BORNIT®

ROCK SOLID CONNECTIONS

Building Protection Compass

Step by step to a dry basement - in new construction and renovation!

DIN 18533 / Vertical / Horizontal / Base /
Floor slab waterproofing / Rear Moisture protection
Wall

www.bornit.com


Quality made
in Germany!

BORNIT® Waterproofing products

Priming

Formation of hollow fillets

Thick bitumen coatings

Pipe seals
Reinforcement inserts
Sealing tapes

Mineral slurries

Water-repellency products

System products

Please observe:
The present brochure includes BORNIT® product and system recommendations. The users themselves shall be obliged to observe the relevant standards, regulations and technical rules and to inform themselves about possible modifications. Illustrations and sketches are for illustrative purposes and do not represent detailed or implementation planning; adjustments to the respective object must be made. Any details given correspond to the technical state of the art upon printing. We reserve the right to changes. Current information can be retrieved from our Internet page www.bornit.com. The Technical Datasheet and the Safety Datasheet available there shall be decisive for proper handling of the products!

BORNIT®
ROCK SOLID CONNECTIONS

Definition of terms

Water impact classes according DIN 18533

Effectiveness and longevity of the waterproofing of building structures depend on a variety of factors.

Thus, the static, structural, building physics and use-specific requirements must be taken into account in advance.

When planning the waterproofing, the design water level (HGW; HHW) should be known. Without this knowledge, it should be set at the ground level (GOK).

If drainage is specified for slightly permeable ground, then it must be checked in advance, how the accumulating drainage water can be securely drained, since many municipalities specify a prohibition for drainage water discharge in their wastewater regulations.

Furthermore, a coordinated product system for waterproofing of foundations as well as proper substrate preparation and processing are decisive.

W1-E Ground moisture and non-pressing water

The minimum water impact on a building structure in contact with the ground is soil moisture and is present with highly permeable soil (k > 10-4 m/s). With little permeable soil, the same water impact class can be achieved with drainage. Accordingly, there is a distinction between W1.1-E and W1.2-E.

W1.1-E is present, when precipitation or surface water, resp., seeps down to at least 50 cm below the sealing level and also cannot accumulate temporarily (at least 50 cm above the assessment water level).

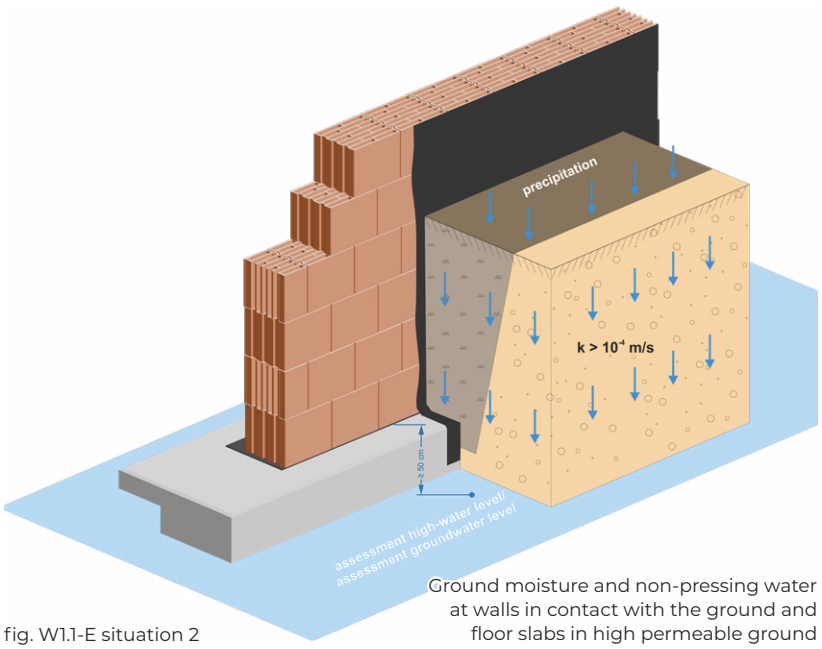

fig. W1.1-E situation 2

Ground moisture and non-pressing water at walls in contact with the ground and floor slabs in high permeable ground

W1-E Ground moisture and non-pressing water

W1.2-E is present, when little water-permeable building ground (k ≤ 10-4 m/s) is present and the sealing level lies at least 50 cm above the assessment water level. It must be ensured that incidental water is diverted away from the building structure by functional drainage according to DIN 4095. Thus, backwater is avoided permanently.

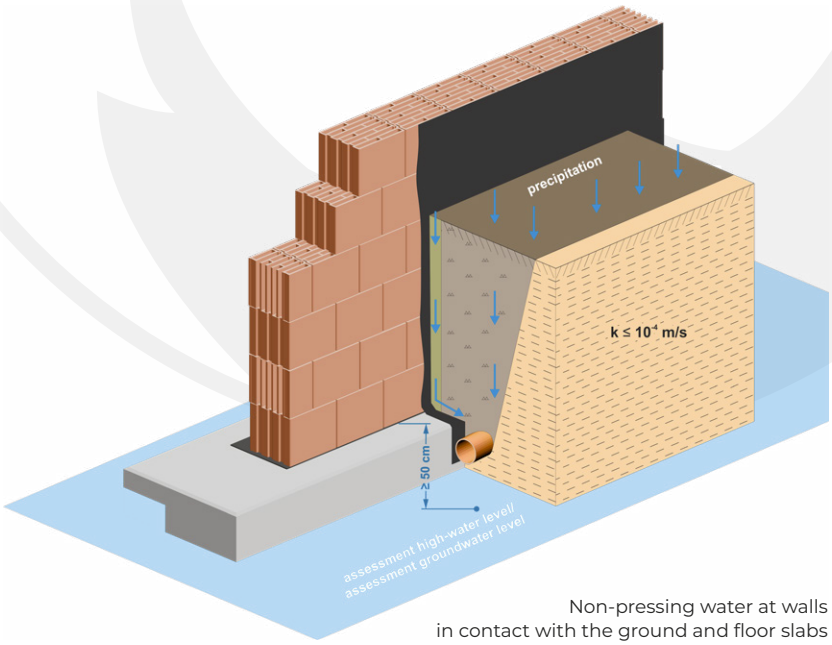

fig. W1.2

Non-pressing water at walls
in contact with the ground and floor slabs
in less permeable ground with drainage

W2-E Pressing water

If backwater, groundwater or high water affects the building structure, then water impact class W2-E is present. There is a distinction between moderate impact (W2.1-E) with a max. hydrostatic water pressure of up to 3 m and high impact (W2.2-E) with a water column of more than 3 m.

W2.1-E is classified into three situations – depending on the type of water impact (backwater, groundwater or high water, resp.).

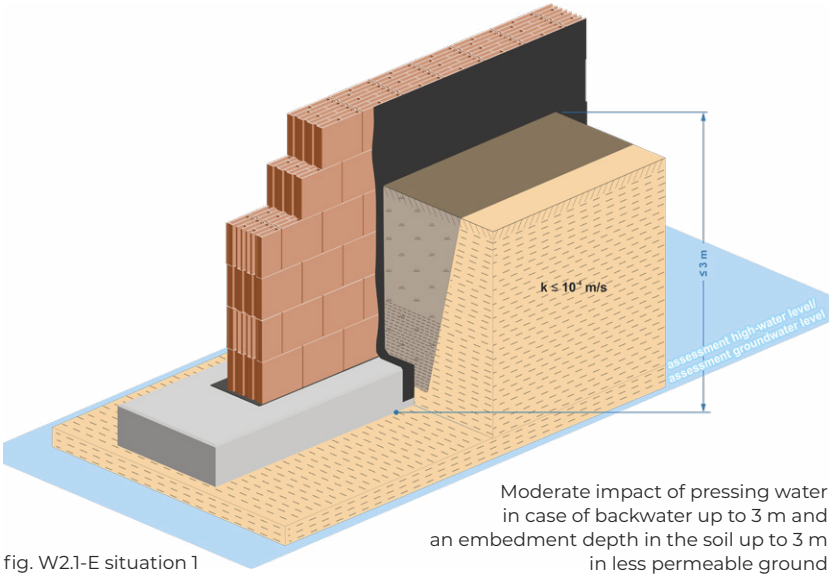

fig. W2.1-E situation 1

Moderate impact of pressing water
in case of backwater up to 3 m and
an embedment depth in the soil up to 3 m
in less permeable ground

Definition of terms

Water impact classes according DIN 18533

W2-E Pressing water

W2.2-E is present, when the building ground is little water-permeable and the foundation depth of the component is > 3 m.

The water impact class W2.2-E distinguishes 2 situations:

Situation 1: the groundwater and high-water levels lie below the foundation depth.

Situation 2: the groundwater and high-water levels lie above 3 m of foundation depth.

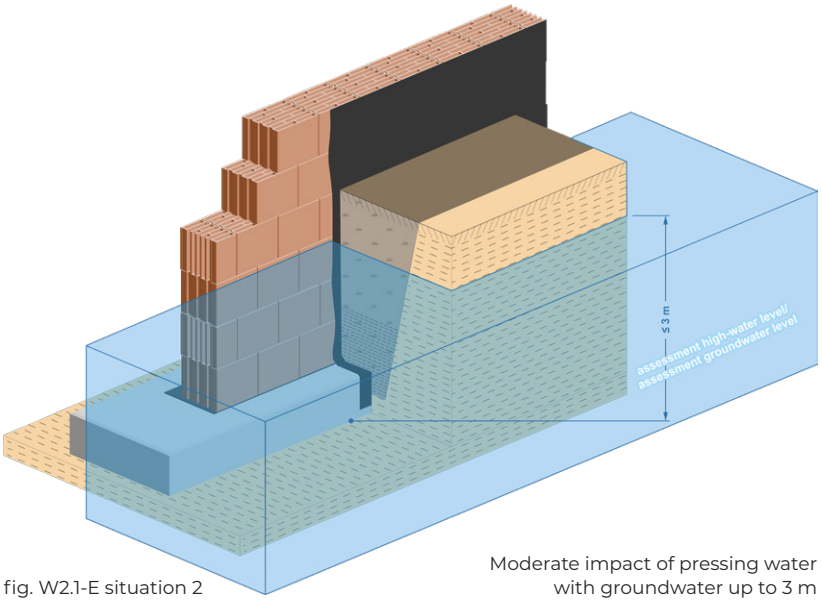

fig. W2.1-E situation 2

Moderate impact of pressing water with groundwater up to 3 m

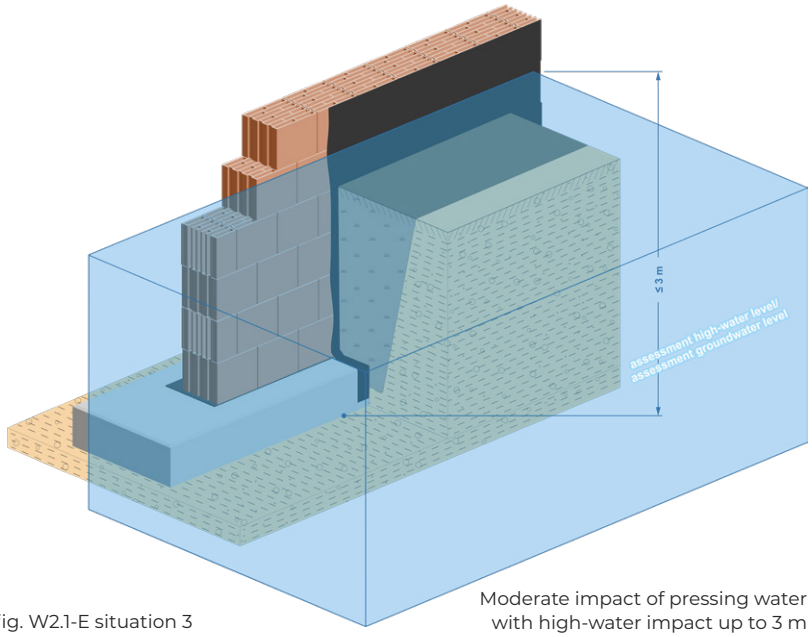

fig. W2.1-E situation 3

Moderate impact of pressing water with high-water impact up to 3 m

W3-E Non-pressing water on earth-covered ceilings

This water impact must be anticipated, when precipitation or seepage water affects an earth-covered ceiling structure without traffic load and seeps down to the sealing through the water-permeable soil cover. Drainage takes place on the sealing with only little formation of backwater, e.g. with suitable drainage measures or respective gradients. The impacting quantity of water can be considerably increased by adjacent vertical components, as e.g. façades, and must be respectively considered upon planning.

