



ClearVue^{PV}

POWERING THE FUTURE

OUR TECHNOLOGY

At ClearVue Technologies, we see a world where consumers are part of the energy solution. We see a world where nearly all buildings and other surfaces become solar photovoltaic (PV) collection sources and where the ClearVue PV Building Integrated Photovoltaics (BIPV) and glass PV solutions form an integral part of that new future.

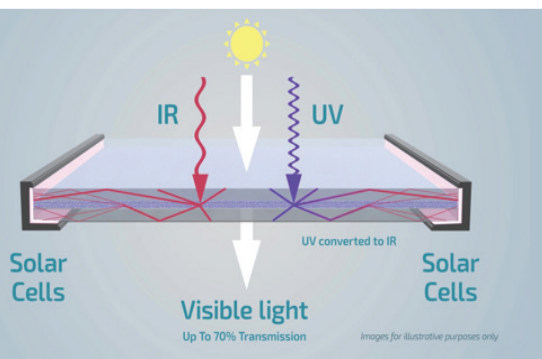
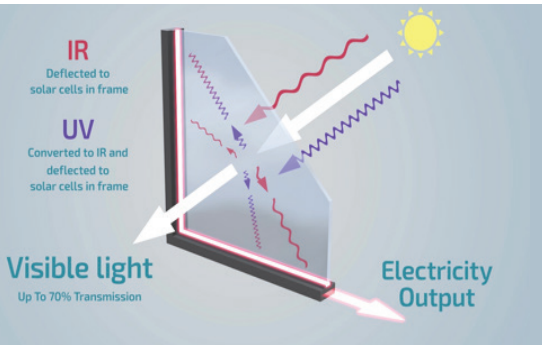
ClearVue's patented innovative glazing technology uses an activated interlayer, sandwiched within a panel composed of a number of glass panes, some of which are coated by specialised thin-films.

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 towards the edges of the glass pane for harvesting through standard crystalline PV cells to create clean energy - all while allowing natural visible wavelength light to pass through, largely unaltered, to provide maximum natural daylighting.

OUR PAYBACKS

Financial Payback < 1 year

Product Embodied Carbon Payback < 10 years



COMPLIANCE & CERTIFICATIONS



Listed to IEC & UL 61730 - 1 & 2

TECHNICAL PROPERTIES

Electrical, Optical & Thermal Parameters

For a 4 ft x 4 ft 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 0.204 Btu / (h · ft ² · °F), with Argon
SHGC * subject to coating selection	~0.4 - 0.67

Mechanical & Structural Properties

For a 4 ft x 4 ft ClearVue standard solar unit

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



ClearVue^{PV}

Email: info@clearvuepv.com

Phone: +61 (8) 9220 9020

Fax: +61 (8) 9220 9029

Address: Suite 7, 567 Newcastle Street, West Perth, WA 6005, Australia