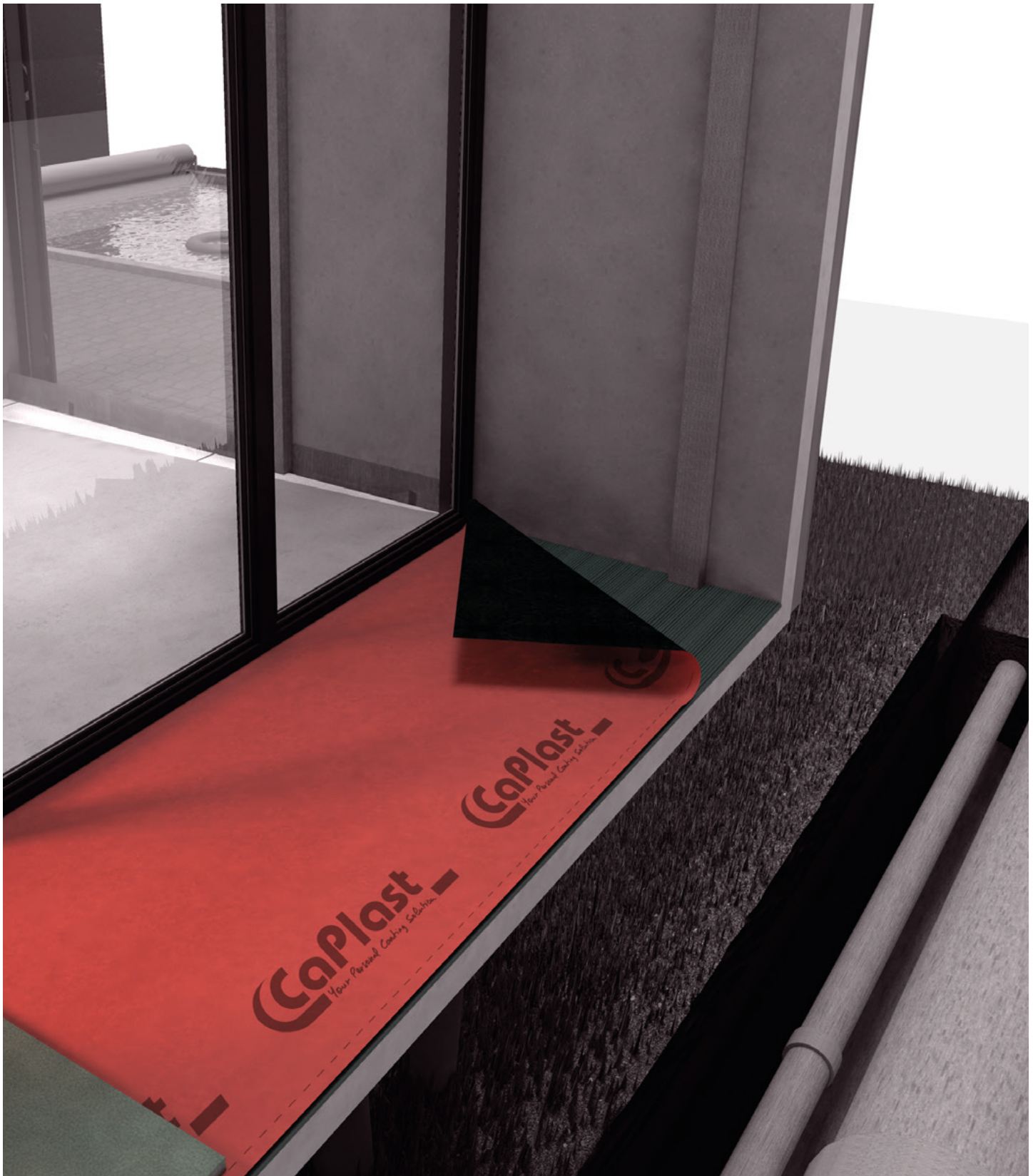


CaFloor EnBa

Product data sheet

Decoupling membrane



CaFloor EnBa

Product description

CaFloor EnBa can be used as a vapour barrier and decoupling membrane in combination with tile and slab coverings as well as natural and artificial stone. The multi-layer special membrane consists of a polymer functional and sealing layer that comes with a non-woven coating on both sides.

Application

Interior and exterior. Floor.

