



Solar  Screen

# SOLAR 50 C

Solar Control  
Thermal Insulation - Interior

### Description

Solar 50 C thermal insulation film keeps out the cold in winter and the heat in summer. Given the energy savings it brings in terms of both heating and cooling, it pays for itself very quickly.

### Visible Light Transmission (%)



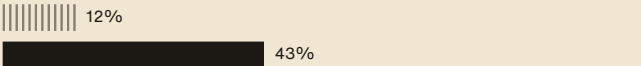
### Visible Light Reflection - External (%)



### UV Rejection (%)



### Total Solar Energy Rejected (%)












0 10 20 30 40 50 60 70 80 90 100

||| 3 mm simple glazing - without film ■ Film applied to 3 mm simple glazing



## Characteristics

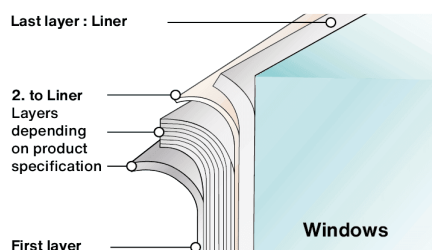
-  **Warranty**  
6 years
-  **Fire Resistance Rating**  
M1
-  **Storage in recommended conditions**  
3 years
-  **REACH / RoHS**  
Compliant
-  **Widths Available**  
152 cm
-  **Installation Type**  
Interior
-  **Color From the Outside**  
Silver
-  **Length**  
30.5 m
-  **Product Carbon Footprint (LCA)**  
1.04 kgCO<sub>2</sub>e/m<sup>2</sup>

## Construction




- 1 Scratch-resistant hard coating providing surface protection, durability, and ease of cleaning
- 2 High optical quality polyester, with an IR-blocking metallic particle coating
- 3 Bonding adhesive
- 4 High optical quality polyester
- 5 PS adhesive, polymerizes with glass within 15 days
- 6 Protection PET release liner, disposable after installation

-  **Composition**  
PET
-  **Thickness**  
40 µm

## Details



## Energy and environmental benefits<sup>01</sup>

-  **Energy savings**  
6.1 kWh/m<sup>2</sup>/year
-  **Carbon footprint reduction**  
1.9 kgCO<sub>2</sub>/m<sup>2</sup>
-  **Financial savings**  
1 euros/m<sup>2</sup>/year



Access our energy savings calculator

## Optical and solar properties

Pane type	Single 3mm		Double Low-E	
	No film	With Film	No film	With Film
UV Rejection (%)	25	99	40	99
<b>Visible Light Transmission (%)</b>	<b>91</b>	<b>60</b>	<b>82</b>	<b>54</b>
Visible Light Reflection - External (%)	8	26	11	20
Visible Light Reflection - Internal (%)	8	25	12	19
Solar Energy Reflection (%)	5	38	12	27
Solar Energy Absorption (%)	8	25	28	39
Solar Energy Transmission (%)	87	37	60	34
<b>Total Solar Energy Rejected (%)</b>	<b>12</b>	<b>43</b>	<b>35</b>	<b>38</b>
Glare Reduction (%)	-	34	-	34
Shading Coefficient	-	0.65	-	.95
<b>g-value</b>	<b>0.88</b>	<b>0.57</b>	<b>0.65</b>	<b>0.62</b>
U-value (W/m <sup>2</sup> .°C)	5.8	4.2	1.1	1.1
Heat Loss Reduction (Winter) (%)	-	27	-	N/A
Emissivity (-)	0.84	0.3	0.05	0.3

## Application advice<sup>02</sup>

Vertical situation and for a standard glazed surface

- Clear Single Pane ✓
- Tinted Single Pane ✓
- Reflective Tinted Single Pane ✓
- Clear Double Pane ✓
- Tinted Double Pane !
- Reflective Tinted Double Pane ✓
- Gas-Filled Double Pane - Low E !
- Stadip Ext. Clear Double Pane ✓
- Stadip Int. Clear Double Pane !

✓ Yes    ✗ Not recommended    ! Caution

## Installation and Maintenance Advise

Use Slide On (600-FO2) or Film On (600-F0355) diluted at 2 cL/L of water for installation and cleaning. Do not clean for one month after installation or apply stickers/adhesives on the film. It is essential to apply our sealing varnish (ref. 0771) to the edges of the film after installation to prevent oxidation of the metal alloys.



Access the installation and maintenance advice video

**01** Values based on a study carried out on an air-conditioned building located in Luxembourg, with a film applied on a low-E double glazing, facing East. The heating months considered are from October to March, and the cooling months from April to September. We consider an electric heating system of the heat pump type, with a production efficiency of 3.5 and an electric cooling system with an efficiency of 3. For more information, visit our online tool.

**02** Advice based on glazed surface area up to 2.5 m<sup>2</sup>, please contact us for any confirmation or thermal shock analysis. The data in this information sheet is not contractual, SOLAR SCREEN reserves the right to modify the composition of its products at any time. Please refer to our warranties and general sales conditions.