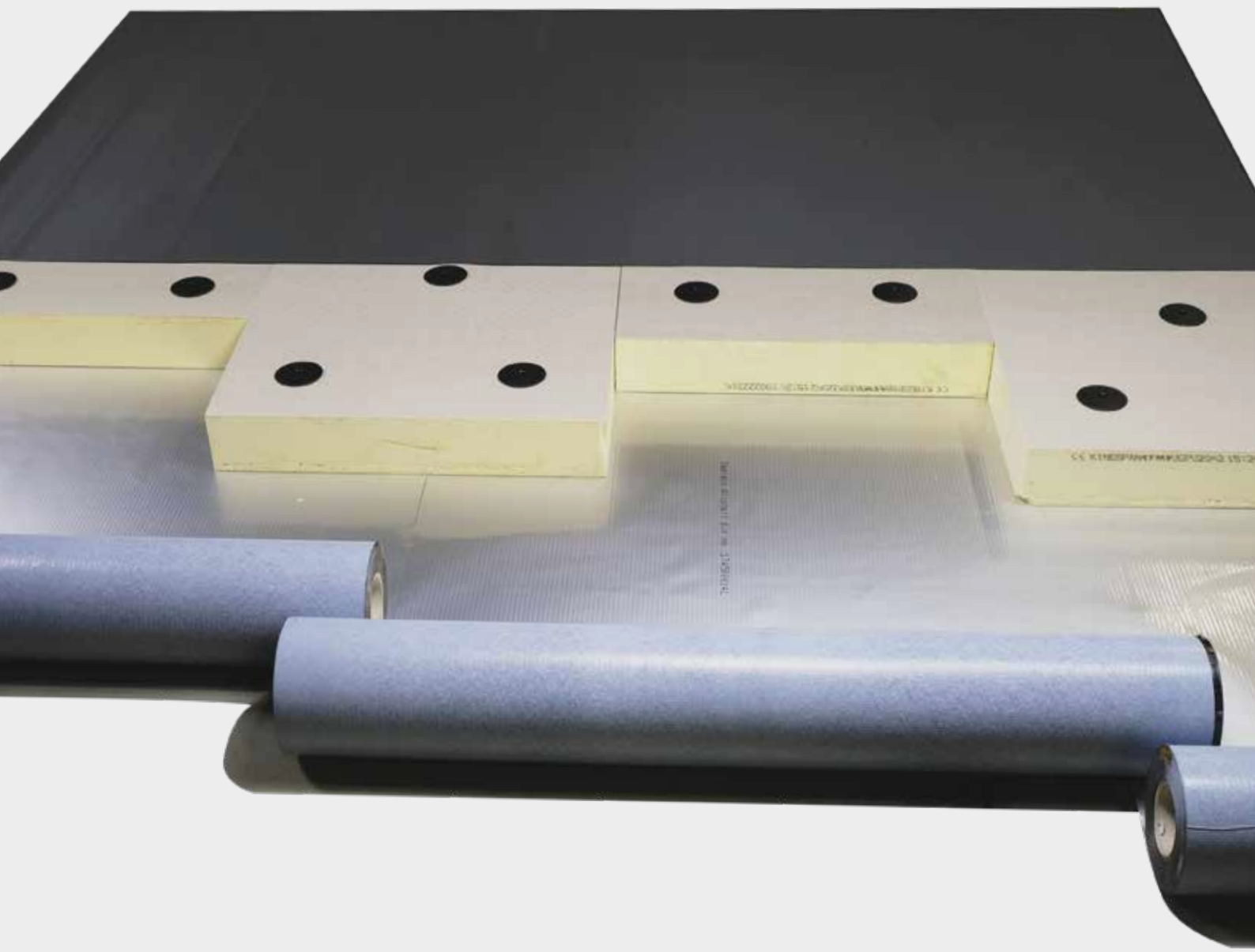
SealEco

AluShell

High Performance, Self-Adhesive Aluminium Vapour Barrier



AluShell is a high-quality self-adhesive vapour barrier composed of a reinforced aluminium foil, a self-adhesive layer of high polymer SBS and a siliconised protective film.
Due to its high resistance to water vapour permeability is used for almost all flat roofs, in combination with most interior climate conditions.

