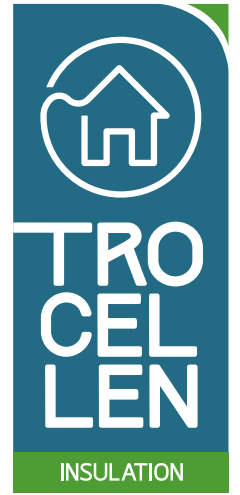


# ROOFING INSULATION

Roof Tile Liner

Construction



# Roofing insulation, roof tile liner

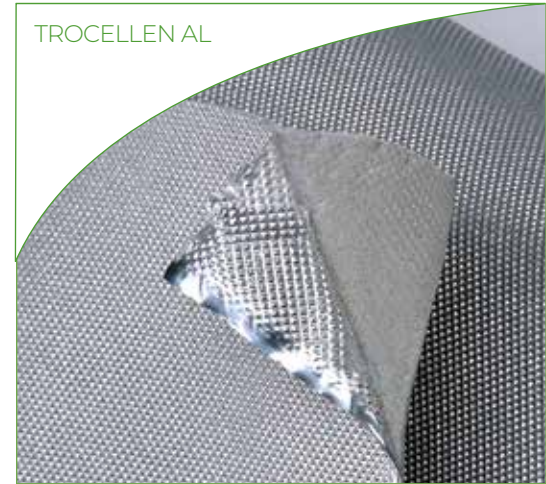
## ROOFING INSULATION

### TROCELLEN AL

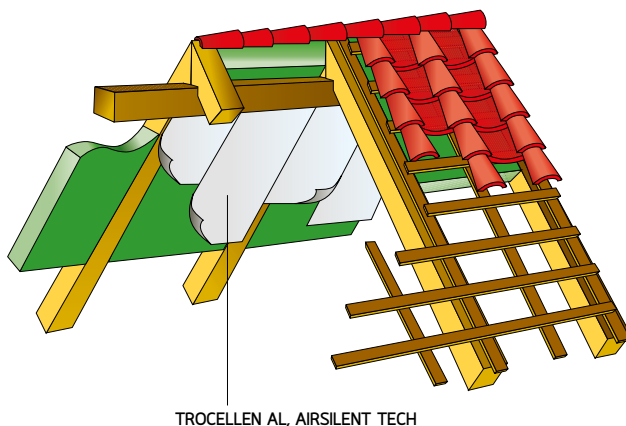
Chemically cross-linked polyethylene foam, laminated with aluminium film which ensures the stability of the mechanical and thermal characteristics, both as a vapour barrier and for reflecting heat.

### AIRSILENT TECH

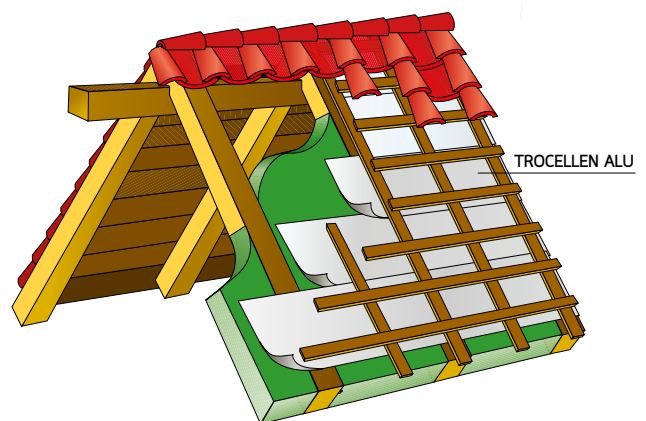
Textile polyester fibres (80-90% regenerated), thermo-welded without resins and glue, density 40 kg/m<sup>3</sup>, colour white or green.



ROOFING INSULATION LAYING METHOD



ROOF TILE LINER LAYING METHOD



## ROOF TILE LINER

### TROCELLEN ALU

Chemically cross-linked polyethylene foam laminated with an embossed or smooth aluminium sheet. What makes this product especially suitable for roof tile lining is that it is an excellent barrier against vapour and has a high capacity to reflect radiated heat. The surface layer of aluminium avoids sediments, moulds or parasites growing.

## INSTRUCTION FOR LAYING

Keep out of direct sunlight. **TROCELLEN** is a thermoplastic foam (i.e. contains air in its closed cell structure) and is therefore subject to considerable variations in size. The greater the surface exposure, the greater the variation.

