

# BARRITEX WM17 WATERPROOFING MEMBRANE

**Pre-applied waterproofing sealing system based on TPO/FPO**

## PRODUCT DESCRIPTION

The BARRITEX WM17 Membrane System consists of a special non-woven PP-Fleece, which is co-extruded with a highly flexible, water and gas resistant, TPO-FPO membrane. The fresh concrete forms a mechanical bond with the PP-Fleece and prevents water tracking between the membrane and the concrete. The BARRITEX WM17 Membrane System is a new, high quality technology and it has been specifically designed for the waterproofing and protection of below ground reinforced concrete.



## APPLICATIONS

BARRITEX WM17 may be used in all applications, where reinforced concrete structures must be protected against groundwater and contaminations. It is suitable for waterproofing of foundations, basements, tunnels, parking decks and all other concrete structures below grade. BARRITEX WM17 can be used in saline soil or alkaline environments due to its chemical resistance.

## HOW DOES BARRITEX WM17 WORK?

The fresh concrete mechanically bonds to the PP-fleece on the BARRITEX WM17 System creating a full and durable bond with the cured concrete. The high mechanical bond between the PP-Fleece and the concrete prevents any lateral water migration between the membrane and the cured concrete. BARRITEX WM17 is installed before the steel reinforcement is placed, and the concrete is poured.

## FEATURES AND BENEFITS OF THE BARRITEX WM17 MEMBRANE SYSTEM

- ⊕ BARRITEX WM17 Membrane System is strong, highly-flexible 1.7mm TPO/FPO waterproofing membrane which forms a permanent mechanical bond with freshly poured concrete
- ⊕ May be used in salt-water areas to protect the concrete structure.
- ⊕ May be used as a supplementary method for high-quality use (A + to A +++) in WU constructions
- ⊕ Used for water pressure-tight surface sealing of (WU) concrete structures
- ⊕ External barrier, for the waterproofing and protection of floor slabs and exterior concrete wall surfaces against soil moisture.
- ⊕ Barrier against radon or radon gas
- ⊕ Tough and resistant - fast and easy to install
- ⊕ High compound shear strength
- ⊕ Quality controlled / CE-Certification in acc. to EN 13967 (more test reports are available on request)
- ⊕ Crack bridging up to 3.2 mm
- ⊕ Tested up to 6.9 bar water pressure
- ⊕ Cold flexibility down to -30 °C; High thermal stability up to +60 °C
- ⊕ May be installed in all weather conditions (in acc. to the application guideline)
- ⊕ Working temperature: +5°C until +35°C (without additional requirements)
- ⊕ No complicated welding equipment is necessary
- ⊕ Lightweight, versatile- and easy on-site handling
- ⊕ Membrane overlap with self-adhesive strip for overlapping (long edge)
- ⊕ Protects concrete against chemical, salt and sulphate attack



## APPROVALS

- 🔗 CE Marking in acc. to DIN EN 13967
- 🔗 In regarding to the German DIN 18195 Standard - new DIN 18533
- 🔗 In regarding to the German DIN SPEC 20000-202
- 🔗 General German Test Report / abP
- 🔗 BARRITEX WM17 can be used in construction joints and has been tested as a surface sealing system that is water tight for joints and cracks up to 3.2 mm and a water pressure of up to 6.9 bars.

## FORM OF DELIVERY

BARRITEX WM17 Membrane rolls are individually wrapped in foil.

BARRITEX WM17 Membrane should be stored in its original packaging. BARRITEX WM17 should be kept dry and protected from direct sunlight, snow, ice, water, heat or heat sources. The storage temperature should be between + 5 ° C and + 30 ° C.

Do not stack any sharp items or additional pallets on top of the other BARRITEX WM17 Membrane pallets during transport and storage.

Please refer to the product label for production date and identification number. Minimum shelf life is 18 months from the date of production.

	ARTICLE NUMBER	WIDTH	LENGTHS	UNITS	OVERLAPPINGS	
<b>BARRITEX WM17</b>	25-310	1.00 M	20 M	15 ROLLS/ PALLET	BUTYL-EDGE	100 MM

