

NEW! Even more security now!

BT 21

»All-weather« waterproofing membrane

Cold-applied, self-adhesive membrane for the reliable waterproofing of buildings, usable down to -5 °C

CERESIT
C_BT21_TM_11_0613

CHARACTERISTICS

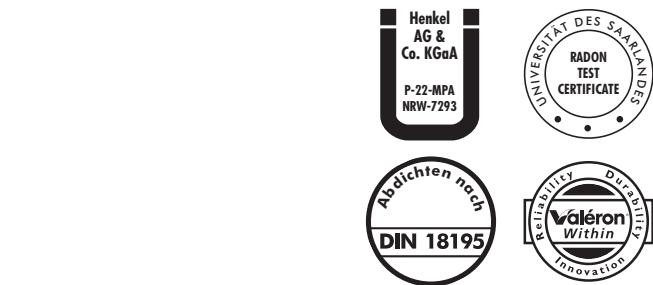
- for cold application down to -5 °C
- equipped with adhesive strips on both sides for extra safety
- also usable on damp substrates if used in a system with BT primers
- immediately impervious to water and driving rain
- flexible and crack-bridging

1
**National Test Certificate no.
P-22 0310 297, MPA-NRW
Test Certificate for radon tightness by
the Saarland University**

SCOPE OF USE

The BT 21 Waterproofing Membrane is used for waterproofing vertical and horizontal surfaces, indoors and outdoors, on the water-exposed side:

- For waterproofing cellar walls in contact with soil and floor slabs against ground moisture and non-accumulative seepage water (water load acc. to DIN 18 195, part 4).
- For waterproofing horizontal and sloped surfaces in the open (outdoors) and in the soil, as well as walls and floors in wet rooms against non-pressurized water of moderate load acc. to DIN 18 195, part 5 (e.g. balconies, rooftop loggias, terraces, flat garage roofs under a protective layer).
- For waterproofing against capillary rise of moisture and as a water vapour barrier on floor areas under screeds.
- For waterproofing wet rooms and retaining walls. On large-pored stones (e.g. pumice and LECA stones) where a contact adhesion of less than 80 % can be expected, and in the load case "accumulative seepage water" acc. to DIN 18 195, part 6, other water-



proofing systems must be used, e.g. CP 43, CP 44 or CP 48.

SUBSTRATE PREPARATION

Before installing the BT 21 waterproofing membrane, all mineral substrates must be pretreated with a BT primer. At temperatures above +5 °C, use BT 26 "All-Weather" Primer, at lower temperatures use BT 28 Special Primer (solvent-based).

For further information on primer application and surface preparation refer to the technical information sheets of these products.

Metal and plastic surfaces do not need to be primed. The surface must be smooth, pressure-resistant, clean and load-bearing.

Before installing the membrane, check if the priming coat is completely dry, i.e. the primer must be fully hardened and the colour must not come off on contact. In addition, test the membrane's adhesion to the sub-

strate: press a small strip (5 x 10 cm) of the membrane onto the primer and pull it off again.

If more than 30 % of the primer comes off the substrate, adhesion is not yet sufficient.

In this case, the membrane must be installed at a later date.

Adhesion is sufficient if the membrane can only forcibly be removed from the substrate.

Before installing BT 21, make sure that no condensate or ice has formed on the priming coat. This can occur under unfavourable climatic conditions, primarily at the base slab/wall junction. Before installing the membrane, make sure to provide a dry bonding surface, e.g. by allowing the water to evaporate/dry off or by applying heat.

APPLICATION

1. Cutting BT 21 to size:

Cut the BT 21 »All-Weather« Waterproofing Membrane to the required size or length. Use a sharp knife and a board to support the action, then roll the membrane up again.

