

# EASYSEAL NON-WOVEN SELF-HEALING WATERPROOFING MEMBRANE

## PRODUCT DESCRIPTION

EasySeal 200 and 450 is a “light-weight” waterproofing system for the use in any water-sealing applications.

EasySeal is a needle punched non-woven fleece impregnated with super absorbing polymer (SAP).



## APPLICATION AREAS

Specially designed to provide waterproof protection for below ground concrete structures EasySeal 200 and 450 using the latest technology available eliminates conventional waterproofing materials such as bituminous liners, coatings and synthetic membranes of all kinds. EasySeal 200 and 450 can be pre-applied and post-applied.

## HOW DOES NON-WOVEN WATERPROOFING MEMBRANE EASYSEAL 200 AND 450 WORK?

Non-Woven Waterproofing Membrane EasySeal 200 and 450 is a needle punched non-woven fleece impregnated with SAP. Penetrating water causes the polymers to swell and thus renders the EasySeal membrane impermeable. The building structure is permanently protected against penetrating water, even small cracks and voids in the concrete are sealed.

## CHARACTERISTICS AND ADVANTAGES

- 📍 Tough and resistant, quick and easy to install
- 📍 High compound shear strength
- 📍 Can be installed in every season, independently of temperature
- 📍 During the installation contact with rain water, ground water needs to be avoided
- 📍 No need for complicated welding equipment or specially trained personnel
- 📍 Quality controlled product
- 📍 Self- healing properties by the pressure of the swelling polymers
- 📍 Seals small cracks in the concrete by the pressure of the swelling SAP
- 📍 Can be used in salt water conditions
- 📍 Tests have been made at the University of Braunschweig, Germany
- 📍 Tests have been made at the KIWA Accredited Independent Laboratory, Germany
- 📍 Enormous water absorbing capacity and therefore enormous swelling and sealing capacity

## PRODUCT DATA

	EasySeal 200 and 450 Non-Woven Waterproofing Membrane	Article-No.
Dimensions/ Packaging	EasySeal 200: 2m x 50m per roll; roll-Ø approx. 50 cm; 5 rolls per pallet EasySeal 450: 2m x 50m per roll; roll-Ø approx. 50 cm; 5 rolls per pallet	21-102 21-100
Storage	Shelf life 5 years when stored clean, dry and shaded from sunshine.	

## APPROVALS

- 📍 CE-Certificate

## TECHNICAL DATA



Type:	Needle punched nonwoven, impregnated
Weight:	200g/m <sup>2</sup> and 450g/m <sup>2</sup>
Raw material:	Polypropylene fibres, white
Class of Rubustness:	GRK 3
Swelling material:	Water absorbing, swelling polymer
Swelling pressure:	> 170 kN/m <sup>2</sup>

**EasySeal 200 Non-woven Waterproofing Membrane**

Property	Test-Method	Unit	Value
Tensile strenght (MD)	DIN EN ISO 10319	kN/m	≥ 6,2 (- 1,0)
Tensile strenght (CMD)	DIN EN ISO 10319	kN/m	14,0 (- 1,6)
Elongation at break (MD)	DIN EN ISO 10319	%	≥ 105,0 (± 20,0)
Elongation at break (CMD)	DIN EN ISO 10319	%	75,0 (± 20,0)
Perforation behaviour	DIN EN ISO 13433	Mm	≥ 15,6 (+ 12,0)
Protection efficiency	DIN EN 13719	at 300 kPa	
		%	3,5 (+2,4)
Resistance to weathering	DIN EN 12224	- to be covered on the day of installation - for an application without reinforcement function - permanent for 5 years with 4 ≤ pH ≤ 9 in natural soils and soil temperatures ≤ 25 °C	
Dangerous substances	Less than required by national regulations in the EU member states.		

**EasySeal 450 Non-woven Waterproofing Membrane**

Property	Test-Method	Unit	Value
Tensile strenght (MD)	DIN EN ISO 10319	kN/m	≥ 13,6 (- 2,0)
Tensile strenght (CMD)	DIN EN ISO 10319	kN/m	22,0 (- 3,2)
Elongation at break (MD)	DIN EN ISO 10319	%	≥ 91,0 (± 20,0)
Elongation at break (CMD)	DIN EN ISO 10319	%	76,0 (± 20,0)
Perforation behaviour	DIN EN ISO 13433	mm	≥ 10,4 (+ 8,0)
Protection efficiency	DIN EN 13719	at 300 kPa	
		%	1,6 (+1,1)
Resistance to weathering	DIN EN 12224	- to be covered on the day of installation - for an application without reinforcement function - permanent for 5 years with 4 ≤ pH ≤ 9 in natural soils and soil temperatures ≤ 25 °C	
Dangerous substances	Less than required by national regulations in the EU member states.		

**ADDITIONAL INFORMATION**



**Surface**

All surfaces onto which the EasySeal Membrane is to be applied should be sound, solid and free from voids >12mm. All corners, upstands, pipe / service penetrations, etc. must be detailed correctly (please consult our Technical Department for further advice) prior to the application of the membrane.

**Application**

- 🔗 EasySeal should be fixed onto the prepared substrate with the fleece facing the concrete to be waterproofed.
- 🔗 Horizontal overlaps should be detailed with CEM805 Adhesive.
- 🔗 Vertical overlaps must be secured with CEM805 Adhesive.
- 🔗 All overlaps should be a minimum of 50mm and should to be mechanically fixed using staples. Do not use fixings on the horizontal overlaps.
- 🔗 Roll ends should be staggered by at least 300mm
- 🔗 Backfilling should be clean well compacted as defined by ASTM 1557
- 🔗 The contact pressure should be at least 150 kg/m<sup>2</sup>.

**General Advice**

Service temperature: -30° C - 70° C

The above-mentioned temperatures constitute the generally valid area in which no additional measures need to be taken during application.

**Environment and health**

This product does not represent a hazardous substance within the meaning of the EU Hazardous Substances Regulation. A safety data sheet for transport, placing on the market and use is available on the request.

**Dangers and Safety**

The essential safety, toxicological, physical and ecological data for the handling of EasySeal can be taken from the product-specific safety data sheets.

**Data**

All technical data stated in this product data sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

**Legal advice**

All above mentioned Information concerning BPA products, especially any recommendations and advices relating to the application and use of BPA products are given in good faith based on BPA's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with BPA's recommendations.

In practice, the differences in materials, actual site conditions and other factors outside are such that no warranty nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered.

The user of the product must test the product's suitability for the intended application and purpose before proceeding with the full application of the products. BPA reserves the right to change the properties of its products without notice. Users must always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request. All sales of BPA are subject to our current terms and conditions.

**Local Restrictions**

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local product data sheet for the exact description of the application fields.

