Technical Data Sheet

PM3SGGEOTEX 200





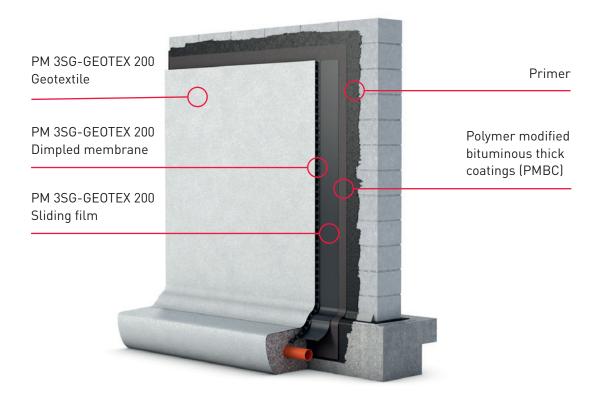
The three-layer PM 3SG-GEOTEX 200 protection and drainage system is a high-quality addition to polymer modified bituminous thick coatings (PMBC) for exterior basement walls. Thick coatings act as a permanent waterproofing, filling in cracks and joints, but for backfilling or subsequent soil settling, they can be extremely sensitive to impacts and pressure. The result: elaborate time-intensive and thus cost-intensive safeguarding work for the backfilling process and the risk of later complaints. PM 3SG-GEOTEX 200 solves multiple problems as a complete, multi-layer protection and drainage system for below-ground structures with PMBC or other waterproofings. PM 3SG-GEOTEX 200 consists of a dimpled membrane, a rugged geotextile and a sliding foil on the back side. The sliding film distributes the effective earth pressure and acts as a sliding surface in case of any settling of the filling soil. The protective effect meets the requirements of DIN 18533. The good water draining capacity of PM 3SG-GEOTEX 200 is muliple times higher than required by drainage standard DIN 4095. PM 3SG-GEOTEX 200 has a compressive strength of 200 kN/m². The drainage sheet is available in many different length and width variations.

