

# **RENOLIT** ALKORTEC





# **RENOLIT ALKORTEC:** the high-quality synthetic waterproofing membrane

**RENOLIT** ALKORTEC is a high-quality synthetic waterproofing membrane based on EVA/EBA. In addition to the advantages it offers as a single-layer synthetic waterproofing membrane, **RENOLIT** ALKORTEC has a number of product-specific characteristics:

## Cost-effectiveness

- Savings in the installation costs: one single 30 m<sup>2</sup> roll replaces 6 bituminous rolls in a 2 layer system.
- Savings in structure: the waterproofing is more than 5 times lighter than the so-called "traditional" multilayer (bituminous) solutions
- Quick and easy installation by means of hot air
- Can be used with standard unplasticized PVC roof accessories (outlets, rooflights, pipes, ...)

# Durability

- 25 years of expertise with EVA/EBA based roofing membranes
- Possibility of extended product warranties

## Fire resistance

- Good fire resistance performance
- No naked flame during installation
- Self-extinguishing waterproofing membrane

# Physical properties

- High chemical resistance
- Bitumen-resistant
- Resistant to root penetration (EN 13948)
- Good dynamic and static perforation resistance
- Vapour permeable

## Aesthetic

- Homogeneous weld seams
- Smooth appearance without folds on all kinds of roof shapes

# Environment-friendly

- •Low environmental impact
  (NFP 01-010: 0.17 kg equivalent CO2/m²/year)
- The **RENOLIT** ALKORTEC range is part of the ROOFCOLLECT® program
- Recyclable

## General

- Production in an ISO 9001 certified company
- Complies with the European Building Regulations via CE marking



BMW (Germany)



Airport (Germany)



Porsche (Germany)



## The quarantee of quality

All our waterproofing membranes and roofing systems are thoroughly tested internally and externally for usability and durability. By combining the results of these tests with a level of know-how that has been developed for over 40 years, we can offer our customers high-quality and high-tech products.

All the products in the **RENOLIT** ALKORTEC range which are sold and installed according to our latest instructions have a 10-year product warranty. Depending on the project, an extension of the warranty to 15 or 20 years is available upon request.

Longer material warranties can also be provided for projects in combination with PV systems. For more details, please contact the technical team of RENOLIT.

## Quality of service

RENOLIT not only supplies high-quality synthetic waterproofing membranes; we also provide you with excellent support. Our highly motivated team works hard every day to provide you with the very best technical and commercial solution tailored to your needs.

Our technical and commercial team is at your service every day to advise and assist you with your particular project. Also, we can provide help with:

- Building physics calculations
- Wind load calculations
- PV and solar projects
- Technical and commercial training
- Specific project monitoring
- The drafting of specifications



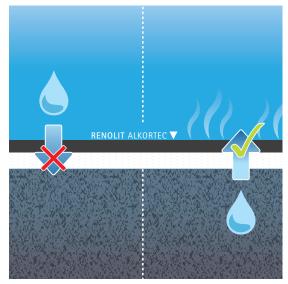
The RENOLIT ALKORTEC roofing membrane is tested for ageing in some of the harshest environments on the planet: in Florida (humid tropical climate) and in Arizona (desert climate).





# Vapour permeability of the RENOLIT ALKORTEC roofing membrane

The RENOLIT ALKORTEC waterproofing membrane is the ideal solution for the refurbishment of an existing roofing membrane. If the defective roofing membrane and the underlying roof structure are not completely compromised by penetrating moisture, the RENOLIT ALKORTEC waterproofing membrane can be installed over the old roofing system, without increasing the risk of condensation. The high vapour permeability of the roofing membrane ensures that any moisture that may be present in the existing roof structure evaporates. This will result in a considerable gain in time and money.



With a  $\mu$  value of 25,000, the  $\mbox{RENOLIT}$  ALKORTEC waterproofing membrane is considered as vapour permeable.