It is important when laying **TROCELLEN**, in order to avoid this problem, to keep edges held down (for example using weights to prevent the sheet from being lifted by the wind), making sure to weld overlapping edges with hot air. Cover the entire layer with sufficient covering to protect it from direct sunlight and the elements and from subsequent risk of expansion.

**TROCELLEN ALU** rolls should be laid with the aluminium side upwards, i.e. towards the roof tiles.

## LOFT INSULATION

### TROCELLEN N

Chemically cross-linked polyethylene foam, does not rot, maintains mechanical and acoustic characteristics through time. Excellent heat insulation.



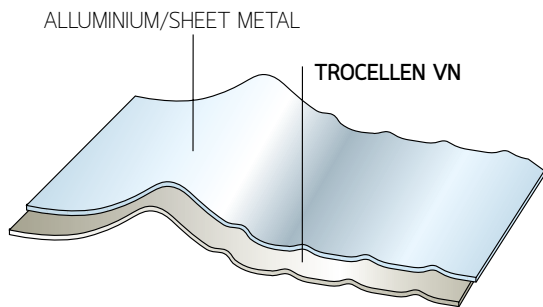
## LAYING INSTRUCTIONS

**TROCELLEN ALU** or **AL** type PE rolls should be laid with the aluminium or aluminium film coating facing inside and fixed in place with staples or nails. To ensure uniform insulation, it is important to seal the joints with special adhesive insulating tape.

## INDUSTRIAL ROOFING

### TROCELLEN VN

Physically cross-linked polyethylene foam, long-lasting, ideal for industrial roofing insulation.



## ROOFING PROFILES

Made of chemically cross-linked polyethylene foam, 25 ÷ 35 mm thick, they are supplied ready to instal, already shaped and coloured according to the roofing panels characteristics.

Resistant to chemical agents and easy to use, they offer an effective and long lasting thermal insulation.

## TECHNICAL DATA

TECHNICAL CHARACTERISTICS	NORM	UNIT	TROCELLEN N	TROCELLEN AL	TROCELLEN ALU	TROCELLEN VN
Description			Chemically cross-linked polyethylene foam	Chemically cross-linked PE foam bonded with embossed, scratch resistant metallic film (25 µm)	Chemically cross-linked PE foam bonded with embossed, scratch resistant metallic film (25 µm)	Physically cross-linked PE foam
Density	EN ISO 845	kg/m³	30	30	30	30
Thickness	EN ISO 1923	mm	3 - 5 - 10	3 - 5 - 10	3 - 5 - 10	3 - 5 - 10
Colour	BASE Spec.		anthracite	anthracite	anthracite	anthracite
Reaction to fire	UNI 8457 UNI 9174		NA	NA	CL0-2	NA
Compression stress strength at 10%	EN ISO 3386/1	kPa	19	19	19	13
Water vapour diffusion factor (µ-value)	EN 12086 EN ISO 12572		≥ 2000	≥ 15000	≥ 65000	≥ 2000
Water assorption after 28 days	ISO 2896	Vol. %	< 3	< 3	< 3	< 2
Dimensional stability (< 5%)	ISO 2796	°C	100	100	100	95
Thermal conductivity coefficient at 10 °C (λ-value)	EN 12667	W/mK kcal/mh°C	0,0359 0,0309	0,0359 0,0309	0,0359 0,0309	0,0344 0,0296





## ITEM SPECIFICATIONS

### TROCELLEN AL

Chemically cross-linked closed cell foam rolls, density 30 kg/m<sup>3</sup>, colour anthracite grey, laminated with scratch-resistant embossed metallic film, CFC free.

- Thermal conductivity coefficient at 10 °C ( $\lambda$ -value)= 0,0359 W/mK (0,031 kcal/mh°C)
- Water vapour diffusion factor ( $\mu$ -value)  $\geq$  15000
- Classified F1, toxicity and opacity of fumes in case of fire, according to NF F 16-101

Resistant to chemical agents, does not rot. Heat reflective and good vapour barrier.

### AIRSILENT TECH

Textile polyester fibres (80-90% regenerated), thermo-welded without resins and glue, density 40 kg/m<sup>3</sup>, colour white or green.

