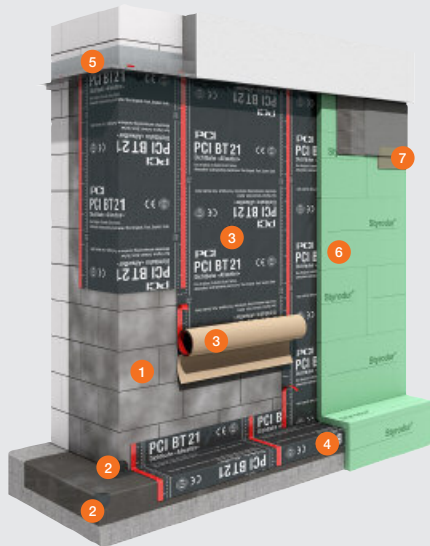


System for Waterproofing of Buildings PCI BT 21

System for waterproofing buildings in accordance with DIN 18533 W1 and W4 with cold-applied self-adhesive membranes



Brief description:

The **PCI BT 21 waterproofing system for buildings** is a professional system for waterproofing building elements in contact with the soil using a cold-applied self-adhesive membrane in accordance with DIN 18533. The membrane can be quickly and easily cut to size and can also be processed at temperatures as low as -5°C. Buildings waterproofed using this system can be protected and the trench can be backfilled immediately after the completion of waterproofing work.

System benefits:

- Reliable protection even at low temperatures
- Reliable protection by tested system
- Time-saving as a result of immediate backfilling of the construction trench



Worksteps	Products
Primer	1 PCI BT 26 »All-weather« primer for self-adhesive cold-bonding membranes.
Waterproofing Internal corner / external corner	2 PCI BT 45 Internal PVC corner piece for waterproofing edges of foundations and PCI BT 46 External PVC corner piece for waterproofing edges of foundations
Waterproofing surface (W1)	3 PCI BT 21 »All-weather« waterproofing membrane, cold-applied, self-adhesive membrane for the reliable waterproofing of buildings, down to -5 °C
Waterproofing of base point / edges	4 PCI BT 23 alternatively PCI BT 21 "All-weather" waterproofing strips, cold-applied, self-adhesive strips for the reliable waterproofing of building elements down to -5 °C
Upper edge	5 PCI BT 42 Self-adhesive butyl sealing tape with nonwoven plastic backing on one side
Insulation board adhesive	6 PCI Pecimor® DK Bitumen adhesive for insulation boards for external basement walls and foundations
Waterproofing under walls (W4) and waterproofing of foundation wall (W4)	7 PCI Barraseal® Turbo Flexible mineral waterproofing slurry for external basement walls, foundations and concrete elements

Waterproofing in accordance with DIN 18533 using PCI BT 21

As a cold-applied self-adhesive membrane, PCI BT 21 has the advantage that the construction trench may be backfilled immediately after the completion of waterproofing work. In addition, in contrast to a thick bituminous coating, waterproofing may also be applied at temperatures as low as -5°C. At such low temperatures, PCI BT 28 special primer must be used. PCI BT 21 bridges cracks and ensures very good adhesion. Used within the system and with the appropriate components, PCI BT 21 ensures reliable application and effective waterproofing.

In accordance with DIN 18533, cold-applied self-adhesive bituminous membranes are allowed for use in applications with water exposure classes W 1 (soil moisture and non-pressing water) and W 4 (in the areas of foundation walls and under outer shells). The cold-applied self-adhesive bituminous membrane from PCI forms the waterproofing layer of a high quality system which is completed by the appropriate thermal insulation, protection and drainage products. Insulation boards may be bonded in place using PCI Pecimor® DK.



Priming in the summer: PCI BT 26, priming in the winter: PCI BT 28 special primer



Application of PCI BT 21 and pressing into place



Bonding of insulation boards using PCI Pecimor® DK

Inspection of work on site

Before PCI BT 21 is applied to the main surface of the structure to be waterproofed, reinforcement strips of PCI BT 21 which have been cut to size with a width of about 20 to 30 cm must be applied at all corners, mouldings and edges as well as around pipe entries. When applying PCI BT 21 to the surface, it is important to avoid bubbles and creases and to apply the membrane strips with a minimum overlap of 8 cm. At corners and edges, PCI BT 21 must be

applied with an overlap of 10 cm.

It is not necessary to inspect the thickness of the coating and the reliability of waterproofing is always ensured.

Waterproofing with PCI BT 21 results in rapid construction progress as the waterproofing layer is fit to withstand severe rain immediately and no drying time is required. PCI BT 21 has been tested in accordance with the standard and is approved for use in Z-shaped and L-shaped waterproofing.

