# TRASPIR ALU FIRE A2 430

## REFLECTIVE HIGHLY BREATHABLE MEMBRANE

LCA

CE EN 13859-1/2

A2-s1,d0

| AUS | USA | A | CH | D | F | I |
|---|---|---|---|---|---|---|
| AS/NZS 4200.1 Class 4 | IRC vp | Önorm B4119 UDTyp I US | SIA 232 UD (g) | ZVDH USB-A UDB-A | DTU 31.2 E1 Sd1 TR3 E600 JO C3 | UNI 11470 A/R3 |

REFLECTIVE 95%

OPEN JOINT 5000h UV

STRONG

### NON-COMBUSTIBLE A2-s1,d0

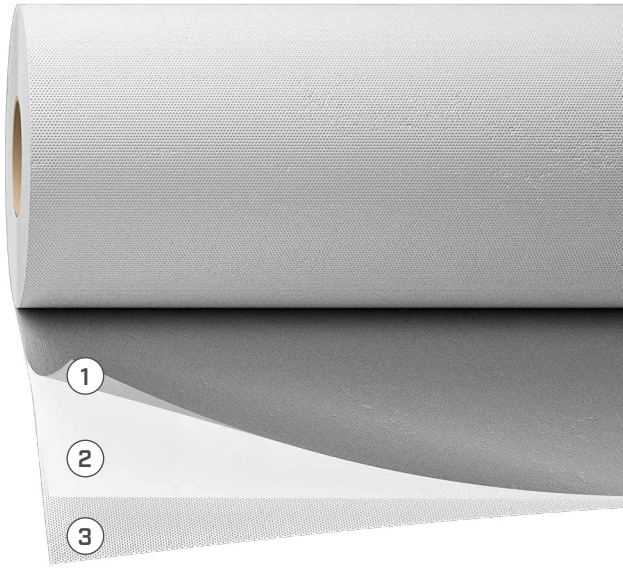
Membrane tested in accordance with EN 13501-1 and classified as a non-combustible material.

### REFLECTIVE

Thanks to its ability to reflect up to 95% of the heat, it improves the thermal performance of the construction panels.

### HIGH MASS PER UNIT

With a value of 430 g/m², it is an extremely robust, thermally stable and stress-resistant product during installation.




## COMPOSITION

1. **top layer:** perforated aluminium foil
2. **middle layer:** PE functional film
3. **bottom layer**: glass fibre fabric

## CODES AND DIMENSIONS

| CODE | description | tape | H [m] | L [m] | A [m²] | *H [ft]* | *L [ft]* | *A [ft²]* | |
|---|---|---|---|---|---|---|---|---|---|
| **TALUFIRE430** | TRASPIR AUL FIRE A2 430 | T | 1,2 | 35 | 42 | *4* | *164* | *646* | 20 |


### UV STABILITY

The top layer in aluminium ensures high UV stability, even when exposed during construction or if there are cracks or open joints in claddings.

### SAFETY

As it is a non-combustible membrane, it can also be applied in combination with photovoltaic systems or at electrical voltage points.

