COMBIDIC®-1K

1 component bituminous thick layer coating (PMBC)



Material number	Package type	Colour	Units / pallet	Pc/package
205011006	32 l, tub	Black	18,000	1,000

Fields of application / waterproofing

- For waterproofing building components in direct ground contact with ground moisture and non pressure water (W1.1-E, W1.2-E in accordance with DIN 18533)
- For waterproofing against splash water and ground moisture at the wall base (W4-E in accordance with DIN 18533)
- As retroactive building waterproofing in accordance with WTA datasheet 4-6
- As an adhesive for protection and drainage boards

Product features

- Waterproofing material in accordance with DIN 18533, DIN EN 15814
- Ready to use
- Seam-free and jointless
- Flexible and crack bridging

Advantages

- Easy application
- Solvent free

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Technical Data

Material properties

Product components	Ready to use
Base material	Polystyrene filled bituminous thick layer coating
Consistency	Filler consistency
Density, ready to use product (ISO 1183-1)	approx. 0.7 kg/dm³
Crack bridging DIN EN 15812	> 2 mm
Crack-bridging ability (classification DIN EN 15814)	CB 2
Rain resistance in accordance with DIN EN 15816 (classification)	< 8 hours (R2)
Watertightness DIN EN 15820 (slotted disc pressure 1mm)	>0.75 bar (W2A)
Watertightness (classification DIN EN 15814)	W2A
Compressive strength in accordance with DIN EN 15814	C1
Compressive strength in accordance with DIN EN 15815	0.06 MN/m²
Classification of the reaction to fire in accordance with DIN EN 13501-1	E

Application

Substrate/application temperature	approx. 5 - 30 °C
Consumption pro m² and mm layer thickness	approx. 1.3 l

Material rate

Material consumption rate according to the area of application

Water exposure classes (DIN 18533)	Exposure WTA leaflet 4-6	Dry film thickness (mm)	Wet film thickness (mm)	Applied quantity (l/m²)
W1.1-E, W1.2-E Ground moisture and non pressure water	DIN 18195-4 Ground moisture and non-standing seepage water	3.0	4.0	≥ 4.0
W4-E* Splash water at the wall base and capillary water in and under walls in direct ground	Base sealing/wall contact area	3.0	4.0	≥ 4.0
Bonding of insulation boards		1	-	>1.3
Levelling layers		1	-	>1.3
Possible additional consumption in case of uneven substrates and artisanal variations must be considered				

* Bituminous thick layer coatings are not permitted as cross-section sealing in accordance with DIN 18533.

Processing equipment

Aids/tools

- Serrated or layer-thickness trowel
- Trowel
- Flat trowel
- Spray equipment

Manual processing

Can be trowelled off

Machine application

COMBIDIC®-1K can be mechanically applied. For precise information, see the additional Technical Information No. 43.

Suitable substrate

- Building components in direct ground contact

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Preparing the substrate

Requirement for substrate

1. Frost-free
2. Load-bearing
3. Even
4. Pore open
5. Sealed in the surface
6. Free of adhesion inhibiting substances

Preparing the details

1. Edges are to be chamfered and corners are to be rounded.
2. Depressions > 5 mm and mortar pockets, plaster grooves in brickwork, open butt or bed joints, damaged areas, large pored substrates or uneven masonry work must be levelled in advance with ASOCRET-M30.

Wall/floor transitions, internal corners, joints

1. Pre-screen the professionally prepared substrate with AQUAFIN-1K or ASOCRET-M30 in consistency that can be screened, and install a coved fillet of ASOCRET-M30 with an edge height of at least 4 cm while it is still wet.
2. In the area of structural movement joints, the waterproofing is reinforced with ADF-Dehnfugenband (Expansion-Joint-Tape) or ASO-Joint-Tape-2000-S and integrated in the area waterproofing.

Intersections

1. Intersections must be connected to the pipes or casing pipes by means of sealing coves. Alternatively, depending on the nominal diameter, ASO-Dichtmanschette-Boden, ASO-Dichtmanschette-Wand or ADF-Rohrmanschette can be used.
2. The following area is to be waterproofed and must be carried out at least 5 cm onto the pipe penetration.

