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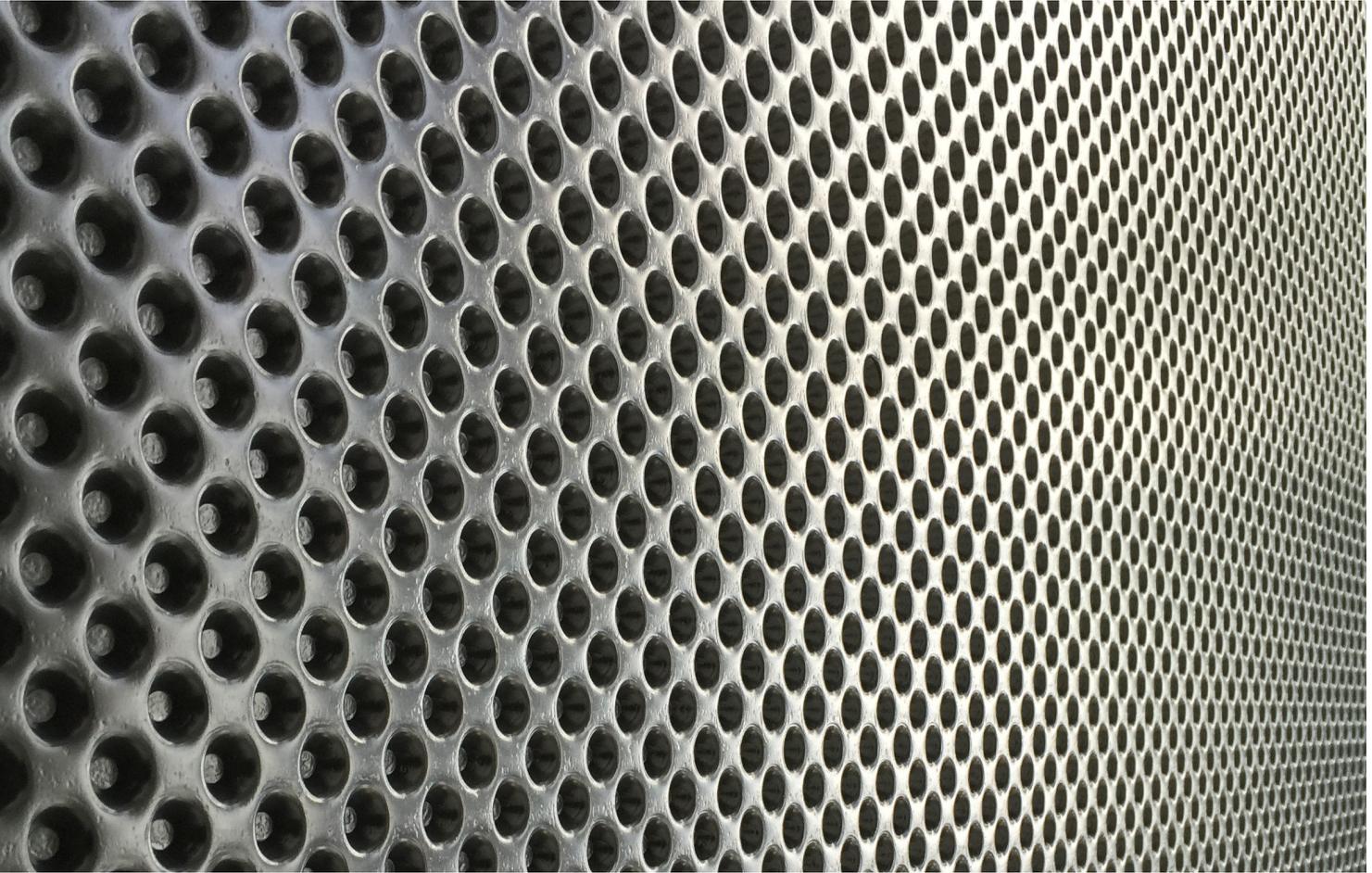


PDM 400; 500; 600 BLACK

PDM 400 BLACK

Flexible plastic HDPE sheets for waterproofing





WELCOME

Geomembrane is a waterproof membrane that solves effectively problems with humidity and increases life comfort in the building. Its strong and flexible dimples resist against the mechanical impacts caused by the back filling of the ground avoiding any kind of damage on the surface of the waterproofing layer. The air gap created by the dimples of Geomembrane between the ground and building parts like basement walls or floors is ideal for all kinds of drainage.

