Public Safety Building, Salt Lake City, UT

FAÇADES & BEYOND

Building-Integrated Photovoltaic (BIPV) Glass System

SOLARVOLT™
Building Integrated Photovoltaic

A Legacy of Sustainability Charges Ahead

Vitro Architectural Glass, North America's largest and most trusted glass manufacturer, is responsible for many of the commercial glass industry's most-specified products, including high-performance *Solarban*® low-emissivity (low-e) glasses, *Starphire Ultra-Clear*® glass and a range of performance-tinted glasses.

Vitro Glass was the first U.S. glass manufacturer to have its entire collection of architectural glass products recognized by the *Cradle to Cradle Certified*™ Products Program and the first North American manufacturer to publish third-party verified Environmental Product Declarations (EPDs) for its flat glass and processed glass products. Our products have been installed on hundreds of LEED® certified buildings, including three of the world's 11 certified net-zero "living" buildings and eight of the AIA Committee on the Environment (COTE) award-winners for 2020 and 2021. Learn more at **vitroglazings.com/sustainability**.

Unveiling New Possibilities

The Vitro legacy of sustainability continues with the *Solarvolt*™ building-integrated photovoltaic (BIPV) glass system. To realize this offering, Vitro Architectural Glass acquired assets from *Solarnova*: a proven, Germany-based manufacturer of BIPV glass systems with successful commercial installations throughout Europe and North America.

Seamlessly integrated into the building structure, *Solarvolt*™ BIPV glass unveils new possibilities for renewable power generation and design. *Solarvolt*™ BIPV glass combines aesthetics, CO_2-free power generation and protection from the elements for commercial buildings.

Why *Solarvolt*™ BIPV?

- Made-to-order
- Aesthetic flexibility
- High-performance
- Replaces conventional cladding
- Sustainable

Public Safety Building, Salt Lake City, UT

Elegant, Reliable Energy Generation & Protection

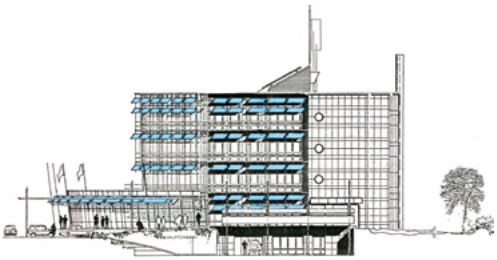
An Integrated Building Envelope Solution

Solarvolt™ BIPV glass systems replace traditional façade cladding materials, such as stone or ceramic materials, and enhance just about any part of commercial building exteriors: balustrades and balconies, skylights, spandrel glass, roof elements, canopies and more. Upon request, *Solarvolt*™ BIPV glass can become components of many traditional façade solutions.

Vitro manufactures customizable lites, including popular glass-glass composite solar panels with solar cells arranged between two glass lites, as well as glass substrate lites in 2,500mm x 3,700mm (98.4" x 145.6") and in thicknesses up to two 10mm (0.39") lites.

- Power Generation
- Design Element
- Building Component
- All in One

A World of Design Possibilities



Once you determine a size, Vitro engineering services can design the right photovoltaic glass lite for your needs. Cell density, transparency, colors and shapes will be adapted to your exact aesthetic, performance and technical requirements.

Our glass lites can be used in commercial buildings to enhance their aesthetics and energy generation performance. Two examples include the Public Safety Building in Salt Lake City, Utah, and the National Academy of Sciences in Washington, D.C.

Harness Light & Shadow

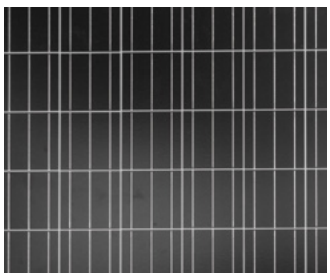
The term "solar painting" is often used to refer to the interplay of light and shadow resulting from the spacing between individual solar cells. This technique is commonly leveraged for overhead glazing and skylight applications. Learn more at **vitrosolarvolt.com**.

ADAC, Laatzen, Germany

Photovoltaic (PV) Crystalline Silicon Types

Monocrystalline PV renders a black appearance on solar cells with maximum energy-generation performance.

For a patterned appearance with some of the energy generation benefits of monocrystalline PV and higher visible light transmission, monocrystalline PV strips are also available.



Monocrystalline PV

Monocrystalline PV Strips

National Academy of Sciences, Washington, D.C.

Renewable Energy Revolution.

Why choose BIPV glass lites over other building envelope materials?

They help your project achieve zero energy.

At NEURONAL in Mexico City, Mexico, the *Solarvolt*™ BIPV glass façade can generate up to 44,000 kWh per year. It also results in energy savings— by providing shade from the sun, it reduces air conditioning costs by 25% to 30%. It also diminishes noise from the outside and provides wind and weather protection.

With the help of *Solarvolt*™ BIPV glass, tomorrow's buildings will be constructed as visually attractive, small-scale power stations, driving the CO_2-free zero energy transformation through self-sufficiency. The renewable energy revolution has already begun. Are you ready? *Solarvolt*™ BIPV glass by Vitro Architectural Glass can take your sustainability goals to the next level.

