

ClimaVision®micro

Micro-optical films
for energy efficient windows

Sun protection



up to 183 kWh/m²/year

Self-regulating g-value



>0,4 to <0,1

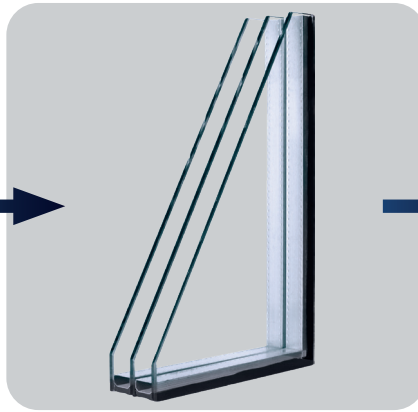
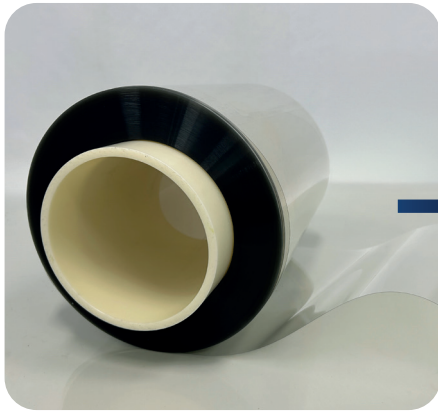
Temperature reduction



up to 8°C

The smart glass solution

with passive, self-regulating light control

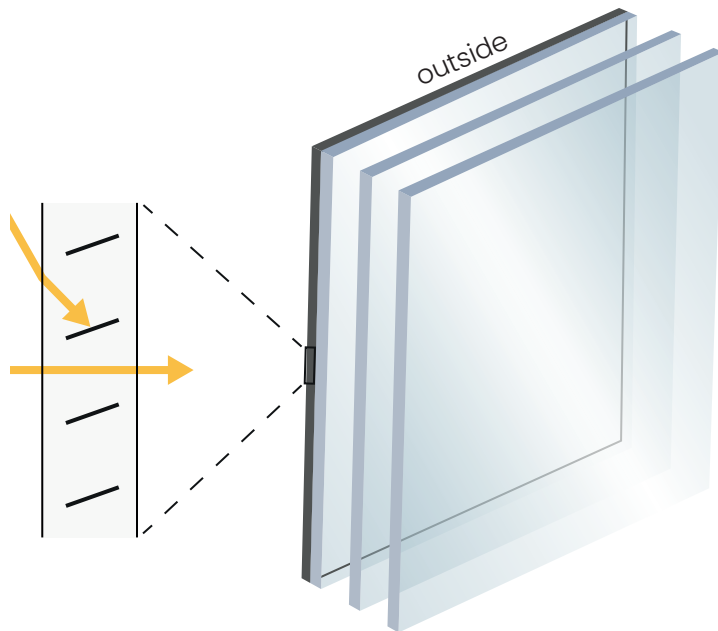


ClimaVision® *micro* films feature integrated micro-louvers that intelligently regulate sunlight.

At **low sun angles**, the micro-louvers selectively allow light and heat into the room, supporting natural heating.

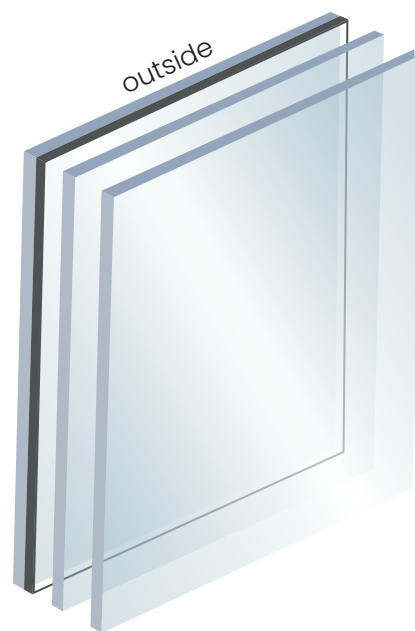
At **high sun angles**, they block direct sunlight and effectively reduce heat input.

