

# CLIMA CONTROL 80

## MEMBRANE WITH VARIABLE VAPOUR DIFFUSION

### VARIABLE DIFFUSION

Variable resistance to vapour diffusion: maximum protection for walls and excellent security in insulation.

### TRANSPARENCY

Easy to install thanks to its transparent quality; controls the passage of water vapour based on climate and humidity.

### SCIENTIFICALLY TESTED

The product has been researched and tested by external scientific bodies who have also simulated its behaviour in real conditions.



SEE THROUGH



VARIABLE SD



CLIMA SEARCH TEST



ASTM TESTED

## COMPOSITION

- ① top layer: PA functional film
- ② bottom layer: non-woven PP fabric

## CODES AND DIMENSIONS

| CODE      | description      | tape | H<br>[m] | L<br>[m] | A<br>[m <sup>2</sup> ] | H<br>[ft] | L<br>[ft] | A<br>[ft <sup>2</sup> ] |  |
|-----------|------------------|------|----------|----------|------------------------|-----------|-----------|-------------------------|---------------------------------------------------------------------------------------|
| CLIMA80   | CLIMA CONTROL 80 | -    | 1,5      | 50       | 75                     | 5         | 164       | 807                     | 81                                                                                    |
| CLIMA8030 | CLIMA CONTROL 80 | -    | 3        | 50       | 150                    | 10        | 164       | 1615                    | 81                                                                                    |



### EASY INSTALLATION

Ideal for installation directly on the substructure (struts or joists), thanks to its slight transparency.

### RETROFIT

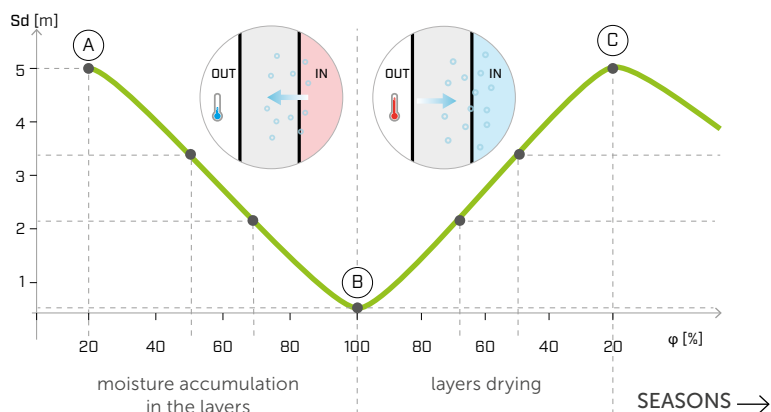
Thanks to its ability to adapt vapour diffusion according to the hygrometric conditions of the materials it comes into contact with, it is ideal for energy refurbishment of existing buildings.

## TECHNICAL DATA

| Properties                                  | standard             | value                                         | USC units                       |
|---------------------------------------------|----------------------|-----------------------------------------------|---------------------------------|
| Mass per unit area                          | EN 1849-2            | 80 g/m <sup>2</sup>                           | 0.26 oz/ft <sup>2</sup>         |
| Thickness                                   | EN 1849-2            | 0,22 mm                                       | 9 mil                           |
| Variable water vapour transmission (Sd)     | EN 1931/EN ISO 12572 | 0,15/5 m                                      | 23/0.7 US Perm                  |
| Tensile strength MD/CD                      | EN 12311-2           | > 120/90 N/50 mm                              | > 14/10 lbf/in                  |
| Elongation MD/CD                            | EN 12311-2           | 50/50 %                                       | -                               |
| Resistance to nail tearing MD/CD            | EN 12310-1           | > 40/40 N                                     | > 9/9 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 E                                       | -                               |
| Resistance to penetration of air            | EN 12114             | < 0,02 m <sup>3</sup> /(m <sup>2</sup> h50Pa) | < 0 cfm/ft <sup>2</sup> at 50Pa |
| Resistance to temperature                   | -                    | -20/80 °C                                     | -4/176 °F                       |
| Indirect exposure to UV rays                | -                    | 2 weeks                                       | -                               |
| Thermal conductivity (λ)                    | -                    | 0,2 W/(m·K)                                   | 0.12 BTU/h·ft·°F                |
| Specific heat                               | -                    | 1700 J/(kg·K)                                 | -                               |
| Density                                     | -                    | approx. 400 kg/m <sup>3</sup>                 | approx. 25 lbm/ft <sup>3</sup>  |
| Variable water vapour resistance factor (μ) | -                    | approx. 1000/25000                            | approx. 0,75/25 MNs/g           |
| VOC                                         | -                    | 0 %                                           | -                               |

Waste classification (2014/955/EU): 17 02 03.

| USA and CA Properties               | standard       | value                                                  |
|-------------------------------------|----------------|--------------------------------------------------------|
| Water vapour transmission (dry cup) | ASTM E96/ E96M | 1.86/10.6 US Perm<br>106/605 ng/(s·m <sup>2</sup> ·Pa) |
| Water vapour transmission (wet cup) | ASTM E96/ E96M | 1.86/10.6 US Perm<br>106/605 ng/(s·m <sup>2</sup> ·Pa) |
| Vapour barrier                      | ASTM E 2178-13 | compliant<br>< 0.02 L/(sm <sup>2</sup> ) at 75Pa       |



- (A) DRY LAYERS:  $S_d$  5 m**  
maximum protection - vapour control layer to limit the passage of vapour in view of the season when moisture accumulates within the layers
- (B) HUMID LAYERS:  $S_d$  0,15 m**  
maximum breathability - breathable membrane to allow drying during the reverse steam diffusion phenomenon
- (C) DRY LAYERS:  $S_d$  5 m**  
maximum protection for the start of a new year and a new cycle



## HYGROMETRIC PROPERTIES

The special PA film gives the product the ability to adapt to the hygrometric conditions of the building. If the membrane comes into contact with high humidity levels, it transforms from a vapour barrier into a breathable product, guaranteeing that the structure remains dry.