	GROSS AREA	NET AREA	THICKNESS
<b>BARRITEX WM17</b>	ROLLE	APP. 18.00 M <sup>2</sup> PER ROLL	1.7 MM



**TECHNICAL DATA**

PRODUKT TYPE	BARRITEX WM17			
Intended use	EN 13967 – Flexible membrane for waterproofing (concrete structures)			
	Type A and Type T Waterproofing membrane with moisture barrier and groundwater barrier			
Material	BARRITEX WM17	TPO/FPO-PP membrane + PP nonwoven		
Visible defects	BARRITEX WM17	no visible defects	✓ passed	EN 1850-2
Straightness	BARRITEX WM17	≤ 75 mm / 10 m	✓ passed	EN 1848-2
Mass	BARRITEX WM17	0.870 kg/m <sup>2</sup> (without butyl strip)	(+/- 75 g/m <sup>2</sup> )	EN 1849-2
Thickness	BARRITEX WM17	1.7 mm	(+/- 10%)	EN 1849-2
Water tightness	BARRITEX WM17	690 kPa		ASTM D 5385
		60 kPa / 24h	✓ tight	EN 1928 (B)
		500 kPa / 72h		EN 1928 (B)
Durability against artificial aging	BARRITEX WM17	12 weeks / 70 °C; 60 kPa / 24h	✓ tight	EN 1296 EN 1928 (B)
Durability against chemicals	BARRITEX WM17	28 d / +23 °C; 60 kPa / 24h	✓ tight	EN 1847 EN 1928 (B)
Compatibility with bitumen	BARRITEX WM17	28 d / +70 °C; 60 kPa / 24h	✓ tight	EN 1548 EN 1928 (B)
Water tightness Crack bridging	BARRITEX WM17	mechanical bond with concrete 6.9 bar / 3.2 mm	✓ tight	ASTM D 5385
Water vapour transmission	BARRITEX WM17	<b>g</b>	<b>Sd</b>	<b>μ</b>
		6,23 <sup>10-9</sup> kg/(m <sup>2</sup> s)	64 m	79000
Tensile strength MD / CMD	BARRITEX WM17	450 / 210	N/50mm	EN ISO 12311-2 (A)
Shear resistance in the overlap	BARRITEX WM17	Collapse outside of the overlapping:		
		150	N/50mm	EN 12317-2
Resistance to impact	BARRITEX WM17	800	mm	EN 12691 (A)



<b>Tear resistance MD / CMD</b>	<b>BARRITEX WM17</b>	≥ 300 / 300	N		EN 12310-1
<b>Resistance to static load</b>	<b>BARRITEX WM17</b>	20kg / 24h		✓ passed	EN 12730 (A)
		20kg / 24h			EN 12730 (B)
<b>Crack bridging ability</b>	<b>BARRITEX WM17</b>	3.2	mm	✓ passed	ASTM D 5385
<b>Reaction to fire</b>	<b>BARRITEX WM17</b>	Class E			EN ISO 11925-2 EN 13501-1

### ADDITIONAL INFORMATION

Our TPO/FPO-PP has a very slow decomposition time. The basic materials PP are thermoplastics known for their recyclability. Please see the BARRITEX WM17 installation guideline for detailed application instructions.

#### Substrate pretreatment

The substrate for the BARRITEX WM17 membrane needs sufficiently stabilized to avoid movement during the construction works.

A smooth, uniform and clean substrate surface is essential to prevent membrane damage. Large gaps > 12mm and voids must be closed before installation of the BARRITEX WM17 membrane system. The substrate can be damp or slightly wet, but ponding water must be avoided.

Some examples of suitable substrates to fix the BARRITEX WM17 membrane system onto are:

- Concrete surfaces
- Formwork
- Plywood
- Compacted soil

All corners, up-stands, pipe / service penetrations, etc. must be detailed correctly (please consult our Technical Department for further advice) prior to the application of the membrane.

BARRITEX WM17 Membrane is designed for use with structural reinforced concrete. The concrete should be designed by a Structural Engineer to EN 1992. Please ensure that the concrete is placed and cured correctly, and that all non- movement construction joints are detailed with CEMflex Active Waterstop or QUELLMAX Bentonite Waterstop Tape.

#### Application of barritex WM17 Membrane

The edges of the membrane should be overlapped by a minimum of 100mm and the ends of the rolls staggered by a minimum of 300mm. The installed membrane should be inspected for damages prior to the placement of the concrete. In the unlikely event of damage occurring to the membrane, repairs may be completed by simply placing and bonding a (repair) patch of membrane over the damaged area using for example our CEM 805 as an adhesive.

The installed membrane may be cleaned using a soft-brush and/or a low-pressure cold water. All standing water or any construction debris must be removed from the membrane prior to placing the concrete.

#### General Advice

Application temperature: +5°C until +35°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 BARRITEX WM17 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.

### **Disclaimer**

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 Data Sheet for the product concerned, copies of which will be supplied on request. All sales of BPA products 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.

