

PRODUCT BROCHURE

SUPPLIER OF MATERIALS FOR THE
AIRTIGHTNESS OF ENCLOSURE STRUCTURES



GREEN HOUSE WARM LIFE

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ALTARON
ADVANCED MATERIAL INNOVATOR



SUPPLIER OF MATERIALS FOR THE
AIRTIGHTNESS OF ENCLOSURE STRUCTURES

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COMPANY PROFILE

Jiangsu Aotelong New Materials Co., Ltd. was established in 2006, leading professional manufacturer in China, which locates in Shatou Industrial Park, Yangzhou City, near Shanghai port.

We have been qualified by ISO9001 system certification and German Hohenstein OEKO-TEX Standard 100 certification, and have passed the British BBA and EU CE certification.

Our company has five spunbond production lines, four building waterproof breathable membranes and vapor barrier production lines and two printing equipment. Products include nonwoven fabric, composite nonwoven fabric, waterproof breathable membranes, vapor barrier, thermal insulation barrier, meltblown, etc. The annual total output can reach 20,000 tons, and the composite 125,000 square meters.

Advanced production equipment and management team ensure consistent quality of nonwovens, waterproof breathable membrane, vapour barrier and other products. Good customer reputation and thoughtful after-sales service have enabled our company to gain high recognition from customers. Our products are not only sold well throughout the country, but also exported to the United States, Europe, Canada, Southeast Asia, Russia, Japan, Canada and other countries.

BREATHABLE MEMBRANE

Product introduction

ATL Breathable membrane is a multi-layer diffusion membrane—a vapour-permeable material for protection of the thermal insulation of the roofs and walls against atmospheric moisture, condensate (arising from the temperature difference inside and outside the building) and wind influence.

ATL breathable membrane is a three layers membrane. (Thermal laminated by non woven PP + waterproof and vapour permeable membrane + non woven PP). ATL waterproof membrane is a kind of roof deck protection, can protect the construction structure from being eroded by wind and rain and strengthen the gas tightness and water tightness as well as boast good breathability which expels water vapour out of the construction, thus avoiding mould and

condensation.

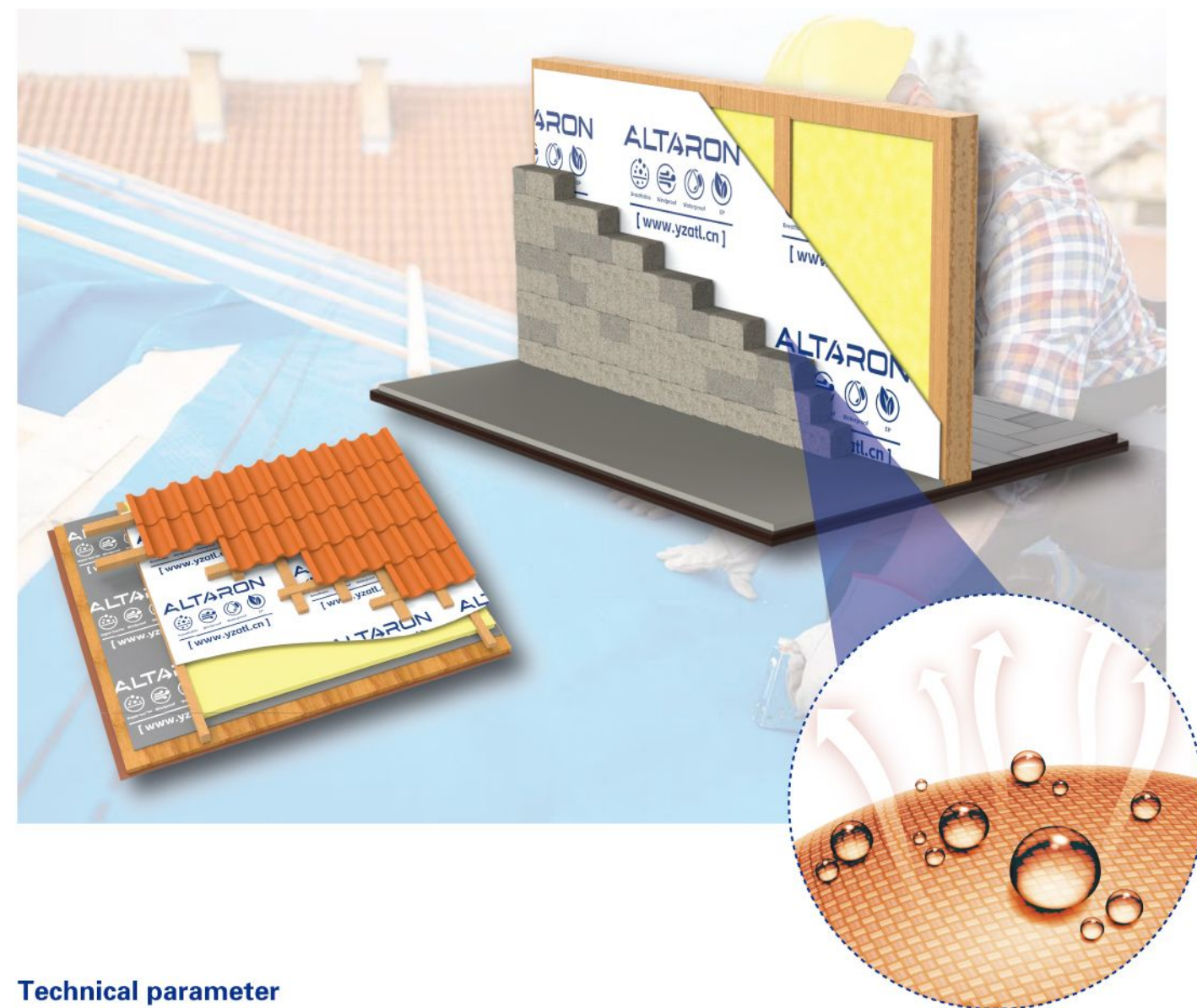
The structure of the diffusion membrane provides both high water-repellent properties and vapour permeability of the material. It is possible to install ATL waterproofing on the roof and heat-insulated walls of the buildings almost under any weather conditions.

