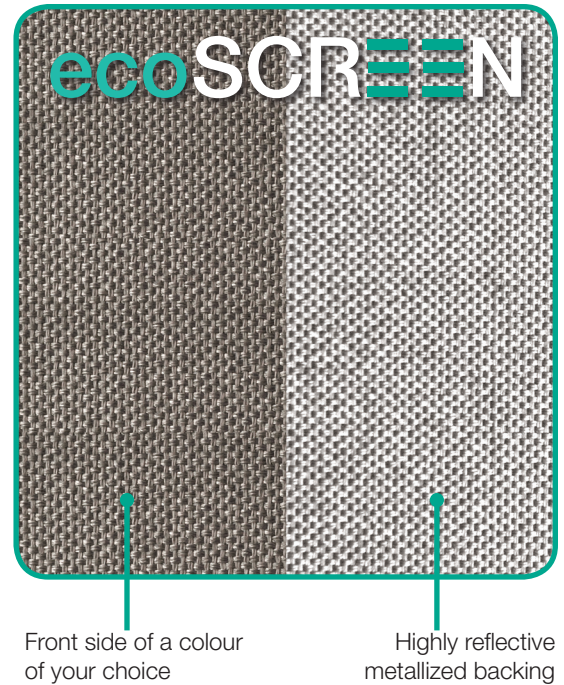


ES-8400M with highly reflective metallized backing

Sun Projects' EcoScreen 8400M is a PVC-free, highly reflective metallized sunscreen fabric designed to improve solar energy performance, while at the same time providing an astonishing view to the exterior.

Due to its highly reflective nature, this fabric is an optimal solution to help reduce solar heat gain substantially lowering heating and cooling costs. It helps to reduce CO₂ emissions and minimise the greenhouse effect.

The EcoScreen 8400M complements all environments including: offices, healthcare facilities, audio-visual environments, institutional, educational buildings and personal residences.



A study of the impact of ES-8400M on building energy consumption

The simulation was performed for 7 locations in North America to include the impact of climate: Toronto, New York City, Chicago, Dallas, Los Angeles, Vancouver and Calgary.

A generic private office (4m x 4m x 3m high) with double-glazed low-e windows occupying 80% of the south wall (typical office glass façade) was used for the simulation. The shades close when direct sunlight is incident on the window to protect from glare.

In order to accurately model the shading characteristics, the fabric properties (transmittance, reflectance and absorptance) were measured with a spectrophotometer using the ASTM Standard E903 Test Method. The measured values for normal incidence are shown below:

Fabric	Solar Reflectance (Rs)	Visible reflectance (Rv)	Solar transmission (Ts)	Visible transmission (Tv)
ES-8406M	48.7	47.3	12.0	9.3

ES-8406M

City	Peak load reduction (%)	Cooling energy savings (%)	Reduction in peak load (\$ savings/m ²)	Reduction in annual energy (\$ savings/m ²)
Toronto	24.3%	17.0%	\$0.55	\$1.18
New York City	21.4%	14.1%	\$0.49	\$1.12
Dallas	21.6%	13.4%	\$0.58	\$1.43
Los Angeles	20.3%	16.0%	\$0.53	\$1.72
Vancouver	21.4%	18.3%	\$0.54	\$1.26
Calgary	25.6%	24.0%	\$0.66	\$1.97
Chicago	20.1%	15.8%	\$0.53	\$1.25