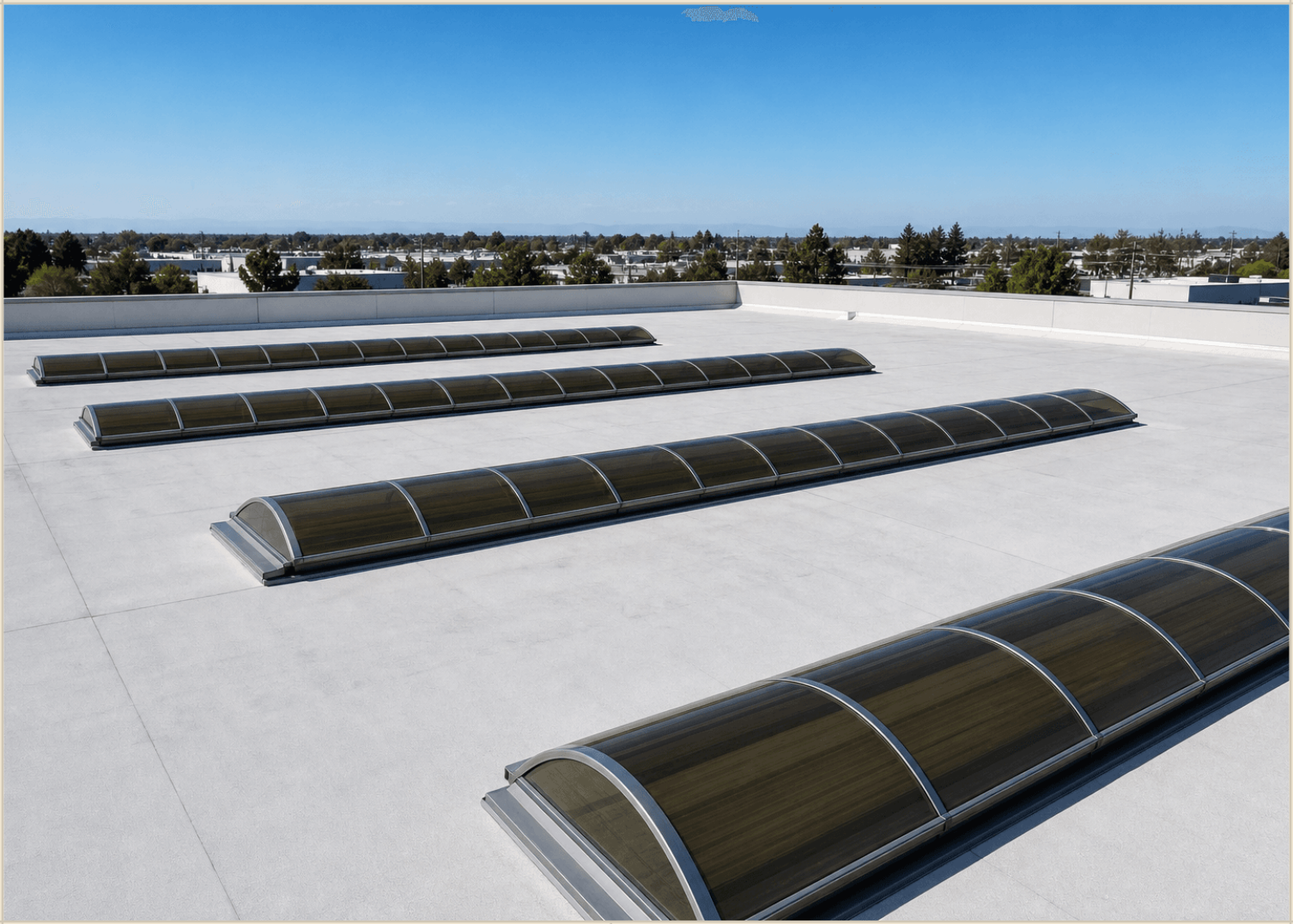


Solar Screen

Master 870 X

Solar Control

Polycarbonate Application - Exterior

Description

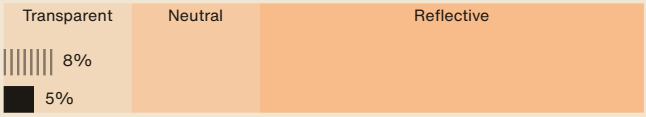
Master 870XC is a next-generation polyurethane-based solar control film engineered for non-mineral substrates such as polycarbonate and PMMA, delivering over 95% infrared rejection with a neutral, non-reflective appearance that preserves natural light and blends seamlessly into any urban, industrial, or airport roofing environment. At 4x the thickness of a standard solar film, its flexible TPU construction not only enables effortless installation on curved and complex surfaces, but also structurally reinforces the substrate it bonds to, backed by a 5-year warranty for long-lasting.

Certified B Corporation

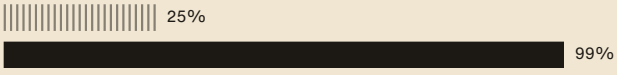
Visible Light Transmission (%)



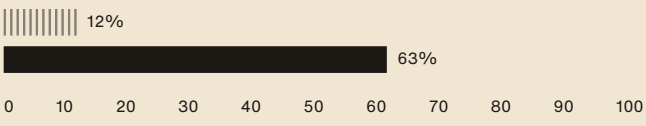
Visible Light Reflection - External (%)



UV Rejection (%)



Total Solar Energy Rejected (%)



Master 870 X

Solar Control
Polycarbonate Application - Exterior

Characteristics

Warranty
Up to 5 years

Storage in recommended conditions
1 years

Widths Available
152 cm

Installation Type
Exterior

Color From the Outside
Neutral

Length
15 m

Product Carbon Footprint (LCA)
3.5 kgCO2e/m²

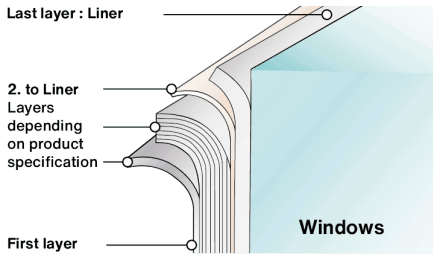
Construction

1 Self-healing coating
2 Polyuréthane Thermoplastique (TPU) base film
3 PS adhesive, polymerizes with glass within 15 days
4 Protection PET release liner, disposable after installation

Composition
PU

Thickness
195 µm

Details



Energy and environmental benefits[01]

Energy savings
88.6 kWh/m²/year

Carbon footprint reduction
28.0 kgCO2/m²

Financial savings
20 euros/m²/year

Access our energy savings calculator

Optical and solar properties

	Single 3mm		Double Low-E	
Pane type	No film	With Film	No film	With Film
UV Rejection (%)	25	99	40	99
Visible Light Transmission (%)	**91**	**35**	**82**	**32**
Visible Light Reflection - External (%)	8	5	11	6
Visible Light Reflection - Internal (%)	8	5	12	6
Solar Energy Reflection (%)	5	5	28	5
Solar Energy Absorption (%)	8	75	12	79
Solar Energy Transmission (%)	87	20	60	16
Total Solar Energy Rejected (%)	**12**	**63**	**35**	**79**
Infrared Rejection (780 - 2500 nm) (%)	16	96	16	97
Glare Reduction (%)	-	59	-	61
Shading Coefficient	-	0.43	-	0.24
g-value	**0.88**	**0.37**	**0.65**	**0.21**
U-value (W/m².°C)	5.8	5.8	1.1	1.1

Application advice[02]

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.

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 m², please contact us for any confirmation or thermal shock analysis.
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