Technical Data

Sliding film Geotextile Total weight Dimple height Dimple height Water flow capacity in the plane, rigid – soft, i = 0.01 approx. 0.12 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.5 l/o.75 l/o.1.5 l/o.2.5 m Roll length Air volume between the dimples Temperature resistance Chem. properties Chem. properties Biolog. properties Physiolog. properties Characteristic opening width Water permeability EN ISO 11058 Fire behaviour LDPE approx. 200 µm polypropylene approx. 200 kN/m² = 20 t/m² approx. 0.12 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.5 l/o.75 l/o.1.5 l/o.2.5 m approx. 0.30 l/s·m at 20 kPa approx. 0.5 l/s·m at	6:	
Geotextile polypropylene Total weight approx. 730 g/m² Dimple height 8 mm Compressive strength approx. 200 kN/m² = 20 t/m² Water flow capacity in the plane, rigid - soft; i = 1.0 approx. 2.40 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.5 l/s·m at 20 kPa approx	Dimpled membrane	HDPE
Total weight approx. 730 g/m² Dimple height 8 mm Compressive strength approx. 200 kN/m² = 20 t/m² Water flow capacity in the plane, rigid – soft; i = 1.0 approx. 2.40 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 5.5 l/m² Roll width 0.5/0.75/1.0/1.5/2.0/2.5 m Roll length 12.5/15/20 m Air volume between the dimples approx. 5.5 l/m² Temperature resistance -30 °C to +80 °C Chem. properties chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width Water permeability approx. 170 μm Water permeability EN ISO 11058	Sliding film	LDPE approx. 200 µm
Dimple height 8 mm Compressive strength approx. 200 kN/m² = 20 t/m² Water flow capacity in the plane, rigid – soft; i = 1.0 approx. 2.40 t/s·m at 20 kPa approx. 0.12 t/s·m at 20 kPa approx. 0.22 t/s·m at 20 kPa approx. 0.22 t/s·m at 20 kPa approx. 0.30 t/s·m at 20 kPa approx. 0.5 t/s·m at 20 kPa approx. 0.5 t/s·m at 20 kPa approx. 0.5 t/s·m at 20 kPa approx. 0.30 t/s·m at 20 kPa approx. 0.30 t/s·m at 20 kPa approx. 0.30 t/s·m at 20 kPa approx. 0.50 t/s·m at 20 kPa approx. 0.10 t/s·m at 20 kPa approx. 0	Geotextile	polypropylene
Compressive strength Water flow capacity in the plane, rigid – soft; i = 1.0 rigid – soft, i = 0.01 rigid – soft, i = 0.02 rigid – soft, i = 0.03 Roll width Air volume between the dimples Temperature resistance Chem. properties Biolog. properties Physiolog. properties Characteristic opening width Water permeability EN ISO 11058 approx. 2.40 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 5.5 l/m² approx. 5.5 l/m² Chem. cresistant resistant to bacteria and fungi, rot-resistant, root-proof approx. 170 µm approx. 100 · 10-3 m/s	Total weight	approx. 730 g/m ²
Water flow capacity in the plane, rigid – soft; i = 1.0 approx. 2.40 l/s·m at 20 kPa approx. 0.12 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.5 l/s·d 20 kPa approx. 5.5 l/s·d 20 kPa approx. 5.5 l/s·d 20 kPa approx. 5.5 l/m² chemical-resistant resistant resistant to bacteria and fungi, rot-resistant, root-proof safe for drinking water approx. 170 μm water permeability approx. 170 μm approx. 100 · 10·3 m/s	Dimple height	8 mm
in the plane, rigid – soft; i = 1.0 approx. $2.40 \text{ l/s} \cdot \text{m}$ at 20 kPa approx. $0.12 \text{ l/s} \cdot \text{m}$ at 20 kPa approx. $0.12 \text{ l/s} \cdot \text{m}$ at 20 kPa approx. $0.12 \text{ l/s} \cdot \text{m}$ at 20 kPa approx. $0.22 \text{ l/s} \cdot \text{m}$ at 20 kPa approx. $0.30 \text{ l/s} \cdot \text{m}$ a	Compressive strength	approx. 200 kN/ m^2 = 20 t/ m^2
rigid – soft; i = 1.0 rigid – soft, i = 0.01 rigid – soft, i = 0.01 rigid – soft, i = 0.02 rigid – soft, i = 0.02 approx. 0.12 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.5 l/s·m at 20 kPa approx. 15 l/s·m at 20 kPa approx. 10 l/s·m at	Water flow capacity	
rigid – soft, i = 0.01 approx. 0.12 l/s-m at 20 kPa approx. 0.22 l/s-m at 20 kPa approx. 0.32 l/s-m at 20 kPa approx. 0.30 l/s-m at 20 kPa approx. 0.30 l/s-m approx. 0.30 l/s-m approx. 0.30 l/s-m approx. 0.30 l/s-m at 20 kPa approx. 0.30 l/s-m approx. 0.30 l/s-m approx. 0.30 l/s-m approx. 0.30 l/s-m at 20 kPa approx. 0.30 l/s-m ap		
rigid – soft, i = 0.02 rigid – soft, i = 0.03 Roll width Roll length Air volume between the dimples Temperature resistance Chem. properties Biolog. properties Biolog. properties Characteristic opening width Water permeability EN ISO 11058 Roll vision i = 0.02 approx. 0.22 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.22 l/s·m at 20 kPa approx. 0.20 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.20 kPa approx. 0.20 l/s·m at 20 kPa approx. 0.30 l/s·m at 20 kPa approx. 0.20 l/s·m at		
Roll width 0.5/0.75/1.0/1.5/2.0/2.5 m Roll length 12.5/15/20 m Air volume between the dimples approx. 5.5 l/m² Temperature resistance -30 °C to +80 °C Chem. properties chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width approx. 170 µm Water permeability EN ISO 11058 approx. 100 · 10-3 m/s	rigid – soft, $i = 0.01$	
Roll width 0.5/0.75/1.0/1.5/2.0/2.5 m Roll length 12.5/15/20 m Air volume between the dimples approx. 5.5 l/m² Temperature resistance -30 °C to +80 °C Chem. properties chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width approx. 170 µm Water permeability EN ISO 11058 approx. 100 · 10-3 m/s	rigid – soft, $i = 0.02$	
Roll length 12.5 / 15 / 20 m Air volume between the dimples approx. 5.5 l/m² Temperature resistance -30 °C to +80 °C Chem. properties chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width approx. 170 µm Water permeability EN ISO 11058 approx. 100 · 10-3 m/s	rigid – soft, i = 0.03	approx. 0.30 l/s·m at 20 kPa
Air volume between the dimples approx. 5.5 l/m² Temperature resistance -30 °C to +80 °C Chem. properties chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width approx. 170 µm Water permeability EN ISO 11058 approx. 100 · 10-3 m/s	Roll width	0.5 / 0.75 / 1.0 / 1.5 / 2.0 / 2.5 m
between the dimples Temperature resistance Chem. properties Biolog. properties Physiolog. properties Characteristic opening width Water permeability EN ISO 11058 Temperature resistance -30 °C to +80 °C chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof safe for drinking water approx. 170 µm approx. 170 µm	Roll length	12.5 / 15 / 20 m
Temperature resistance -30 °C to +80 °C Chem. properties chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties Safe for drinking water Characteristic opening width water permeability EN ISO 11058 -30 °C to +80 °C chemical-resistant resistant to bacteria and fungi, rot-resistant, root-proof approx. 170 μm approx. 170 μm		approx. 5.5 l/m²
Chem. properties chemical-resistant Biolog. properties resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width approx. 170 µm Water permeability EN ISO 11058 approx. 100 · 10-3 m/s	Temperature resistance	-30 °C to +80 °C
Biolog. properties resistant to bacteria and fungi, rot-resistant, root-proof Physiolog. properties safe for drinking water Characteristic opening width approx. 170 μm Water permeability EN ISO 11058 approx. 100 · 10 ⁻³ m/s		chemical-resistant
Characteristic opening width approx. 170 μm Water permeability EN ISO 11058 approx. 100 · 10 ⁻³ m/s		
opening width approx. 170 µm Water permeability EN ISO 11058 approx. 100 · 10 ⁻³ m/s	Physiolog. properties	safe for drinking water
EN ISO 11058 approx. 100 · 10 ° m/s		approx. 170 μm
Fire behaviour class E		approx. 100 · 10 ⁻³ m/s
	Fire behaviour	class E