The dimples of Geomembrane resist against compressions even higher than 180kNm^2 keeping continuously an air gap of $5,3\text{l/m}^2$ between the walls or floors of the building and itself. This space is big enough for the drainage of the rain or ground water, as well as for the evaporation of humidity if supported with a suitable system of ventilation.

You can find the Geomembrane PDM in two colours black and brown.

TECHNICAL DATA SHEET



**FLEXIBLE PLASTIC HDPE SHEETS FOR WATERPROOFING TYPE V
ACCORDING TO EN 13967**

COMMERCIAL NAME: PDM 400 BLACK

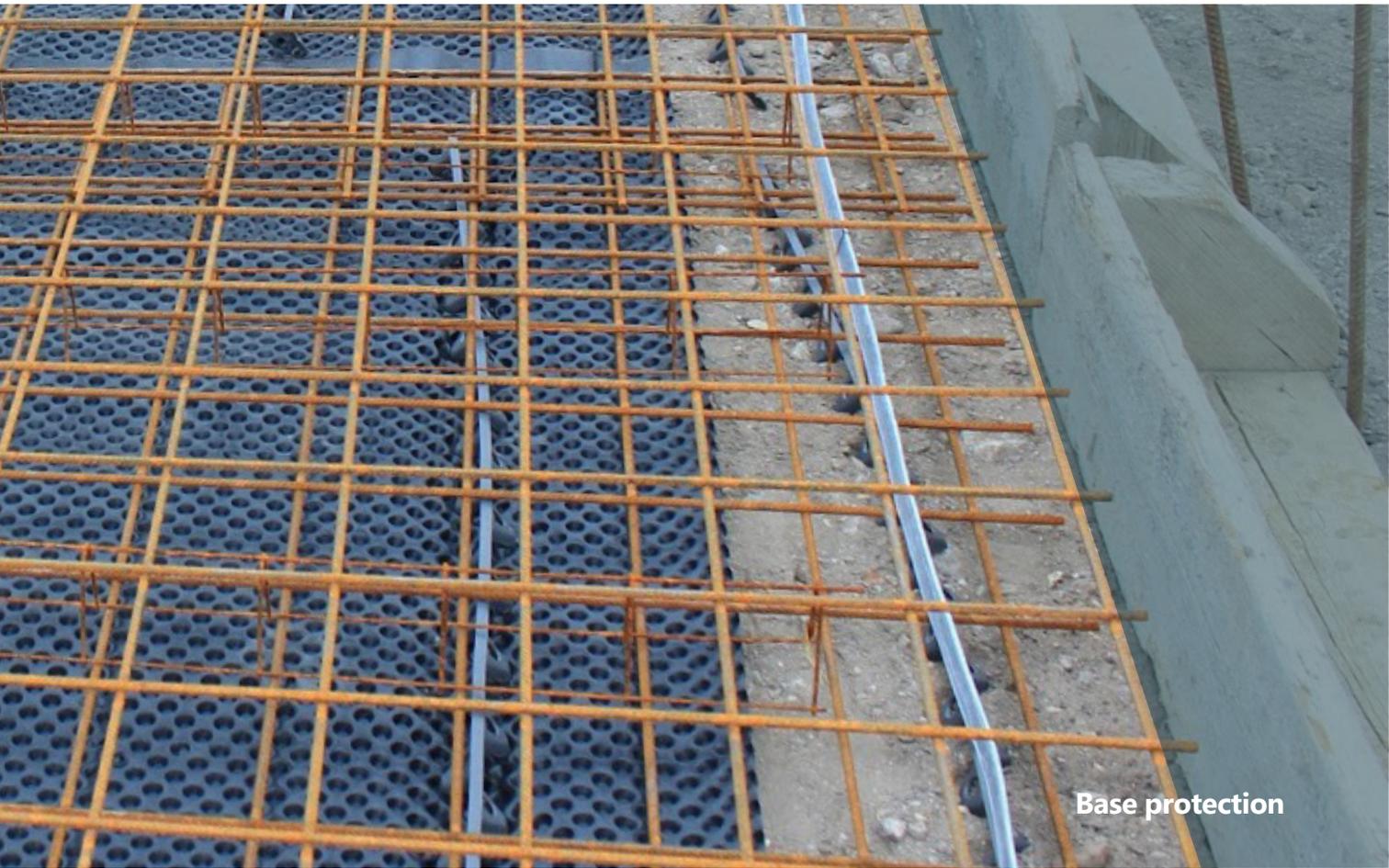
CHARACTERISTIC	TEST METHOD	UNIT	PERFORMANCE
Length	EN 1848-2	m	20 ± 5%
Width	EN 1848-2	m	±10%
Thickness	EN 1849-2	mm	0,35 ± 15%
Mass	EN 1849-2	g/m ³	400 ± 5%
Visible defects	EN 1850-2	Visible defects	No visible defects
Water tightness to liquid water	EN 1928	Pass	Pass
Resistance to static loading	EN 12730	kg	≥ 20kg
Impact test	EN 12691	mm	NPD
Tensile properties: - Maximum tensile force - Elongation	EN 12311-2	N/50 %	≥ 75 md ≥ 80 cmd ≥ 30 md ≥ 40 cmd
Durability of watertightness against artificial ageing	EN 1296 and EN 1928	-	NPD
Durability of watertightness exposure to chemicals	EN 1296 and EN 1928	-	NPD
Resistance to tear (nail shank)	EN 12310-1	N	≥ 250 md ≥ 250 cmd
Bitumen compatibility	EN 1548 and EN 1928	Pass	N.A.
Joint strength	EN 12317-2	N/50	N.A.
Resistance to deformation under load	Annex B EN 13967 or EN 25619	kN/m ²	≥ 155
Reaction to fire	Classes in accordance with EN 13501-5		NPD
Dangerous substances	According to national regulations	-	-