This principle of angle-dependent transmission enables self-regulating adjustment, ensuring a comfortable indoor climate throughout the day and year.



Micro-louvers integrated in the film

Existing glazing film outside



New glazing film inside

For existing buildings

The film is applied to the outside of the existing insulating glass. It features a durable scratch-resistant layer and UV-blocking.

For new buildings

The film is directly integrated into multi-pane glazing by the insulating glass manufacturer, ensuring a seamless and permanently protected application.

Micro-louver film

for a perfect balance between view and energy performance

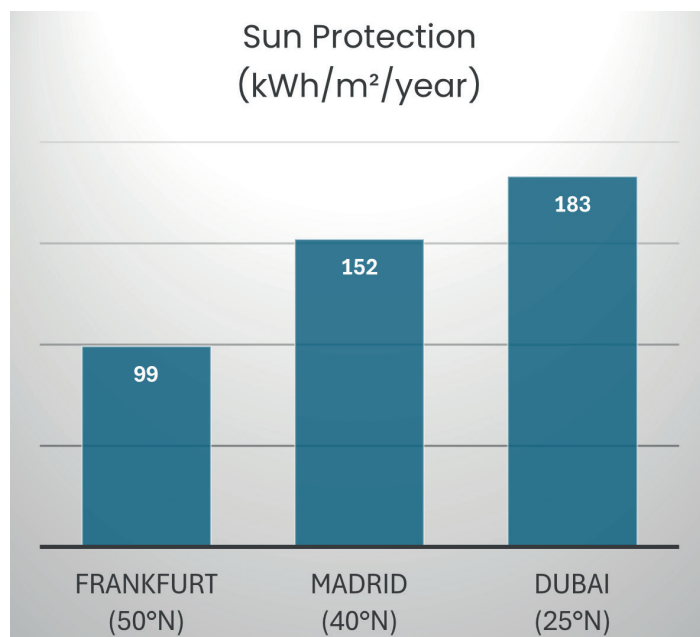
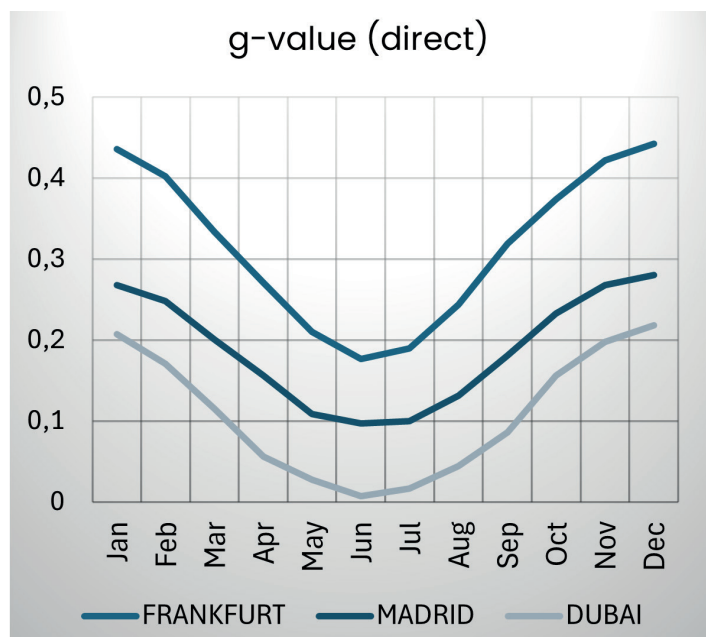
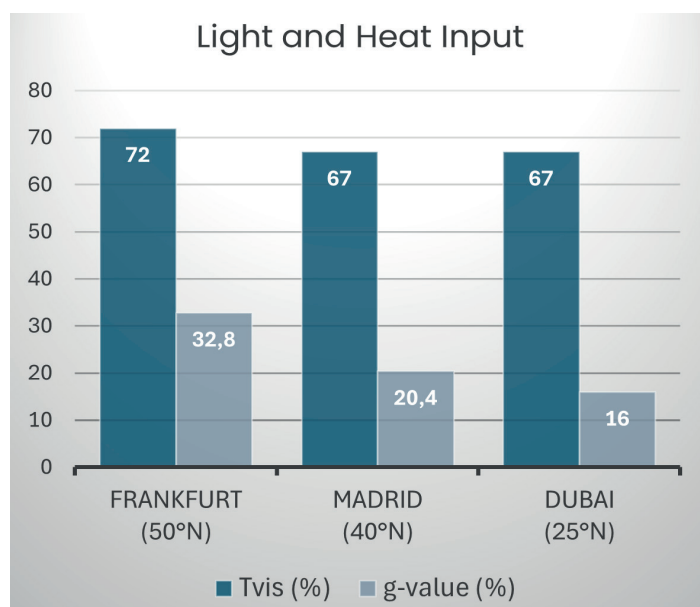
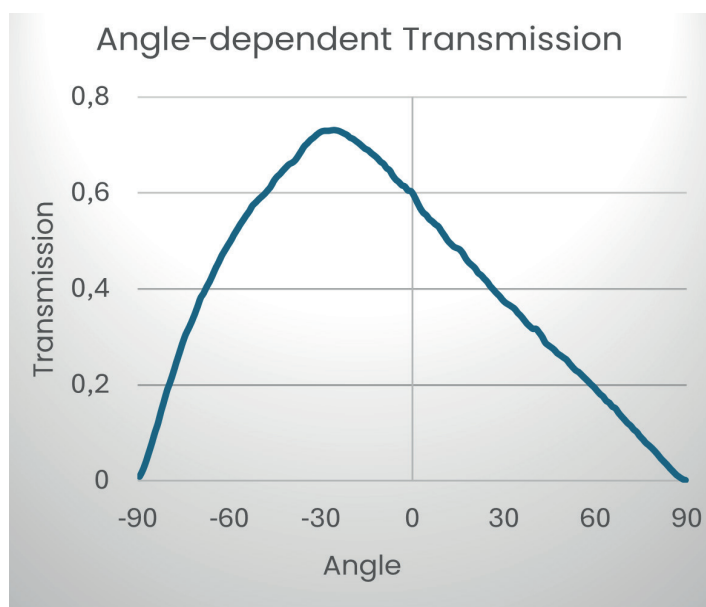
Our micro-optical films with integrated micro-louvers set new standards in solar shading. They show **angle-dependent transmission**.