Application

AluShell can apply to most standard substrates, such as profiled metal sheet, wood and concrete. Before installing AluShell, Primer 9800 should be applied to each surface. Seams are made by overlapping 80mm and applying pressure with a roller.

Install a high-quality vapour barrier

The purpose of applying a vapour control layer is to prevent internal condensation. AluShell ensures that the amount of vapour diffusion in the roof build-up is limited or avoided. Due to the high SD value (vapour diffusion resistance), AluShell is suitable for almost all roofs.

It is important to remember that a correct roof build-up contributes to a comfortable and healthy environment. A high-quality vapour barrier is integral to this.

Moisture, in combination with elevated temperatures, can lead to increased vapour pressure. Roofs above bathrooms, swimming pools, social housing, spaces with high moisture production require extra attention. Traditional vapour-repellent layers such as PE films may not always be sufficient. Moist vapour can diffuse through these types of vapour barriers.

Advantages

✔ Fast application
The most significant advantage of AluShell is that it is effortless to apply on almost any surface. Splices can be made by pressing two sheets onto each other.

✔ Solid vapour barrier
The glass fibre reinforcement scrim provides exceptional strength to AluShell, meaning that even on profiled sheeting, it can be walked on without tearing, which substantially reduces the risk of vapour leaks.

✔ High- and immediate tack
The strength of the adhesive layer based on high polymeric SBS bitumen is very high and instantaneous after application, which certainly has advantages in windy conditions.

✔ Cold Adhered System
AluShell is installed without the use of a naked flame or hot air. The self-adhesive layer makes the seam connections watertight and airtight immediately after rolling. The need for a torch to install decent vapour barriers is history.

✔ Temporary waterproofing
After applying AluShell, the roof is protected immediately against all kinds of weather influences. We recommend, however installing the roofing membrane immediately. Alushell is not a waterproofing layer.

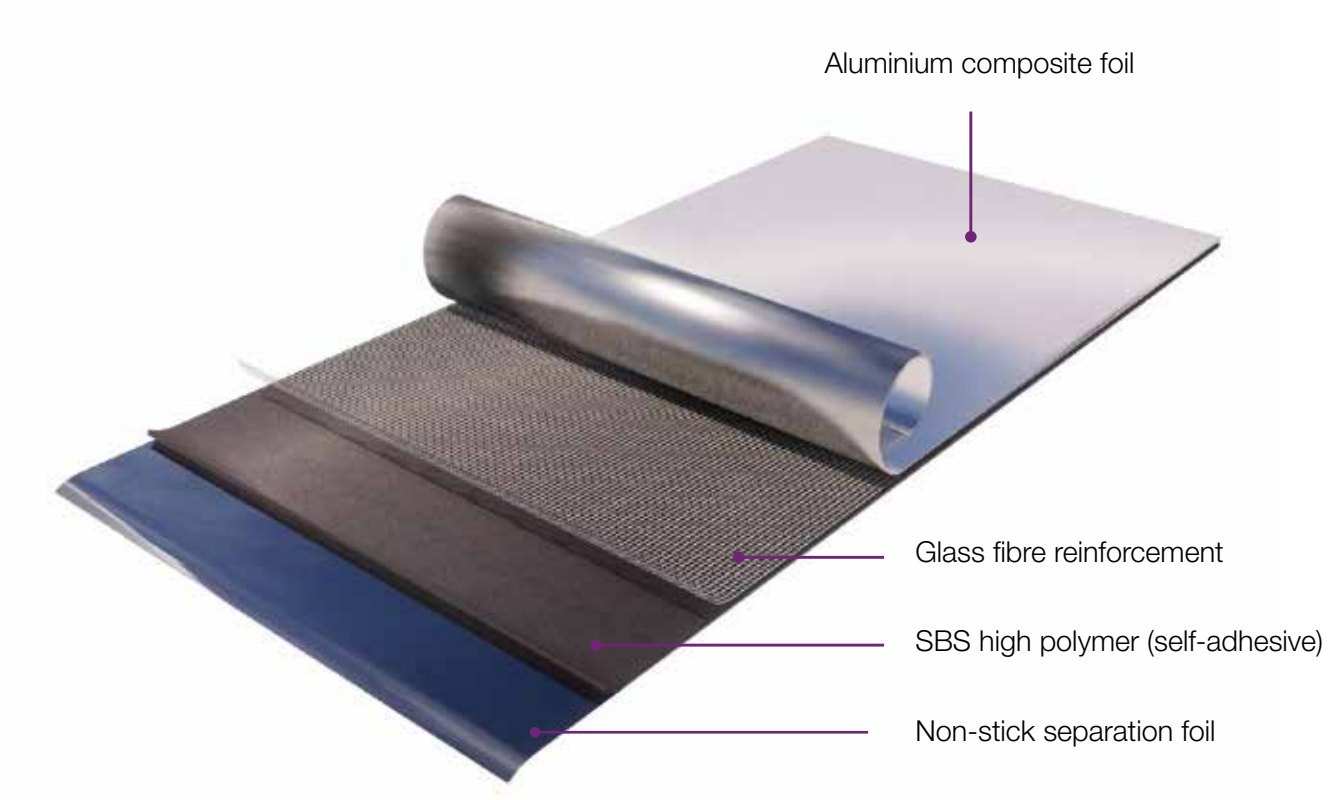
When the dewpoint is reached, these vapours condensate. If insufficient evapouration occurs, moisture accumulates in the structure, which can manifest itself in damp spots and mould formation, however, it can also lead to the collapse of roofs, ceilings, etc. This problem also manifests itself in insufficiently ventilated and heated rooms.