APPLICATION OF THE PRODUCT

Geomembrane is easy for installation independently from the atmospheric conditions. It is not a heavy material and its very suitable for transportation and transfer.

Its used as bedpan concrete, saves a significant assets, and it shortens the process of construction.



Base protection

WHERE IS GEOMEMBRANE USED

Protection of basement walls and foundations

The underground parts of buildings must be protected against damp and ground water and this is necessary for a comfortable and also safety reasons. When rust affects the reinforcement of the concrete the structure system is also damaged and this can be dangerous for the stability of the building especially in critical situations like earthquakes. Therefore, foundations and basements have to be waterproofed. Moreover, the

waterproofing materials are very sensitive. If not properly protected, they are under the risk of being damaged during the back-filling of the building site. Geomembrane's tough but flexible body absorbs mechanical impacts of ground parts like stones and gravel and prevents any such damage on the waterproofing layer even if they might hit the wall. During the life-time of the building Geomembrane continues to protect the underground walls also against the attacks of roots and most chemicals which might be harmful for underground building parts.

Internal repair of wall damages caused by damp and humidity

If basements are not correctly waterproofed from outside, the walls get mouldy and the damage of the humidity cannot be repaired by repainting or plastering from inside. If geomembrane is applied together with a new layer of plaster or gypsum board, the final surface of the wall remains clean and smooth.

Internal repair of floor damages caused by damp and humidity

Mould is a problem also for ground slabs. If no waterproofing is made during the construction period, damages and deformations appear on finishing layers of ground slabs caused by humidity.

Geomembrane is the ideal material for the internal damp-proofing of floors, because it can resist not only against humidity but also against vertical loads, as Geomembrane's 8mm high dimples do not squash down. So, a continuous air gap is provided between the existing and the new floor, which can be also ventilated at wall flashings.

Protection from ground slabs against humidity coming from the ground

Even if concrete slabs for open areas are coated with materials like asphalt, they have to be protected against the humidity coming from the ground. The damp-proofing layer must be also resistant against impacts, compression and tearing otherwise it can easily be damaged during the construction works for the application of the ground slab.