Product features

- ◇ ATL three-layer membrane, unlike other similar purpose materials, can be laid directly on top of the insulant, without creating special air gaps.
- ◇ As a result, time, labour and material costs are saved, since there is no need to use the boarding between the thermal insulation and the membrane during installation.
- ◇ The structure of the diffusion membrane provides both high water-repellent properties and vapour permeability of the material.

Technical parameter

Material	Nonwoven fabric and PE film
Weight per unit area	approx. 260 g/m ²
Water penetration resistance	W1
Outdoor weathering	12 weeks
Suitability as temporary covering	3 months
UV resistance	3 months
Dimensions	1.5×50 m (or Custom)
Fire behaviour	Class E



Technical parameter

Sku	Construct	Weight	Tensile strength	Product series				
				Reaction to fire	Water Penetration	Water Penetration after aged	UV	SD
T80	3 layer	80g/m ²	140±40N/100±40N	Class E	Class W1	Class W1	3 month	0.02±0.015
T100	3 layer	100g/m ²	180±50N/110±50N	Class E	Class W1	Class W1	3 month	0.02±0.015
T120	3 layer	120g/m ²	240±50N/150±50N	Class E	Class W1	Class W1	3 month	0.02±0.015
T140	3 layer	140g/m ²	260±50N/180±50N	Class E	Class W1	Class W1	3 month	0.02±0.015
T150	3 layer	150g/m ²	280±50N/200±50N	Class E	Class W1	Class W1	3 month	0.02±0.015
T180	3 layer	180g/m ²	320±50N/250±50N	Class E	Class W1	Class W1	3 month	0.02±0.015
T205	3 layer	205g/m ²	300±50N/260±50N	Class E	Class W1	Class W1	3 month	0.02±0.015
FQ130	3 layer	130g/m ²	240±50N/180±50N	Class E	Class W1	Class W1	3 month	0.02±0.015



VAPOR BARRIER

Product introduction

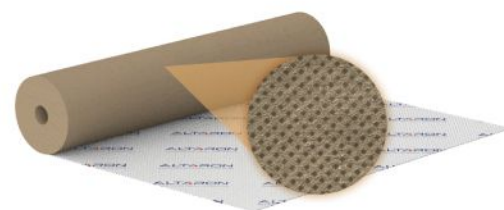
ALTARON Vapor barrier is made of high polymer material and is laid under the foundation layer. This prevents indoor vapor from penetrating into the thermal insulation layer while enhancing the watertightness of the building. As a result, the performance of the thermal insulation layer is not affected and its service life is increased, improving thermal insulation and energy saving and providing continuous energy saving effects.