The sealing of an earth-covered ceiling must be designed against an impact from non-pressing water (sealing level ≥ 30 cm of assessment high-water level/assessment groundwater level), wherein an accumulation height of 10 cm must not be exceeded. Otherwise, the sealing must be designed according to W2-E.

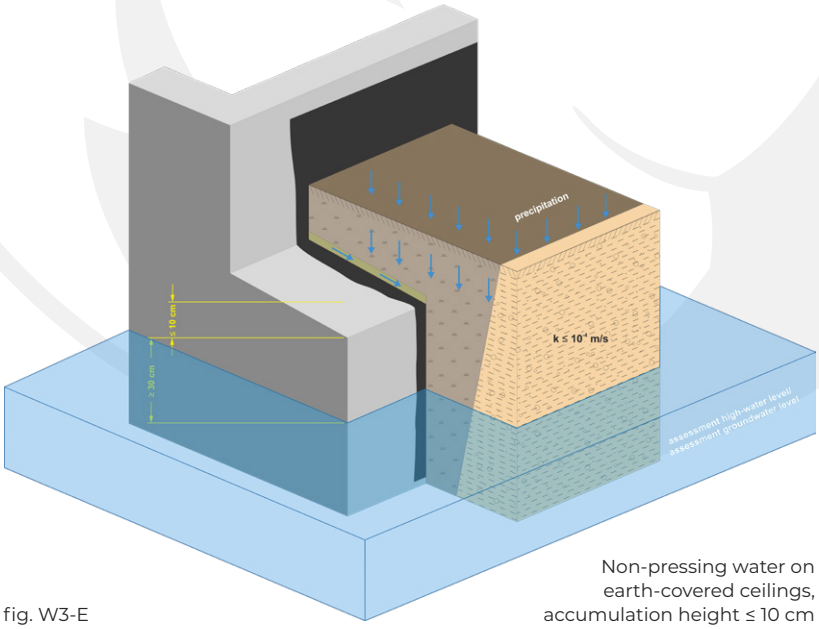

fig. W3-E

Non-pressing water on earth-covered ceilings, accumulation height ≤ 10 cm

Definition of terms

Water impact classes according DIN 18533

W4-E Splash water at the wall base as well as capillary water in and below walls

At the wall base, splash and seepage water have an impact on the base's surfaces, floor slabs or foundations. Via the floor slab, water can rise through capillaries and thus reach outer as well as inner walls.

In case of a wall base with double-shell masonry, precipitation water running off can seep into the space between the shells. These impacts require base point, base and cross-section sealing. At the wall base, W4-E must be assumed in the area from approx. 20 cm below ground surface to approx. 30 cm above ground surface, should W2-E not be present with the assessment water level or due to undrained, little water-permeable in-situ soil.

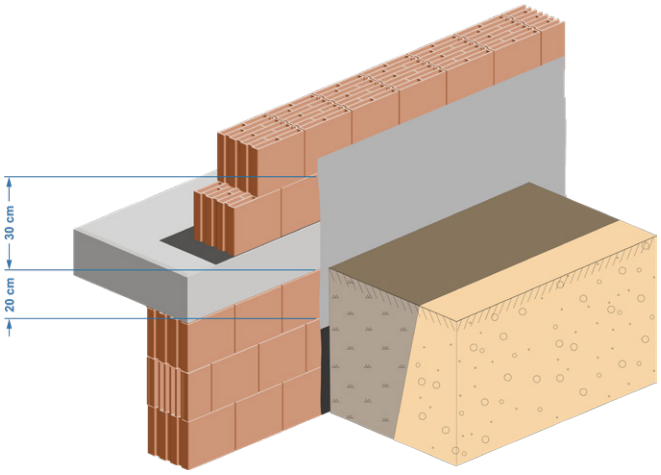

fig. W4-E

Water at the wall base, single-shell masonry, built with a cellar

Crack classes and crack-bridging classes

Crack class	*Crack formation / change of crack width after application of the sealing*	*Crack-bridging class of the sealing type*
R1-E (low)	≤ 0,2 mm	RÜ1-E, crack bridging up to 0,2 mm
R2-E (moderate)	≤ 0,5 mm	RÜ2-E, crack bridging up to 0,5 mm
R3-E (high)	≤ 1,0 mm; crack shift ≤ 0,5 mm	RÜ3-E, crack bridging up to 1,0 mm crack shift ≤ 0,5 mm
R4-E (very high)	≤ 5,0 mm; crack shift ≤ 2,0 mm	RÜ4-E, crack bridging up to 5,0 mm crack shift ≤ 2,0 mm

PMBC correspond to crack bridging class RÜ3-E. So they can be used on all surfaces up to crack class R3-E.

Space utilisation classes

Space utilisation class	*Requirement for dryness of the room air of rooms sealed on the earth side*	*Examples*
RN1-E	low requirement	underground parking garage open factory and storage hall
RN2-E	average requirement	cellar or warehouse in usual residential and office buildings; lounges
RN3-E	high requirement	rooms for the storage of irreplaceable cultural assets; room for central computer

PMBC may be used for all space utilisation classes.

Definition of terms

Water impact classes according DIN 18533

Water impact class	Type of water impact	Assessment water level (assessment ground-water level or assessment high-water level, resp.) / hydrostatic pressure	Embed-ment depth	Water permeability coefficient of the building ground	Drainage accor-ding to DIN 4095
W1-E – Ground moisture and non-pressing water					
W1.1-E – Ground moisture and non-pressing water at floor slabs & walls in contact with the ground					
W1.1-E, situation 1 Ground moisture at floor slabs	Ground moisture	Lower edge of sealing level ≥ 50 cm above assessment groundwater level / assess-ment high-water level	--	$k > 10^{-4}$ m/s	no
W1.1-E, situation 2 Ground moisture and non-pressing water at walls in contact with the ground and floor slabs	Ground moisture and non-pressing water	Lower edge of sealing level ≥ 50 cm above assessment groundwater level / assess-ment high-water level	any	$k > 10^{-4}$ m/s	no
W1.2-E – Ground moisture and non-pressing water at floor slabs & walls in contact with the ground with drainage					
W1.2-E non-pressing water at walls in contact with the ground and floor slabs	non-pressing water	Lower edge of sealing level ≥ 50 cm above assessment groundwater level / assess-ment high-water level	any	$k \leq 10^{-4}$ m/s	yes
W2-E – pressing water (pressing water from the outside: groundwater, high water, backwater) at walls in contact with the ground and floor slabs					
W2.1-E – moderate impact of pressing water					
W2.1-E, situation 1 moderate impact of pressing water	Backwater	hydrostatic pressure ≤ 3 m	max. 3 m into the ground	$k \leq 10^{-4}$ m/s	no
W2.1-E, situation 2 moderate impact of pressing water	Groundwater	hydrostatic pressure ≤ 3 m	any	--	no
W2.1-E, situation 3 moderate impact of pressing water	High water	hydrostatic pressure ≤ 3 m	max. 3 m into the ground	any	no

W2.2-E – high impact of pressing water					
W2.2-E, Situation 1 High impact of pressing water	Backwater	Hydrostatic pressure > 3 m	any	$k \leq 10^{-4}$ m/s	no
W2.2-E, Situation 2 High impact of pressing water	Ground- and High water	Hydrostatic pressure > 3 m	any	any	no
W3-E – Non-pressing water on earth-covered ceiling areas					
W3-E Non-pressing water on earth-covered ceiling areas	Precipitation water, backwater ≤ 100 mm	Sealing level ≥ 30 cm above assessment groundwater level / assessment high-water level		--	related to the object
W4-E – Splash water at the wall base as well as capillary water in and below walls in contact with the ground					
W4-E Water at the wall base as well as in and below walls	Splash, surface and seepage water, water rinsing in capillaries	Wall base: at approx. 0.2 m below to approx. 0.3 m above ground surface, if conditions of W2-E are not present		$k > 10^{-4}$ m/s $k \leq 10^{-4}$ m/s	no yes

Conclusion:

Waterproofing undertaken by water impact class:	Execution of waterproofing with polymer-modified bitumen thick coatings:	Minimum dry layer thickness:
W1-E W4-E	2 layers without reinforcement insert (layers can be applied fresh on fresh)	3 mm
W2.1-E W3-E	2 layers with reinforcement insert (prior to application of the 2nd waterproofing layer, the 1st waterproofing layer must have dried off sufficiently, so that it is not damaged by the subsequent application)	4 mm

Documentation Form

current version of DIN 18533

For the production of waterproofing with polymer modified bituminous thick coatings (PMBC)

Object data

Executing company: _____

Installer / employee: _____

Building project: _____

Client: _____

Date / Daily Report No.: _____

Weather 1st layer

Air temperature in °C ☐ Substrate temperature in °C ☐

Humidity in % ☐ rainy ☐ sunny ☐ cloudy ☐

Weather 2nd layer

Air temperature in °C ☐ Substrate temperature in °C ☐

Humidity in % ☐ rainy ☐ sunny ☐ cloudy ☐

Progress in construction

Basement walls ☐ basement ceiling ☐ Ground floor slab ☐ roof ☐

Embedding depth of the structure into the ground

_____ m

Ground / subsoil according to subsoil expertise / planning requirements

permeable (e.g. gravel / sand) ☐ less permeable (e.g. clay / loam) ☐ water management system ☐

Drainage according to DIN 4095

exists ☐ planned accord. to Bill of Quant. ☐ non accord. to Bill of Quant. ☐

Water impact class

W1.1-E, Situation 1 ☐
Lower edge waterproofing level ≥ 50 cm above groundwater level / high water level Ground moisture for floor slabs (highly permeable ground)

W1.1-E, Situation 2 ☐
Lower edge waterproofing level ≥ 50 cm above groundwater level / high water level Ground moisture non-pressing water for walls in contact with the ground and floor slabs (highly permeable ground)

W1.2-E ☐
Lower edge waterproofing level ≥ 50 cm above groundwater level / high water level Ground moisture/non-pressing water for walls in contact with the ground and floor slabs (only slightly permeable ground with drainage according to DIN 4095)

W2.1-E, Situation 1 ☐
Backwater up to 3 m
Embedding depth max. 3m

W2.1-E, Situation 2 ☐
Groundwater up to 3 m
Any embedding depth

W2.1-E, Situation 3 ☐
High water up to 3 m
Embedding depth max. 3 m

W3-E ☐
Non-pressing water on earth-covered ceilings

W4-E ☐
Splash water at the wall base/capillary water in and below walls

Substrate wall

Masonry - smooth ☐ porous aggregates ☐ profiled ☐

rendered surface ☐ other ☐

Concrete ☐ Waterproof concrete structure ☐

Substrate ground

Concrete ☐ Waterproof concrete structure ☐

Floor slab

With overhang ☐ flush ☐

Cross-section waterproofing

Damp-proof course ☐ crack-bridging mineral waterproofing slurry ☐ other ☐

Preparation of the substrate

Surfaces cleaned ☐ Indentations > 5 mm closed with mortar ☐

Foundation projection / face side abrasive mechanical pre-treated/cleaned ☐ Thin render produced ☐

Edges bevelled ☐ Scratch coat, pipes filled ☐

Projecting horizontal barrier removed ☐ Protection against the action of water from behind ☐

Primer

Designation of product: _____ Quantity used in l/m²: ☐

Degree of dilution: ☐ Produced on: ☐

Sealing cove

Made of bituminous thick coating ☐ Made of mortar ☐ Produced on: ☐

Made of BORNIT® Triangle Tape ☐ Designation of product: _____

Surface waterproofing

Thick coating used: _____ Layer of reinforcement Y ☐ N ☐

1st layer applied on: _____ 2nd layer applied on: _____

Required wet layer thickness: _____ consumption in l/kg per m²: _____

Joint / Sealing tape

Designation of product: _____ adhered with: _____

prepared on: _____

Protection measures

taken ☐ specification: _____

Protective layer

Protective panel used: _____ adhered with: Y ☐ N ☐

Adhesive used: _____ prepared on: _____

Drainage layer (vertical drainage)

Drainage panel used: _____ adhered Y ☐ N ☐

Drainage mat used: _____

Perimeter insulation

Insulating panel used: _____ over the entire surface ☐

Adhesive used: _____ selectively ☐

Check of the wet layer thickness

Measurement of the wet layer thickness (at least 20 measurements per object or 20 measurements per 100 m², resp.)

	1st application (in mm)	2nd application (in mm)
Measurement No. 1		
Measurement No. 2		
Measurement No. 3		
Measurement No. 4		
Measurement No. 5		
Measurement No. 6		
Measurement No. 7		
Measurement No. 8		
Measurement No. 9		
Measurement No. 10		
Measurement No. 11		
Measurement No. 12		
Measurement No. 13		
Measurement No. 14		
Measurement No. 15		
Measurement No. 16		
Measurement No. 17		
Measurement No. 18		
Measurement No. 19		
Measurement No. 20		

If you have no test card available, copy the example onto cardboard or heavy paper and cut it to size.