By using a special non-woven, **CaFloor EnBa** guarantees excellent bond adhesion with cementitious thin-bed and medium-bed mortars as well as liquid bonded waterproofing. This means **CaFloor EnBa** is ideal for rapid and reliable waterproofing and decoupling work. In addition, it regulates the uncontrolled entry of moisture into the construction, thus ensuring long-term safety and durability.

Benefits

- High-performance decoupling for problematic substrates
- Easy to apply
- Particularly high adhesive strength values
- Alkali-resistant
- Neutralises tensions from the substrate
- Suitable for heated screeds
- Excellent load transfer

Meets the requirements/classifications of the relevant standardisation and data sheets:

- ZDB (Central Association of the German Construction Industry) data sheet 'Decoupling in interior areas' from the German Tile and Natural Stone Association

Areas of use:

Stress group	Exemplary for the following fields of application	Required breaking strength of the covering (DIN EN ISO 10545-4)	Maximum pressure	Category
I	Residential construction, hotel bathrooms, health service rooms	< 1.500 N		EK-W and EK-H
II	administrative buildings, commercial areas, canteen kitchens, sales rooms - access with pneumatic tyres	1.500 - 3.000 N	> 2 N/mm ²	EK-G
III	Trade and industry, wholesalers, shopping arcades - access with superelastic, solid rubber and Vulkolland tyres	3.000 - 5.000 N	2 - 6 N/mm ²	
IV	The same as Group III - Access with polyamide rollers	5.000 - 8.000 N	6 - 20 N/mm ²	EK-M
V	Trade and industry, heavy-duty areas, assembly halls and warehouses - access with pneumatic tyres	> 8.000 N	> 20 N/mm ²	

Product Information

- ZDB data sheet 'Large formats in interior areas' from the German Tile and Natural Stone Association
- Euro FEN data sheet no. 8 'Decoupling systems in interior areas'
- DIN 18534-5 'Waterproofing for indoor applications - Part 5: Waterproofing with waterproofing materials in sheet form in conjunction with tiles (AIV-B)' (2017)
- ZDB data sheet 'Composite waterproofing - Composite waterproofing in sheet form (AIV-B)'

Technical Information

KEY FEATURES	RULES AND REGULATIONS	VALUES	TOLERANCE	
			min	max
Fire behaviour when in contact with the surface	EN 13501-1	E		
Maximum longitudinal tensile force (N / 5cm)	EN 12311-2 A	600 N	- 100 N	+ 200 N
Maximum lateral tensile force (N / 5cm)	EN 12311-2 A	650 N	- 100 N	+ 200 N
Elongation in the case of the maximum longitudinal tensile force (%)	EN 12311-2 A	60%	- 15 N	+ 15 N
Elongation in the case of the maximum lateral tensile force (%)	EN 12311-2 A	70%	- 15 N	+ 15 N
s _d value [m]	EN 12311-2 A	60 m	- 10 N	+ 25 N
Waterproof	EN 1928	Fulfilled at 1.5 bar		
Adhesive tensile strength (MPa)	EN 14891	≥ 0.2	- 0	
Further Properties				
Length	EN 1848-2	Various		
Width	EN 1848-2	Various		
Straightness	EN 1848-2	Passed (< 30 mm / 10 m)		
Weight per unit area / mass per unit area	EN 1849-2	> 395 g / m ²	- 15 g / m ²	+ 40 g / m ²
Thickness	EN 1849-2	> 1.00 mm	- 0.2 mm	+ 0.2 mm
Resistance to deformation under load	EN 13984:2013 Annex B	KLF		
Visible defects	EN 1850-2	None		
Additional Properties				
Temperature resistance		- 30 to + 70 °C	(up to + 80 °C for short periods)	
Application temperature		+ 5 to + 35 °C		
Water column	EN 20811	> 400 cm		

System Information

Adhesive requirements:

approx. 1.5 kg/m² for the bonding of **CaFloor EnBa** using a 3 x 3 mm or 4 x 4 mm notched trowel.

Application Instructions

The field sizes must not exceed 40 m² with a maximum side length of 8 metres. Compact field sizes with a side ratio of less than 1:2 must be created.

Existing movement and structural joints in the substrate must be adopted in a congruent manner. Flank tears are not a reason for complaint, as they do not restrict the product's functionality.

