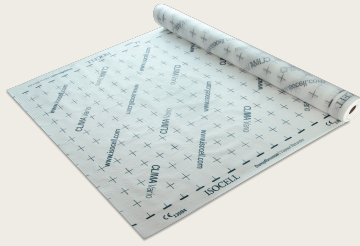


Technical data sheet

CLIMA Vario



A moisture-variable vapour retarder designed for use within the airtight layer of a building envelope. The membrane's diffusion resistance (sd-value) adapts dynamically to changes in ambient relative humidity.

In winter, when indoor air is typically dry, the membrane exhibits a high sd-value, significantly reducing vapour transmission. This minimizes the amount of water vapour entering the structure or insulation, protecting the building fabric from moisture accumulation.

In summer, especially under solar heating, reverse diffusion can cause higher relative humidity behind the membrane. In response, the membrane's sd-value decreases, allowing stored moisture to escape from the construction back into the interior environment. This self-drying effect helps keep the building assembly dry and promotes long-term durability.

Advantages

- transparent
- moisture-variable with sd-value range
- printed cutting line
- tear resistant

Field of application

- flat roofs
- construction components with permeable and impermeable outer shell in new constructions and refurbishment
- for wall, ceiling and roof

Available dimensions

Article number	Roll width	Roll length	Rolls / Pallet	Total area
2CLVA	1.50 m	50 m	50 rolls	3750 m ²

Technical data

sd-value	2-16 m	Material composition	Non-woven composite made from polymers with filament reinforcement
Elongation (EN 12311-1) lengthwise	≤ 90 %	Elongation (EN 12311-1) crosswise	≤ 90 %
Tensile strength (EN 12311-1) lengthwise	≥ 304 N (±90)	Tensile strength (EN 12311-1) crosswise	≥ 248 N (±90)
Tear propagation resistance (EN 12310-1) lengthwise	≥ 280 N (±60)	Tear propagation resistance (EN 12310-1) crosswise	≥ 299 N (±60)
Temperature resistance	-40-80 °C	Weight	115 (± 5 %) g/m ²
Colour	White transparent	Storage	cool and dry
Fire performance (EN 13501-1 / EN 11925-0)	E		

CLIMA Vario

Info

Vapour barriers can be used with wall, roof and ceiling construction elements as an airtight layer and as a vapour retarding layer.

(1) Mechanical attachment of the vapour barrier

The vapour control layer is typically installed perpendicular to the direction of rafters, joists, or studs, with the smooth or printed side facing the installer. The membrane is mechanically fixed to timber structures using tacking staples, with an overlap of approximately 100 mm at each joint. When installing onto metal C-studs, temporary fixation can be achieved using double-sided adhesive tape or, alternatively, a sprayable contact adhesive to hold the membrane in place prior to final sealing or mechanical fixing.

(2) Airtight adhesion

Airtight adhesion of the joints, connections and penetration points must be carried out using the AIRSTOP Adhesion system.

(3) Transverse lathing / Mounted at intervals

Supporting laths beneath the vapour control layer must be installed prior to the cellulose insulation being blown in. The laths should be spaced at a maximum centre distance of 300 mm (≤ 30 cm) to provide adequate support. All joints in the vapour barrier must be covered with an additional lath to maintain consistent pressure and air seal integrity. Any glued seams or connections under tension must be mechanically secured (e.g. with battens or pressure laths) to prevent failure over time. The membrane must be installed without tension or stretching, ensuring a flat, wrinkle-free finish.

(4) Longitudinal lathing

If no transverse lathing is used — for example, when formwork is installed on longitudinal lathing — the vapour control layer must be installed parallel to the rafters or structural members. All membrane joints must lie directly over timber elements and be secured with overlapping staples and airtight sealing using AIRSTOP adhesive tape.

Before blowing in the insulation, the longitudinal laths must be installed to provide mechanical support and pressure relief at the membrane joints, ensuring long-term airtightness and preventing damage during insulation fill.