BORNIT®
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Test card to determine the wet-layer thickness of PMBC according to EN 15 814 / DIN 18 533

Test card-No:

At least 20 test per 100 m² surface

(Documentation required for W2.1-E)

Examiner:

Check for thorough drying

Reference sample set up on: _____

Reference sample checked for thorough drying:

1. date: _____ Thoroughly dried Y ☐ N ☐
2. date: _____ Thoroughly dried Y ☐ N ☐
3. date: _____ Thoroughly dried Y ☐ N ☐
4. date: _____ Thoroughly dried Y ☐ N ☐
5. date: _____ Thoroughly dried Y ☐ N ☐

Note / Special features / Additional appendixes, if applicable:

_____

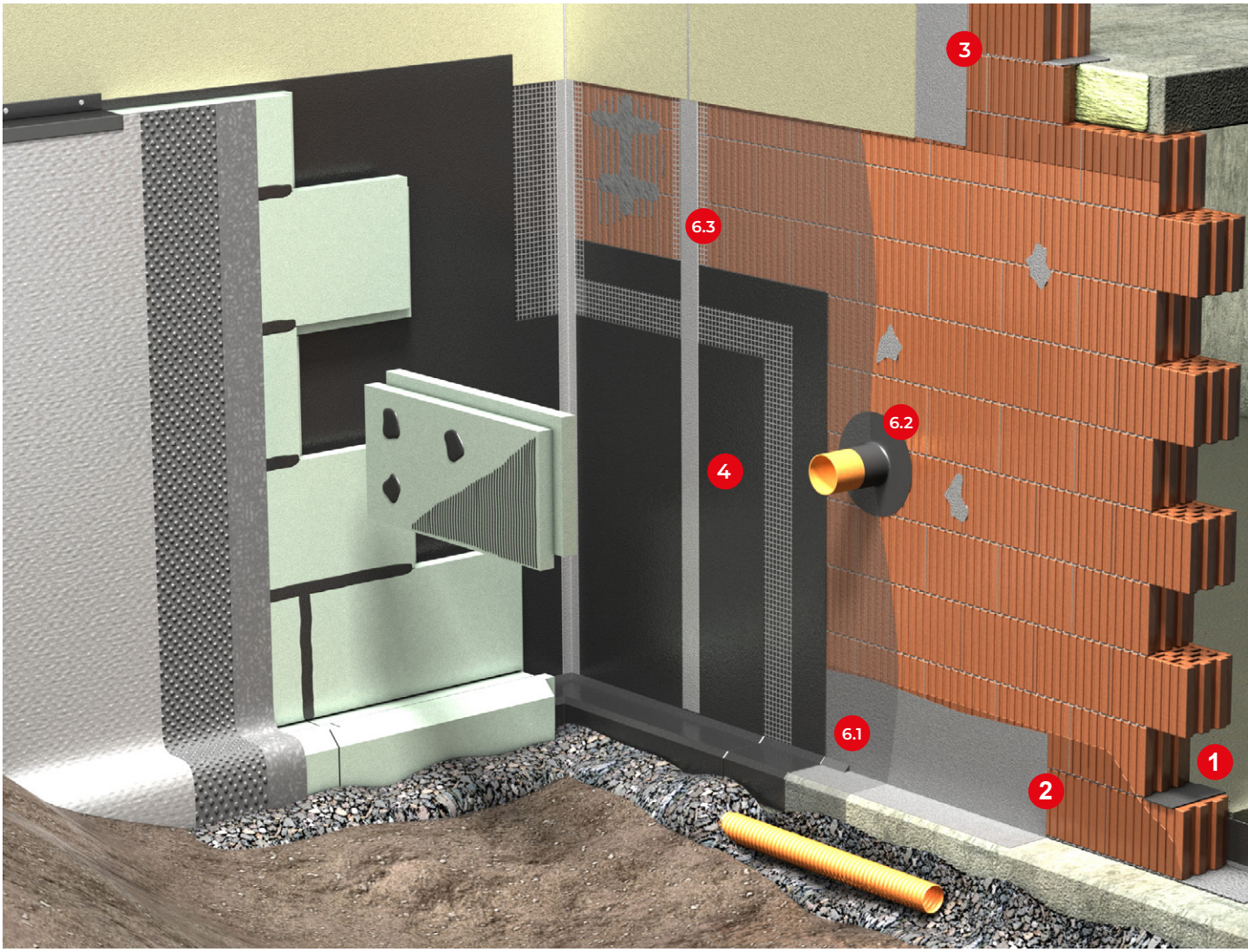
Place, date Name and signature of the executor

_____

Place, date Name and signature of the site management

Sealings at the foundation

Where does my house need protection in the foundation area?

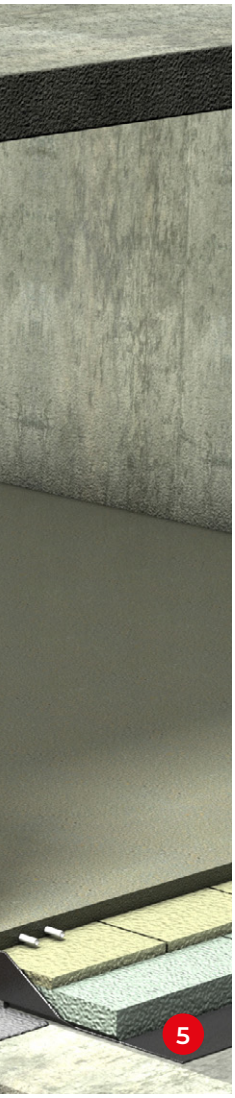


1 Horizontal sealing in or underneath walls in the brickwork

The horizontal sealing serves as protection against rising moisture in the wall. It is either executed with a crack-bridging mineral sealing slurry (BORNIT® Slurry EL, BORNIT® Profi Hybrid 2C, BORNIT® Mineral Flex 2C) or as a brickwork barrier layer.

2 Protection against moisture penetration

The thick bitumen coating can be damaged by pressing water from the negative side (e.g. standing water in the shell construction). The intermediate sealing (consisting of BORNIT® Basic Primer in combination with BORNIT® Slurry SF) protects the thick bitumen coating against moisture / water penetrating from the rear.



3 Base sealing

The base sealing consists of a mineral slurry (e.g. BORNIT® Slurry EL / BORNIT® Profi Hybrid 2C). It protects the area of the external wall at risk of splash water, which after filling of the construction pit is visible above the ground level.

4 Vertical sealing

This sealing serves for protection of the entire area of the foundation in contact with the ground against moisture or water, resp. as well as any aggressive substances naturally occurring in the ground.

5 Floor slab sealing

The floor slab must always be sealed against rising moisture. This can be undertaken either with a suitable thick bitumen coating or bituminous sheeting. It must be observed that the floor slab sealing is integrated into the horizontal sealing.

6 Sealing details

6.1 *Formation of the hollow fillet*

A hollow fillet should be formed in the valley area between the floor slab and the rising wall. The hollow fillet can be formed either with bituminous (e.g. BORNIT® Triangle Tape or 2-component bitumen thick coating) or mineral (e.g. BORNIT® Sealing Mortar) materials.

6.2 *Sealing of penetrations*

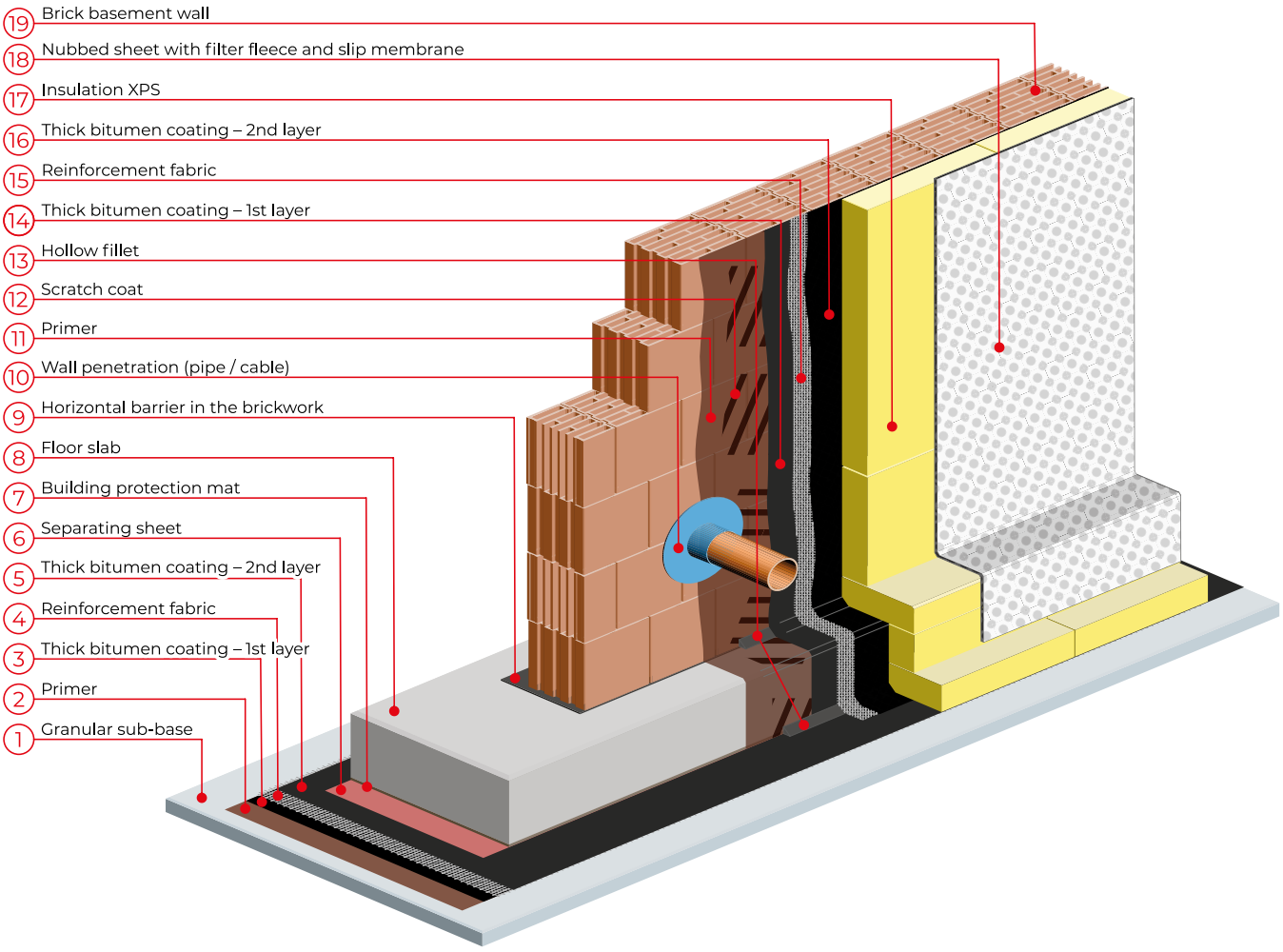
Penetrations (e.g. pipe or cable passages through the wall) require special attention. The passages can be securely and quickly integrated into the vertical sealing using pipe sleeves (BORNIT® EasyPipe).

6.3 *Sealing of expansion joints*

An expansion joint is the interspace between two components or building sections, which enables their different movements. Expansion joints are flexibly bridged with BORNIT® Joint Fabric Tape; subsequently, they are integrated into the vertical sealing.