# Bitumen compatible

The complete range of RENOLIT ALKORTEC roofing membranes is bitumen-resistant. When RENOLIT ALKORTEC membranes are installed on an existing bituminous membrane, there is no need to apply a separation layer. The direct contact with the bitumen will not be detrimental to the normal behaviour and service life of the waterproofing membrane. Because the RENOLIT ALKORTEC waterproofing membrane is bitumen-resistant, the polyester fleece-backed RENOLIT ALKORTEC A membrane can be used in a glued system, either with the RENOLIT ALKORPLUS adhesives or with bitumen.



A fleece-backed **RENOLIT** ALKORTEC A membrane is bonded to the roof by means of hot bitumen.



# High chemical resistance

The RENOLIT ALKORTEC roofing membranes are internally plasticised with a high polymer. As a result, they offer excellent chemical resistance and they are resistant to microorganisms. This excellent chemical resistance also ensures that the RENOLIT ALKORTEC roofing membrane

can be installed without a separation layer on polystyrene or polyurethane insulation or on EPDM. Depending on the fire regulations, a flame-retardant layer (glass fleece) may need to be applied.

## **Ecological roofing systems**

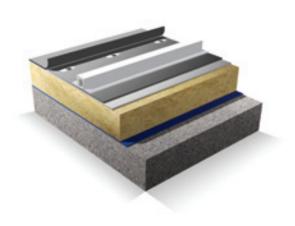
Pending general European regulations, the RENOLIT ALKORTEC roofing membrane is tested for environmental impact ("Démarche haute qualité environmentale"). Document SFEC-FDE&S NO 07-004 is available on request. In addition to conventional roofs, the RENOLIT ALKORTEC range includes ecological roofing systems.



**RENOLIT** ALKORSOLAR - your solar panels are fixed without any perforation of the waterproofing membrane.

Good examples include the green roof system and the RENOLIT ALKORSOLAR system based on EVA/EBA.





# Recyclability

EVA/EBA can be recycled in the production process. This prevents waste of our valuable natural raw materials and helps protect the environment. Old EVA/EBA waterproofing membranes can be collected at the end of their service life and can be recycled into new raw material.

RENOLIT takes its environmental responsibility very seriously and is part of the ROOFCOLLECT® programme for the collection and recycling of roofing membranes.

# Easy, quick and reliable

**RENOLIT** ALKORTEC roofing membranes are quick and easy to install by means of hot air.

In addition to the RENOLIT ALKORTEC roofing membranes, RENOLIT supplies accessories from the RENOLIT ALKORTEC range. Certain accessories from the existing RENOLIT ALKORPLUS range can also be used with the RENOLIT ALKORTEC roofing systems. Prefabricated corners, metal sheets, etc. are available in the RENOLIT ALKORTEC range. RENOLIT ALKORTEC waterproofing membranes can be used with standard unplasticized PVC roof accessories (rooflights, outlets, pipes, etc.)



A selection from the **RENOLIT** ALKORTEC range

# RENOLIT ALKORTEC F – the easy-to-install solution

The RENOLIT ALKORTEC  $F_{35196}$  roofing membrane features a polyester reinforcement and offers some unique advantages in terms of usability.

Firstly, for the mechanical fastening of this roofing membrane, RENOLIT ALKORTEC F requires fewer fasteners than an EVA/EBA membrane without a polyester reinforcement (± 25% fewer fasteners). The reinforcement also offers the advantage that the waterproofing membrane is more mechanically stable (no curling or warping when the waterproofing membrane is hot-air welded). In contrast to fleecebacked waterproofing membranes, there is no need for a junction strip for the sealing of the transverse seams.



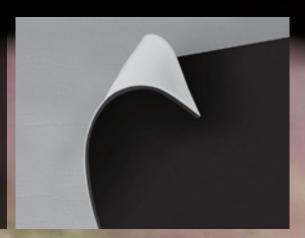
Using a hot-air welding machine

# **RENOLIT ALKORTEC A – the all-round solution**

Depending on the selected roofing system, the **RENOLIT** ALKORTEC A roofing membrane can be mechanically fastened, bonded or loose laid under ballast.