Flat roof protection



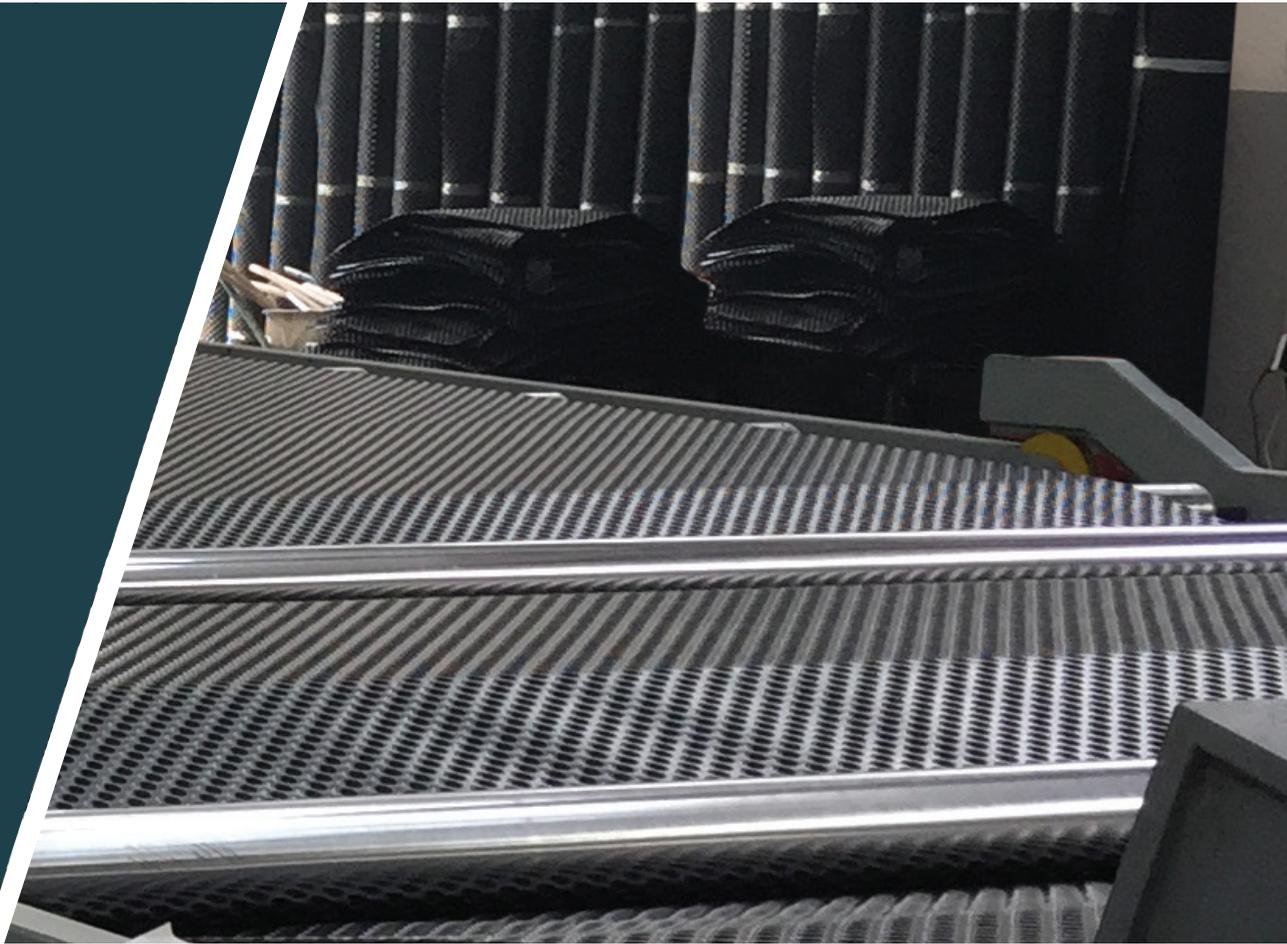
Side protection



ENVIRONMENTAL RESPONSIBILITY

Geomembrane is made of HDPE for whom we know that 85% of its contents can be recycled.

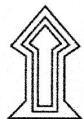
Chemically is inert, so there is no product or compounds that can activate it and make any reactions.



BENEFITS OF THE GEOMEMBRANE

After it's set, the Geomembrane provides:

- Mechanical protection of the waterproofing material;
- Humidity protection of the construction;
- Drainage of atmospheric water in the basement walls;
- Provides drying of the moisture from the outside of the construction;
- Improves the sound insulation and the thermos insulation;
- 30 years guarantee of the material under normal conditions;
- It can be put into the construction independently from the atmospheric conditions and after it is set, immediately starts in function.



PRESTOL GRUP
dooel - Gevgelija

Declaration of Performance
EN 13967 2015 0437-CPR-0018/15
(PG – 751 – 101 - 07)

PDM 400 Black

1. Product Type Unique identification code of the product-type:	PDM 400 black PG - 751 – 101-07
2. Type batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):	See lot no.
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:	Flexible plastic HDPE sheets for waterproofing type V according to EN 13967
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):	PDM 400 BLACK Prestol Grup dooel, str.Moinski pat 101, 1480 Gevgelija,Macedonia
5. Contact Address Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):	Not relevant see (see 4.)
6. AVCP System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:	System 2+
7. Notified body (hEN) In case of the declaration of performance concerning a construction product covered by a harmonized standard:	Notified factory production control certification body No.0437 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity of the factory production control.
8. Notified body (ETA) In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:	Not relevant (see 7)



