

PT PMB Professional 1C-F

**- one component polymer modified bitumen thick coating -
(fiber reinforced, high compressive strength, sprayable)**

Product description

PT PMB Professional 1C-F is a one component, thixotropic, fiber reinforced and polymer modified bitumen thick coating (PMBC) with high rubber content. The product is solvent-free. The water parts in the emulsion 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 1C-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.

Application areas

PT PMB Professional 1C-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), W3-E (pressure-free water on earthcovered 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.

Product advantages

- **One component**
- **Thixotropic**
- **Sprayable**
- **No mixing required**
- **Watertight**
- **According DIN EN 15814 and 18533**
- **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
Color	: black
Processing temperature	: 5°C up to + 30°C
Consistency	: pasty
Density	: approx 1.06 g/cm ³
Thickness	: 1 mm wet film thickness = approx. 0.7 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/m² depend of required protection


WATER INFLUENCE CLASSES	MDLT*	WLT*	CONSUMPTION
W1-E (ground damp and pressure-free water)	3 mm	4.62 mm	4.85 kg/m ²
W3-E (pressure-free water on earth-covered ceilings)	4 mm	6.15 mm	6.45 kg/m ²
W4-E (splash water and ground damp at wall base as well as capillary water in and under walls)	3 mm	4.62 mm	4.85 kg/m ²
Scratch coating			1-2 kg/m ²

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 laboraty.

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

	proof-tec GmbH Wiesedermeerer Hauptstr. 24 D-26446 Friedeburg 17 EN 15814:2012 Unique identification code of the product-type proof-tec - 1110 EN 15814; PMB-CB2, W2A, C2A Polymer modified bituminous thick coating (PMB) for waterproofing of below ground structures															
	<table border="0"> <tr> <td>Water tightness</td> <td>Class W2A</td> </tr> <tr> <td>Crack bridging ability</td> <td>Class CB2</td> </tr> <tr> <td>Water resistance</td> <td>No colouration of the water No debonding from inlay</td> </tr> <tr> <td>Flexibility at low temperature</td> <td>No cracks</td> </tr> <tr> <td>Dimensional stability at high temperatures</td> <td>Class E</td> </tr> <tr> <td>Reaction to fire</td> <td>Class E</td> </tr> <tr> <td>Resistance to compression</td> <td>Class C2A</td> </tr> <tr> <td>Durability of water tightness and reaction to fire</td> <td>passed</td> </tr> </table>	Water tightness	Class W2A	Crack bridging ability	Class CB2	Water resistance	No colouration of the water No debonding from inlay	Flexibility at low temperature	No cracks	Dimensional stability at high temperatures	Class E	Reaction to fire	Class E	Resistance to compression	Class C2A	Durability of water tightness and reaction to fire
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Delivery form

30 kg unit

Article-No. 11100030

Storage

12 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 1C-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 prepered when mixing PT PMB Professional 1C-F 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

PT PMB Professional 1C-F can be applied with a trowel or spraying device on the primed surface. The material is ready to use. PT PMB Professional 1C-F may not be applied by frosty temperatures or rain. 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 1C-F. The coating has to be protected against damages. Drainage layers and protective layers should be applicated 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 m².
 - 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

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 03/2017

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