With the **RENOLIT** ALKORTEC A roofing membrane, depending on the wishes of the client or architect, the roofer can offer a range of solutions to waterproof the roof with one single product.

For the waterproofing of transverse seams, junction strips must be applied.



### **INSTALLATION SYSTEMS**

### Bonded:

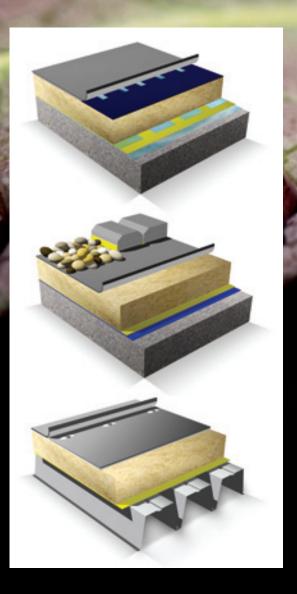
The polyester-fleece backing of the roofing membrane ensures that it can be perfectly bonded to many types of substrates.

#### Ballasted:

Because the **RENOLIT** ALKORTEC A roofing membrane is resistant to root penetration, a ballasted roofing system can be used for traditional ballast, paving slabs on support pads, large roof gardens, etc. The polyester fleece offers an additional protection when the roofing membrane is installed on an uneven substrate.

## Mechanically fastened:

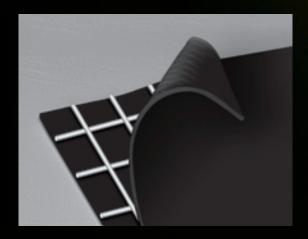
Taking into account lower pull-out values than those of our RENOLIT ALKORTEC F roofing membrane, the RENOLIT ALKORTEC A membrane can also be fixed by means of mechanical fasteners.



# **RENOLIT** ALKORTEC F – Excellent mechanical properties

For over 40 years, our company has been a major player in the flat roof market. Especially in the market for industrial roofs, mechanically fastened systems are the most commonly used. The highest nail tear resistance is achieved by synthetic waterproofing membranes with polyester reinforcement.

Fast and reliable installation is the key to this general market development. The **RENOLIT** ALKORTEC F roofing membrane is the ideal solution for roofs requiring a high-quality mechanically fastened waterproofing system.



#### **INSTALLATION SYSTEMS**

## Mechanically fastened:

The **RENOLIT** ALKORTEC F roofing membrane has a polyester reinforcement and is ideal for use with a mechanically fastened system. Furthermore, this waterproofing membrane can be installed quickly and easily to produce a smooth roof surface.

For the fastening of solar panels on existing or new EVA/EBA roofs, the RENOLIT ALKORSOLAR system, with its special EVA/EBA formulation, is the ideal solution. This ultra-light fastening system ensures that the solar panels can be secured by means of mechanical fasteners but without perforating the roofing membrane.

### Ballast:

Because the **RENOLIT** ALKORTEC F waterproofing membrane is resistant to root penetration, a ballasted roofing system can be used for traditional ballast, paving slabs on support pads, extensive roof gardens, etc.



# **RENOLIT** ALKORTEC – the high-quality EVA/EBA synthetic waterproofing membrane

# **RENOLIT** - the synthetic roof specialists

RENOLIT ALKORTEC waterproofing membranes offer customers a high-quality solution for the waterproofing of flat roofs. RENOLIT has more than 25 years of experience with waterproofing membranes based on EVA/EBA. In fact, we have been in the flat roof market for over 40 years. With our wide range of roof products and systems based on TPO, PVC and EVA/EBA, we can say without fear of contradiction that we are the synthetic roof specialists.

**RENOLIT** ALKORPLAN:

Synthetic waterproofing membranes based on PVC-P.

**RENOLIT ALKORTEC:** 

Synthetic waterproofing membranes based on EVA/EBA.

**RENOLIT** ALKORTOP:

Synthetic waterproofing membranes based on TPO.



# RENOLIT ALKORTEC the EVA/EBA waterproofing membrane

## RENOLIT ALKORTEC F 35196

Thermoplastic flexible synthetic waterproofing membrane based on EVA/EBA with a woven polyester reinforcing.

