

# Technical Data Sheet

## PT PMB Professional 2C-F

**- 2 component polymer modified bitumen thick coating -  
(fiber reinforced, low shrinkage)**

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### Product description

PT PMB Professional 2C-F is a two component, thixotropic, fiber reinforced and polymer modified bitumen thick coating (PMBC) with high rubber content. The material is on base of a special bitumen emulsion (component A) and a reactive powder (component B). The product is solvent-free. By adding the reactive powder into the bitumen component it reacts, which leads to a fast rain protection and a faster reaction of the whole system. The water parts in the coating disappears and that leads to a solid substance, which is watertight, highly flexible and crack-bridging after drying. The pasty and stable material enables the application of high thicknesses in one step by spray and trowel application. PT PMB Professional 2C-F cannot be re-emulsified even with longer water contact. In addition the product is resistant to commonly occurring substances in soils. The waterproofing coating has no joints.

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### Application areas

PT PMB Professional 2C-F is used for positive side below ground waterproofing of buildings according DIN EN 15814 and DIN 18533. It protects underground structures according to DIN 18533 part 3 permanently against W1-E (ground damp and pressure-free water), W2.1-E (moderate action of pressing water  $\leq 3$  m immersion depth), W3-E (pressure-free water on earth-covered ceilings) and W4-E (splash water and ground damp at wall base as well as capillary water in and under walls). The product is suitable for horizontal and vertical areas. The coating can also be used as an intermediate sealing (under cement floors) of floor plates, balconies and terraces. The material adheres on all dry and slightly moist, mineral surfaces as well as on bituminous surfaces. A primer is always recommended.

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### Product advantages

- **Two component**
- **Thixotropic**
- **Sprayable**
- **No mixing required**
- **Watertight (pressurized water)**
- **According DIN EN 15814 and 18533**
- **Fast drying**
- **Solvent-free**
- **Radon gas resistant**
- **Highly elastic**
- **Fiber-reinforced**
- **Crack-bridging**
- **Free of lightweight fillers like polystyrene**
- **Not harmful for groundwater**
- **„Made in Germany“**

## Specification

|                        |  |
|------------------------|--|
| Base                   | : bitumen emulsion, polymer, rubber, additives and reactive powder           |
| Color                  | : black  |
| Processing temperature | : 5°C up to + 35°C   |
| Consistency            | : pasty  |
| Density                | : approx 1.08 g/cm <sup>3</sup> (after mixing)                               |
| Crack bridging         | : > 2 mm (DIN EN 28052-6 at + 5°C)   |
| Processing time        | : approx. 1.5 hours at 20°C, higher temperatures leads to a faster reaction. |
| Thickness              | : 1 mm wet film thickness = approx. 0.8 mm dry film thickness                |
| Curing time            | : 2 up to more days, depend of temperature, humidity, thickness and surface  |
| Consumption            | : approx. 2.0-6.0 kg/m <sup>2</sup> depend of required protection            |


| WATER INFLUENCE CLASSES   | MDLT* | WLT*    | CONSUMPTION            |
|---|-------|---------|------------------------|
| W1-E<br>(ground damp and pressure-free water)   | 3 mm  | 3.95 mm | 4.35 kg/m <sup>2</sup> |
| W2.1-E<br>(moderate action of pressing water ≤ 3 m immersion depth)                               | 4 mm  | 5.26 mm | 5.80 kg/m <sup>2</sup> |
| W3-E<br>(pressure-free water on earth-covered ceilings)   | 4 mm  | 5.26 mm | 5.80 kg/m <sup>2</sup> |
| W4-E<br>(splash water and ground damp at wall base as well as capillary water in and under walls) | 3 mm  | 3.95 mm | 4.35 kg/m <sup>2</sup> |
| Scratch coating   |       |         | 1-2 kg/m <sup>2</sup>  |

The consumption rates shown are minimum values. A separate professional levelling of the substrate, for example by a scratch coating is expected. According to DIN 18533 part 3, a layer thickness addition of at least 25% of the minimum dry layer thickness is to be added.

\*MDLT = Minimum dry layer thickness  
 \*WLT = Wet layer thickness

All technical datas are measured in our laboratory.