System Structure

Sealing underneath the floor slab and the brick basement



① Concrete

② BORNIT® Grundbit
BORNIT® Basement Primer

③ BORNIT® Profi Hybrid 2C
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express

④ BORNIT® Glass Fabric

⑤ BORNIT® 2C (Thick coating)
BORNIT® Profi Hybrid 2C
BORNIT® Profi 1C Express
BORNIT® 2C Flex (Thick coating)

⑥ Separating sheet

⑦ Building protection mat

⑧ Reinforced waterproofing concrete

⑨ BORNIT®-G200 DD

⑩ BORNIT® EasyPipe (from 8 mm to 160 mm)

⑪ BORNIT® Grundbit
BORNIT® Basement Primer

⑫ BORNIT® Profi Hybrid 2C
(also area not in contect with the ground)
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

⑬ BORNIT® Sealing Mortar (cementitious)
BORNIT® Triangle Tape

⑭ BORNIT® Profi Hybrid 2C
(also area not in contact with the ground)
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

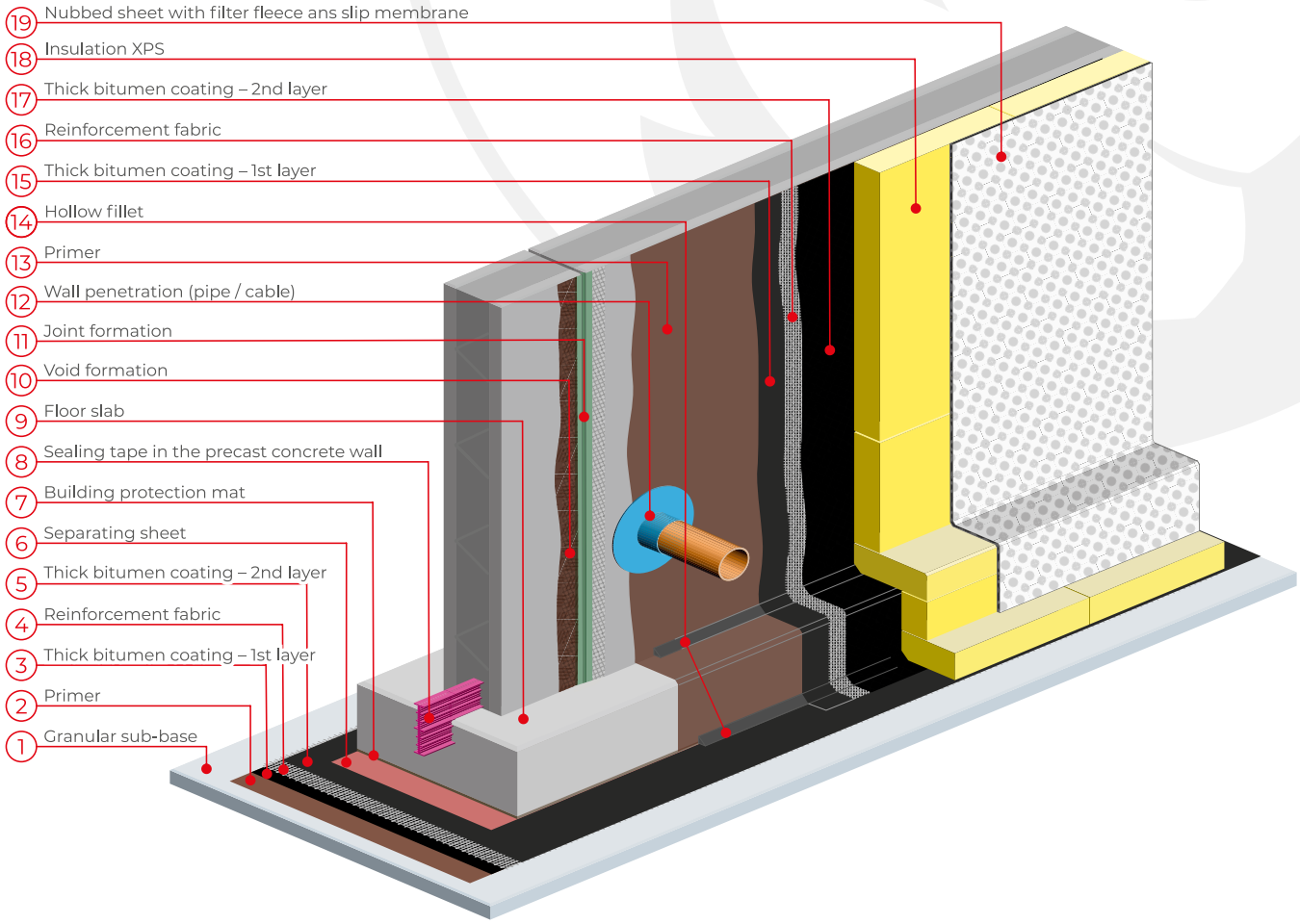
⑮ BORNIT® Glass Fabric

⑯ BORNIT® Profi Hybrid 2C
(also area not in contact with the ground)
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

⑰ Insulation XPS

⑱ Nubbed sheet with filter fleece and slip membrane

Sealing underneath the floor slab and the concrete basement



① Concrete

② BORNIT® Grundbit
BORNIT® Basement Primer

③ BORNIT® Profi Hybrid 2C
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express

④ BORNIT® Glass Fabric

⑤ BORNIT® 2C (Thick coating)
BORNIT® Profi Hybrid 2C
BORNIT® Profi 1C Express
BORNIT® 2C Flex (Thick coating)

⑥ Separating sheet

⑦ Building protect mat

⑧ Sealing tape according to RAL assembly directive

⑨ reinforced waterproof concrete

⑩ BORNIT® Profi Hybrid 2C
(also area not in contact with the ground)
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

⑪ BORNIT® Joint Fabric Tape

⑫ BORNIT® EasyPipe (from 8 mm to 160 mm)

⑬ BORNIT® Grundbit
BORNIT® Basement Primer

⑭ BORNIT® Sealing Mortar (cementitious)
BORNIT® Triangle Tape

⑮ BORNIT® Profi Hybrid 2C
(also area not in contact with the ground)
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

⑯ BORNIT® Glass Fabric

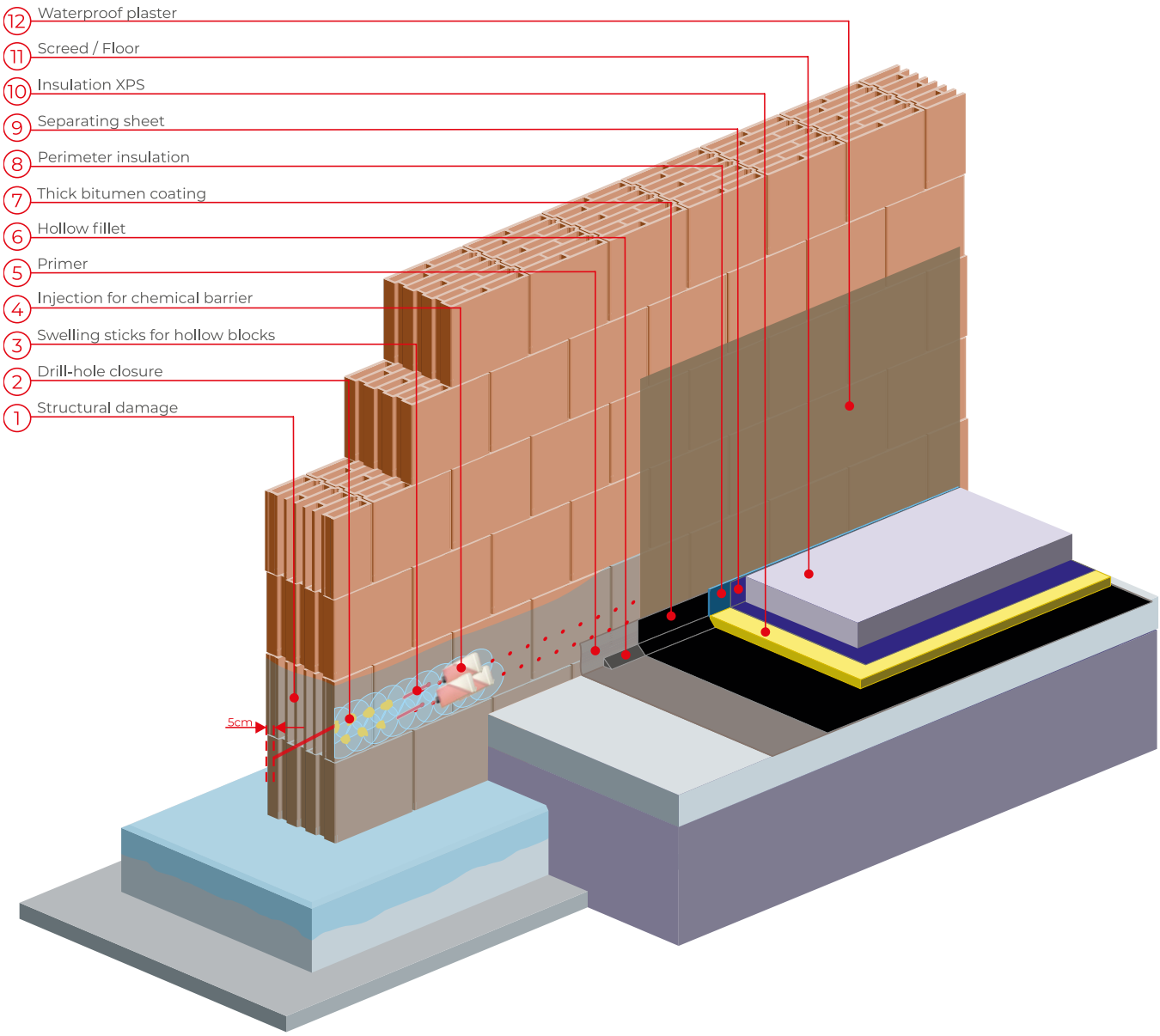
⑰ BORNIT® Profi Hybrid 2C
(also area not in contact with the ground)
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

⑱ Insulation XPS

⑲ Nubbed sheet with filter fleece and slip membrane

Definition of terms

Drainage of a brick wall using drill-hole injection



① Soaked masonry

② Drill Hole Filler

③ BORNIT® Filling Sticks

④ BORNIT® Injektil Super

⑤ BORNIT® Grundbit
BORNIT® Basement Primer

⑥ BORNIT® Triangle Tape (bituminous)
BORNIT® Sealing mortar (cementitious)

⑦ BORNIT® Profi Hybrid 2C
BORNIT® 2C Flex (Thick coating)
BORNIT® 2C (Thick coating)
BORNIT® Profi 1C Express
BORNIT® 1C (Thick coating)

⑧ Perimeter insulation

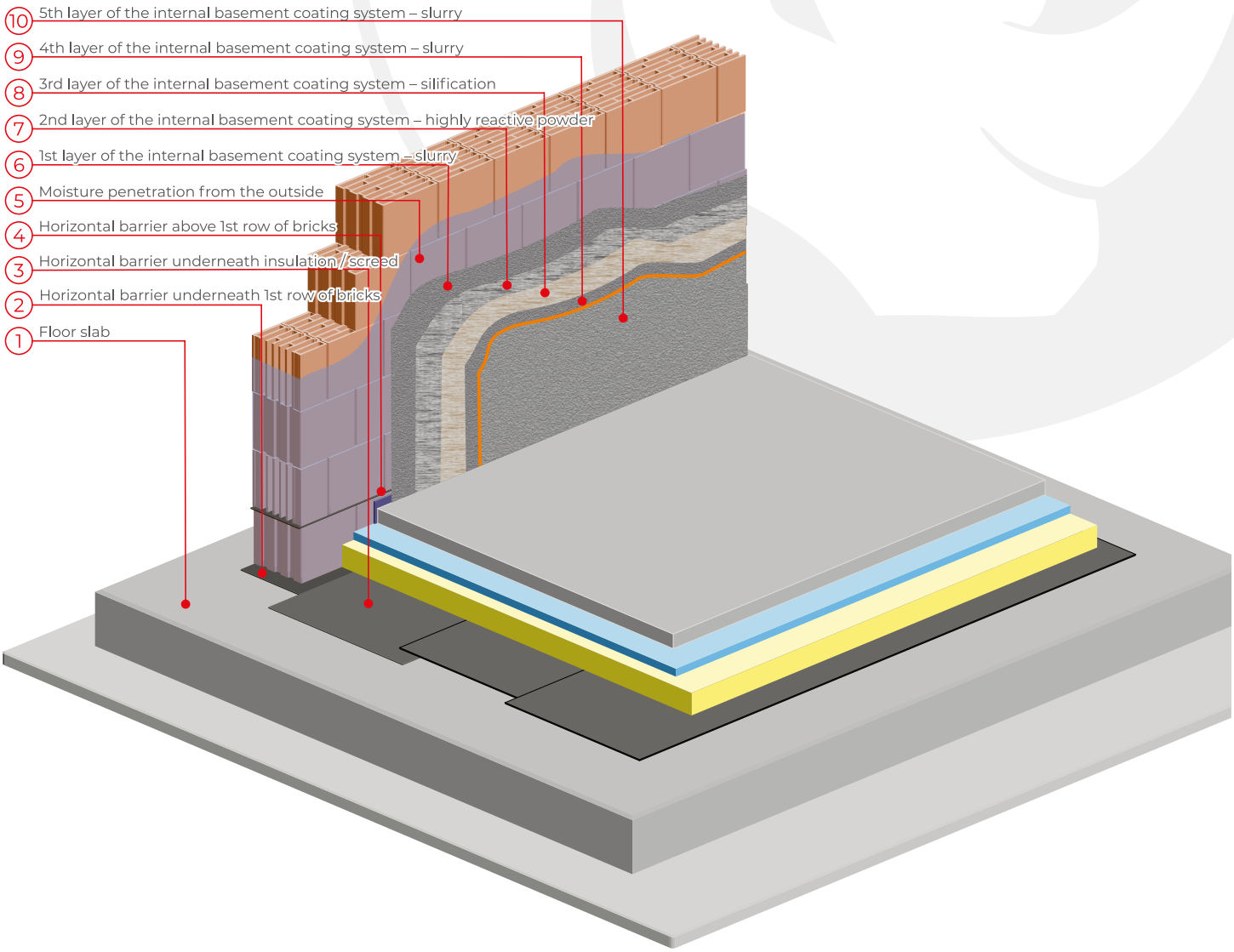
⑨ Separating sheet

⑩ Insulation XPS

⑪ Screed

⑫ Waterproof Plaster

Sealing with BORNIT® Basement Coating System from the negative side



① reinforced waterproof concrete

② BORNIT® G200 DD

③ BORNIT® V60 S4 + AL

④ BORNIT® G200 DD

⑤ despite horizontal barrier, water penetrating from the outside trough defective sealing

⑥ BORNIT® Slurry

⑦ BORNIT® Water Stop
(into the still fesh, wet slurry)

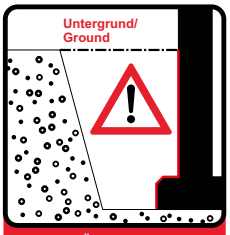
⑧ BORNIT® Solidificator
(apply into Items 6+7 without wait)

⑨ BORNIT® Slurry - 1st layer
(apply onto Items 6+7+8 without wait)

⑩ BORNIT® Slurry - 2nd layer
(spread after 30 min.)

