PHOTOVOLTAIC SKYLIGHT RENOVATION

As part of the comprehensive revitalization former Bell Labs facility into the iconic mixed-use Metroburb in New Jersey, Onyx Solar provided $5,575~\text{m}^2$ (60,000 SqFt) amorphous silicon photovoltaic architectural glass panes.

This installation facilitated the creation of the **largest photovoltaic** skylight of its kind in the USA.

The PV skylight both **naturally illuminates the complex while it generates free**, **clean electricity from the sun**. It currently offsets around 60 tons of annual CO₂ emissions, drastically improving the building's energy efficiency and reducing its carbon footprint.

Utilizing state-of-the-art technology, Bell Work's skylight features **24 different sizes of glass** to cover the multiple skylight opening of **Eero Saarinen-designed architectural gem.**

Each glass panel is comprised by amorphous silicon thin film photovoltaic active glass, laminated between two sheets of tempered glass.

The PV glass provides **exceptional light transmittance while simultaneously achieving an optimal solar heat gain coefficient,** enabling the building to **offset HVAC** requirements and maintain its distinctive design.

Originally constructed in 1962, the building is revered for its role in spurring the development of some of the world's foremost inventions and research concepts, including the first practical solar cell. Furthermore, it was home to seven Nobel Prize award winners

TECHNICAL DATA

Nominal Power (Wp/m²)
Visible Light Transmittance (VLT)
Solar Factor (g-value)
U value (W/m²K)
U value (Btu/h ft² °F)
Light Reflection (external)

34 Wp/m² 16% 32% N/A N/A 8%