RENOLIT ALKORTEC A 35198

Thermoplastic flexible synthetic waterproofing membrane based on EVA/EBA, with a 200 g/m<sup>2</sup> polyester fleece.

Fire-resistance  $B_{ROOF}$  (t1) according to ENV 1187\*. The RENOLIT ALKORTEC products are produced in an ISO 9001-certified company and have a CE marking: BCCA 0749, BC2-320-0295-0100-01.

\* Certificates available upon request

Physical properties (EN13956)	Testing methods	Unit	RENOLIT ALKORTEC A 35198	RENOLIT ALKORTEC F 35196
Effective thickness of the membrane	EN 1849-2	mm	1,2 / 1,5	1,2/1,5
Tensile strength (longitudinal and transverse)	EN 12311-2	N/50mm	≥ 650	≥1000
Elongation at break	EN 12311-2	%	≥ 40	≥ 15
Dynamic resistance to impact	EN 12691	mm	≥ 300	≥ 300
Resistance to static perforation	EN 12730	kg	≥ 20	≥ 20
Tear strength	EN 12310-2	N	≥ 150	≥ 180
Resistance to root penetration	EN 13948		conforming	conforming
Dimensional stability	EN 1107-2	0/0	≤ 1	≤ 0,3
Cold crack temperature	EN 495-5	°C	≤ - 20	≤ - 20
UV resistance	EN 1297	-	conforming	conforming
Hail resistance	EN 13583	m/s	≥ 17	≥ 17
Lamination strength: peel resistance	EN 12316-2	N/50mm	≥150	≥ 150
shear resistance	EN 12317-2	N/50mm	≥ 500	≥ 800
Vapour diffusion resistance	EN 1931	-	25.000	25.000
Bitumen compatibility	EN 1548	-	conforming	conforming
External fire behaviour	EN 13501-5	Class	B <sub>ROOF</sub> (t1) *	B <sub>ROOF</sub> (t1) *
Reaction to fire	EN 13501-1	Class	Е	Е

## Conditions of delivery

RENOLIT ALKORTEC F is available as standard in the following roll widths: 1.05 m; 1.60 m; 2.10 m

RENOLIT ALKORTEC A is available as standard in the following roll widths: 1.05 m; 1.55 m; 2.05 m



Sunparks (Belgium)

# Storage

Store in a dry place, parallel and in their original packaging. RENOLIT ALKORTEC waterproofing membranes are delivered in rolls. Each delivery may contain up to 10% of short rolls (min. roll length 8 m).



Ewert House, Oxford University (Great Britain)

The information contained in the present commercial literature has been given in good faith and with the intention of providing information. It is based on current knowledge at the time of issue, and may be subject to change without notice. Nothing contained herein may induce the application of our products without observing existing patents, certificates, legal regulations, national or local rules, technical approvals or technical specifications or the rules and practices of good workmanship for this profession. The purchaser should verify whether import, advertising, packaging, labelling, composition, possession, ownership and the use of our products or the commercialisation of them are subject to specific territorial rules. He is also the sole person responsible for informing and advising the final end user. When faced with specific cases or application details not dealt with in the present guidelines, it is important to contact our technical services, who will give advice, based on the information at hand and within the limitations of their field of expertise. Our technical services cannot be held responsible for the conception of, nor the execution of the works. In the case of negligence of rules, regulations and duties on the part of the purchaser we will disclaim all responsibility. The colours respect the UV resistance required by EOTA, but are still subject to the natural change over time. Are excluded from the guarantee: aesthetic considerations in case of partial repair of deficient membrane covered by the quarantee. The product availability differs from country to country, please refer to the RENDLIT technical department for further advice.

# WWW.ALKORPROOF.COM











RENOLIT roofing products and systems have a standard guarantee of 10 years, and are installed by approved contractors and installers who are trained and assessed by RENOLIT. All RENOLIT waterproofing membranes for roofing are part of the ROOFCOLLECT® collection and recycling programme.

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