Your central thread for...

optimal waterproofing for the protection of building structures against water and aggressive substances in the soil



Nein/No: Öl/Fett/Teer/etc.
Ja/Yes: Ziegel/Beton/Putz etc.

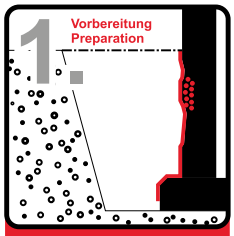
Substrate Preparation

Is the substrate contaminated?
(oils, greases, mould release agents, dirt and dust, etc.)

- Remove mechanically

Do sharp edges and burrs exist? (e.g. edge of the floor slab, etc.)

- Break them off mechanically; chamfer the floor slab (approx. 2x2 cm)



BORNIT® Solidificator
BORNIT® Slurry SF
BORNIT® Basement Primer
BORNIT® Unibit (1:2 with H_2O)

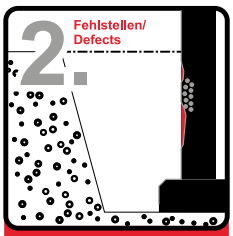
Do defects with more than 5 mm in depth and/or width exist?

- Slightly pre-moisten these spots and fill them with BORNIT® Sealing Mortar

Does a protrusion of the floor slab and thus a hollow fillet exist?

- Formation of the hollow fillet with:
  - BORNIT® Triangle Tape or 2-component Bitumen Thick Coating (radius max. 2 cm) - priming of the hollow fillet in advance with:
    - BORNIT® Basement Primer
  - or BORNIT® Sealing Mortar (for BORNIT® Profi Hybrid 2C only mineral material!)

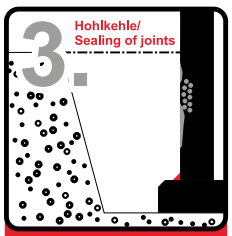
    IMPORTANT: Do not prime the fillet area with bituminous material beforehand!



< 5mm:
BORNIT® Thick Bitumen Coating
> 5mm:
BORNIT® Sealing Mortar

Is the substrate very sandy / flaky?

- Pre-treat the substrate with:
  - BORNIT® Basic Primer



BORNIT® Triangle Tape
BORNIT® Sealing Mortar

Is protection against moisture acting on the rear required as intermediate waterproofing?

- Priming with BORNIT® Basic Primer
- Apply BORNIT® Slurry SF at least to above the horizontal barrier

Execution of the base waterproofing for the splash-water area

Priming with:

- BORNIT® Stick Emulsoion (thinning 1:1 with water) (when using BORNIT® Profi Hybrid 2C, BORNIT® Mineral Flex 2C)

Substrate waterproofing in the splash-water area with:

- BORNIT® Slurry EL

or

- BORNIT® Profi Hybrid 2C

or

- BORNIT® Mineral Flex 2C

Priming for bituminous waterproofing:

Priming

Apply primer thinly with brush, roller or suitable spraying equipment

- BORNIT® Basement Primer

or

- BORNIT® Stick Emulsion (thinning 1:1 with water) (when using BORNIT® Profi Hybrid 2C, BORNIT® Mineral Flex 2C)

Defects smaller than 5 mm

Apply BORNIT® Thick Bitumen Coating in a scraping manner (mandatory according to DIN 18533)

Do pipe penetrations / passages exist?

Waterproofing of pipe penetrations with:

- Pipe waterproofing system BORNIT® EasyPipe

The construction substrate is now prepared for the BORNIT® Thick Bitumen Coating to be subsequently applied.

Your central thread for...

optimal waterproofing for the protection of building structures against water and aggressive substances in the soil

Which water impact class, according to DIN 18533, is relevant for the respective waterproofing? (see page 4-9 - definition of water impact classes)

W1-E / W4-E

The following BORNIT® Bitumen Thick Coatings can be used for waterproofing:

- BORNIT® 1C (Bitumen Thick Coating)
- or BORNIT® 2C (Bitumen Thick Coating)
- or BORNIT® 2C Flex (Bitumen Thick Coating)
- or BORNIT® Profi 1C Express
- or BORNIT® Profi Hybrid 2C
- BORNIT® Mineral Flex 2C
- BORNIT® Slurry EL

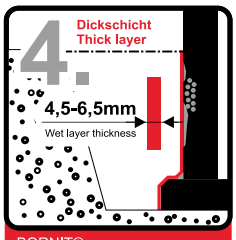
W2.1-E / W3-E

The following BORNIT® Bitumen Thick Coatings can be used for waterproofing:

- BORNIT® 2C (Bitumen Thick Coating)
- or BORNIT® 2C Flex (Bitumen Thick Coating)
- or BORNIT® Profi 1C Express
- or BORNIT® Profi Hybrid 2C
- BORNIT® Mineral Flex 2C

Application of the 1st layer of the selected bitumen thick coating

Observe the wet layer thicknesses according to the note on processing for the respective product and check using the layer thickness test card



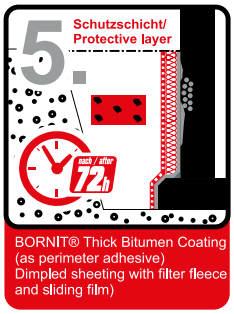
BORNIT®
Thick Bitumen Coating
optionally
BORNIT® Glass Fabric

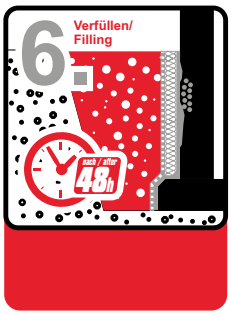
Is the waterproofing undertaken according to DIN 18533 - W2.1-E / W3-E?

Embed BORNIT® Glass Fabric 165 in the fresh 1st layer of the bitumen thick coating

Application of the 2nd layer of the bitumen thick coating

"Fresh on fresh" or after initial drying of the 1st layer, resp. (depending on the load case)





Is perimeter insulation to be used?

- **Important:** Attachment only after complete and thorough drying of the thick bitumen coating!
- Adhere insulating panels with adhesive in selected spots (W1-E) or over the entire surface (W2-E / W3-E) (approx. 2 kg/litre per m²)
- All BORNIT® Thick Bitumen Coatings are suitable as fixing adhesive for insulating panels

Drainage layer / protective layer?

- Dimpled sheeting with filter fleece and sliding film

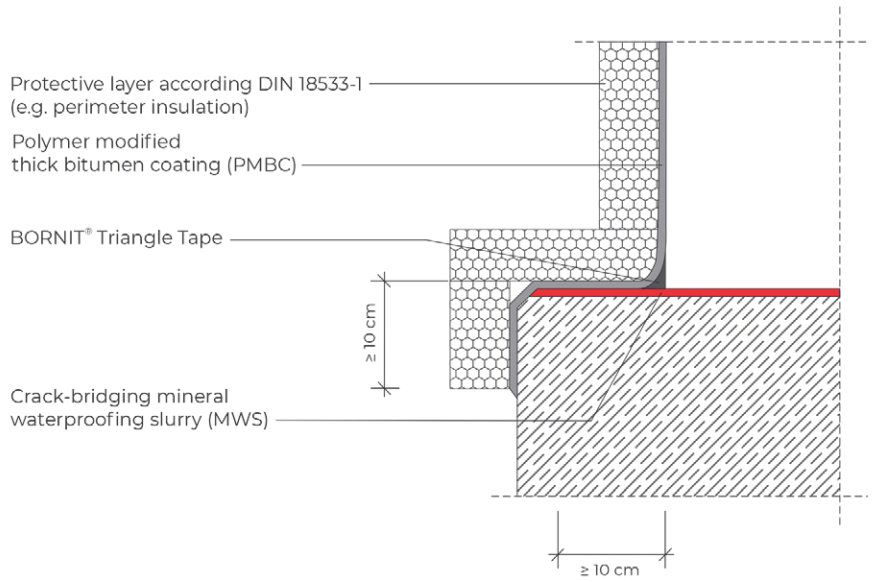
Filling of the construction pit

Consumption per m²:

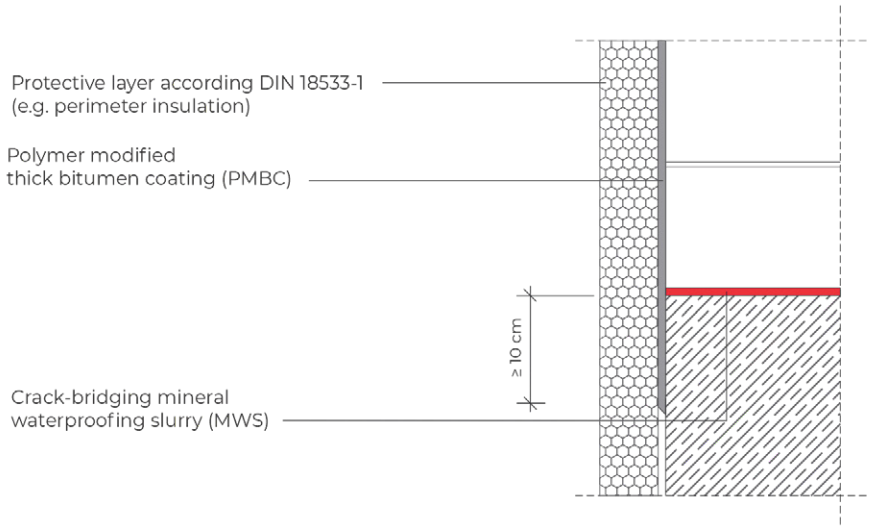
Water impact class (DIN 18533)	*BORNIT® 1C (Bitumen Thick Coating)*	*BORNIT®-Profi 1C Express*	*BORNIT® 2C (Bitumen Thick Coating)*	*BORNIT® 2C Flex (Bitumen Thick Coating)*	*BORNIT®-Profi Hybrid 2C*	*BORNIT® Mineral Flex 2C*	*BORNIT® Slurry EL*
W1-E	4.5 ltr./m²	3.5 ltr./m²	4.5 kg/m²	4.5 ltr./m²	3.5 kg/m²	3.6 kg/m²	3.5 kg/m²
Dry layer thickness	3 mm	3 mm	3 mm	3 mm	3 mm	3 mm	2 mm
W2.1-E / W3-E	-	4.5 ltr./m²	6.0 kg/m²	6.0 ltr./m²	4.5 kg/m²	4.8 kg/m²	-
Dry layer thickness		4 mm	4 mm	4 mm	4 mm	4 mm	
W4-E	4.5 ltr./m²	3.5 ltr./m²	4.5 kg/m²	4.5 ltr./m²	3.5 kg/m²	2.4 kg/m²	3.6 kg/m²
Dry layer thickness	3 mm	3 mm	3 mm	3 mm	3 mm	2 mm	2 mm

