

Fast setting cement mortar

# PCI Polyfix® plus PCI Polyfix® plus L

for the fast installation in above  
and below ground situations

Listed as reprofiling and construction mortar at Tiefbauamt Graubünden  
(Civil Engineering Office in Grisons/Switzerland).

## Fields of application

- For indoor and outdoor use.
- For setting, raising and levelling manhole rings and covers.
- For forming impermeable coverings, inspection channels and berms.
- For regrouting clinkers in channels.
- For closing openings.
- For building a wall in channels.
- For anchoring and fixing steel elements, bolts and step irons.
- For sewage water and drinking water application as well as road construction.

## Features and benefits

- Fast setting, crack-free curing:
  - PCI Polyfix plus after approx. 5 minutes
  - PCI Polyfix plus L after approx. 25 minutes
- Can be exposed to vehicular traffic after approx. 2 hours.
- Can be processed from +1°C.
- Easy to apply, time saving, no supporting wedge necessary due to excellent non-sag properties.
- To be mixed manually or mechanically.
- No primer or bonding agent required.
- High compressive strength and bending tensile strength, reliable and stable anchoring.
- Waterproof, resistant to weathering, frost and de-icing salt, multi-purpose use indoors and out.
- Sulphate resistant.
- Permanent resistance to heavy chemical attack of exposition class XWW3 to DIN 19573 (tested at pH 4.0).
- Chloride free, does not cause corrosion to steel.
- Abrasion resistant, meets the requirements as WW grout in accordance with DIN 19573.
- Concrete grey after curing.
- Water impermeable from 10 mm layer thickness up to head of water of 5 m.

# PCI®

Für Bau-Profis



Time-saving Installation of a manhole cover with PCI Polyfix plus.

<b>CE</b>	
0921	
<b>PCI Augsburg GmbH Piccardstraße 11 D-86159 Augsburg</b>	
14 DE0122/02	
<b>PCI Polyfix plus L (DE0122/02) EN 1504-3:2005</b>	
<small>Cement based mortar (CC) for structural repair of concrete structures EN 1504-3 Methods 3.1/3.2/4.4/7.1/7.2</small>	
<small>Reaction to fire</small>	<small>Class A1</small>
<small>Compressive strength</small>	<small>Class R3</small>
<small>Chloride ion content</small>	<small>≤ 0,05 %</small>
<small>Adhesive bond</small>	<small>≥ 1,5 MPa</small>
<small>Elastic modulus</small>	<small>≥ 15 GPa</small>
<small>Thermal compatibility</small>	<small>≥ 1,5 MPa</small>
<small>Part 1: Freeze-thaw</small>	<small>Comply with 5.4 (EN 1504-3)</small>
<small>Capillary absorption</small>	<small>≤ 0,5 kg/m<sup>2</sup>·h<sup>0,5</sup></small>
<small>Dangerous substances</small>	<small>Comply with 5.4 (EN 1504-3)</small>

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A brand of

**BASF**

We create chemistry

## Technical Data Sheet

PCI Polyfix® plus PCI Polyfix® plus L

## Features and benefits

- For drinking water application with official test certificate to DVGW worksheet W 347 / W 270.
- Certified to EN 1504-3 class R3.

## Technical data

### Material

	PCI Polyfix plus	PCI Polyfix plus L
Material base	special cement with additives, chloride free	
Components	single component	
Fresh mortar density	approx. 2.1 g/cm <sup>3</sup> and/or kg/l	
Consistency	powder	
Largest grain	0.7 mm	
Shelf life	min. 9 months; store in a dry place, no permanent storage over +30°C	
Packaging size	25 kg bag, stock no. 3923/6 20 kg pail, stock no. 1150/8	25 kg bag, stock no. 6101/5 20 kg pail, stock no. 1151/5

### Application

	PCI Polyfix plus	PCI Polyfix plus L
Consumption	approx. 2.1 kg fresh mortar and/or approx. 1.75 kg dry mortar per litre of hollow space to be filled	
Processing temperature	+1°C to +30°C (substrate temperature)	
Quantity of gauging water		
- for 25 kg bag	approx. 4 l	
- for 20 kg pail	approx. 3.1 l	
- for 1 kg powder	approx. 160 ml	
Mixing time	approx. 30 to 60 seconds (depending on quantity)	
Layer thickness		
- unblended	up to 50 mm	
- blended	30 to 100 mm up to 2 parts by volume of gravel for 3 parts by volume of powder (and/or crushed stone of grain size 4/8 or 8/16)	
Processing time* after mixing	approx. 3 minutes	approx. 20 minutes
Curing time* after mixing	approx. 5 minutes	approx. 25 minutes
Compressive strength to DIN EN 196-1**		
at +1°C after 4 hours	11 N/mm <sup>2</sup>	-
at +1°C after 8 hours	15 N/mm <sup>2</sup>	16 N/mm <sup>2</sup>
at +5°C after 2 hours	11 N/mm <sup>2</sup>	-
at +5°C after 4 hours	15 N/mm <sup>2</sup>	12 N/mm <sup>2</sup>
at +23°C after 1 hour	16 N/mm <sup>2</sup>	15 N/mm <sup>2</sup>
Abrasion resistance to DIN EN 12808-2 (specified value < 1000 mm <sup>3</sup> )	175 mm <sup>3</sup>	
Suitability test in accordance with quality guidelines of Tiefbauamt Graubünden:		
- 6 h at RT	> 18 N/mm <sup>2</sup>	> 18 N/mm <sup>2</sup>
- 1 d in formwork, 27 d underwater	> 45 N/mm <sup>2</sup>	> 45 N/mm <sup>2</sup>

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

\*\* Subject to deviations under site conditions.

## Technical Data Sheet

PCI Polyfix® plus PCI Polyfix® plus L

### Preparation of substrate

- The substrate must be clean, free of dust, and able to take weight.

Thoroughly pre-wet substrate prior to the application. Do not overwater!

### Application procedure

1 Fill PCI Polyfix plus / PCI Polyfix plus L in a clean mixing bucket and add water (see "Technical Data").

2 Mix mortar manually by trowel or by using a suitable paddle (e.g. from Collomix) attached to an electric drill

until a plastic consistency is produced.

3 Apply mixed PCI Polyfix plus / PCI Polyfix plus L within 3/20 minutes!

4 In case of a high layer thickness, PCI Polyfix plus / PCI Polyfix plus L can be pre-mixed with sharp-grained, washed,

dry gravel or crushed stone, grain size 4 to 8 mm or 8 to 16 mm, mixing ratio in parts by volume 3 : up to max. 2. Mix with water until a stiff-plastic consistency is produced.

### Please note

- Do not apply PCI Polyfix plus / PCI Polyfix plus L at substrate temperatures below +1°C and above +30°C and in hot weather and strong wind.
- Never mix PCI Polyfix plus / PCI Polyfix plus L with other mortars or binding agents.

- Low temperatures increase, high temperatures reduce the working and setting time.
- A mortar mix which has already begun to set cannot be reconstituted by adding water or additional mixing.
- Suitable tools are available from e.g. Collomix GmbH, Horchstr. 2, 85080

Gaimersheim/Germany,  
[www.collomix.de](http://www.collomix.de).

- Clean tools with water immediately after use; when the product has cured it can only be removed by mechanical scraping.

### 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).

## Technical Data Sheet

PCI Polyfix® plus PCI Polyfix® plus L

### Information on the safe use

PCI Polyfix plus / PCI Polyfix plus L contain 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.

Giscode ZP 1

*For further information: see PCI Material Safety Data Sheet.*



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zertifiziertes Qualitäts-  
managementsystem

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