Processing instructions

The **CaFloor EnBa** decoupling and sealing system has been specially developed for the laying of tile, slab, natural stone and artificial stone coverings in residential and commercial areas, even faced by loads of up to 2 KN/m². The decoupling function reduces stresses between the substrate and the floor covering, bridges cracks and facilitates safe laying even on critical substrates. In residential and commercial areas, the floor coverings can be laid without any tension. Hairline cracks can emerge when using rigid cement joints, which is why we recommend using soft joints such as suitable silicone joints.

CaFloor EnBa provides you with a versatile and reliable system for your flooring projects.

Substrates

The substrate must be clean, dry, devoid of warpage, vibration, dust and grease. Changes in shape must be prevented by suitable countermeasures. (e.g. by screwing in wooden floors at correspondingly short intervals).

Moisture-sensitive substrates must be protected against the effects of moisture from the adhesive mortar system through the use of suitable measures (e.g. suitable primers). Increased levels of residual moisture in the substrate can affect neighbouring components.

The substrates can include: wooden substrates (e.g. chipboard and pressed boards) / cement screeds / CA screeds / heated screeds / balconies & terraces / dry screeds / mixed substrates / mastic asphalt screeds / plastic coverings or coatings.

The heating of the substructure can be dispensed with through the use of **CaFloor EnBa** if the maximum permissible CM% level of residual moisture is observed.

Substrate Preparations

In order to successfully lay and pave coverings using the **CaFloor EnBa** decoupling membrane, it is essential that the substrate is even, dry, free of separating agents, has sufficient load-bearing properties and is warp-resistant. The evenness must ensure that the tiles can be laid without any resulting cavities. Large-format flooring tiles require more even substrates than those required according to DIN 18202 'Tolerances in building construction'. Refer to the Instructions in ZDB data sheet 'Large formats' from the German Tile and Natural Stone Association. If you need to perform levelling and smoothing work, we recommend the use of suitable floor levelling compounds before laying **CaFloor EnBa**.

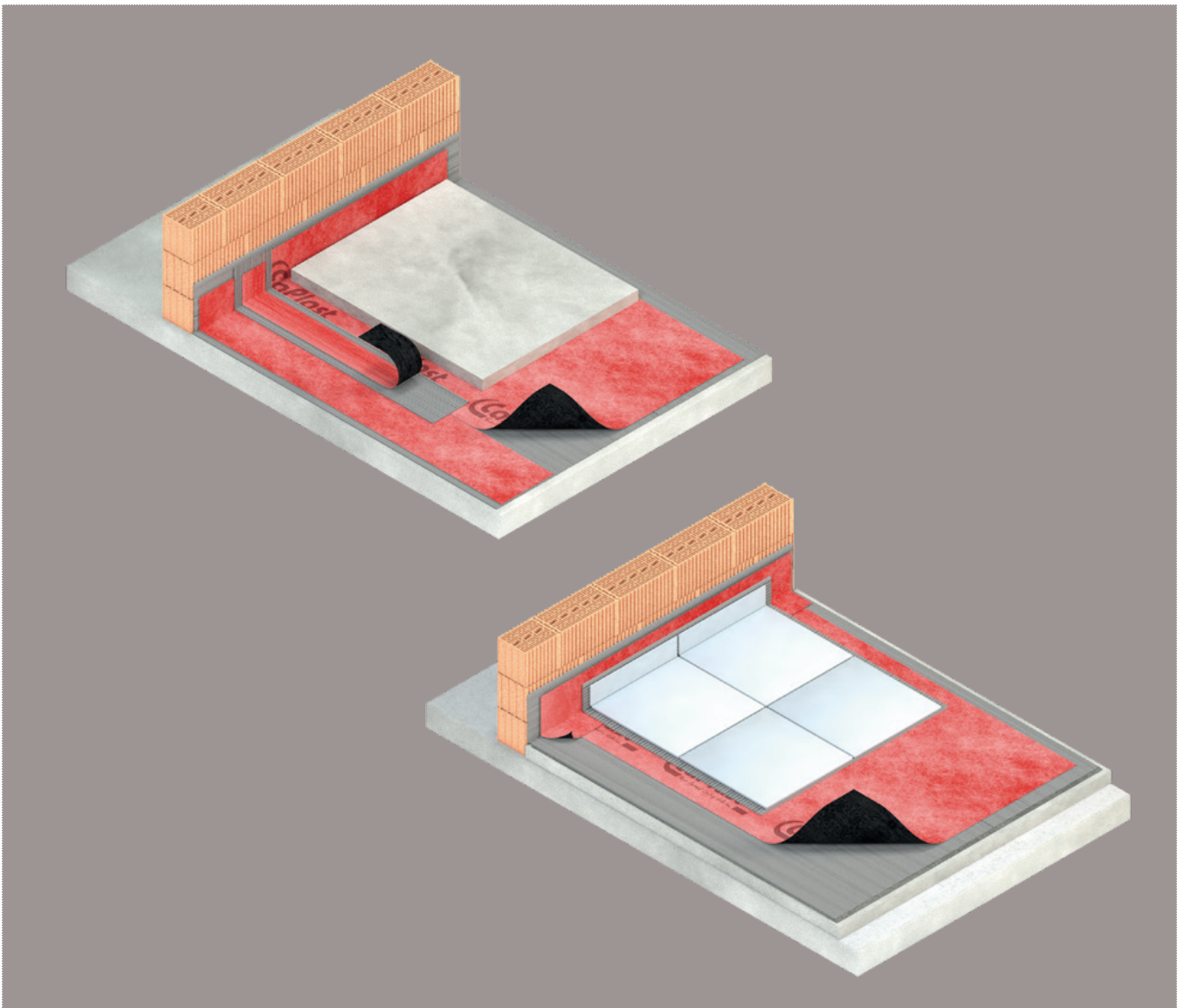
You can bridge cracks with a width of up to 0.4 mm, provided there is no height offset. Larger cracks must be sealed in advance using epoxy resin and secured accordingly. These preparatory measures guarantee optimum levels of adhesion and durability of the coverings and ensure an aesthetically appealing end result.