Detailed illustrations

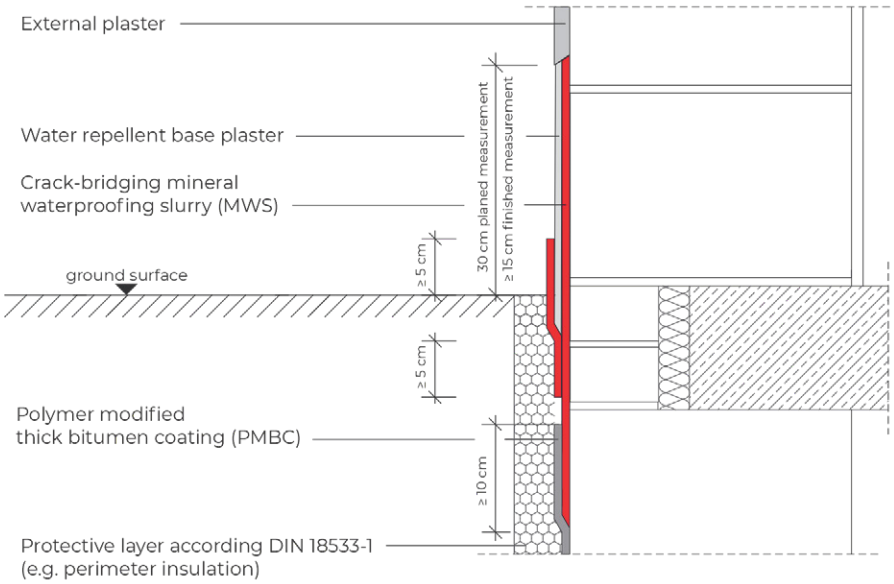
Detail: Waterproofing basement base point W1-E (protruding floor slab)



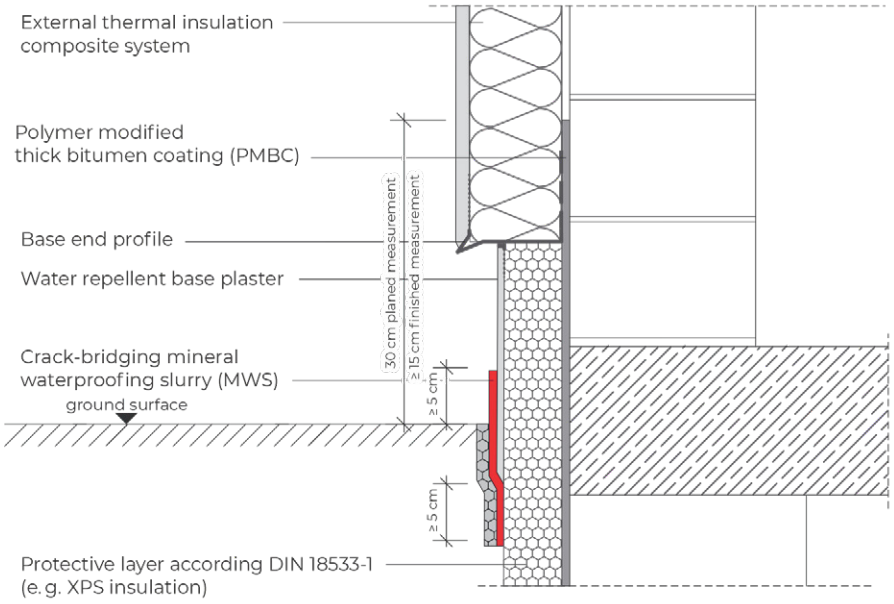
Detail: Waterproofing basement base point W1-E (flush floor slab)



Detail: Base Sealing W4-E: single-shell masonry with base plaster



Detail: Base Sealing W4-E: External thermal insulation composite system



Vertical waterproofing

Priming of the area in contact with the ground

BORNIT® Basement Primer or BORNIT® Stick Emulsion (1:1 with water), resp., using brush, roller or suitable spraying equipment.

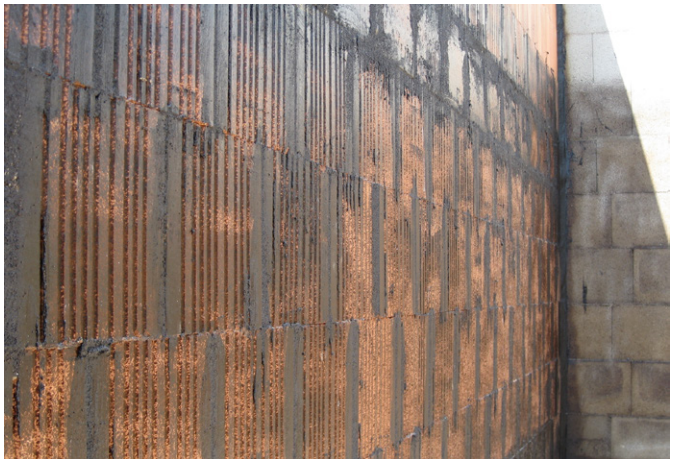
Defects smaller than 5 mm as well as pores in the substrate can be closed by applying the thick bitumen coating in a scraping manner. Especially for concrete surfaces, application in a scraping manner is likewise recommended in order to avoid the formation of bubbles (mandatory according to DIN 18533).

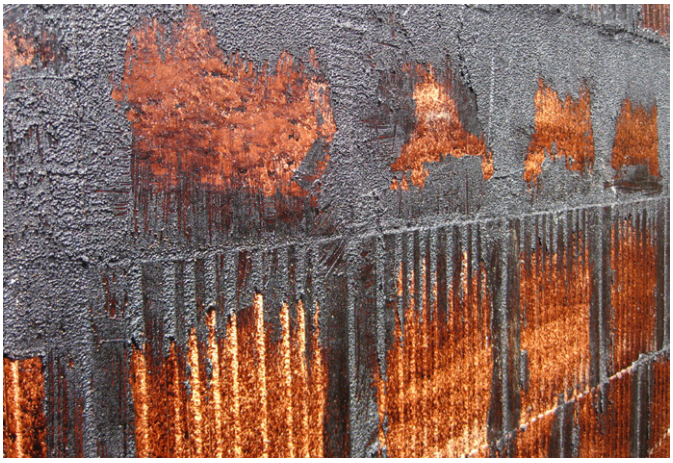
The substrate must be firm, clean, dust-free and free from separating substances (e.g. oils, greases, release agents, etc.). The substrate should be absorbent. It may be slightly moist, but not wet.

The substrate must be free from burrs or sharp-edged unevennesses as well as soil.

For solidification of sandy substrates, priming with BORNIT® Basic Primer is recommended.

Badly or unfilled depressions, like masonry joints, mortar pockets or surface defects >5 mm, must be repaired with BORNIT® Sealing Mortar. No plaster layer is required for fully and flushly grouted masonry. Subsequently, the prepared substrate is primed with





Application of the 1st layer of the thick bitumen coating

Single-component thick coatings can be used directly from the delivery container - do not stir up!

Two-component thick coatings are mixed according to the Technical Datasheet with stirring equipment and the BORNIT® Anchor stirrer prior to processing.

IMPORTANT: Observe the load case according to DIN 18533! (see page 4-8)

The BORNIT® Thick Bitumen Coating is applied to the prepared substrate with a notched trowel, smoothing trowel or suitable spraying equipment; upon application with a notched trowel, observe possible air pockets.

load case according to DIN 18533 as well as the information stated in the Technical Datasheet of the BORNIT® Thick Bitumen Coating chosen must be observed!

In case of a protruding floor slab, application of the thick bitumen coating must be continued from the wall area across the floor slab up to at least 10 cm (at W1-E) or 15 cm (at W2.1-E) to the front face of the floor slab.

In case of interruptions of work, the thick bitumen coating must be spread out “to zero”; upon resumption of work, continue with an overlap. There must not be any interruptions of work at building corners.

IMPORTANT: BORNIT® Thick Bitumen Coatings must not be processed in case of frost or impending rain. In case of sun and/or summer temperatures, freshly coated surfaces must be suitably shaded; furthermore, sufficient air circulation must be provided in the construction pit.

The processing temperature (ambient and substrate temperatures) must not be below +5 °C and should not exceed +30 °C.

According to DIN 18533 - W2.1-E, layer thickness tests must be performed and recorded (protocol, see pages 12/13).

For that, the required layer thicknesses for the respective

Vertical waterproofing

Embedding of BORNIT® Glass Fabric (upon waterproofing according to DIN 18533 W2.1-E / W3-E) and application of the 2nd layer of the thick bitumen coating

If waterproofing according to DIN 18533 W1-E / W4-E is undertaken, the 2nd layer of the thick coating can be applied “fresh on fresh” (without reinforcement fabric).

Upon waterproofing according to DIN 18533 W2.1-E / W3-E BORNIT® Glass Fabric is superficially embedded into the still fresh 1st layer of the thick bitumen coating. the 2nd layer of the thick coating must only be applied once the 1st layer has dried to that extent that it is not be damaged by the subsequent application anymore.

First, all outer and inner corners are provided with BORNIT® Glass Fabric.

Subsequently, the BORNIT® Glass Fabric is worked into the fresh thick bitumen coating. An overlap between the individual sheets of at least 10 cm must be observed upon application.

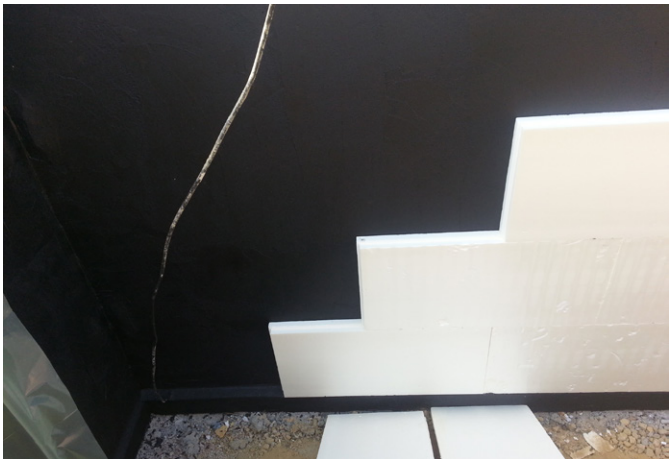
It is recommended to embed the BORNIT® Glass Fabric into the thick bitumen coating down to the front surface of the floor slab.

Insulating panels or protective layers, resp., must only be attached after complete and thorough drying of the thick coating.

Insulating panels are adhered with adhesive in selected spots (W1-E) or over the entire surface (W2.1-E) (approx. 2.0 kg or litres, resp., of thick coating per m^2).

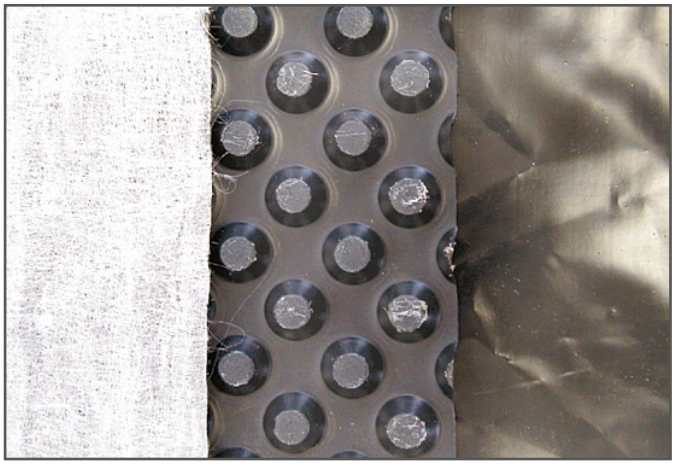
The drainage or protective layer, resp., is attached with the sliding film facing the wall side – the nubs and the filter fleece are visible on the outside.

Upon layered filling of the construction pit, it must be observed that the dimpled sheeting is not damaged by compacting equipment (e.g. vibrating plate).



IMPORTANT: The dimpled sheeting must under no circumstances be attached with nails or the like in the waterproofing area; upon filling of the pit, support the upper area of the dimpled sheeting with battens in order to prevent folding down.

If cuts are made in the dimpled sheeting (e.g. for light wells), the upper, open edge must be closed (e.g. with turned over geotextile) in order to prevent penetration of foreign substances – these can block the water-conducting dimpled area!

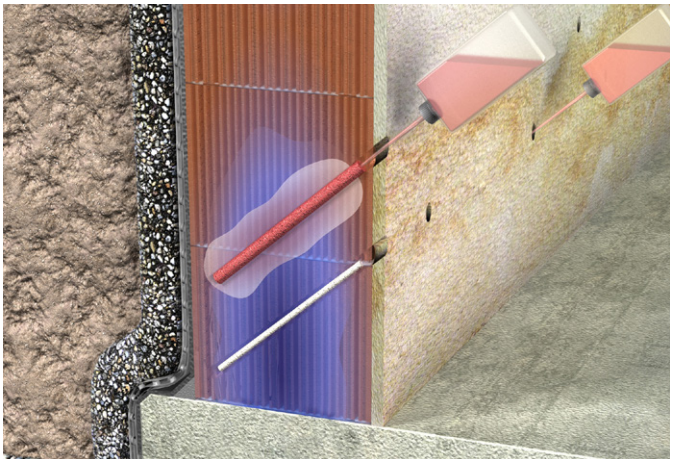


Horizontal waterproofing

Horizontal waterproofing (cross-sectional waterproofing) protects the upright wall against moisture ascending via capillaries.

