

Technical Data Sheet

RENOLIT ALKORPLAN Pro C – Fully bonded membrane

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Mint green PVC-P geomembrane for all concrete constructions below ground level.

DESCRIPTION

The **RENOLIT ALKORPLAN Pro C** is a mint green geomembrane made out of a highly flexible PVC film heat-coupled to a non-woven polypropylene fleece.

It provides an effective barrier against the three types of groundwater inflows (capillary humidity rise, hydrostatic groundwater pressure, soil infiltration water) and ground gases such as Radon.

The product contains a high amount of recycled pre-consumer material.

APPLICATIONS

The **RENOLIT ALKORPLAN Pro C** membrane is suitable for waterproofing foundations, basements, tunnels, underground parking lots and all other concrete constructions in contact with the ground. It can be used in saline, acidic or alkaline environments due to its chemical resistance.

The **RENOLIT ALKORPLAN Pro C** membrane is used in pre-application, its geotextile facing the concrete to be poured.

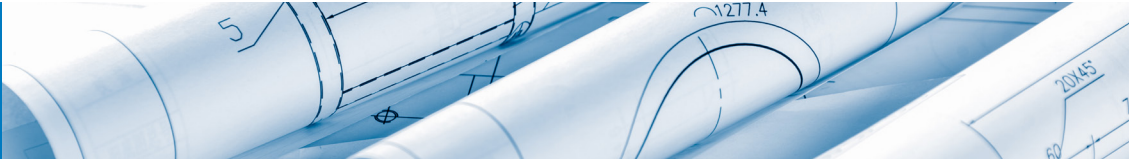
REGULATIONS & STANDARDS

- CE Marking EN 13967 and EN 13491.
- DIN 18195 Standard – new DIN 18533.
- DIN SPEC 20000-202 approved.
- Avis technique CSTB (on going).

STORAGE & HANDLING

The **RENOLIT ALKORPLAN Pro C** membrane has to be stored under dry conditions, and protected from severe weather conditions and direct sunlight. The storage temperature should be between +5°C and +30°C.

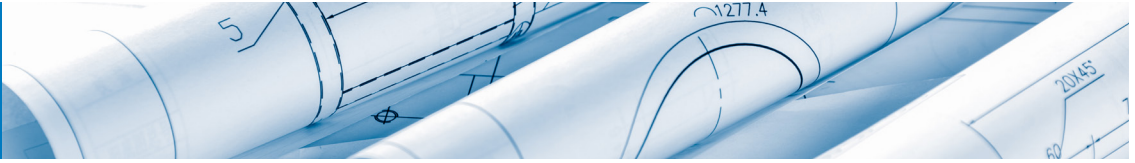
Description	Packaging
RENOLIT ALKORPLAN Pro C 1.2 mm Mint green PVC membrane. Width of free edge for welding = 50 mm	Width 1.08 m Length 20 m 18 rolls/pallet
RENOLIT ALKORPLAN Pro C 1.2 mm Mint green PVC membrane. Width of free edge for welding = 100 mm	Width 2.16 m Length 25 m 9 rolls/pallet



PRODUCT PROPERTIES

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Properties	Test standard	Units	Performance
Thickness -PVC-P -Geocomposite	EN 1848-2	mm	1.2 (+5%/-5%) 1.2 + 0.6 (+10%/-5%)
Surface Mass Geocomposite	EN 1849-2	kg/m ²	1.564 (+10%/-5%)
Straightness	EN 1848-2	mm/10m	≤75
Colour	-	-	Translucent
Resistance to water pressure -24h/60kPa -72h/1000kPa	EN 1928	-	Watertight Watertight
Resistance to static load	EN 12730	kg	≥20
Tensile properties -Tensile strength -Elongation at break	EN 12311-2 (A) EN ISO 527/3	N/ 50mm %	≥600 ≥200
Durability against artificial aging 84d/(70°C)	EN 1296 EN 1928 (B) 24h/1000kPa	-	Watertight
Durability against chemicals Storage in solution 28d/23°C -Alkaline Ca(OH) ₂ -Acid H ₂ SO ₃ -Brine NaCl	EN 1847 EN 1928 (B) 24h/1000kPa	-	Watertight Watertight Watertight
Compatibility with bitumen 28d/70°C	EN 1548 EN 1928 (B) 72h/500kPa	-	Watertight
Resistance to impact	EN 12691 Method A Method B	mm mm	≥500 ≥2000
Tear resistance (nail)	EN 12310-1	N	≥500
Reaction to fire	EN 13501-1	-	Class E
Shear resistance of the welded seam (automatic welding machine)	EN 12317-2	N/50mm	≥600 breaks outside the welded joints
Resistance to static puncture	EN ISO 12236	kN	≥2,0
Permeability to liquids	EN 14150	m ³ /(m ² ·d)	≤10 ⁻⁶
Resistance to oxidation (90d/85°C) -Residual tensile strength at break -Residual elongation at break	EN 14575 EN ISO 527/3	% %	>85 >85



CONCRETE BONDING PROPERTIES

Properties	Test standard	Units	Performance
Crack bridging ability crack 3.2mm	ASTM D5385 (modified) 28d/690Kpa	-	Watertight
Resistance against lateral water flow hole Ø 23.5mm concrete(*) min. C20/25	EN 12390-8 (modified) 7d/500kPa	-	Watertight
Concrete adhesion property After 7d at 23°C After 28d at 23°C After 28d at 50°C	EN 1348	N/mm ²	0.515 0.626 0.679

INSTALLATION

In post-applied installation, the membrane will be placed with the PP fleece facing the hardened concrete and fixed with nails at the edges. The **RENOLIT ALKORPLAN Pro C** membranes can be sealed together very easily by mastic glue **RENOLIT CEM805**, by thermal welding or by using butyl tape **RENOLIT ALKORPLAN Pro BAND**. The backfilling will be sized to exert a minimum pressure of 150 kg/m² on the membrane.



Sealing by mastic glue **RENOLIT CEM 805**.



Thermal welding.



Sealing by butyl tape **RENOLIT ALKORPLAN Pro BAND**.

These data are statistic figures according to Harmonized European Standards. This document cancels and replaces any other document previously published. In order to improve his products, the manufacturer reserves the right to change them without prior notice.