Use of PCI BT 21 for Z-shaped and L-shaped waterproofing

The detailed drawing shows that two types of waterproofing are possible with double-leaf brickwork (Z-shaped and L-shaped waterproofing). Both types of waterproofing protect the underlying masonry and the structure under the waterproofing against moisture and ensure hygienic conditions. Z-shaped waterproofing, which is positioned between the two shells of the masonry also ensures that any condensation arising in the structure can easily escape via the outer shell. Z-shaped waterproofing must bridge the gap between the two shells, which is why waterproofing products in sheets such as PCI BT 21 are always used.

In contrast, L-shaped waterproofing under the masonry may be applied in the form of sheets (PCI BT 21) and in the form of flexible mineral waterproofing slurry (PCI Barraseal® Turbo).

Benefits of L-shaped waterproofing with PCI BT 21:

- The cold-applied membrane is self adhesive and therefore easy to use as there is no need for welding or bonding.
- There is no need to change materials on site.

Both Z-shaped and L-shaped waterproofing can be completed using PCI BT 21.

- The outer leaves of the brickwork can be installed immediately on the PCI BT 21 membrane.



Double-leaf brickwork system

Benefits of L-shaped waterproofing with PCI Barraseal® Turbo

- PCI Barraseal® Turbo is easy to apply to corners, edges and entry points. The waterproofing effect is easier to establish and can be confirmed by visual inspection.
- In addition to waterproofing the outer leaf, PCI Barraseal® Turbo can also be used for waterproofing under the inner leaf.
- PCI Barraseal® Turbo can also be applied above ground level. The material can be left in place as a foundation coating or simply painted or plastered over.

Notes on using PCI BT 21

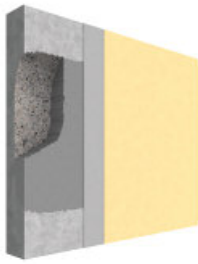
The primer must be selected on the basis of the ambient temperature. The standard primer is PCI BT 26 all-weather primer. In combination with PCI BT 28 special primer, PCI BT 21 may be used at temperatures between 5°C and -5°C. The surface to be covered with cold-applied self-adhesive membrane must be free from condensation (observe the dew point). Exterior and interior masonry walls must be protected by at least one horizontal damp-proof course.

The top edge of the membrane must be completely covered using PCI BT 42 tape and may also be mechanically fixed using flashing strips or clamping rails.

Before the construction trench is backfilled, all waterproofing must be protected against mechanical damage by a protective layer (protective fleece, drainage boards, insulating boards). Insulating boards such as Styrodur® C can withstand mechanical compression and the pressure of the soil.

Overview of Construction Systems

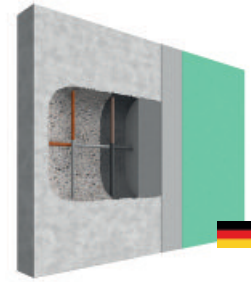
System for Concrete and
Masonry Refurbishment



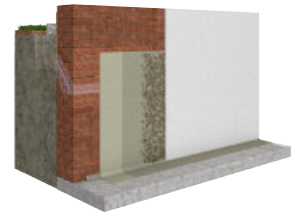
System for Concrete
Repair



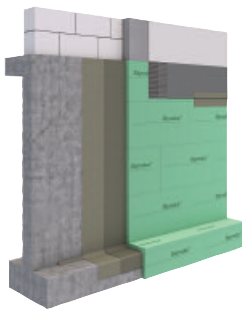
System for Structural
Repair (PCC)



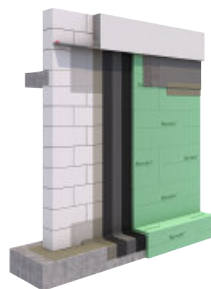
System Barra



System Barraseal Turbo



System Pecimor



System BT 21



System for Double-Leaf
Brickwork



www.pci-augsburg.de

The specifications in the valid technical data sheets are to be followed for the use of the PCI products mentioned.

System for Waterproofing of Buildings PCI BT 21, edition September 2020 (German edition November 2019)

Any subsequent publication supersedes this edition; the latest edition is always available on the Internet under www.pci-augsburg.de



PCI Augsburg GmbH

Piccardstr. 11
86159 Augsburg
P.O.B. 10 22 47
86012 Augsburg
Germany

Tel. +49 (821) 59 01-0

Fax +49 (821) 59 01-372

www.pci-augsburg.de



zertifiziertes Qualitäts-
managementsystem