

# Rasco 1K PMBC low shrinkage S

Single component, polymer-modified bitumen thick coating (PMBC) with polystyrene, for waterproofing of structures below ground in accordance with EN 15814 and DIN 18533 - also against water under pressure

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).

It can be applied to vertical and horizontal surfaces, foundation slabs, foundations and cellar walls. Can be used on all known and suitable mineral substrates.



## PRODUCT FEATURES

- Solvent-free and environmentally friendly
- Filled with polystyrene
- Crack-bridging and flexible
- Easy processing
- Good stability
- Seamless hard-drying
- Applicable by trowel
- Resistance to all aggressive substances that occur naturally in soils
- Ready to use
- Impervious to radon
- Very good application when sprayed with suitable airless spraying equipment
- Frost-free at least 12 months shelf-life

## TECHNICAL DATA

|   |               |
|---|---------------|
| Density                                     | 0.65 kg/l     |
| Material shrinkage                          | 16 %          |
| Complete hardening / full loading capacity* | 4 days        |
| Rain resistance after*                      | 3-4 hours     |
| Working and drying temperature**            | +5°C to +30°C |

\* These times may vary greatly, depending on humidity, temperature, coating thickness and substrate. Times are based on the standard climate of + 23 °C and 50 % relative humidity.

\*\* Temperature: component, installation and ambient temperature.

## DELIVERY UNITS

1,000 l Container

30 l bucket | 18 buckets / pallet | pallet weight approx. 400 kg



10 l bucket | 44 buckets / pallet | pallet weight approx. 350 kg

## WATER INFLUENCE CLASSES

|  | MDLT* | WLT*    | CONSUMPTION           |
|--|-------|---------|-----------------------|
| W1-E (ground damp and pressure-free water)                       | 3 mm  | 3.57 mm | 3.57 l/m <sup>2</sup> |
| W2.1-E (moderate action of pressing water ≤ 3 m immersion depth) | 4 mm  | 4.76 mm | 4.76 l/m <sup>2</sup> |
| W3-E (pressure-free water on earth-covered ceilings)             | 4 mm  | 4.76 mm | 4.76 l/m <sup>2</sup> |
| W4-E (splash water and ground damp at wall base)                 | 3 mm  | 3.57 mm | 3.57 l/m <sup>2</sup> |
| Scratch coating  |       |         | 1-2 l/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

## CE-MARKING

|  |  |
|--|--|
| <br>0432, 0672  | <br>Otto-von-Guericke-Ring 11 - 65205 Wiesbaden<br>www.bitumentchnik.de |
| 17<br>CPR-DE1/90506421<br>EN 15814:2011+A2:2014<br><b>Rasco 1K PMBC low shrinkage S</b><br><i>Polymer modified bitumen thick coating for waterproofing</i> |  |
| Watertightness   | Class W2A  |
| Crack bridging ability   | Class CB2  |
| Water resistance   | no coloration of the water,<br>no debonding from inlay   |
| Flexibility at low temperature   | no cracks  |
| Dimensional stability at high temperature  | no sliding or draining down  |
| Reaction to fire   | Class E  |
| Resistance to compression  | Class C2A  |
| Dangerous substances   | NPD  |
| Durability of water tightness and reaction to fire   | passed   |

## GENERAL NOTES

In case of sealing or maintenance work the relevant standards and guidelines must be followed.

## SUBSTRATE PREPARATION

- Preparation of the substrate has always to be carried out in accordance with DIN 18533 part 3.
- The substrate must be sufficiently dry, level, stable, frost-protected, clean and without traces of oil, grease, tar, honeycombing, cracks, dust, dirt, residue mortar or other potential contaminants.
- Edges should be broken and inside joints rounded out with suitable material.
- The risk of blister/bubble formation as a result of pores or hollow areas in the concrete can be reduced by scratch coating using **Rasco 1K PMBC low shrinkage S**.
- Mineral substrates have to be prepared using **Rasco Bitumen Primer** (approx. 0.1-0.2 l/m<sup>2</sup>).
- Open butt joint up to 5 mm should be closed by means of scratch coating using **Rasco 2K PMBC low shrinkage**.
- Open butt joints or pits > 5 mm must be filled using a suitable mortar.

## APPLICATION

- Rasco 1K PMBC low shrinkage S is ready to use and is applied evenly in at least two coats after the Rasco Bitumen Primer has dried on the prepared substrate.
- Application to the required layer thickness is carried out using either suitable airless spraying equipment, a smoothing trowel or a normal trowel.
- The second coat may be applied as soon as the first coat is dry enough so that it cannot be damaged.
- Tools and equipment should be cleaned using water immediately after use.

## SPECIAL NOTES

- Rasco 1K PMBC low shrinkage S meets high standards of the PMBC-product quality and can be applied for waterproofing in transition to concrete with high resistance to water penetration (waterproof concrete)
- 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, Rasco 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 10 places per project and one 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.
- Please note the Safety Data Sheet (accessible at <http://www.rasco-bitumen.com/>)
- Please note the Declaration of Performance (accessible at <http://www.rasco-bitumen.com/>)

**Note:** The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the Rasco product installation. For the most up-to-date TDS and warranty information, please visit our website at [www.rasco-bitumen.com](http://www.rasco-bitumen.com). Any alterations to the wording or requirements contained in or derived from this TDS shall void all related Rasco warranties.

**Issue 02:** This document has been updated with respect to material shrinkage and consumption data. When this version is updated it will lose its validity.