

ORAGUARD®

Functional Films

Spectrally Selective Solar Protection Films

ORAGUARD® HelioShield

ORAFOL
ENGINEERED
FOR EXCELLENCE

ORAGUARD® HelioShield

Spectrally Selective Solar Protection Films

ORAGUARD® HelioShield Solar Protection Films enable the efficient retrofitting of glass surfaces with state-of-the-art solar protection technology. These innovative premium films combine high light transmission with excellent infrared reflection, significantly reducing heat build-up in buildings during the summer months. The result: a more comfortable indoor climate in non-air-conditioned spaces and a substantial reduction in cooling costs for air-conditioned buildings – without significantly altering the original appearance of the glass. ORAGUARD® HelioShield is available as both an interior and exterior film, ensuring the perfect solution for any type of glazing.

Product Properties

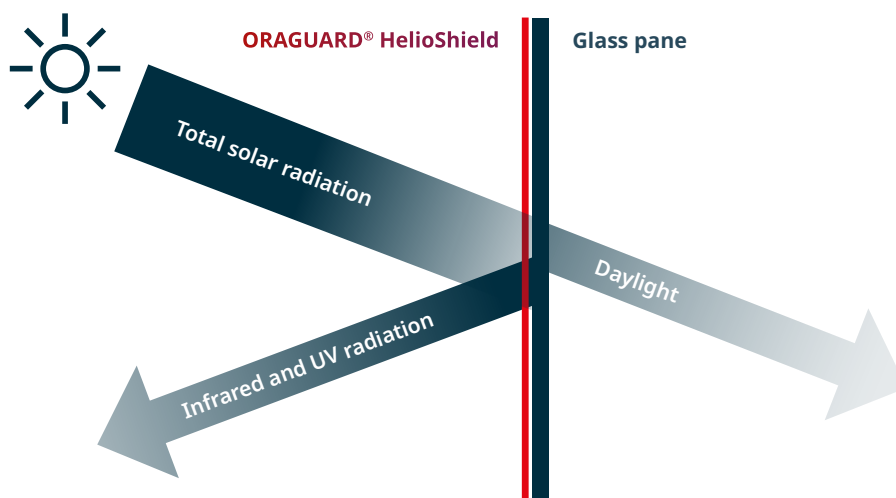
- **High Light Transmission** – Maximizes the use of natural daylight.
- **Color-Neutral Daylight** – High color rendering index (~98 %) ensures an almost unchanged perception of natural light.
- **Effective Infrared Rejection** – Significantly reduces heat radiation indoors.
- **Maximum Energy Efficiency** – Lowers cooling energy demand in air-conditioned buildings and substantially reduces energy costs.
- **Minimal Absorption** – Reduces thermal stress on glazing, allowing for versatile applications.
- **Reliable UV Protection** – Blocks nearly 100% of UV radiation, ensuring long-term protection of interiors and furnishings.
- **Neutral Appearance** – No noticeable reflections or mirror effects, preserving the building's original facade appearance.
- **Flexible Application** – Available as both interior and exterior film, providing the ideal solution for any type of glazing.



Function and Application

In **air-conditioned buildings**, the significant reduction of solar heat gain can lower cooling costs by up to 30%, enabling more efficient and sustainable climate control, while the investment in ORAGUARD® HelioShield typically pays for itself within the first three years after installation.

In **non-air-conditioned buildings**, the spectrally selective high-tech films reflect a large portion of solar radiation and create a natural, passive cooling effect, resulting in comfortable indoor temperatures – especially during hot summer months – and significantly improving occupant comfort. At the same time, high light transmission is maintained year-round, ensuring bright, naturally lit interiors even in winter, while the films' extremely low absorption reduces thermal stress on glazing and enhances its durability.



Technical Data*

| Properties | ORAGUARD® HelioShield 75 Int. | ORAGUARD® HelioShield 75 Ext. | ORAGUARD® HelioShield 80 Int. | ORAGUARD® HelioShield 80 Ext. |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Light Transmission | 71 % | 72 % | 78 % | 79 % |
| Light Reflection on film side | 8 % | 8 % | 10 % | 10 % |
| Absorption | 31 % | 25 % | 22 % | 19 % |
| Total Solar Energy Rejection (TSER) | 53 % | 53 % | 42 % | 43 % |
| G-Value | 0,47 | 0,48 | 0,58 | 0,57 |
| UV Protection | > 99 % | > 99 % | > 99 % | > 99 % |
| Thickness | 62,5 µm | 75 µm | 62,5 µm | 75 µm |
| Installation | Interior | Exterior | Interior | Exterior |
| Color Rendering Index D65 | 98 % | 98 % | 98 % | 98 % |
| Warranty | 12 Years | 10 Years** | 10 Years | 8 Years** |

Fire protection in accordance with EN 13501-1: See our website at www.orafol.com

* Data measured on 4 mm float glass in accordance with EN 410 and are subject to technical tolerances. Subject to alterations.

** if applied vertically (warranty for sloped/horizontal applications: 6 years)



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