

## Protan InfraPlan P20


**Product Description:**

Protan InfraPlan is a homogenous, flexible waterproofing membrane made of plasticised PVC, with a light-coloured signal layer on the top surface.

**Application Areas:**

Protan InfraPlan is designed for functionality and versatility and can be used for waterproofing of tunnels, underground constructions and also for the horizontal and vertical sealing of foundations basements and terraces.

**Characteristics / Benefits:**

- Complies with EN 13967 and EN 13491 and meets all standard requirements.
- Certified according to the Norwegian handbook N500 and R510.
- Homogenous material with a signal layer on the top surface.
- Not compatible with bitumen and must be protected against UV.
- The membrane is welded together using hot air which provides a homogenous joint.
- The membrane can be recycled and has a low carbon footprint.

**Product properties**

Characteristic	Typical value	Unit	Test method
Thickness, total	2.00 (±5%)	mm	EN 1849-2
Thickness, signal layer	0.20mm (-0.05/+0.3mm)	mm	EN 1849-2
Visible defects	Pass		EN 1850-2
Straightness and flatness	Pass		EN 1848-2
Tensile strength L/T	≥ 1600 /1400	N/50 mm	EN 12311-2 (A)
Elongation L/T	≥ 250/250	%	EN 12311-2 (A)
Tensile strength L/T	≥ 20/17 (avg: ≥ 18)	N/mm <sup>2</sup>	EN 12311-2 (B)
Elongation L/T	≥ 300/300	%	EN 12311-2 (B)
Modulus of elasticity L/T	< 20/20	N/mm <sup>2</sup>	EN 12311-2 (B)
Resistance to tearing L/T	87/65	N	ISO 34-1
Resistance to tearing L/T	360/340	N	EN 12310-2
Thermal expansion	1.1 x 10 <sup>-4</sup>	m/m/°C	ASTM D696
Foldability low temperature	-30	°C	EN 495-5
Resistance to static puncture	4.8	kN	EN ISO 12236
Resistance to impact	≥ 1250	mm	EN 12691
Joint shear resistance	≥ 1100	N/50 mm	EN 12317-2
Joint peel resistance	≥ 250	N/50 mm	EN 12316-2
Water tightness	Pass		EN 1928
Water permeability	< 1 x 10 <sup>-7</sup>	m <sup>3</sup> /m <sup>2</sup> d	EN 14150
Resistance to weathering	≤ 10	%	EN 12224
Resistance to oxidation	≤ 20	%	EN 14575
Chemical resistance, acid	≤ 10	%	EN 14414 (A)

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Chemical resistance, alkaline	≤ 10	%	EN 14414 (A)
Hot water storage (85°C, 90 days)	< 15	%	EN 14575
Resistance to microorganisms	≤ 10	%	EN 12225
Resistance to root penetration	No root penetration		CEN/TS 14416
Reaction to fire	Class E		EN 13501-1

### Dimensions / packaging

<b>Width:</b>	2.15 m (-0.5% / +1%)		
<b>Length:</b>	According to order		
<b>Roll weight:</b>	According to order		
<b>Pallet:</b>	According to order		
<b>Thickness:</b>	2.0 mm		
<b>Colours:</b>	Topside: Light colours	Backside: Black	
	Available in different light colours		

### Health, Environment & Safety

There is no requirement for a material safety data sheet according to EC-regulation 1907/2006, article 31. The product does not harm the environment when used as specified.

### Environment

Protan InfraPlan contains no substances which are listed on REACH/ ECHA's (European Chemicals Agency) candidate list. The membrane contains no priority environmental pollutants or other relevant substances in quantities considered to be hazardous to health and the environment.

### Storage

The membrane should be kept dry with the rolls placed on pallets and protected on site with tarpaulins or similar.

### Approvals:

Certified according to the Norwegian handbook N500 and R510.



#### Protan Legal Notice

The details provided in this document, especially the recommended application and utilisation for the products and their system accessories, are based on Protan's current knowledge and experience of the products when properly stored, handled and installed under normal conditions according to Protan's recommendations. A warranty in respect of merchantability or of fitness for a particular utilisation, nor any liability arising out of any legal relationship whatsoever, cannot be inferred either from this information, or from any written or verbal recommendations, due to the differences in materials, substrates and actual site conditions in practice. The user of the product is responsible for the product's suitability for the intended application. Protan reserves the right to change product specifications without notice. Additionally, Protan's current sales and delivery terms are valid and applicable for all orders.

It is necessary for the user to always refer to the latest version of the relevant Product Data Sheet, which can be requested directly from Protan. All information provided, as well as technical and drawing data, complies with current technical standards and is based on Protan's knowledge and experience. In addition, national standards and regulations must be observed where appropriate.