2. Waterproof corners and edges:

Before installing the BT 21 membrane, a reinforcing strip of approx. 30 cm width is applied to all corners, edges and grooves. These strips can be cut from the membrane. Alternatively, BT 23 »All-Weather« Waterproofing Strips can be used. Also inner and outer corners must be waterproofed separately before installing BT 21. To ensure rapid work progress and reliable waterproofing, it is possible to use prefabricated inner and outer corner elements (CA 25 and CA 26). Before installing the membrane, these elements can be fixed on the priming coat with sections cut from the BT 21 membrane. Alternatively, corners can be covered with additional sections cut from the membrane acc. to the installation instructions.

3. Install the membrane / seam areas:

Bond the membrane to the entire surface by simultaneously stripping off the backing paper. When working on walls, apply BT 21 vertically from top to bottom. Use the following steps:

- Slowly and uniformly peel approx. 1 m backing paper off the strip's top edge.
- Align the strip and fix it to the substrate with the adhesive side down. Continue to peel off the paper and to bond the remaining part of the strip.
- After that, press the entire strip firmly down, e.g. with a rubber roller.

In the seam area, very carefully roll over the overlapping areas between the strips. These areas must have a minimum width which is marked on the membrane strips.

BT 21 is equipped with special bitumen strips on both sides that provide additional protection in the overlapping seam area. Before fixing the next overlapping strip, remove the red cover strips on the membrane.

When waterproofing roof loggias, always install 2 membrane layers.

4. Fix the top edge:

The top edge of the strip should be secured on vertical areas. According to the relevant DIN, this can be done

with clamping rails or flashing strips, alternatively with CA 22 Fixing Tape or CA 23 Alu Fixing Tape.

5. Fix the bottom edge (base slab front):

To prevent water from seeping behind the base slab front, the bottom edge of the installed membrane must be waterproofed with CP 43 or CP 48. Cover approx. 10 cm above and below the bottom edge.

6. Thermal insulation and back-filling:

According to DIN 18 195, BT 21 must be protected against damage by a protective layer, e.g. the CA 21 Polyester Web. An additional layer of thermal insulation, e.g. extruded rigid polystyrene boards or (when installing drainage) bitumen-impregnated drainage boards, can be fixed as follows:

BT 40 Perimeter Fix allows especially fast and efficient fixing of the insulation boards. After approx. just 2 hours, back-filling can be started. BT 40 can also be used at temperatures below +5 °C. At temperatures above +5 °C, it is also possible to use the 2-component bituminous thick coatings CP 43 and CP 48. For further application details please refer to the respective Technical Data Sheets.

After finishing the insulation works, the excavation must always be back-filled within 72 hours. Only use sand, fine-grained gravelly sand or a similar fine-grained material. Filling and compacting must be done in layers of 30 cm.

PLEASE NOTE

Use the BT 21 »All-Weather« Waterproofing Membrane only in dry conditions at temperatures from -5 °C to +30 °C (but not in blazing sunshine) and below 80 % relative air humidity.

At summer temperatures above +25 °C, self-adhesive waterproofing systems like BT 21 must be stored in a cool place as the thermoplastic adhesive layer softens under the influence of heat, especially direct sunshine.

At low temperatures, store BT 21 in a temperature-controlled place at a minimum of +10 °C prior to application.

During the construction phase, water must be prevented from running behind the waterproofing layer, including

- water from the cellar base
- water running off from the ceilings/floor slabs
- water penetrating through brick wall heads not waterproofed by the cellar ceiling

or

- water from unconnected downpipes.

Please refer to the following technical information:

- Technical Data Sheets of other Ceresit products
- the relevant guidelines and regulations of various organizations
- the respective DIN standards for the type of substrate and work to be done.

Please refer to the Safety Data Sheet for information on safety and disposal.