NEURONAL (Santa Fe Offices), Mexico City, Mexico

EWE Arena, Oldenburg, Germany

EWE Arena, Oldenburg, Germany

Resources, Certifications & Accreditations

Solarvolt™ BIPV glass systems are being tested to achieve the newest UL certification. Previous certificates include:

IEC 61215 / EN 61215

Crystalline silicon terrestrial photovoltaic (PV) modules—Design qualification and type approval

IEC 61730 / EN 61730

Photovoltaic (PV) module safety qualification—Requirements for construction

IEC 61730 / EN 61730

Photovoltaic (PV) module safety qualification—Requirements for testing

All *Solarvolt*™ BIPV certifications and warranties are registered under ILUMIMEX S.A. de C.V., a Vitro company. *Solarvolt*™ BIPV also is undergoing new certification testing to **IEC**, **UL** and **CAN/CSA** standards and is pursuing **CEC** and **SGCC** certification.

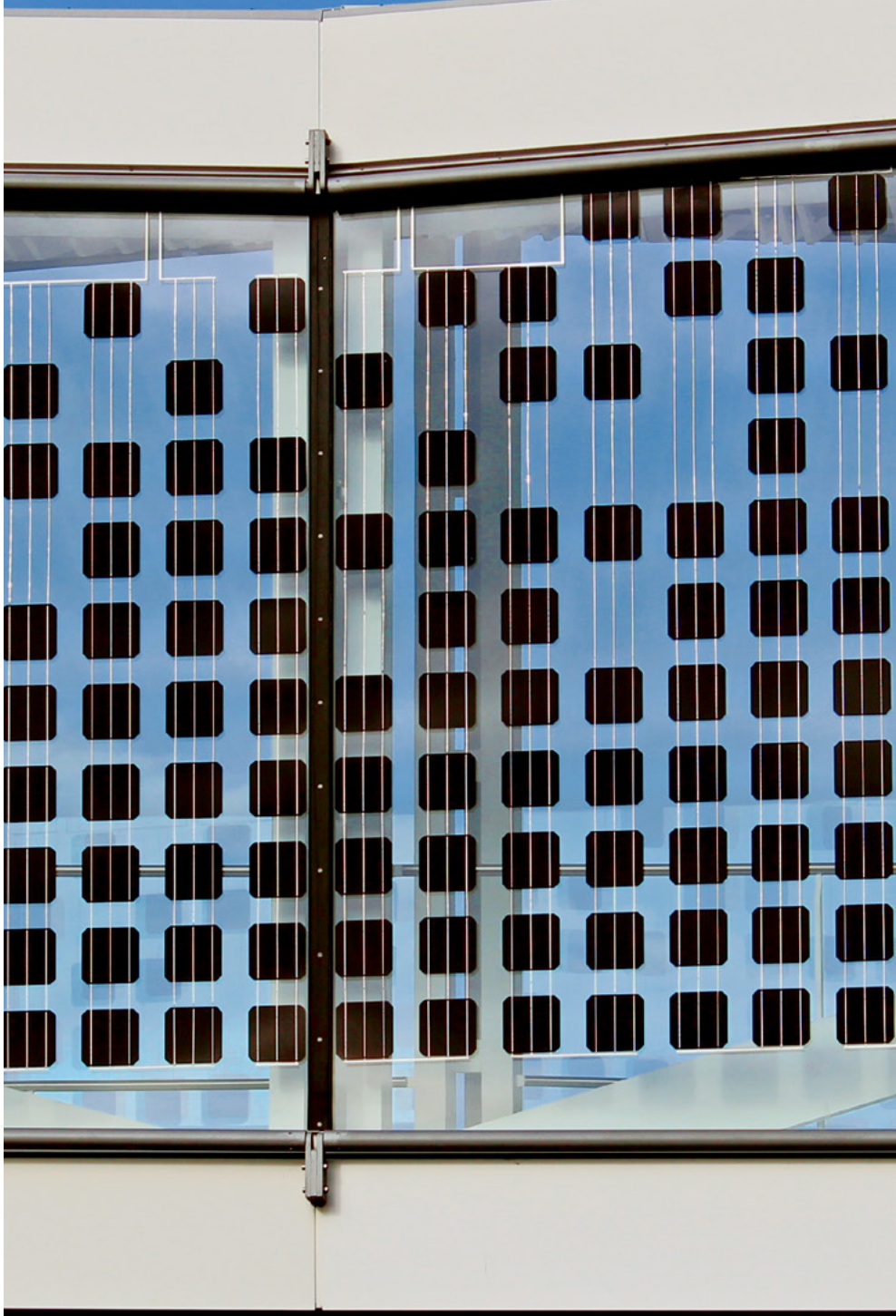
Download certificates, performance guarantees and more at **vitrosolarvolt.com**. A warranty is available.

Explore the full range of Vitro Glass products, including literature and technical information, at **vitroglazings.com**.

Charge Ahead.
Reach Out.

For specification information and additional technical details, reach out to your Vitro National Architectural Manager.

vitroglazings.com/rep



Deutsche Messe (Brücke), Hannover, Germany

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vitrosolarvolt.com

Vitro®
Architectural Glass

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