## TECHNICAL DATA

| Properties | standard | value | *USC units* |
|---|---|---|---|
| Mass per unit area | EN 1849-2 | 430 g/m$^2$ | *1.41 oz/ft$^2$* |
| Thickness | EN 1849-2 | 0,43 mm | *17 mil* |
| Water vapour transmission (Sd) | EN 1931 | 0,08 m | *43 US Perm* |
| Tensile strength MD/CD | EN 12311-1 | 3000/3200 N/50 mm | *343/365 lbf/in* |
| Elongation MD/CD | EN 12311-1 | 6/5 % | - |
| Resistance to nail tearing MD/CD | EN 12310-1 | 580/450 N | *130/101 lbf* |
| Watertightness | EN 1928 | class W1 | - |
| After artificial ageing[1] | | | |
| - watertightness | EN 1297/EN 1928 | class W1 | - |
| - tensile strength MD/CD | EN 1297/EN 12311-1 | 2800/3000 N/50 mm | *343/365 lbf/in* |
| - elongation | EN 1297/EN 12311-1 | 6/5 % | - |
| Reaction to fire | EN 13501-1 | class A2-s1,d0 | - |
| Resistance to penetration of air | EN 12114 | < 0,05 m$^3$/(m$^2$h50Pa) | *< 0.003 cfm/ft$^2$ at 50Pa* |
| Flexibility at low temperatures | EN 1109 | -40 °C | *-40 °F* |
| Resistance to temperature | - | -40/90 °C | *-40/194 °F* |
| Equivalent thermal resistance with 50 mm air gap ($\varepsilon_{other\ surface}$ 0,025-0,88) | ISO 6946 | $R_{g,0,025}$: 0,821 (m$^2$K)/W<br>$R_{g,0,88}$: 0,731 (m$^2$K)/W | *4.66 h·ft$^2$·°F/BTU*<br>*4.15 h·ft$^2$·°F/BTU* |
| UV resistance without final coating[2] | EN 13859-1/2 | 5000h (> 12 months) | - |
| UV stability with joints up to 50 mm wide exposing no more than 50% of the surface[3] | EN 13859-1/2 | permanent | - |
| Thermal conductivity (λ) | - | 0,0007 W/(m·K) | *0 BTU/h·ft·°F* |
| Specific heat | - | 800 J/(kg·K) | - |
| Density | - | 1000 kg/m$^3$ | *approx. 62 lbm/ft$^3$* |
| Water vapour resistance factor (μ) | - | approx. 185 | *approx. 0.4 MNs/g* |
| VOC | - | not relevant | - |
| Reflectivity | EN 15976 | 95 % | - |

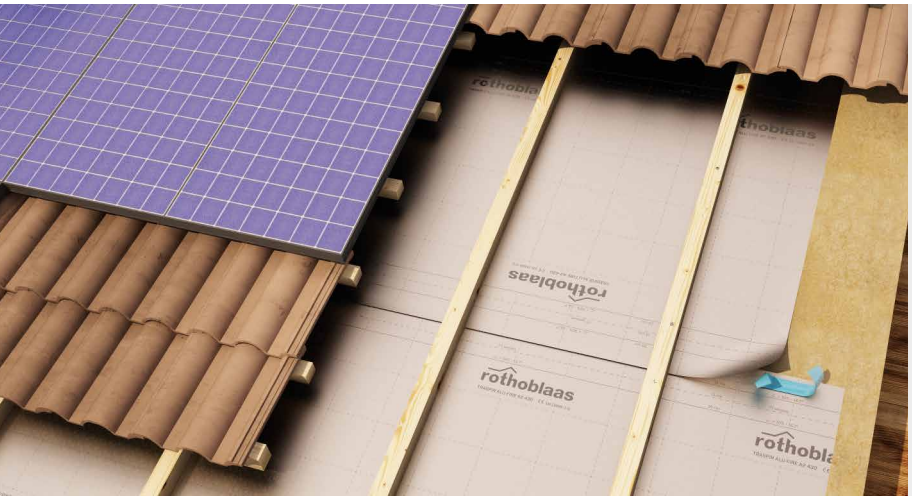
[1] Ageing conditions are tested in accordance with EN 13859-2, Annex C, extended to 5000h (standard 336h).
[2] Laboratory ageing test data cannot reproduce unforeseeable causes of the product's degradation, or consider the stresses to which it will be subjected during its service life. To ensure its integrity, as a precautionary measure, exposure to weathering during construction should be limited to a maximum of 10 weeks. According to DTU 31.2 P1-2 (France) 5000h of UV ageing equates to a maximum exposure period of 6 months during the construction phase
[3] The membrane is not intended as a final waterproof layer for roofs.

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

## FIRE BEHAVIOUR IN FAÇADES

TRASPIR ALU FIRE 430 was tested inside a ventilated façade made of timber panels according to the protocol "Assessment of fire performance of façades using large fire exposure".

| PERFORMANCE: | |
|---|---|
| vertical fire spread | **60 minutes** |
| burning parts | **60 minutes** |




## MECHANICAL STRENGTH

The combination of aluminium and a glass fibre reinforcing layer ensures high mechanical performance.