Please take notice about the safety information and advice given on the safety data sheets and packaging labels. GISCODE: BBP10

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|   | proof-tec GmbH<br>Wiesedermeerer Hauptstr. 24<br>D-26446 Friedeburg<br><br>17<br>EN 15814:2012<br>Unique identification code of the product-type<br>proof-tec - 1130<br>EN 15814; PMB-CB2, W2A, C2A<br>Polymer modified bituminous thick coating (PMB) for<br>waterproofing of below ground structures |
| Water tightness<br>Crack bridging ability<br>Water resistance<br><br>Flexibility at low temperature<br>Dimensional stability at high temperatures<br>Reaction to fire<br>Resistance to compression<br>Durability of water tightness and reaction to fire | Class W2A<br>Class CB2<br>No colouration of the water<br>No debonding from inlay<br>No cracks<br><br>No sliding or draining down<br>Class E<br>Class C2A<br><br>passed   |

**Delivery form**

30 kg unit  
(component A 22 kg + component B 8 kg)

Article-No. 11300030

**Storage**

6 months (frost-free and dry, +5°C up to +25°C in original packaging).

**Application****Surface preparation**

The surface must be mineral, dry or light humid, sound, absorbent and clean. Bonding inhibiting agents such as grease, oil, formwork oil and all loose particles and dust must be removed before application of PT PMB Professional 2C-F. Damaged area like cracks, holes or cavities have to be reprofiled with PT Swelling mortar. Cavities or surface damages >5mm have to be reprofiled with PT Surface Sealing Mortar. Cracks have to be treated or waterproofed separately by using injection systems. Concrete surface maybe have to be grinded before application. A priming of o be treated substrate is always recommended because it leads to a better bonding and is also a dust binder. A primer can be prepared when mixing PT PMB Professional 2C-F component A (liquid component) 1 : 5 with drinking water. In case of an old bitumen coating requires a new coating, use PT Bitumen Primer as primer. Trial test to check the bonding are always recommended.

**Material**

Die PT PMB Professional 2C-F can be applied with a trowel or spraying device on the primed surface. Before the application re-mix the component A with a slowly rotating mixer. The reaction powder (Component B) must be added portion by portion. Both components are mixed thoroughly with a mixing device (minimum 3 minutes). The material is processable when a homogenous, lump-free mass is obtained. Don't change the mixing ratio (22 kg + 8 kg). PT PMB Professional 2C-F cannot be applied under rainy or frosty conditions. In case of rain the surface must be protected.

Firstly, a sealing cove must be created with PT Swelling Mortar in the connection of floor/wall. A proper processing is very important in the area of joints, flashings and cappings as well as penetrations. The fresh coating must be protected from sun and rain. We recommend an additional sealing with PT Reactive Slurry Crystalline in the area of the wall/floor connection in order to prevent a negative water pressure on the bituminous coating during the construction process.

In case of high water pressure, we recommend a reinforcement mesh between the two layers of PT PMB Professional 2C-F. The coating has to be protected against damages. Drainage layers and protective layers should be fixed after the coating has completely dried. If possible, tools and equipment should be cleaned immediately after use or use solvents to clean already dried residue.

**SPECIAL NOTES**

- The required minimum dry coat thickness must be maintained across the entire working area.
- The required wet coat thickness must not be exceeded by more than 100 % in any one place.
- During work breaks the polymer-modified bitumen coating has to be 'scraped down to nothing' and must not end on/in a corner of the building.
- In accordance with DIN 18533 part 3, PT PMBC-Reinforcement Mesh is to be embedded.
- The waterproof coating is to be protected in accordance with DIN 18533 part 1.
- Verification of the layer thickness is carried out by measuring the wet layer thickness in accordance with DIN 18195 supplement 2. It has to be carried out according to DIN 18533 part 3 in at least 20 places per project and at least at 20 places per 100 m<sup>2</sup>.

- To test the drying and adhesion of the PMBC applied, the PMBC has to be passed through the 15 cm connection area. In these areas, the drying and adhesion must be tested in a destructive manner. The result of this check must be documented.
- The result of the layer thickness and completed drying tests must be documented in accordance with DIN 18533 part 3 in the form of a protocol report.

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**Recommended tools**

Brush

Trowel

Gloves

Safety glasses

Mixing equipment

Spraying device

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**Application areas:****Remarks**

The information given in this technical data sheet corresponds to the current state of development and is based on our experience, our knowledge and is non-binding. An investigation has to be done with focus on the respective building project and the area of application. The technical expert advice of proof-tec employees does not exclude the planning or control by an engineer. We are liable within the scope of our general delivery and sales conditions, we are not liable for the application of our materials. The generally accepted rules of technology must be observed. If necessary, preliminary tests have to be carried out.

Version 08/2021

All previous versions of this technical data sheet are not valid anymore and should not be used anymore.