The Vapor Barrier is typically used in conjunction with waterproof and breathable membranes on steel or timber roofs or walls. It is installed beneath the insulation wool and is waterproof, moisture-proof and leakage-proof, effectively preventing water vapour from passing through and avoiding the formation of mould and condensation. This maintains indoor dryness, breathability and comfort.

Technical parameter

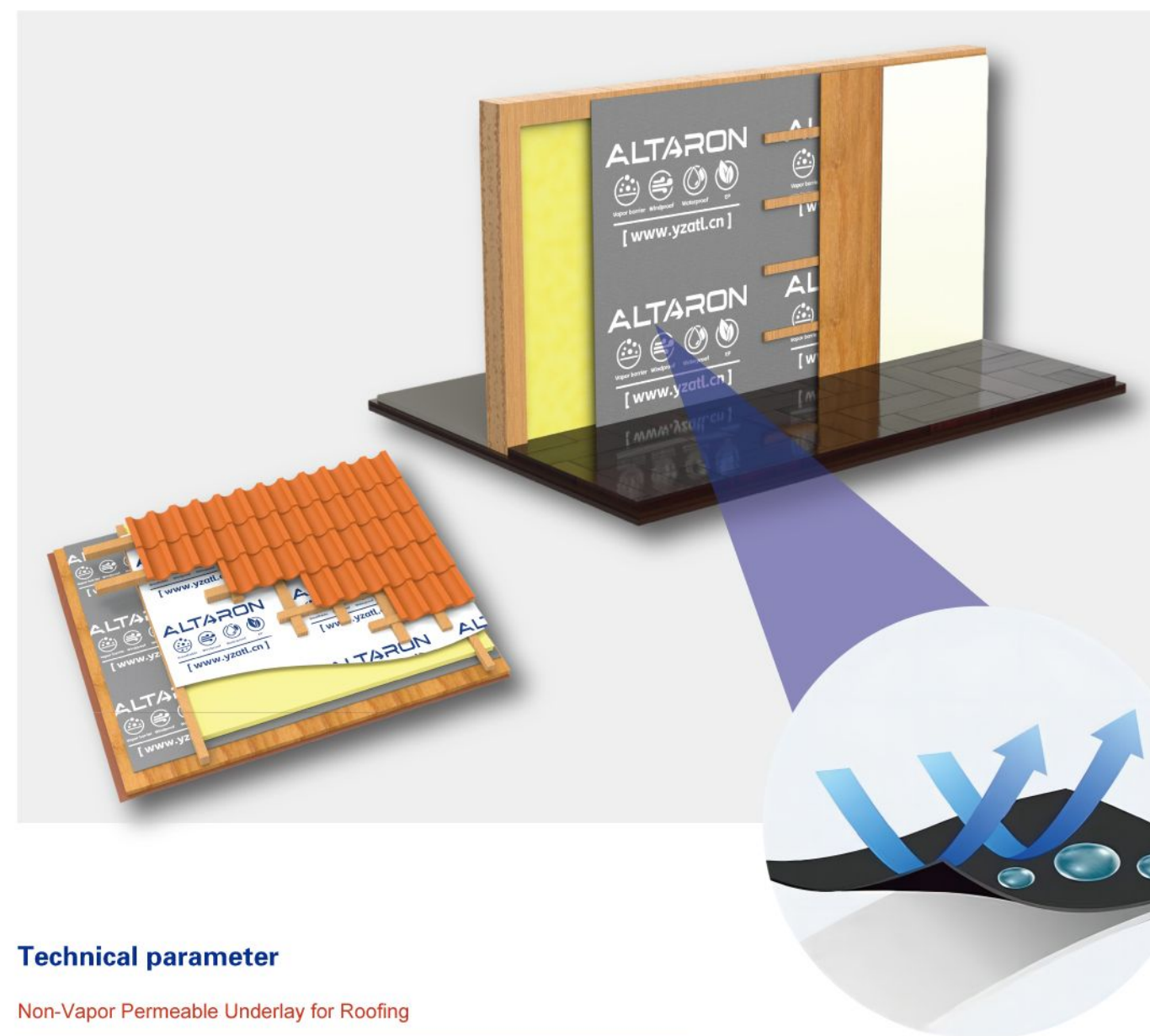
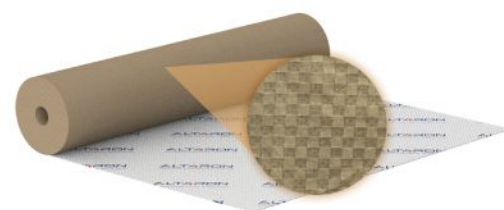
Non-Woven Fabric Reinforced Woven PE Underlay

