	Technical information - product	Number	IT.003
		Edited on	08/07/2021
		Revision	11.2
		Hydroinsulation	

Three-layer water insulation membrane AlphaProPlus

1. **Technical specification:** PN-EN 13967:2012 Flexible sheets for waterproofing. Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet. Definitions and characteristics.
2. **Manufacturer/production site:** Alpha Dam Sp. z o.o., 87-208 Dębowa łąka 45
3. **Product description:** A three-layer membrane, including a polyethylene core, laminated on a single side with non-woven polypropylene. Thanks to the use of the **AlphaProPlus** technology, the membrane is extremely resistant, while also light and the external coating provides excellent binding to concrete.
4. **Intended use and the scope of application:**

The product is used in structures of walls or on floors, or under floors / under panels placed in the ground in order to protect against water exerting hydrostatic pressure, penetrating inside from the ground or from one part of the structure to another.

5. **Application method:**

- 5.1. Horizontally, on substrate concrete or on a substrate made e.g. of compacted sand
- 5.2. Vertically, e.g. in formwork before concrete pouring, application directly onto walls or thermally insulating panels.

6. **Information for the user:**

6.1. **Application conditions:**

The **AlphaProPlus** membrane should be applied under conditions allowing standard masonry works, do not apply at temperatures below -5°C. Prevent damage to the membrane during reinforcement works. The substrate for the membrane should not be deformable, should be compact, smooth, clean and uniform, without sharp edges and holes or protruding aggregate pieces. Special care should be taken during reinforcement and formwork works in order not to damage the hydroinsulating membrane.

6.2. **Conditions of use:**


Water protection using the **AlphaProPlus** membrane should be provided according to a technical project prepared according to the effective construction regulations.

6.3. **Joining:**

Edges of the membrane should be mechanically affixed to the formwork using a tacker, before gluing or thermal welding or affixed in a glued system to a prepared concrete structure, using adequately selected glue, e.g. Styrbit. Consult the manufacturer if a different glue is used. In all membrane installation methods, use a min. 6 cm wide overlap between membrane strips.

6.4. **Concrete mix and concrete:**

The mix should be applied directly onto the ready hydroinsulation system. The mix should display consistency enabling thorough soaking and penetration of the cement mixture into the structure of the non-woven polypropylene in order to achieve the correct binding of insulation and concrete.

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Correct application, compaction and care of concrete are important. The structure of the insulated element should display an adequate degree and type of reinforcement, such that it is water-tight and resistant to cracking. Remove any contamination from the hydroinsulation membrane before pouring out the concrete foundation slab, e.g. by washing using water under pressure (remove stagnant water afterwards) or using compressed air.

6.5. Storage:

AlphaProPlus should be stored at the construction site before use, in the original packaging, protected against sunlight.

7. Warranty

The warranty includes water tightness of the product for 10 years from the purchase date.

The conditions of warranty application include:

1. Use of the product according to the Technical Information about the product.
2. Product storage according to the Technical Information about the product.
3. The instructions provided above base on the current state of the knowledge, experience and study results. The instructions do not result in legal responsibility and do not exempt the contractor from responsibility for the performed work and the need to observe the conditions present at the construction site. During work, the relevant standards and generally accepted rules of construction art should be observed, together with conditions at the construction site.
4. Documentation of the purchase according to the purchase invoice and the product ID.

8. Information about the CE mark:

According to the requirements resulting from the PN-EN 13967:2012 standards




Number of the Certificate of Compliance of the Site Production Control is no. **1434-CPR-0257**

The use of the CE mark is subjected to supervision of the Site Production Control by Polskie Centrum Badań i Certyfikacji S.A., Testing and Certification Division in Gdańsk, notified body no. 1434.

9. Product specification:

Main characteristics	Unit	Functional properties
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Visible faults	-	none
Length	m	25 (0% to +5%)
Width	m	1,500 (0% to 1%)
Linearity	mm	< 30/10 m
Thickness	mm	1,300 (±5%)
Specific weight	kg/m ²	1,150 (±5%)
Water tightness	400 kPa, method B	Water-tight
Resistance to static loads	kg, method B	≥ 20
Mechanical properties during stretching	Method A	
Maximum force		
- Longitudinal direction	N/50 mm	≥ 450
- Transversal direction	N/50 mm	≥ 350
Elongation		
- Longitudinal elongation	%	≥ 350
- Transverse elongation	%	≥ 350
Durability after artificial ageing	60 kPa, method B	Water-tight
Durability after contact with bases	60 kPa, method B	Water-tight
Resistance to nail tearing		
- Longitudinal direction	N	≥ 270
- Transversal direction	N	≥ 300
Impact resistance	mm, method A	≥ 450
Shearing resistance of the joint		
- Longitudinal overlap	N/50 mm	≥ 150
- Transversal overlap		≥ 130
Joint water-tightness using APP 40H	60 kPa, method B	Water-tight
Joint water-tightness using a thermal weld	60 kPa, method B	Water-tight
Bending resistance at low temperatures	°C	≤ -30
Radon permeability		
Transmittance	m/s	$3,81 \times 10^{-2} \pm 5,71 \times 10^{-9}$
Resistance	s/m	$2,63 \times 10^7 \pm 3,94 \times 10^6$
Permeability	m ² /s	$4,57 \times 10^{-11} \pm 6,85 \times 10^{-12}$
Resistance to artificial ageing through long-term influence of elevated temperature	24 weeks 70°C	No visible faults
Adhesion to concrete after 28 days	MPa	1,09
Resistance to lateral water migration	-	up to 5 bar
Fire reaction	Class	E
Hazardous substances	-	NPD

Signed on behalf of the manufacturer:

(Majek Iwona)

Iwona Majek – Representative

Dębowa Łąka, 8th July 2021