

MC-Plan 217 M

Fully bonded pre-applied FPO sheet membrane for sub-structure waterproofing



PRODUCT PROPERTIES

- Highly flexible waterproofing FPO membrane system against pressurized water
- Simple, easy and quick to install
- Permanently bonded to the hardened concrete by physical bonding
- Resistant to mechanical stress
- No moisture can get behind it
- Maximum safety thanks to prefabricated system components
- CE Marking according to DIN EN 13967
- Resistant to Radon according to DIN ISO 11668-13
- Can be integrated into Nafuflex and MC-Proof waterproofing system

AREAS OF APPLICATION

- Surface waterproofing of reinforced concrete structures against up to 5 bar water pressure
- Suitable for waterproofing for horizontal floor slabs, one or two sided formworked vertical concrete structural elements
- Waterproofing membrane system that can be used in combination with watertight concrete structures

APPLICATION ADVICE

General Information: A simple and quick-to-apply waterproofing membrane system that physically adheres to fresh concrete without the need for other construction adhesives or thermal welding.

Substrate Preparation: The surface to be covered with the MC-Plan 217 M membrane system before concreting should be solid, sufficiently load-bearing, and free of weathered parts and sharp edges. Cavities, cracks and surface defects must be sealed with suitable materials. A further requirement is that the surface must be swept clean and dry.

Water that may have accumulated in the working pit due to rainfall or other causes must be pumped out.

Application: When installing the MC-Plan 217 M waterproofing membrane, care should be taken to ensure that the FPO side faces outwards, towards the water trying to penetrate, and the white felt side faces inwards, towards the concrete. The system consists of the following elements.

MC-Plan 217 M: waterproofing sheet membrane

MC-Plan 216 RT: repair tape

MC-Plan 216 CT: connection tape

MC-Plan 216 IC: inner corner

MC-Plan 216 EC: external corner

MC-Plan 216 PT: penetration tape

The membrane overlap shall be joined together on the self-adhesive strips available at the membrane's longitudinal edge. To join the transverse seams MC-Plan 216 CT connecting tape is to be used according to the manufacturer's instructions. Care should be taken to ensure that the felt-lined parts are as close together as possible when adhering the connecting tape, particularly along the seam running down the middle of the tape. The maximum permissible distance tolerance is 5mm between two membranes and overlying should be avoided.

For the corners of floor-wall connections, MC-Plan 216 IC/EC prefabricated corner elements are recommended.

Important information: MC-Plan 217 M can be used on construction joints and predesigned crack joints. For expansion joints, it is recommended to combine with appropriate joint sealing systems from the MC-Waterstop range.

A post-installation check is to be done before pouring concrete for any damages and repairs.

Place the concrete directly onto the installed system as soon as installation work is done to avoid wrinkles, dirt accumulation, and damage by 3rd parties.

After the removal of formwork, all penetrations (e.g. tie rod holes) must be sealed.

APPLICATION ADVICE

The waterproofing system on the vertical wall must be protected with appropriate means before backfilling.

UV-Resistance max.4 weeks for outside storage/exposure to direct sunlight.

Attention: colour of materials or printing may vary slightly from batch to batch.

Processing recommendations: The release liner can be removed at a temperature not exceeding 28 °C.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Width	mm	approx. 1,000	+/- 5 mm
Length	m	15	
Weight	g/m ²	approx. 1,340	± 75 g / m ²
Total thickness	mm	1.7	
Layer thickness (Waterproofing membrane)	mm	1.2	
Elongation at break	%		DIN EN 12311-2 Method A
Longitudinal		40	Tolerance: ≥ 25 %
Lateral		45	Tolerance: ≥ 25 %
Breaking load	N/50 mm		DIN EN 12311-2 Methode A
Longitudinal		590	Tolerance: ≥ 400 N / 50 mm
Lateral		420	Tolerance: ≥ 250 N / 50 mm
Tear resistance	N		DIN EN 12310
Longitudinal		565	Tolerance: ≥ 300 N
Lateral		525	Tolerance: ≥ 300 N
Impact strength	mm	≥ 300	DIN EN 12691
Sd-value	m	120	DIN EN 1931 Method B
Resistance to static loads	kg		DIN EN 12730
		≥ 20	Method A: EPS
		≥ 20	Method B: Concrete
Fire behaviour		E	EN 13501-1
Thermal resistance	°C	> -30 < 60	
Application conditions	°C	> 5 < 35	
Delivery form	MC-Plan 217 M : 1x15m roll		
	System accessories:		
	MC-Plan 216 RT: 20m roll		
	MC-Plan 216 CT:20m roll		
	MC-Plan 216 IC:25 pcs		
	MC-Plan 216 EC:25 pcs		
	MC-Plan 216 PT:100m roll		
Colour	Grey & White		
Storage	Can be stored for 12 months in unopened original packaging in a dry place.		

Note: The information in this data sheet must be adapted by the installer, specialist planner, and/or building inspector to the respective construction project, intended use, and specific local conditions. Any non-standard local conditions must be taken into account, and application-specific conditions must be reviewed in advance by the planner/specifier. Deviations from the specified standard conditions require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2600030047]