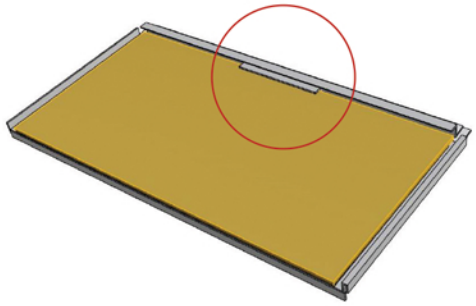
LEDOLAS
Lighting | Energy | Decontamination

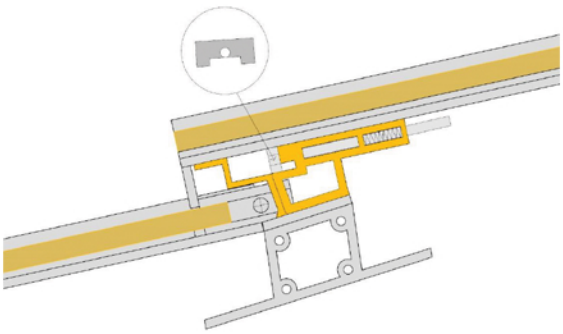
Solar Powered Roofing System

Large, unused areas of your roof certainly make a perfect choice for installing solar panels and saving money on electric bills. We saw the need for an aesthetically pleasing system, that's completely integrated and doesn't have the double cost of installing the roofing and then mounting the solar array on it.

BIPV - Our roof tile system uses thin film PV modules as the actual roof tiles and replaces traditional roofing systems. What separates our product from others is a set of unique features that makes it the most advanced design on the market. Features like different pattern mounting types, easy panel removal if maintenance is required (no need to remove whole array), array of different colors, and more.



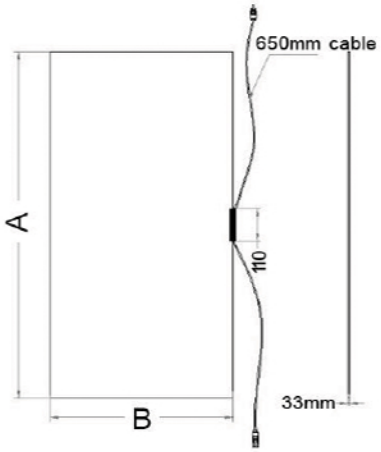
Features – The solar powered aluminum roofing system is designed to withstand hurricane winds carrying large projectiles and bad hail storms. Sheet metal panel system can support most solar modules manufactured in the world from one square foot to 5 square feet in sizes and it can be manufactured with pre-galvanized and painted steel, aluminum, copper or brass.



Integrated Design – The roof seam design prevents rain and ice penetration from major storms and can withstand hurricane sustained winds of 155 MPH for 4 hours or more. It also provides a waterproof connection to flashing, trim and side aprons and enables easy disassembly. The tiles anchor with stainless steel screws - directly into the trusses or roof panels and in hurricane locations two lag screws can be used to enhance stability of the roof. Anchors on outside rows need to be located at the edge for solar attachment to side aprons/skirts.

LEDOLAS
Lighting | Energy | Decontamination

THIN FILM SOLAR PANEL SPECIFICATION RANGE



WARRANTY:

-10 years materials and workmanship

-25 years power output guarantee for 90% of nominal output during first 10 years and 80% over 25 years

-View our website for detailed specs on different panel options for the windows and doors

Electrical Specifications (performance at STC: 1000W/m ², 25°C, AM1.5)	
Nominal Power(Pm)	64W-225W
Open Circuit Voltage(Voc)	60.2V-116V
Short Circuit Current (Isc)	0.59A-3.75A
Voltage at max. Power(Vm)	42.6V-87V
Current at max. Power(Im)	0.55A-3.73A

System Properties (at STC)		
Maximum System Voltage	V_{sys}(V)	1000(600UL)
Limiting Reverse Current	I_R(A)	2-3.5
Maximum Series Fuse	I_{CF}(A)	2-3.5

Temperature Coefficients (at STC)	
Temperature Coefficients of Isc	α=0.060%/°C
Temperature Coefficients of Voc	β=-0.321%/°C
Temperature Coefficients of Pm	γ=-0.214%/°C

Mechanical Specifications	
Length	1200mm-3000mm
Width	600mm-1200mm
Thickness	6.8mm
Area	0.72m ²-3.6 m ²
Weight	11.8kg-78kg
Frame	Designed to application
Lead Cable	2.5mm ² 650mm
Connectors	MC4