# BARRIER ALU NET SD1500

## REFLECTIVE VAPOUR BARRIER Sd > 1500 m

200 g/m²

LCA

EN 13984

B-s1,d0

| AUS | USA | A | CH | D | F | I |
|---|---|---|---|---|---|---|
| AS/NZS 4200.1 Class 1 | IRC Class 1 | Önorm B3867 DS dd | SIA 232 V.u.u. V.v.o.>90mm | ZVDH Dd | DTU 31.2 para-vapeur E1 Sd3 TR3 | UNI 11470 A/R3 |

STRONGER

SUPER BARRIER

REFLECTIVE 70%

RADON BARRIER

### REINFORCING GRID

Thanks to its composition, the membrane is not affected by mechanical stress or by staples and nails.

### REFLECTIVE

Thanks to its ability to reflect up to 70% of the heat, the membrane improves the thermal performance of the construction panels.

### REACTION TO FIRE B-s1,d0

Self-extinguishing membrane which does not spread the flame in case of fire contributing to the protection of the structure.

### RADON BARRIER

The membrane has been tested in accordance with ISO/TS 11665-13 for protection against radon gas of the entire system.


## COMPOSITION

1. **coating:** PET film
2. **top layer:** aluminium film
3. **middle layer:** PE film
4. **reinforcing layer:** reinforcing PE grid
5. **bottom layer:** PE film

## CODES AND DIMENSIONS

| CODE | description | mass per unit area [g/m²] | tape | H [m] | L [m] | A [m²] | *H [ft]* | *L [ft]* | *A [ft²]* | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BARALU1500** | BARRIER ALU NET SD1500 | 200 | - | 1,5 | 50 | 75 | *5* | *164* | *807* | 30 |

### ENERGY SAVING

The reflectivity of the membrane improves the energy performance of the construction panels as it reflects heat inwards increasing thermal resistance.

### SAFETY

Thanks to its B-s1,d0 fire rating, the membrane is self-extinguishing in the event of contact with an open flame, providing greater safety both during construction and after the building has been completed.

## TECHNICAL DATA

| Properties | standard | value | *USC units* |
|---|---|---|---|
| Mass per unit area | EN 1849-2 | 200 g/m$^2$ | *0.66 oz/ft$^2$* |
| Thickness[1] | EN 1849-2 | 0,15 mm | *6 mil* |
| Water vapour transmission (Sd)[2] | EN 1931/EN ISO 12572 | 4000 m | *0.001 US Perm* |
| Tensile strength MD/CD | EN 12311-2 | > 400/400 N/50 mm | *46/46 lbf/in* |
| Elongation MD/CD | EN 12311-2 | > 10/10 % | - |
| Resistance to nail tearing MD/CD | EN 12310-1 | >300/300 N | *67/67 lbf* |
| Watertightness | EN 1928 | compliant | - |
| Water vapour resistance: | | | |
| - after artificial ageing | EN 1296/EN 1931 | compliant | - |
| - in the presence of alkalis | EN 1847/EN 12311-2 | npd | - |
| Reaction to fire | EN 13501-1 | class B-s1,d0 | - |
| Resistance to penetration of air | EN 12114 | <0,02 m$^3$/(m$^2$h50Pa) | *< 0.001 cfm/ft$^2$ at 50Pa* |
| Resistance to temperature | - | -20/80 °C | *-4/176 °F* |
| UV stability[4] | EN 13859-1/2 | 336h (3 months) | - |
| Thermal conductivity (λ) | - | 0,39 W/(m·K) | *0.23 BTU/h·ft·°F* |
| Specific heat | - | 1700 J/(kg·K) | - |
| Density | - | approx. 1330 kg/m$^3$ | *approx. 83 lbm/ft$^3$* |
| Water vapour resistance factor (μ) | - | approx. 26000000 | *approx. 20000 MNs/g* |
| VOC (GEV procedure) | - | very low emission (1+)[3] | - |
| Radon diffusion coefficient D | ISO/TS 11665-13 | < 3,5·10$^{-15}$ m$^2$/s | - |
| Radon diffusion length l | ISO/TS 11665-13 | < 4.1·10$^{-5}$ m | - |
| Reflectivity | EN 15976 | approx. 70 % | - |
| Equivalent thermal resistance with 50 mm air gap ($\varepsilon_{other\ surface}$ 0,025-0,88) | ISO 6946 | $R_{g,0,025}$: 0,801 (m$^2$K)/W<br>$R_{g,0,88}$: 0,406 (m$^2$K)/W | *4.56 h·ft$^2$·°F/BTU*<br>*2.30 h·ft$^2$·°F/BTU* |

[1]The thickness at the grid 0,45 mm (18 mil).
[2]Total barrier in accordance with ZVDH classification (Germany) with a minimum guaranteed value exceeding 1500 m.
[3]BARRIER ALU NET SD1550 belongs to the same product family as BARRIER ALU NET ADHESIVE 300, making the results applicable to this product also.
[4]Laboratory ageing test data cannot reproduce unforeseeable causes of the product's degradation, or consider the stresses to which it will be subjected during its service life. To ensure its integrity, as a precautionary measure, exposure to weathering during construction should be limited to a maximum of 4 weeks.

Waste classification (2014/955/EU): 17 09 04

## DETERMINATION OF THE RADON DIFFUSION COEFFICIENT

Radon is an invisible, odourless gas found in soil that can seep through building foundations, accumulating indoors and posing a health risk to occupants.
BARRIER ALU NET SD1500 has been tested in accordance with ISO/TS 11665-13 as an effective radon gas barrier, ensuring a safe and healthy environment.

| | |
|---|---|
| Rn diffusion coefficient D | **3,5·10$^{-15}$ (m$^2$/s)** |
| Rn diffusion length l | **4,1·10$^{-5}$(m)** |
| Rn resistance $R_{Rn}$ | **179759 (Ms/m)** |

Rn
RADON BARRIER

## RELATED PRODUCTS

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