Processing

In accordance with the applicable regulations, it is important to integrate movement joints within the tiled flooring. In the case of large-area coverings using **CaFloor EnBa**, movement joints should also be set in accordance with the regulations by dividing the area up into fields. In outdoor areas, especially on balconies and terraces, the field sizes should not exceed an edge length of 3 metres in order to minimise tensions. However, depending on the substructure, smaller fields may also be required to ensure the flooring's optimum levels of stability and durability.

1. The preparation of the substrate requires a dry, clean, stable and even surface free of any components that could impair adhesion. If necessary, levelling measures and appropriate priming work must be performed before the laying takes place.
2. The choice of adhesive depends on the nature of the substrate and must be matched to it. The adhesive must ensure good adhesion to the substrate and anchor itself mechanically within the backing layer of the decoupling membrane. In the majority of cases, a thin-bed mortar with hydraulic setting properties can be used. You must ensure that there are no material incompatibilities. When using covering materials with a side length of ≥ 30 cm, the use of a tile adhesive (rapid adhesive) with a crystalline water binding is recommended for the rapid development of the tensile strength and drying of the mortar. It is also possible to bond the **CaFloor EnBa** decoupling membrane across the entire surface using a suitable (quick-setting) sealing compound on suitable substrates, which enhances safety and saves time.
3. The thin-bed mortar is applied to the substrate using a notched trowel (recommended 3 x 3 mm or 4 x 4 mm).
4. The membranes, which have previously been cut to size, are completely embedded in the applied adhesive together with the backing layer. The smooth side of the notched trowel or a screed grating board is recommended to press them down. Air pockets must be avoided and the glue-open time must be observed.
5. The membranes in the joint area are butt-jointed and bonded across the whole area with **CaFloor DIBA** sealing tape using the sealing adhesive. The drying and processing time of the decoupling system can be influenced by the prevailing temperature and is between + 5 °C and 35 °C.
6. Connections and edge insulation strips to fixed installation parts must be established in a functional manner.
7. In the case of pipe penetrations, sealing sleeves (**CaFloor DIBA expansion zone sleeves**) must be glued into them.
8. In the area of thin-bed floor drains, a cut-to-size connection collar of the format 50 x 50 cm made of **CaFloor EnBa** must be clamped or glued tightly into the flange of the floor drain. The adjoining membrane must be brought up to a distance of approx. 10 cm from the floor drain and bonded tightly to the connecting collar without leaving any cavities.
9. You can start laying the flooring once the entire **CaFloor EnBa** has been bonded tightly with all corners and connections. The tile adhesive and sealing mortar (under the membrane, joints) must have hardened by this time.
10. For the tile laying, thin-bed mortar with hydraulic setting properties is applied directly to **CaFloor EnBa** (floor) and the tiles are embedded in it over almost the entire surface. Suitable reaction resin adhesives and grouts must be used in the case of floor coverings exposed to chemicals.

CaFloor EnBa / DIBA Accessories



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