



CONCEPT

The Solar Tapestry project is conceived from an initial question about use and being useful. In response to the recent acquisition of the site and the prospective plans for the future, it seems important to design a work of art that doesn't expire after a year of use and isn't limited to one site. The proposal for the Solar Tapestry revolves around the idea of creating a work of art that operates as a piece of infrastructure that is useful in generating power and providing shade for events and expositions, while also creating a system with adaptability, flexibility, mobility and scalability - able to meet varying demands on site and off.

PRINCIPLES

The Solar Tapestry combines the principles of a parabolic concentrated solar shield with a venetian blind; making a retractable shading system, composed of parabolic solar blinds with a mirror along the concave surface of the parabola and thin film photovoltaic cells along the convex surface behind.



Mojave Solar Project; parabolic trough concentrated solar power plant precedent

Venetian blind precedent

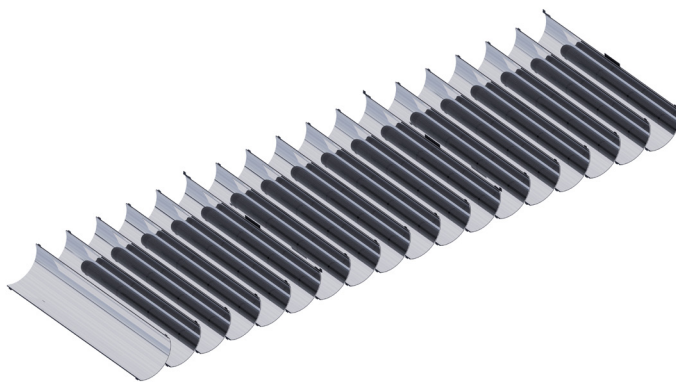
TECHNOLOGY

Solar blind parabolic sandwich panel:
1. Thin film super mirror
2. Recycled bottle plastic substrate
3. Thin film photovoltaic cells

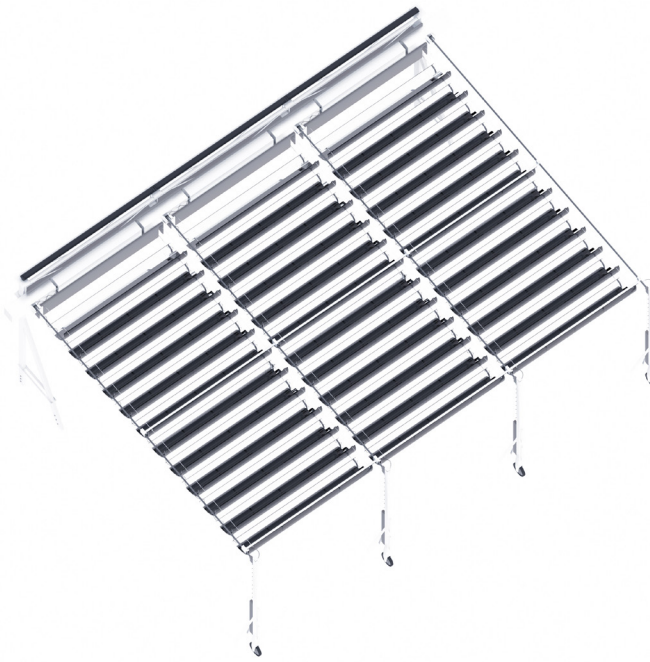


CONSTRUCTION

Solar energy reflects from the sun through the parabolic trough mirror to charge the photovoltaic film behind.



Solar Tapestry building sample:



BAY

BAY module comprised of 6 solar blinds



BAY module with solar blind control wires and power



BAY module plugged into power system with support bar