9. Declared performance

Characteristic	Unit	Performance	Test Standard
Water tightness to liquid water	Pass	Pass	EN 1928
Resistance to static loading	kg	≥20kg	EN 12730
Tensile properties:			
- Maximum tensile force	N/50 mm	≥75 md ≥80 cmd	EN 12311-2 EN 12311-2
- Elongation	%	≥30 md ≥40 cmd	
Durability of watertightness against artificial ageing	-	NPD	EN 1296 and EN 1928
Durability of watertightness exposure to chemicals	-	NPD	EN 1296 and EN 1928
Resistance to tear (nail shank)	N	≥250 md ≥250 cmd	EN 12310-1
Joint strength	N/50 mm	N.A.	EN 12317-2
Impact test	-	NPD	EN 12961
Reaction to fire		NPD	Classes in accordance with EN 13501-5
Dangerous substances	See footnote a)	-	According to national regulations

a) In absence of European harmonized test methods, testing and declaration for the release of substances must be obtained in regards of national regulations.

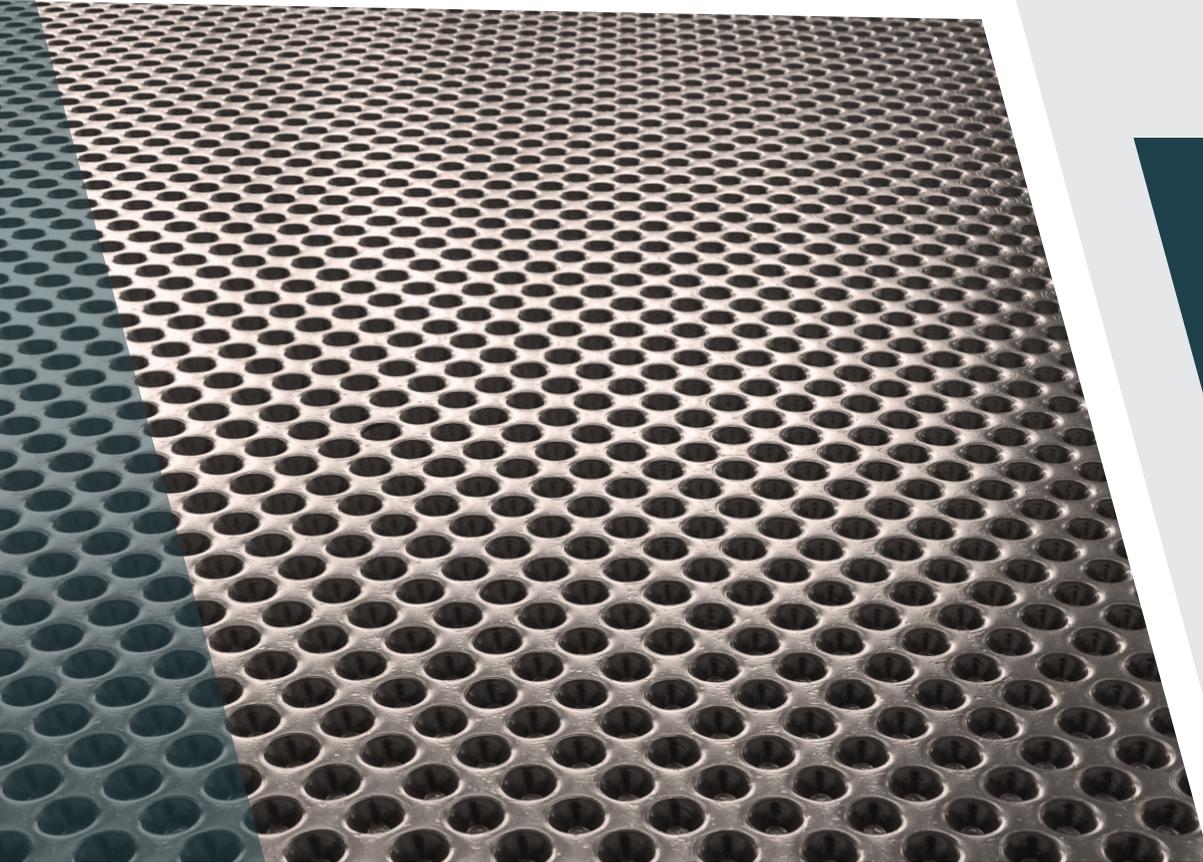
10. Declaration

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer, identified in point 4.

Signed for and on behalf of the manufacturer by:

Pero Kokochev
Managing Director





PRESTOL GRUP Ltd
101 Moinski pat Str., 1480 Gevgelija, MACEDONIA
Phone: +389 34 215 836 | +389 78 238 465
info@prestol.com.mk
www.prestol.com.mk