The self-regulating **g-value** automatically adapts to the climatic conditions – shown as an example for **Frankfurt** (50°N), **Madrid** (40°N) and **Dubai** (25°N) facing south.

The micro-louvers allow maximum daylight to enter while effectively blocking direct sunlight from a high sun position – and with

an outstanding solar efficiency index of up to 4.0. This is the first time that maximum light transmission has been achieved with minimum heat input – an innovation that surpasses conventional solar shading solutions.

The **solar energy saving** is up to 183 kWh/m²/year, which significantly reduces the load on air conditioning systems – a game changer for energy-efficient buildings.



Product data

Film width: up to 1.4m	UV protection [300 – 380 nm]: >99%
Film length: unlimited	Scratch resistance: 3H
Film thickness: 300 µm	Glare shield: angle-dependent >30° >50%
Film material: coated PET	Adhesive: single-sided with liner

Effective solar shading

Shading from direct sunlight while allowing pleasant and natural daylight to enter the room

Smart self-regulation

Seasonal adaption without additional control technology

Comfortable indoor climate

Temperature reduction of up to 8°C on hot days ensures maximum comfort

Glare-free transparency

Reduced glare while maintaining a clear view to the outside

Minimal maintenance effort

No restrictions due to wind, no cleaning or maintenance required

Freedom for architecture

No external sun protection required, enabling more flexibility for innovative facade design