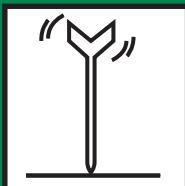
Should you need support or advice, please consult our advisory service for architects and craftsmen.
Phone: +49 (0) 211/797 106-07/-55/-59
Fax: 0211-798-1204

THE BT 21 SYSTEM AT A GLANCE:

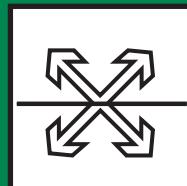
- BT 21 »All-Weather« Waterproofing Membrane
- BT 23 »All-Weather« Waterproofing Strips
- BT 26 »All-Weather« Primer
- BT 28 Special Primer (solvent-based)
- BT 40 Perimeter Fix
- CA 21 Polyester Web
- CA 22 Fixing Tape
- CA 23 Alu Fixing Tape
- CA 25 Inner Corner Element
- CA 26 Outer Corner Element
- CA 31 Expansion Resin
- CA 32 Sealing Hose
- CA 33 Cartridge Gun



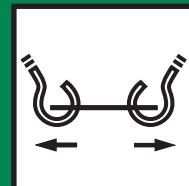
Use of the original Valeron membrane provides additional protection thanks to:



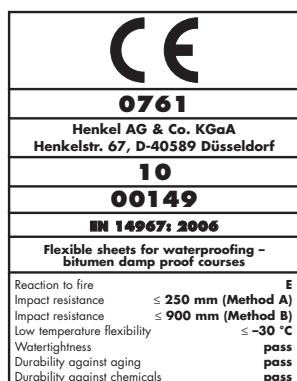
Especially high resistance to point loads



High tear resistance due to cross-lamination



High elasticity ensures maximum flexibility



TECHNICAL DATA

Material base:	tearproof, double cross-laminated polyethylene sheeting with a thermoplastic bitumen-rubber adhesive and waterproofing compound
Dimensions:	thickness approx. 1.5 mm width: 1.0 m
Weight:	approx. 1.7 kg/m ²
Working temperature:	-5 °C to +30 °C
Crack bridging:	> 5 mm with a crack offset of 2 mm
Cold flexibility:	< -30 °C
Tensile strength: – longitudinal/transverse:	> 200 N/50 mm max. tensile force > 150 % elongation
Tear resistance:	> 100 N (longitudinal/transverse)
Resistance to static load:	method B: 5 kg
Resistance to impact:	method A: 500 mm
Durable watertightness: after ageing: against chemicals:	passed passed
Shear resistance of the seams:	> 200 N/50 mm
Thermal stability:	> 70°C
Water vapour permeability (DIN EN 1931):	approx. 0.11 g/m ² d
Water-vapour-diffusion resistance coefficient μ : (DIN EN 1931)	approx. 240 000
Water-vapour-diffusion-equivalent air layer thickness (s_d value): (DIN EN 1931)	approx. 360 m
Watertightness:	> 4 bar / 24 h
Fire behaviour:	Euro class E
Radon tightness:	radon-proof
Colour:	blackish grey
Transport and Storage:	BT 21 »All-Weather« Waterproofing Membrane must be transported and stored upright. Prior to use, protect the membrane against pressure, heat and moisture. Shelf life: 12 months Remove the protective carton only shortly before use. For further storage information see "Important information"

The above information, in particular recommendations for the handling and use of our products, is based on our professional knowledge and experience. As materials and conditions may vary with each intended application and thus are beyond our control, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for the intended application method and use. Legal liability cannot be accepted on the basis of the contents of this technical data sheet or any verbal advice given unless there is evidence of wilful intent or gross negligence on our part.

This technical data sheet supersedes all previous editions.

Apart from the information given in this technical data sheet, it is also important to observe the relevant guidelines and regulations of various organizations and trade associations as well as the applicable DIN standards.

All data given was obtained at an ambient and material temperature of +23°C and 50 % relative humidity unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.



Henkel AG & Co. KGaA – Bautechnik

Henkelstraße 67 · D-40589 Düsseldorf

Telefon +49 211 797 0 • Telefax +49 211 798 2148

Internet: www.ceresit.com · E-Mail: ceresit.bautechnik@henkel.com

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