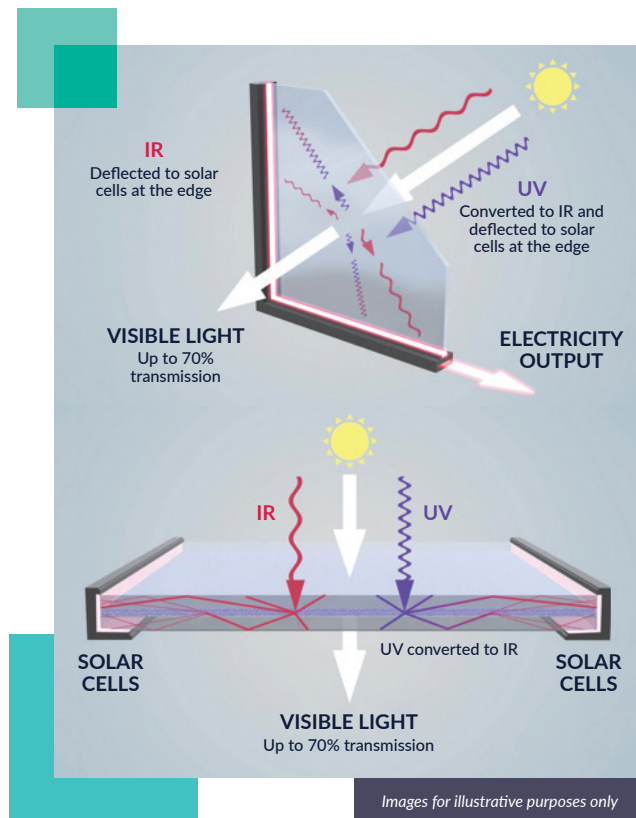


OUR TECHNOLOGY

At ClearVue Technologies, we see a world where nearly all buildings and other surfaces become solar photovoltaic (PV) collection sources and a key part of the response to the climate crisis, with the ClearVue PV Window Integrated Photovoltaics (WIPV), glass PV and smart facade solutions forming an integral part of that future.

ClearVue's patented innovative glazing technology uses an activated interlayer, sandwiched within a panel composed of a number of glass panes, some of which are coated by specialised thin-films.

Our advanced glazing system combines: our proprietary nano and micro particles dispersed into an interlayer; a clever internal design; and our custom shaped PV cells. The combined solution prevents heat and unwanted solar radiation (UV and infrared) from penetrating the glass pane. The unwanted solar radiation is then redirected to the edges of the glass pane for harvesting through standard crystalline PV cells to create clean energy - all whilst allowing natural visible wavelength light to pass through, largely unaltered, to provide maximum natural daylighting.



Images for illustrative purposes only

TECHNICAL PROPERTIES – GREENHOUSES

Electrical, Optical & Thermal Parameters

For a 4ft x 4ft ClearVue standard solar unit

Parameters	Values
Energy produced per unit	40 watts at peak
Voltage open circuit V_{oc}	61.5V DC
Amperes short circuit I_{sc}	0.835 A
Maximum power voltage V_{mp}	52 V
Maximum power current I_{mp}	0.77 A
Tolerance	±5%
Fill Factor (FF)	Up to 78%
Visible transmission	Up to 70% ($T_{direct} + T_{diffused}$)
U-Value	0.246 Btu / (h · ft ² · °F), with air
SHGC *subject to coating selection	~0.67

Mechanical & Structural Properties

For a 4ft x 4ft ClearVue standard solar window

Parameters	Values
Wind pressure for deflection	0.116 psi
Ultimate strength	0.435 psi
Water penetration test pressure (EN)	0.131 psi
Air infiltration test	0.022 psi
Height of load impact test (EN)	17.72 inches
Sound test (acoustic insulation)	37dB

COMPLIANCE & CERTIFICATIONS



Listed to IEC & UL 61730 - 1 & 2