Splash water zone / plinth area

1. In the area of the splash water zone, the waterproofing must be run a minimum 30 cm above the ground.
2. After being adjusted to the ground, the waterproofing must reach ≥ 15 cm above ground level.
3. As standard, this connection is established with flexible, cementitious waterproofing slurry, e.g. AQUAFIN-RB400, in order to achieve an adhesive substrate, e.g. for building skirt renders, etc.
4. The overlapping of the bituminous thick layer coating on the waterproofing slurry is min. 10 cm here

Application

Application

1. Prepare the substrate with a primer coat of ASOL-FE (diluted 1:5 with water).
2. In the case of very absorbent concrete substrates, a scratch coat is recommended to avoid the formation of air bubbles in the bituminous thick layer coating.
3. After complete drying of the primer / scratch coat, COMBIDIC®-1K can be applied.
4. We recommend homogenising COMBIDIC®-1K before application.
5. Apply COMBIDIC®-1K with a flat trowel in min. 2 application steps.
6. To achieve an even layer thickness, ideally comb with a toothed trowel or coating thickness trowel of the appropriate size and form a sealed surface with the smooth side of the toothed trowel.
7. Application takes place while the product is still wet.
8. The dry film thickness must be at least 3 mm.
9. In the area of the base slab, the waterproofing must be run at least 10 cm down the end face of the sill.

Testing the waterproofing

A layer thickness check should always be carried out and documented. The layer thickness check is carried out in the fresh condition by measuring the wet film thickness (at least 20 measurements per building project or at least 20 measurements per 100 m²). Drying / the dry film thickness is destructively tested using the wedge cut method on a reference sample consisting of the project substrate stored in the building pit.

Back-filling of the building pit:

Back-filling the building pit can take place after the bituminous thick layer coating is totally dry.

Cleaning tools

Rinse tools with water immediately after use. Dried material is difficult to remove.

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Drainage and protection boards for building components in direct contact with the ground

The waterproofing must be protected against weathering influences and mechanical damage using suitable protective measures in accordance with DIN 18533. 1. The waterproofing must be totally dry. 2. Suitable protection and drainage boards can be fixed in place with COMBIDIC-1K/-S in batches. 3. Perimeter insulation must cover the whole area and be butt jointed with COMBIDIC-2K-CLASSIC or COMBIDIC-2K-PREMIUM. 4. Drainage is carried out in accordance with the specifications of DIN 4095.

Storage conditions

Storage

Store in a frost-free, cool and dry place. At min. 5 - 40 °C for 12 months in the original canister. Promptly use opened container.

Notes

- Protect surfaces that are not to be treated from the effects of COMBIDIC®-1K!
- Negative water pressure cannot be absorbed by bituminous waterproofing. It is necessary to apply waterproofing with AQUAFIN®-1K beforehand in the areas in which this can be expected.
- Do not apply during rain or with air / substrate temperatures below +5 °C.
- Protect masonry work tops and open window parapets against water penetration.
- The load case-specific minimum film thickness must not be undershot at any point at the time of acceptance!
- The required wet film thickness must not exceed 100% at any point.
- Protect COMBIDIC®-1K from weathering influences such as rain, frost, strong solar radiation, etc. until totally dry!

Observe applicable safety data sheet!

Explanations

Conformity / Declaration / Verification

CE

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EN 15814:2011+A2:2014
COMBIDIC-1K
Polymer modified bituminous thick coatings (PMB) for waterproofing in below ground structures

Watertightness	W2A
Crack-bridging capacity	CB2
Resistance to water	passed
Flexibility at low temperatures	passed
Stability at high temperatures	passed
Reaction to fire	Class E
Compressive strength	C1
Durability of watertightness and the reaction to fire	fulfilled

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Impact classes and typical applications in accordance with DIN 18533

Impact classes and typical applications in accordance with 18533			
Water exposure class		Water exposure	Example applications
W1-E		Ground moisture and non-pressurised water	• Capillary-bound water and water transported by capillary force even against gravity
	W1.1-E	Ground moisture and non-pressurised water for floor slabs and walls in direct ground	• Highly permeable subsoil • Highly permeable back-filling of the building pit • Minimum 50 cm above the design water level
	W1.2-E	Ground moisture and non-pressurised water for floor slabs and walls in direct ground with drainage	• Water-logging in poorly permeable subsoil is avoided through drainage • Minimum 50 cm above the design water level
W2-E		Pressure water	• Water pressing in from the outside can act as groundwater, flood water or backwater.
	W2.1-E	Moderate influence from pressure water ≤3 m immersion depth	• Backwater / flood water up to 3 m
	W2.2-E	High exposure to pressing water > 3 m immersion depth	• Backwater / flood water over 3 m
W3-E		non-pressurised water on earth-covered ceilings	• Precipitation water that seeps through the earth fill to the waterproofing and must be drained off there
W4-E		Splash water and ground moisture at the wall base and capillary water in and under walls	• Splash and seepage water affect the plinth surfaces, floor slabs and foundations • Water can rise in capillary action in and under walls • With double-shell masonry work, rainwater running off can seep into the space between the shells

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