This cross-sectional waterproofing can be carried out with a crack-bridging mineral waterproofing slurry in at least 2 coats (BORNIT® Slurry EL, BORNIT® Profi Hybrid 2C, BORNIT® Mineral Flex 2C.

A cross-sectional waterproofing can also be carried out with a damp proof membrane. This is applied under the 1st row of bricks and must consist of at least one layer. The contact surfaces for the sheets must be adapted to such thickness with the respectively used masonry mortar, that horizontal surfaces are formed – without unevennesses, which would be damaging for the sheeting. At the joints, overlapping of approx. 20 cm must be observed. The overlaps can be glued together. The damp proof course protruding beyond the brick at the outside wall is cut off flushly prior to application of the thick bitumen coating. The sheeting protruding on the inside serves connection to the horizontal waterproofing of the floor slab.



In case of renovation, a horizontal barrier can also be inserted subsequently by chemical injections.

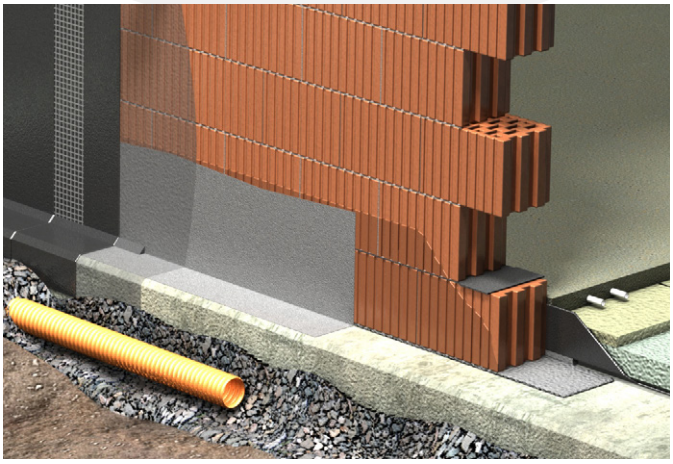
For that, the wall to be treated is pre-drilled at regular intervals diagonally to the wall's cross-section. Each drill-hole is filled with a filling stick and this is then soaked with BORNIT® Injektil Super for a period of 24 hours. Subsequently, the drill-holes are closed with drill-hole filler.

Rear moisture protection

In order to protect the thick bitumen coating against moisture acting on the rear, the area should be additionally waterproofed starting from the floor slab via the hollow fillet up to above the 1st row of bricks.

For that, this area is primed with BORNIT® Basic Primer, and then BORNIT® Slurry SF is applied “fresh on fresh”.

This system setup effectively prevents that water pressure from the inside (e. g. due to rain in the construction phase) can act against the fresh bitumen waterproofing. Thus, detachment of the bitumen waterproofing from the substrate is effectively prevented.



Base waterproofing

The splash-water area of masonry or concrete walls is waterproofed with BORNIT® Slurry EL, BORNIT® Profi Hybrid 2C or BORNIT® Mineral Flex 2C.

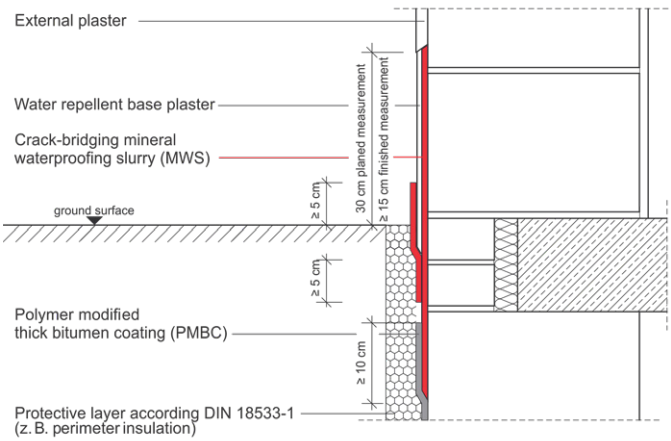
In the splash-water area, the mineral waterproofing has to be executed at least 30 cm above and 20 cm below the final ground level. Following terrain adjustment, the waterproofing must extend at least up to 15 cm above ground level.

The overlapping zone of mineral waterproofing and thick bitumen coating lies below ground level and extends over at least 10 cm.

Thus, the thick bitumen coating ends in the non-visible area of the gravel pack of the splash-water base.

IMPORTANT: Mineral waterproofing always under bituminous waterproofing! First apply the mineral waterproofing products and subsequently process the thick bitumen coating in an overlapping manner.

ATTENTION: Thick bitumen coating applied too high (above ground level) can be removed mechanically with great effort only.



Waterproofing details

Formation of the hollow fillet between floor slab and wall connection

BORNIT® Triangle Tape is excellently suited for the formation of the hollow fillet between floor slab and upright wall.

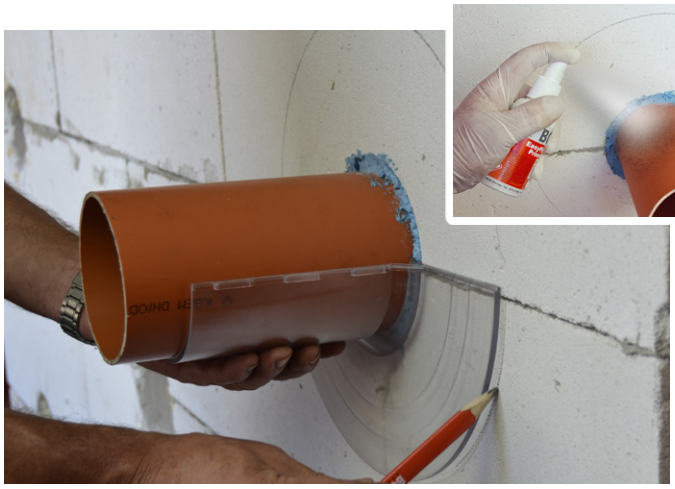
For that, the BORNIT® Triangle Tape is flame-heated on the 90° side and pressed into the fillet. Following cooling down of the first attachment, evenly heat the tape until it starts to melt and press it into the molten pool. For edge fusion, finally apply the flame across the tape once again and smooth it with a spatula (20 mm) warmed to a moderate temperature.

As an alternative, the hollow fillet can also be formed with mineral BORNIT® Sealing Mortar. The sealing mortar likewise forms a waterproof fillet protection, however, in a rigid manner. Here, possible structural movements cannot be compensated as well as with BORNIT® Triangle Tape. In addition, the setting process of the cementitious mixture must have been completed before any further work can be undertaken.

Due to its quick-drying properties, BORNIT® Repabit, BORNIT® 2C and BORNIT® 2C Flex, are suitable for the formation of hollow fillets. In that, a maximum layer thickness in the fillet of 2 cm must not be exceeded.

Waterproofing details

Waterproofing of penetrations



Wall penetrations in the foundation area (e.g. for pipes/ cables) can be securely waterproofed with the pipe sealing system BORNIT® EasyPipe (not at W2.2-E).

The pipe protruding from the wall is fixed in the area of the wall penetration (e.g. with construction foam) prior to assembly of BORNIT® EasyPipe, since the pipe must not move anymore upon assembly of BORNIT® EasyPipe. Draw the external outlines of the BORNIT® EasyPipe sleeve on the substrate with one half as a template. Press the BORNIT® EasyPipe adhesive into the entire groove junction (plate and pipe flange) of the two BORNIT® EasyPipe half-sleeves. Now cut off the nozzle of the cartridge to the required opening size – in order to compensate for the space between pipe and pipe sleeve. Provide the two half-sleeves with 3 adhesive strands each (the first adhesive strand at the outer edge of the shaft – the second about 2 cm below the first one – the third above the 45° angle). Place both half-sleeves around the pipe about 2 cm away from the wall and click it together – slide it towards the substrate in a slightly rotating manner, so that an adhesive bead emerges at the plate edge and at the shaft of the BORNIT® EasyPipe sleeve. In that, it must be observed that the half-sleeves, in particular also in the plate area, are completely joined.

With the exclusive new development, the transparent BORNIT® EasyPipe, a visual leakage check is immediately apparent – the transparent sleeve substantially increases functional safety. Finally spread the emerging adhesive compound.

Quicklink
application video BORNIT® EasyPipe

At expansion joints, movements from building sections must not have such an effect, that the functionality of the waterproofing is put at risk. Therefore, execution and waterproofing of the expansion joints must be adapted to the movements to be expected.

Normally, in the area in contact with the ground, joints of type I are to be expected. These are joints for slow and one-time or rarely repeated movements, e.g. settling movements. In that, the movements of the joint flanks must not exceed 5 mm in total. Expansion joints of type I are waterproofed with a joint sealing tape (e.g. BORNIT® Joint Fabric Tape), which is inserted into the joint in loops. Filling or covering the joints is inadmissible.

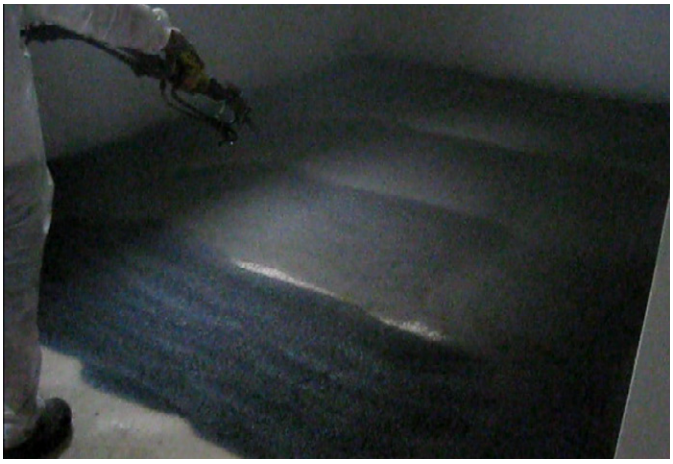
Expansion joints can only be waterproofed, when a seamless connection of the joint sealing tapes is ensured over the entire length of the joint.

The thick bitumen coating used is applied right up to the joint to be bridged. Subsequently, BORNIT® Joint Fabric Tape is immediately applied and fixed on the fresh coating. Following drying of the coating, the same sealing material is applied once again on at least 100 mm to both sides of the BORNIT® Joint Fabric Tape (fabric edge and rubber coating) in a covering manner, so that a closed sealing layer results.

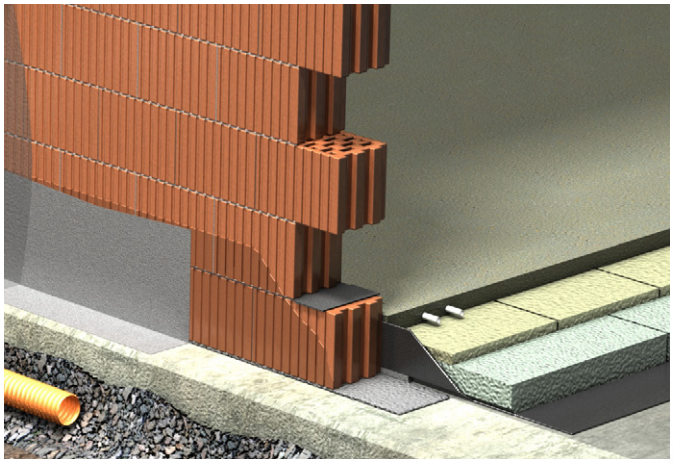
Floor slab waterproofing

For waterproofing of the floor slab, a stable substrate is required and the waterproofing must be protected against damages.

Prime the granular sub-base (concrete layer underneath the floor slab) with BORNIT® Speedbit-Primer, BORNIT® Grundbit, BORNIT® 5M Primer or BORNIT® Bitumen Primer (approx. 0.2 litres/m²) and then weld on weldable bitumen sheeting (e.g. PYE PV 250 S5) over the entire surface. In that, an overlap of the weldable sheeting of at least 10 cm must be observed. The waterproofing must be made of at least 1 layer and adhered to the substrate with adhesive in selected spots or over the entire surface. Subsequently, the floor slab can be cast onto the welded surface.