The application of AluShell should always be made on the warm side of the insulation. It prevents warm moist air from migrating to the insulation. It is vital that the installation is carried out correctly and that all openings are made airtight and vapour-tight. If leaks are not sealed, convection occurs, resulting in further condensation.

Cost Saving

The application of AluShell means that the roof deck is water and airtight, thereby preventing condensation in the insulation, allowing it to perform to its maximum efficiency. The smallest amount of moisture in insulation leads to a reduction in its values, which may result in higher energy costs.

The quality of a roof structure and therefore ultimately the entire roof is partly determined by whether or not a high-performance vapour barrier is applied. As buildings are increasingly better insulated and, as far as possible, delivered airtightly, proper moisture regulation is of the utmost importance. In combination with our EPDM roofing membranes, these roofs effortlessly last more than 50 years.



Specifications

		AluShell 0,4	AluShell 0,6
Width	mm	1080	1080
Roll length	m	50	30
Tensile strength (EN 12311-1)	N/50mm	400	800
Elongation at break (EN 12311-1)	%	2.5	2.5
Resistance to impact (EN 12691)	mm	200	300
Tear resistance (EN 12310-1)	N	60	100
Foldability at low temperature (EN 1109)	°C	< -30	< -30
Reaction to Fire (EN 13501-1; EN ISO 11925-2))	Class	E	E
Shear strength of joint (EN 12317-1)	N/ 50mm	> 300	> 300
Water vapour transmission µd (EN1931)	m	> 1500	> 1500
Artificial ageing by long term exposure to elevated temperature. (EN 1296, EN 1931)		pass	pass
Exposure to liquid chemicals (EN 1847, EN 1931)		pass	pass
Dangerous goods		No dangerous substances	No dangerous substances
Shelf life		12 months	12 months
Min. application temperature	°C	>5	>5

SealEco offers innovative protection against various weather influences, thereby increasing the service life of the various constructions and buildings. Also, in the field of ponds, reservoirs and other universal covers, SealEco offers customised solutions (e.g. basins for industrial or agricultural use). We understand and fulfil your needs by offering complete, professional solutions that meet high standards in terms of durability and ecology. As a leading company in our field, we enable you as a customer to provide your client with the best possible solution. With references all over the world, from the cold north to the warm south, with SealEco as your partner, you have access to more than 50 years of experience and knowledge.
For more information, visit **www.sealeco.com**

Certificates

- Date CE Marking: 2018
- Notified body: 1213-SKZ-TeConA and 1508 Testing Institute High
- Harmonised Norm: EN 13970, Flexible sheets for waterproofing - Bitumen water vapour control layers.
- Our operations are conducted according to ISO 9001 and ISO 14000. Products and systems are tested according to applicable standards, supervised by independent laboratories, authorities and certified to local building codes in all the markets where we are active.

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