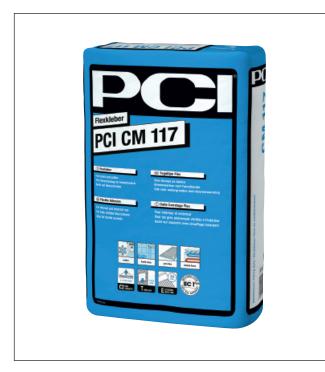
## **SUBSTRATE PREPARATION**

Bonds to all solid, load-bearing, clean, dry and moist substrates free from substances which may impair adhesion. Coatings without adequate bearing capacity must be removed.

Cracks in the screed must be sealed with a friction-locked bond using PCI CK 740 epoxy resin or PCI Apogel SH.

### Indoor use:

Calcium sulphate screeds (gypsum/anhydrite: must be mechanically sanded and cleaned to remove dust, residual moisture  $\leq$  0.5 CM %, heated screeds  $\leq$  0.3 CM %),



lightweight/aerated concrete, plasterboards and gypsum plaster (P IVa, b and P V, residual moisture ≤ 1 CM %), plasterboards and fiberboards, and all highly absorbent substrates must be primed using PCI CT 17 or PCI Gisogrund.

Only use on gypsum plaster (Plv a+b and PV) if the moisture content is <1.0 CM%.

Non-absorbent substrates, tiles, natural and artificial stone flooring and firmly bonded coating must be primed using PCI CT 19 SuperGrip or PCI Gisogrund 303. (Detailed technical notes on the use of the primers are included in the appropriate technical data sheets.) Extruded polystyrene boards (the surface must be roughened and cleaned to remove dust), tile support elements, natural and artificial stone flooring, firmly bonded coatings, mastic asphalt (GE10/GE15, must be rubbed to a matt finish with sand, not for commercial use) do not need to be primed. Paintwork (which must be firmly bonded and must not release particles) must be thoroughly sanded and cleaned to remove dust.



#### Indoor and outdoor use:

Plasters in mortar groups P II/P III (minimum age 28 days), cement screeds (minimum age 28 days, residual moisture < 2 CM %, heated screed < 2 CM %) and concrete (minimum age: 6 months) may be covered directly with tiles. Concrete must be mechanically cleaned and prepared before installing tiles.

# **APPLICATION**

Mix PCI CM 117 with clean, clear water and stir until the mixture is completely free from lumps. Leave the mortar to mature for about 3 minutes and then stir again. If necessary, carefully add small quantities of water to set the mixture to the required consistency. For thin-bed laying, proceed in accordance with the generally recognized rules of technology. Take the open time into account (skin formation). Select the appropriate notched trowel for the size of the tiles. Fresh adhesive residue on the edges of tiles must be removed using a sponge. When the material has hardened, it can only be removed by mechanical means. Natural stones must not be installed using blobs of mortar. Material which has already started to harden must not be stirred up again after the end of the open time.

# **PLEASE NOTE**

This product must be used only in dry conditions at temperatures from +5 °C to +30 °C. Please refer to DIN 18 332. DIN 18 157, DIN 18 515 and the information sheet issued by Zentralverband des Deutschen Baugewerbes e.V. (ZDB -Central Association of the German Building Trade) On sealed substrates and at low temperatures, the time required before the surface can be walked on and grouted will be longer. If the product needs to be modified with a liquid dispersion PCI Lastoflex can be added to PCI CM 117. (Mixing ratio: 25 kg PCI CM 117 + 2 kg PCI Lastoflex + approx. 6.25 I water). Chromate-reduced. Contains cement. Undergoes a strong alkaline reaction with water. Protect your skin and eyes. In the event of contact, wash thoroughly with water. In the event of contact with the eyes, also seek medical attention. Please observe the safety and disposal instructions given in the latest safety data sheet at www.pci-augsburg.de/schwarz.

Advice for architects and contractors is available over the phone

+49(821) 5901-171 or by email at pci-info@pci-group.eu. You will find further data and information at www.pci-augsburg.de/schwarz.

TECHNICAL DATA	
GISCODE:	ZP 1
GEV-Emicode:	EC1 PLUS
Color:	Grey
Bulk density:	Approx. 1.29 kg/dm <sup>3</sup>
Mixing ratio with water:	
For walls:	Approx. 360 ml/kg or 9 l/25 kg
For floors:	Approx. 420 ml/kg or 10.5 l/25 kg
Maturing time:	Approx. 3 minutes
Open time:	Approx. 30 minutes
Working time:	Approx. 2 hours
Working temperature:	+5 °C to +30 °C
Temperature resistance:	−30 °C to +70 °C
Can be grouted after:	Approx. 12 hours
Dry powder consumption	
With notch size:	Approx. kg/m <sup>2</sup>
4 mm	1.8
6 mm	2.5
8 mm	3.2
10 mm	3.6
medium-bed notch	4.9
(In accordance with DIN 18157)	
Storage:	If stored in a cool, dry place, shelf life approx. 12 months. Seal opened containers tightly and use up soon as possible.
Package size:	25 kg sack
Disposal:	Empty packages may be recycled. Waste code number (EWC):

17 01 01



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18 **DE0501/02** 

#### PCI CM 117 (DE0501/02) Flexkleber EN 12004:2007+A1:2012

Improved cementitious adhesive with reduced slip and extended open time for tiles for indoor and outdoor use EN 12004 C2TE

Reaction to fire Initial tensile adhesion strength Tensile adhesion strength after water immersion

after water immersion
Tensile adhesion strength
after heat ageing
Tensile adhesion strength
after freeze/thaw cycle

Class E ≥ 1,0 N/mm²

≥ 1.0 N/mm²

≥ 1,0 N/mm<sup>2</sup> ≥ 1.0 N/mm<sup>2</sup>

≥ 1,0 N/mm²

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, drawings, photographies, data, ratios, weights a.o. stated herein can be changed without advance notice and do not represent the condition of the product as stipulated by contract. It is the sole responsibility of the recipient of our products to observe possible proprietary rights as well as existing laws and provisions. The reference of trade names of other companies is no recommendation and does not exclude the use of products of similar type. Our information only describe the quality of our products and services and are no warranty.

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