Subsequently, thick bitumen coating can be used for intermediate waterproofing (under screed) of floor slabs. BORNIT® Profi 1C Express, BORNIT® 2C Flex, BORNIT® 2C, BORNIT® Profi Hybrid 2C are suitable for that. Waterproofing with polymer-modified thick bitumen coatings must be applied in two layers. The dry layer thickness must be at least 3 mm. In that, the thick bitumen coating is provided up to the intermediate waterproofing of the walls and respectively connected.



Product Overview

primer, bituminous & mineral-based waterproofing

Priming:

BORNIT® Speedbit Primer

Solvent-free, quick-drying elastomer bitumen primer for laying bitumen welding membranes indoors and outdoors, can be rolled, brushed or sprayed on

System products:
BORNIT® MultiClean Spray
BORNIT® Bitumen Cleaner
Bitumen roof sheetings

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	10 ltr.	black	approx. 50 m²	6900004117	4 017228 00541 6	44 bucket
	25 ltr.	black	approx. 125 m²	6900004118	4 017228 00542 3	18 bucket

BORNIT® Basement Primer

Solvent-free polymer bitumen primer for the pretreatment of mineral substrates such as concrete and masonry surfaces, thin liquid, quick-drying, brush- and sprayable

System products:
BORNIT® 1C Bitumen Thick Coating
BORNIT® Profi 1C Express
BORNIT® 2C Bitumen Thick Coating
BORNIT® 2C Flex Bit. Thick Coating

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	5 ltr.	black	approx. 25 m²	6900002657	4 017228 00443 3	60 canister
	10 ltr.	black	approx. 50 m²	6900002656	4 017228 00444 0	60 canister
	20 ltr.	black	approx. 100 m²	6900002655	4 017228 00395 5	24 canister

BORNIT® Stick Emulsion

Solvent-free dispersion for the modification of cement-based mortars, improves adhesion and elasticises, primer for BORNIT® Profi Hybrid 2C (diluted 1 : 1 with water)

System products:
BORNIT® Profi Hybrid 2C
BORNIT® Slurry SF
BORNIT® Sealing Mortar

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	1 kg	white	approx. 5.0 m²	6700000107	4 017228 00274 3	
	10 kg	white	approx. 50.0 m²	6800000356	4 017228 00458 7	60 canister

Product Overview

primer, bituminous & mineral-based waterproofing

for the formation of the hollow fillet in the foundation area:

BORNIT® Triangle Tape

Highly flexible, meltable elastomer bitumen tape for safe and easy joint sealing and right angle corners in civil engineering

System products:
BORNIT® Bitumen Primer
BORNIT® Bitumen Primer Spray
BORNIT® Basement Primer
BORNIT® Trapezium Tape

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
18x35 mm	25 m	black	approx. 25 m	6900002711	4 017228 00056 5	24 box

BORNIT® Sealing Mortar

Ready-mixed mortar for the production of wall / floor connection grooves in basement construction, water-repellent wall and joint mortar, for the creation of barrier plasters, after curingwater-repellent and frost-resistant

System products:
BORNIT® Stick Emulsion
BORNIT® Slurry SF

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	25 kg	grey	approx. 16 - 25 m² at 1 mm layer thickness	6800000358	4 017228 00460 0	40 bag

Bitumen thick coatings (1-component):

BORNIT® Profi 1C Express

1-component, polystyrene-filled bitumen thick coating for the secure waterproofing of structures according to DIN 18533 W1-E, W2.1-E, W3-E, W4-E and for the adhesion of perimeter insulation boards in areas in contact with the soil, PMBC according to EN 15814, quick-drying, can be troweled and sprayed-on, radon-proof

System products:
BORNIT® Basement Primer
BORNIT® Triangle Tape
BORNIT® Slurry SF
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	32 ltr.	black	approx. 6.4 - 9.1 m²	6900002651	4 017228 00496 9	18 bucket

BORNIT® 1C Bitumen Thick Coating

1-component, polystyrene-filled bitumen thick coating for the reliable sealing of structures according to DIN 18533 W1-E, W4-E and for gluing perimeter insulation panels in areas in contact with the ground, PMBC according to EN 15814, can be troweled and sprayed-on

System products:
BORNIT® Basement Primer
BORNIT® Triangle Tape
BORNIT® Slurry SF
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	12 ltr.	black	approx. 2.7 m²	6900002648	4 017228 00407 5	44 bucket
	32 ltr.	black	approx. 6.4 - 7.1 m²	6900002647	4 017228 00408 2	18 bucket

Bitumen thick coatings (2-component):

BORNIT® Profi Hybrid 2C

2-component, flexible reactive sealant for the secure sealing of structures according to DIN 18533 W1-E, W2.1-E, W3-E, W4-E, can be used in the plinth area and for bonding insulation boards, according to EN 15814, quick-drying, trowel- and sprayable, radon-tight

System products:
BORNIT® Stick Emulsion
BORNIT® Sealing Mortar
BORNIT® Slurry SF
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	9 kg	anthracite	approx. 2.0 - 2.5 m²	6900004319	4 017228 00883 7	24 bucket
	24 kg	anthracite	approx. 5.3 - 6.8 m²	6900002658	4 017228 00836 3	18 bucket

BORNIT® 2C Flex Bitumen Thick Coating

2-component, polystyrene-filled bituminous thick coating for the secure waterproofing of structures according to DIN 18533 W1-E, W2.1-E, W3-E, W4-E and for the adhesion of perimeter insulation boards in the area in contact with the soil, PMBC according to EN 15814, with general building authority test certificate according to PG ÜBB, trowelable and sprayable

System products:
BORNIT® Basement Primer
BORNIT® Triangle Tape
BORNIT® Slurry SF
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	30 ltr.	black	approx. 4.6 - 6.6 m²	6900002539	4 017228 00442 6	18 bucket

Product Overview

primer, bituminous & mineral-based waterproofing

Bitumen thick coatings (2-component):

BORNIT® 2C Bitumen Thick Coating

2-component, fiber-reinforced bitumen thick coating for the secure sealing of structures according to DIN 18533 W1-E, W2.1-E, W3-E, W4-E and for gluing perimeter insulation panels in the area in contact with the ground, PMBC according to EN 15814, can be troweled and sprayed-on

System products:
BORNIT® Basement Primer
BORNIT® Triangle Tape
BORNIT® Slurry SF
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	32 kg	black	approx. 4.9 - 7.1 m²	6900002536	4 017228 00409 9	18 bucket

Mineral slurries:

BORNIT® Mineral Flex 2C

2-component, bitumen-free, mineral, flexible polymer-modified thick coating (FPD) for the secure sealing of buildings, for the bonding of perimeter insulation boards, quickly rainproof, waterproof after 24 hours, crack-bridging, UV-resistant, plasterable, trowel- and sprayable, radon-proof

System products:
BORNIT® Basic Primer
BORNIT® Sealing Mortar
BORNIT® Slurry SF
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	25 kg	dark grey	approx. 5.2 - 10.4 m²	6800000947	4 017228 00943 8	18 bucket

BORNIT® Slurry SF

1-component, mineral, rigid sealing slurry for surface sealing in new and old buildings as well as water tanks

System products:
BORNIT® Basic Primer
BORNIT® Stick Emulsion
BORNIT® Sealing Mortar

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	25 kg	grey	approx. 6.25 m²	6800000361	4 017228 00457 0	40 bag

BORNIT® Slurry EL

2-component, crack-bridging, white, mineral sealing slurry for sealing mineral components, can be brushed and troweled

System products:
BORNIT® Basic Primer
BORNIT® Glass Fabric 165

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	33 kg	grey/white	approx. 8.9 m²	6900002694	4 017228 00459 4	40+40 bag + canister

Pipe waterproofing / Reinforcement inserts / Sealing tapes:

BORNIT® EasyPipe

Safe pipe sealing system for use in the foundation and roof area, with little preparatory work and easy handling - maximum safety

System products:
BORNIT® 1C Bitumen Thick Coating
BORNIT® 2C Bitumen Thick Coating
BORNIT® 2C Flex Bit. Thick Coating
BORNIT® Profidicht 1K Fix

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
8-25 mm	1 piece	transparent	1 pipe aperture	6800000594	4 017228 00072 5	1 per box
26-44 mm	1 piece	transparent	1 pipe aperture	6800000595	4 017228 00073 2	1 per box
45-63 mm	1 piece	transparent	1 pipe aperture	6800000596	4 017228 00074 9	1 per box
64-86 mm	1 piece	transparent	1 pipe aperture	6800000597	4 017228 00075 6	1 per box
87-110 mm	1 piece	transparent	1 pipe aperture	6800000598	4 017228 00076 3	1 per box
111-125 mm	1 piece	transparent	1 pipe aperture	6800000599	4 017228 00077 0	1 per box
135-160 mm	1 piece	transparent	1 pipe aperture	6800000600	4 017228 00078 7	1 per box
EasyPipe Adhesive	1 piece	grey	1 EasyPipe	6800000530	4 017228 00079 4	12 per box

BORNIT® Glass Fabric 165

Reinforcement core for waterproofing compliant with DIN 18533 especially suitable for all BORNIT® Bituminous Thick Coatings (PMBC)

System products:
BORNIT® 1C Bitumen Thick Coating
BORNIT® 2C Bitumen Thick Coating
BORNIT® 2C Flex Bit. Thick Coating
BORNIT® Profidicht 1K Fix

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	50 m	white	approx. 45 - 50 m²	6800000481	4 017228 00416 7	33 roll

Product Overview

primer, bituminous & mineral-based waterproofing

Pipe waterproofing / Reinforcement inserts / Sealing tapes:

BORNIT® Joint Fabric Tape

Flexible sealing tape with rubber coating, for sealing of joints and connections, total width 240 mm, rubberized width 150 mm

System products:
BORNIT® 1C Bitumen Thick Coating
BORNIT® 2C Bitumen Thick Coating
BORNIT® 2C Flex Bit. Thick Coating
BORNIT® Profidicht 1K Fix

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
150 mm	30 m	white-grey-white	approx. 30 m of expansion joint	6800000798	4 017228 00917 9	

Further system products:

BORNIT® Injektil Super

Solvent-free, hydrophobic injection agent for the renovation and material consolidation of masonry and concrete walls, forms a chemical horizontal barrier against rising moisture, self-dosing when processed with capillary sticks

System products:
BORNIT® Anti Sulphate
BORNIT® Empty cartridge with spout
BORNIT® Filling Sticks

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	550 g	orange-transparent	approx. 0.04 m²	6900002693	4 017228 00447 1	36 bottles per box
	10 kg	orange-transparent	approx. 0.67 m²	6900002692	4 017228 00446 4	60 canister
	20 kg	orange-transparent	approx. 1.3 m²	6900002691	4 017228 00463 1	24 canister

BORNIT® Basic Primer

Solvent-free primer, as basic protection for the rear moisture protection system in the concave molding, strengthening the building material, against mortar-decomposing salts and efflorescence

System products:
BORNIT® Triangle Tape
BORNIT® 1C Bitumen Thick Coating
BORNIT® 2C Bitumen Thick Coating
BORNIT® 2C Flex Bit. Thick Coating

Type	Content	Colour	sufficient for	Order-No.	EAN-Code	Palletisation
	10 kg	transparent	approx. 96 - 100 m²	6900002784	4 017228 00020 6	60 canister

Comparison

bituminous and mineral-based sealings

	BORNIT® 1C (Bitumen Thick Coating)	*BORNIT®-Profi 1C Express*	*BORNIT® 2C (Bitumen Thick Coating)*	*BORNIT® 2C Flex (Bitumen Thick Coating)*	*BORNIT®-Profi Hybrid 2C*	*BORNIT® Mineral Flex 2C*	*BORNIT® Slurry EL*
DIN 18533 W1-E; W4-E (ground moisture and non-pressing water, splash-/ seepage water)							
DIN 18533 W2.1-E / W3-E (pressing water; non-pressing water on earth-covered ceiling surfaces)							
Processable without mixing							
rainproof according to EN 15816 (*depending on ambient temperature, air humidity and air circulation)	approx. 7 hours	approx. 4 hours	approx. 4 hours	approx. 4 hours	approx. 4 hours	approx. 3 hours	approx. 3 hours
Drying time (*depending on ambient temperature, air humidity and air circulation)	at least 3 days	at least 2 days	at least 2 days	at least 2 days	24 hours (*20°C / 60% rel. air humidity)	24 hours (*20°C / 60% rel. air humidity)	at least 2 days
Application in the visible base area (plaster application thereon possible)							
Adhesion of insulation panels possible (in the area in contact with the ground)							

All BORNIT® bitumen thick coatings as well as mineral waterproofing products can be sprayed; for further technical information, please contact our application technology or sales representatives.

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