

## PHOTOVOLTAIC SKYLIGHT RENOVATION

This building, which dates back to the **early 1900s**, originally functioned as a transshipment warehouse and served as a border station between Belgium and the Netherlands.

Now fully retrofitted, it stands as a center for sustainability.

Onyx Solar was crucial in the manufacturing of photovoltaic glass that was installed to rejuvenate the existing skylight.

The 750 m<sup>2</sup> (8,070 SqFt) skylight integrates 440 units of amorphous silicon PV glass boasting a **great capability to allow the entrance of natural light**.

The PV glass units manufactured incorporate **15mm argon chamber** to provide the insulation required by customer.

On top of this these insulated glass units (IGU) will generate **600 MWh of clean energy** and avert the emission of **400 tons of CO<sub>2</sub>** into the atmosphere throughout their lifespan.

The glass was **custom-made to achieve the desired balance between nominal power, VLT and SHGC (g-value)**.

### TECHNICAL DATA

Nominal Power (Wp/m <sup>2</sup> )	34 Wp/m <sup>2</sup>
Visible Light Transmittance (VLT)	16%
Solar Factor (g-value)	12%
U value (W/m <sup>2</sup> K)	1.10
U value (Btu/h ft <sup>2</sup> °F)	0,19
Light Reflection (external)	8%



TECHNICAL DATA SHEET



## ESSEN'S OLD CUSTOMS

ESSEN, BELGIUM

SKYLIGHT

AMORPHOUS SILICON TECHNOLOGY