- Thermal conductivity coefficient at 10 °C ( $\lambda$ -value)= 0,037 W/mK (0,032 kcal/mh°C)
- Classified F1, toxicity and opacity of fumes in case of fire, according to NF F 16-101

### TROCELLEN ALU

Chemically cross-linked closed cell foam rolls, density 30 kg/m<sup>3</sup>, colour anthracite grey, laminated with a smooth or embossed aluminium sheet, CFC free.

- Thermal conductivity coefficient at 10 °C ( $\lambda$ -value)= 0,0359 W/mK (0,031 kcal/mh°C)
- Water vapour diffusion factor ( $\mu$ -value)  $\geq$  65000
- Classified F1, toxicity and opacity of fumes in case of fire, according to NF F 16-101

Resistant to chemical agents, does not rot. Heat reflective and good vapour barrier.

### TROCELLEN N

Chemically cross-linked closed cell foam rolls, density 30 kg/m<sup>3</sup>, colour anthracite grey, CFC free.

- Thermal conductivity coefficient at 10 °C ( $\lambda$ -value)= 0,0359 W/mK (0,031 kcal/mh°C)
- Water vapour diffusion factor ( $\mu$ -value)  $\geq$  2000
- Classified F1, toxicity and opacity of fumes in case of fire, according to NF F 16-101

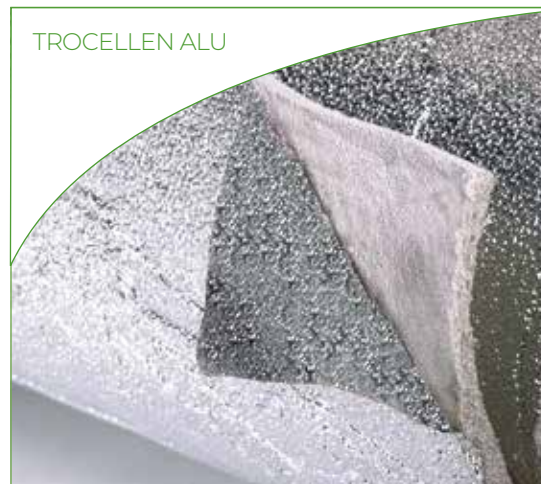
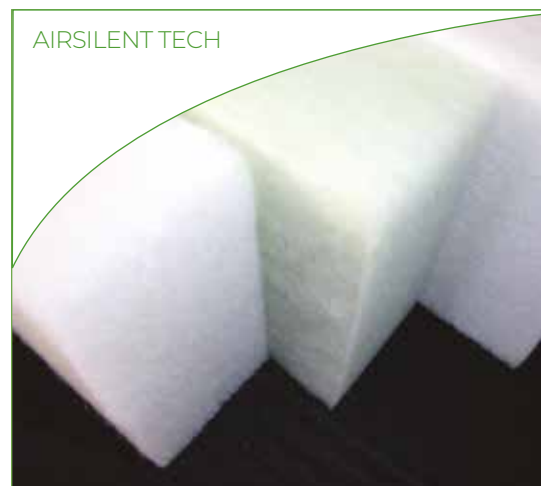
Resistant to chemical agents, does not rot.

### TROCELLEN VN

Physically cross-linked closed cell foam rolls, density 30 kg/m<sup>3</sup>, colour anthracite grey, CFC free.

- Thermal conductivity coefficient at 10 °C ( $\lambda$ -value)= 0,0344 W/mK (0,030 kcal/mh°C)
- Water vapour diffusion factor ( $\mu$ -value)  $\geq$  2000
- Classified F1, toxicity and opacity of fumes in case of fire, according to NF F 16-101

Resistant to chemical agents, does not rot.



# INTERNATIONAL LOCATIONS

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## TROCELLEN\*

Trocellen is a multinational company owned by Furukawa Electric Co. Ltd, internationally renowned for the design and manufacture of cross-linked polyolefin foam.

Through its different Business Units, the company is able to meet the specific needs of the market with a wide range of products and solutions.

It manufactures both semi-finished and finished products. The Trocellen products stand out for their manufacturing processes and the many industrial sectors in which they can be used: Insulation, automotive, footwear, sport and leisure, adhesive tapes and packaging. Trocellen makes safety a lifestyle and turns safety into a lifestyle.

### Insulation Business Unit

The Insulation Business Unit mainly specialises in Sound and Thermal insulation for the building industry. The goal is to create comfortable environments for people or rather to "help people live better!".

\*Trocellen is the member of Furukawa Group.



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