Weight per unit area	Approx. 100 g/m ²
Water Penetration Resistance	W1
Water Vapor Resistance (Sd)	Approximately 35 m
Tensile Strength (MD/CD)	350 N/50mm and 240 N/50mm
Elongation (MD/CD)	Maximum 30%
Tear Resistance (MD/CD)	100 N (±20%) /100 N (±20%)
Outdoor weathering	12 weeks
Suitability as temporary covering	3 months
UV resistance	3 months
Dimensions	1.5×50m (or Custom)
Fire behaviour	Class E



Woven PE underday with non-woven fabric

Weight per unit area	Approx. 100 g/m ²
Water Penetration Resistance	W1
Tensile Strength (MD/CD)	300N/50mm and 240N/50mm
Elongation (MD/CD)	20-25%
Tear Resistance (MD/CD)	50 N (±20%) and 60 N (±20%)
Outdoor weathering	12 weeks
Suitability as temporary covering	3 months
UV resistance	3 months
Dimensions	1.5×50 m (or Custom)
Fire behaviour	Class E



Technical parameter

Non-Vapor Permeable Underlay for Roofing

Weight per unit area	Approx. 100 g/m ²
Temperature resistance	-40°C to +100°C
Tensile Strength (MD/CD)	160N/50mm and 100N/50mm
Elongation (MD/CD)	20-25%
Tear Resistance (MD/CD)	50 N (±20%) and 60 N (±20%)
Outdoor weathering	12 weeks
Suitability as temporary covering	3 months
UV resistance	3 months
Dimensions	1.5 x 50 m (or Custom)
Fire behaviour	Class E



HEAT INSULATION MATERIAL

Product introduction

This product is highly effective in reflecting heat conduction, convection and radiation. In hot environments, the outdoor temperature is much higher than the indoor temperature. Most of the heat is transmitted by radiation. The use of insulation material on the roof and walls can reflect more than 95% of infrared rays, thus preventing the roof and walls from absorbing heat, thereby maintaining a comfortable indoor temperature.

Product features

- ◇ It reflects over 95% of heat radiation and has excellent waterproof performance.
- ◇ It has a service life of more than 20 years and good resistance to aging.
- ◇ It has strong tensile strength, nail tear resistance, light weight and ease of construction.

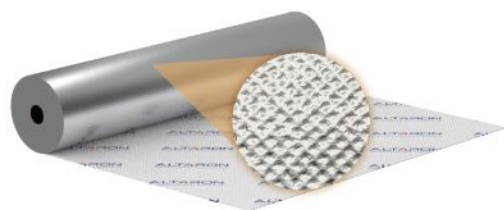
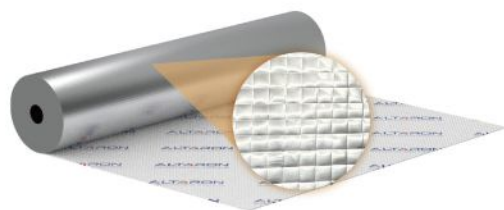
Technical parameter

AL Film Nonwoven Fabric

Appearance	Silver
Structure	AL Film+PE+Nonwoven fabric
Width	150cm
Length	50/100/200m
Weight	100g/m ² (Or custom)
Tensile strength	MD: 160N/50mm CD: 120N/50mm
Impermeability	2000mm, 2h
Tear strength	MD: 45N CD: 70N