For more information, visit www.pmi-plast.de

INSTALLATION INSTRUCTIONS



Vertical installation

The width of the PM 3SG-GEOTEX 200 dimpled sheet must be adjusted to the seal height: Up to a height of 1.90 m, the 2 m wide membrane is unrolled on the wall, up to a height of 2.40 m the 2.50 m wide membrane; for all other heights, both membrane widths can be used. The membranes are cut diagonally to the roll to the correct length and laid lengthwise from top to bottom: The geotextile always faces outwards – towards the ground. It is important to ensure that the sides of the individual membranes overlap while lifting the geotextile accordingly. It is recommended to fold the membrane along the edge line at the corners prior to installation. The upper edges of

the membranes must be about 15 cm above the sealing at all times. The membrane is first attached temporarily (e.g. with wooden battens) because the drainage membrane is held by the pressure of the earth after backfilling. The final membrane is finally overlapped with the starting membrane over a width of at least 30 cm. The lower end rests on the circumferential drainage. The circumferential drainage is enclosed with at least 15 cm of filter-stable material. After backfilling, simply cut off the membrane at the top edge of the soil. The PM EDGE FINISHING PROFILE can be used to cover the upper edge of the membrane.

Accessories:

PM MOUNTING BUTTON with specially hardened steel nails | PM EDGE FINISHING PROFILE made of plastic or metal in black or brown | PM BUTYL ADHESIVE TAPE | PM POWER FIX cartridge adhesive