

# CCS-Membrane

Concrete composite sheet membrane with high peel adhesion

## TECHNICAL DATASHEET

Status 17.06.2020

Item no. A01601020  
 A01602020

### PROPERTIES

**CCS-Membrane (Concrete Composite Sheet Membrane)** is a high quality non-woven seal fleece with a robust LDPE-foil cover with an exceptional flexibility. The high flexibility of the membrane results in a very high crack bridging capability at places where cracks will occur within the concrete. **CCS-Membrane** is a preapplied waterproofing membrane which is installed on the substrate before the concrete is poured. The installation is fast and safe. During the concrete pour the fleece absorbs parts of the cement water mix. Once the concrete cures this results in a very high integral bond of the membrane to the concrete which will effectively prevent any penetration of water in between the membrane and the concrete at places where the membrane is locally damaged.

### APPLICATION

**CCS-Membrane** is applied as linear or full surface external seal for all kinds of reinforced concrete structures. **CCS-Membrane** is part of the CCSM-system which does not only includes innovative system components but also a detailed planning, an installation by qualified workmanship and eventually survey for the correct installation, incl. documentation.

**CCS-Membrane** can be used for bonding to fresh concrete as a pre-applied waterproofing membrane, therefore **CCS-Membrane** is laid out on the substrate with its coated side facing the blinding layer or it will be fixed with its coated side towards the formwork in wall constructions. The position of the reinforcement is directly onto the uncoated side of the seal fleece, concrete is then poured on to this uncoated side of **CCS-Membrane**, which will absorb a part of the concrete water. By doing so it integrally bonds to the concrete from which a high peel adhesion will occur. This function prevents any undergo of water between sealing membrane and concrete effectively which means that there will be no water migration even if damaged.

Alternatively **CCS-Membrane** can be post applied to existing structures. To ensure the sealing of existing buildings the fleece side faces in the direction of the construction **CCS-Membrane** is installed with **2-C Sealing & adhesive compound** on the concrete surface.

On the surface of **CCS-Membrane** isolation boards can easily be installed with solvent free adhesives by simply gluing the boards on the PP-fleece concealed surface.

### TECHNICAL DATA

Dimensions	length	20,0 m	± 5,0 cm; MDV*	DIN EN 1848-2
	width	1,0 m	± 3,0 cm; MDV*	DIN EN 1849-2
	thickness	1,21 mm	± 5,0 %; MDV*	DIN EN 1849-2
	mass per unit area	730 g/m <sup>2</sup>	± 10,0 %; MDV*	
Watertightness (method: water tightness 2,0bar 24h)		pass		DIN EN 1928 (in accordance with)

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Tensile properties	lengthwise	≥ 250 N/50mm**	DIN EN 12311-2
	across	≥ 200 N/50mm**	DIN EN 12311-2
Elongation at break	lengthwise	≥ 20,0 %**	DIN EN 12311-2
	across	≥ 50,0 %**	DIN EN 12311-2
Joint strength	glued seam	≥ 100 N/50mm**	DIN EN 12317-2
Resistance to tearing (nail shank)	lengthwise	≥ 150 N**	DIN EN 12310-1
	across	≥ 150 N**	DIN EN 12310-1
Adhesion to concrete		0,55 N/mm <sup>2</sup>	DIN 1048
Radon diffusion coefficient		$D = 0.39 \cdot 10^{-12} \text{ m}^2/\text{s}$	ISO/TS 11665-13, 2017
Radon diffusion length		$L = 0.43 \text{ mm}$	ISO/TS 11665-13, 2017
Resistance to temperature		-40 °C / +100 °C	
Color		white / blue	

\*MDV: Manufacturer's declared value (Herstellerangabe mit Toleranz)  
\*\*MLV: Manufacturer's limiting value (Grenzwert des Herstellers)

## PACKAGING & STORAGE

20 m/roll; width = 1,0 m	20 rolls á 20 m <sup>2</sup>	pallet: 400 m <sup>2</sup>
20 m/roll; width = 2,0m	20 rolls á 40 m <sup>2</sup>	pallet: 800 m <sup>2</sup>

**CCS-Membrane** can be stored in the original unopened containers for at least 12 months at temperatures between +5° C and +25° C.

## INSTALLATION

### Installation of **CCS-Membrane** in fresh concrete (pre-application)

Underneath a basement slab **CCS-Membrane** is laid out with its coated side facing the binding layer or it will be fixed with its coated side towards the formwork in wall constructions. The position of the reinforcement is directly onto the uncoated side of the seal fleece, concrete is then poured on to this uncoated side of **CCS-Membrane**, which will suck up a part of the concrete water. By doing so the concrete adheres closely to the fleece. The self-adhesive edge strip at the long side of **CCS-Membrane** functions as an overlap joint (remove protective film). It must be complied with a specific striking time of minimum 48 hours. No welding, no open flames, no priming is required.

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### Installation of **CCS-Membrane** in existing buildings (post-application)

**CCS-Membrane** is bonded directly on the concrete surface. The surfaces where the seal fleece is installed on, must be firm, sustainable, clean and free of dust or loose particles. First, the **2-C Sealing & adhesive compound** is installed onto the concrete sub-surface, then the fleece side of **CCS-Membrane** is gently pushed into the humid adhesive. The self-adhesive edge strip at the long side of **CCS-Membrane** functions as an overlap joint (remove protective film).

Storing and working with **CCS-Membrane** is trouble free, as it is neither combustible nor toxic.

The working temperature of **CCS-Membrane** is from -10 °C to +40 °C (-5 °C/+30 °C construction device). **CCS-Membrane** must be stored in a dry place.

## ACCESSORIES

Item no. A02610290	Polymer-swellingpaste cartridge 290ml	290 ml
Item no. A02633000	2-C Sealing & adhesive compound	30 kg
Item no. S01902075	CCS-Membrane adhesive tape 75mm	20 m

### Note:

The information on this data sheet is based on our experience and given to the best of our knowledge, but is not legally binding. Recommendations, which are at variance with those stated in this data sheet, are only binding for us, when confirmed in writing. The manufacturer is not responsible for damages resulting from the misuse or incorrect storage of the product. For the accuracy of this information we are liable within the scope of our delivery and service conditions. Creation date: 06/2020