AL Film Woven

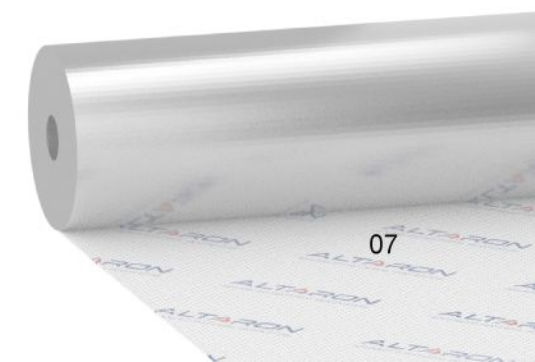
Appearance	Silver
Structure	AL Film+PE+Woven
Width	150cm
Length	50/100/200m
Weight	140g/m ² (Or custom)
Tensile strength	MD: 810N/50mm CD: 800N/50mm
Impermeability	2000mm, 2h
Tear strength	MD: 520N CD: 500N



Technical parameter

AL Film Woven

Appearance	Silver
Structure	AL Film+PE+Mesh+PE
Width	150cm
length	50/100/200m
Weight	90g/m ² (Or custom)
Tensile strength	MD: 220N/50mm CD: 150N/50mm
Impermeability	2000mm, 2h
Tear strength	MD: 250N CD: 120N



WINDOWS TPAES (BREATHABLE)

Product introduction

Window breathable membrane is a soft, high-strength, high tenacity special waterproof raincover, flexible in use, easy to install, and its unique waterproof and vapour permeable can make the building's energy saving, durability and comfort are well improved.

It is a key component to ensure the airtightness of doors and windows and to prevent the wall from condensation and mould, and can be used for the airtightness treatment of doors, windows, panels, pipelines and the combination of steel components and walls on the outdoor side of the building, and it can be used in conjunction with the special adhesive AL-HD200/210/220.

Product features

- ◇ Functions with storm-proof, waterproof, windproof, penetrate water vapour, prevent wall mould.
- ◇ Good elasticity, high longitudinal tensile strength, high toughness, able to resist the deformation displacement generated by the structural elements and not be destroyed, can be used in corners.
- ◇ Excellent self-peeling strength, not easy to delamination itself.
- ◇ One side comes with 20mm wide strong self-adhesive, low temperature and aging resistance.
- ◇ High-strength and ageing-resistant plush fabric base, good adhesive absorption, and close fusion with cement mortar.

Technical parameter

Material	Vapour breathable diffusion impermeable synthetic fleece
Weight per unit area	Approx. 200 g/m ²
Temperature stability range	Approx. -40°C to +80°C
Handling temperature	+5°C to approx. +45°C
Maximum tensile force longitudinal/transverse	550 N/ 240 N
Outdoor weathering	12 weeks
Suitability as temporary covering	3 months
UV resistance	3 months
Dimensions	10×300 cm (or Custom)

Finish: single side self-adhesive with 1 self-adhesive strip.

Finish COMPLETE: full surface adhesive finish.



Widely used



Flat & Metal Roof



Flooring Leaks



Shower Walls & Liners



Trailers & RVs Leaks



Basement Waterproofing



Wooden balcony & Deck



Foundation Waterproofing



Gutters Waterproofing



Skylight Waterproofing

Technical parameter

Inspection Test Report		Refer to Standard	Inspection Result	Single Assessment
Thickness, mm		≤0.7	0.68	Qualified
Mass area ratio, g/m ²		≤200	153	Qualified
Tensile breaking strength, N/50mm	Vertical	≥450	527	Qualified
	Horizontal	≥130	228	Qualified
Elongation at break, %	Vertical	≥20	39	Qualified
	Horizontal	≥80	86	Qualified
Moisture permeability, g/(m ² · s · Pa)		≥4.0×10 ⁻⁷	1.7×10 ⁻⁶	Qualified
Wet resistance factor		≤9.0×10 ²	1.7×10 ²	Qualified
Water vapor diffusion resistance Sd value, m		≤0.5	0.1	Qualified

WINDOWS TPAES (VAPOR BARRIER)

Product introduction

Window vapour barrier with multi-layer composite structure, flexible texture, plasterable, anti-aging and corrosion-resistant. One side of the product comes with ultra-high adhesive self-adhesive for bonding window frames, and the other side needs to be bonded to the wall with special adhesive AL-HD200/210/220 to ensure good airtightness and long-term waterproof stability at the joints.

