Technical Data Sheet

BREAKTHROUGH FLEXIBILITY

PM DRAIN-TEC 400 ECOnopp®

PM DRAIN-TEC CE CONFORM TO DIN EN 13252

PM DRAIN-TEC Whisper quiet up to 27 dB TESTED IMPACT SOUND REDUCTION

Our sustainable, environmentally friendly and resource-saving product line. The use of regranulates relieves the burden on the environment, reduces energy consumption compared to new plastics and reduces CO_2 emissions. This closes the recycling cycle - without even making any compromises on quality or economic efficiency.

For inverted roofs: also available as **PERFORATED VARIANT.**

PM DRAIN-TEC is a whispering sheet among drainage sheets, because the already tested impact sound reduction is to DIN EN ISO 10140 for insulated flat roof structures up to **ΔLw = 27 dB.**

PM DRAIN-TEC 400 ECOnopp® is an effective protection and drainage system and the universal solution for both horizontal and vertical surface drainage on all pressure-resistant surfaces. PM DRAIN-TEC 400 ECOnopp® consists of a dimpled membrane and a sturdy geotextile. The smooth back side allows for a uniform and extensive load distribution on the sealing. This double-layer system protects the waterproofing below it from mechanical damage and damaging thermal stresses. PM DRAIN-TEC 400 ECOnopp® has a compressive strength of 400 kN/m². The drainage membrane is available in many different length and width variations. The excellent water draining capacity is multiple times higher than required by drainage standard DIN 4095. PM DRAIN-TEC 400 ECOnopp® protects the outer walls of basements, earth-covered roofs of underground car parks, patios and green flat roofs against waterlogging. The moisture penetrates the geotextile and enters the ducts of the dimpled membrane, where it is securely drained. In the process, the geotextile acts as a filter and prevents the ducts from getting clogged up. The optimal high-performance geotextile boasts very high initial strength and is subject to only minimum deformation under increasing working load.

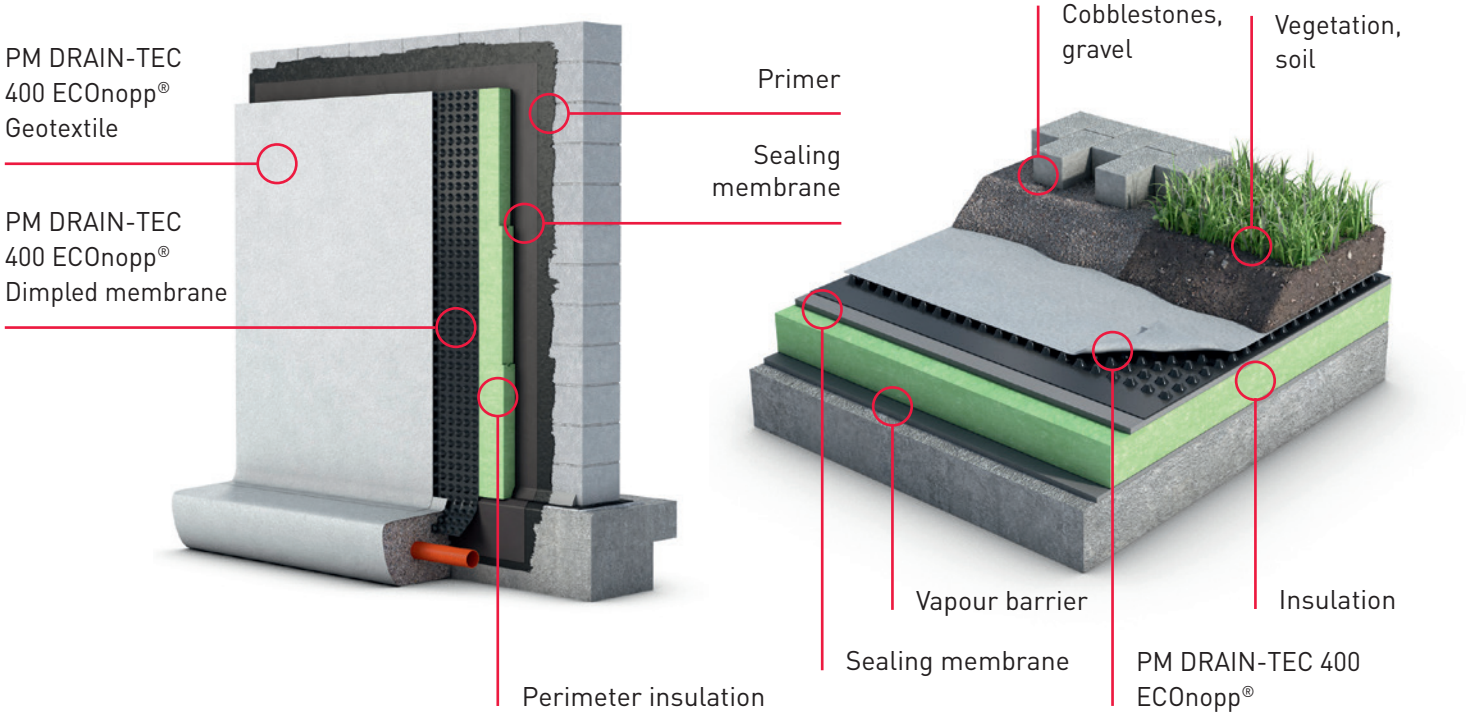
Technical Data

Dimpled membrane	HDPE
Geotextile	polypropylene
Dimple height	8 mm
Total weight	approx. 750 g/m²
Number of dimples	1,710 dimples/m²
Compressive strength	approx. 400 kN/m² = 40 t/m²
Colour	black
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	 approx. 2.72 l/s·m at 20 kPa approx. 0.19 l/s·m at 20 kPa approx. 0.29 l/s·m at 20 kPa approx. 0.37 l/s·m at 20 kPa
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
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
Fire behaviour	class E

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

PM DRAIN-TEC 400 ECOnopp®

INSTALLATION INSTRUCTIONS



Vertical installation
If installed vertically, the width of the PM DRAIN-TEC 400 ECOnopp® dimpled membrane must be adjusted to the sealing 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. At corners, it is recommended to fold the membrane along the edge line 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 earth pressure 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 gravel. After backfilling, simply cut off the membrane at the top edge of the soil.

Horizontal installation
The surface to be drained should have a gradient of at least 2 %. Proceed as follows: Roll out the PM DRAIN-TEC 400 ECOnopp® on the sealed surface with the geotextile facing upwards. Ensure that the individual membranes overlap while lifting the geotextile accordingly. With rising building elements, the drainage membrane should be raised at least 15 cm or to the upper edge of the filling. If the laid membranes have to be extended, the connecting membrane is pushed under at least 20 cm from below. With earth-covered ceilings, the laid drainage membrane can be moved directly with a wheelbarrow; with projecting ground filling of at least 20 cm, this can also be achieved with wheel loaders.

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

PMI-Plast GmbH | Gewerbegebiet Hülsdonk-Nord | Bullermannshof 10 | 47441 Moers
Telephone: 0049 (0) 2841 880 69-0 | info@pmi-plast.de | www.pmi-plast.de