Used for sealing the joints of indoor side doors, windows, panels, floor slabs, pipes and walls of ultra-low-energy buildings, also used for sealing the joints of indoor side one or two structures, the joints of flue ducts and walls as well as the joints of PC prefabricated panels, etc.

In view of the flexibility and elasticity of the waterproof vapour barrier membrane, it is also suitable for sealing the corners and the movable bonding places, which is not easy to be delaminated and ruptured.

Product features

- ◇ Functionally with storm-proof, waterproof, windproof, blocking the diffusion of water vapour and preventing energy loss.
- ◇ Super tensile strength, high toughness, able to resist the deformation displacement generated by the structural components and not be destroyed.
- ◇ Excellent self-peeling strength, not easy to delamination.
- ◇ High mechanical strength of the protective layer, to prevent the destruction of the functional layer to the maximum extent.
- ◇ High-performance self-adhesive, excellent initial adhesion and adhesion, low temperature resistance, aging resistance.
- ◇ The surface of the plush cloth base, good adhesive absorption, acid and alkali resistance, can be closely fused with cement mortar.

Technical parameter

Material	Vapour diffusion impermeable synthetic fleece
Weight per unit area	Approx. 250 g/m ²
Temperature stability range	Approx.-40°C to +80°C
Handling temperature	+5°C to approx. +45°C
Maximum tensile force longitudinal/transverse	580 N/ 260 N
Outdoor weathering	12 weeks
Suitability as temporary covering	3 months
UV resistance	3 months
Dimensions	10×300 cm (or Custom)

Finish: single side self-adhesive with 1 self-adhesive strip.

Finish COMPLETE: full surface adhesive finish.



Technical parameter

Inspection Test Report		Refer to Standard	Inspection Result	Single Assessment
Thickness, mm		≤0.7	0.69	Qualified
Mass area ratio, g/m ²		≤250	203	Qualified
Tensile breaking strength, N/50mm	Vertical	≥500	532	Qualified
	Horizontal	≥80	255	Qualified
Elongation at break, %	Vertical	≥20	39	Qualified
	Horizontal	≥100	103	Qualified
Moisture permeability, g/(m ² · s · Pa)		≤9.0×10 ⁻⁹	5.5×10 ⁻⁹	Qualified
Wet resistance factor		≥5.0×10 ⁴	5.8×10 ⁴	Qualified
Water vapor diffusion resistance Sd value, m		≥30	40	Qualified

BUILDING AUXILIARY MATERIALS

Product introduction

ATL Butyl Tape is primarily used for airtight sealing and waterproofing of buildings to prevent moisture from penetrating into the interior of the building or weak connections, thus keeping the building dry.

Features: easy to install, easy to mould, fast forming, vibration damping, non-polluting, airtight, waterproof, high viscosity and elastic.

It forms a vapour barrier over gaps and cracks, effectively preventing water ingress or egress.

The raw materials used in the production of this product are PVC, PE and rubber.

Thickness: 1-3mm.

It is available in lengths of 15-30 metres.

The adhesive is pressure-sensitive.



Product type

1. ESO-Double-sided waterproof tape
2. ESO-Single-sided aluminum foil waterproof tape
3. ESO-Single-sided non-woven waterproof tape

PE MESH

Product introduction

PE mesh cloth composite PE film is made by adding super-strong PE mesh into LDPE film, which is widely used in the fields of waterproofing of buildings, agricultural greenhouses and transparent door curtains.

Technical parameter

Material	LDPE film +LDPE mesh
Weight per unit area	Approx. 125 g/m ²
Temperature stability range	Approx. -40°C to +80°C
Handling temperature	+5°C to approx. +45°C
Tensile strength(N/5cm)	220
Nail tear resistance	25%
Elongation Strength	25%
Watertightness	W1
UV resistance	3 months
Dimensions	100×500 cm (or Custom)



NOTE