

PHOTOVOLTAIC SKYLIGHT

NEW CONSTRUCTION

Onyx Solar manufactured crystalline silicon insulating photovoltaic glass units to replace the **35 year old glazing atrium** of the Edmonton Conference Center in Canada.

The project involved **custom-engineering PV glass** to fit the **current metal structure**, **integrating 125 different glass types** of **different dimensions, shapes, and cell layouts**.

This upgrade allows the building to **generate an on-site 230,000 kWh** per year which substantially reduces operational and maintenance costs while enhancing thermal insulation and letting in a large amount of sunlight.

The PV glass incorporates a **16 mm air chamber** to insulate the building and the **density of cells was totally customized** to allow the **entrance of a substantial amount of natural light**.

The atrium's lower section showcases a large circular area displaying a **poem in Morse code**. The layout of the solar cells was meticulously designed to form verses of the poem.



TECHNICAL DATA

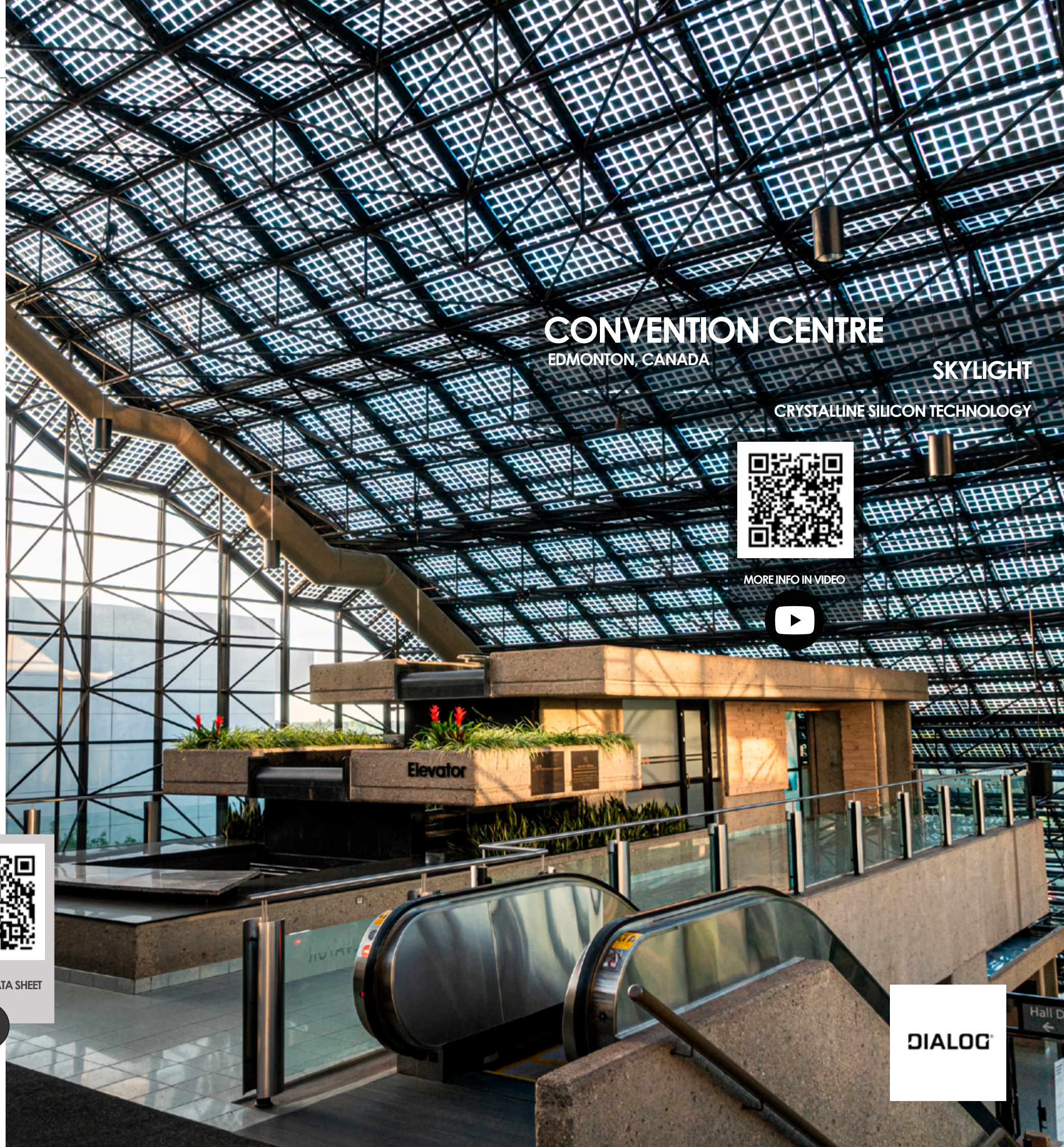
Nominal Power (Wp/m ²)	120 Wp/m ²
Visible Light Transmittance (VLT)	42%
Solar Factor (g-value)	50%
U value (W/m ² K)	1.30
U value (Btu/h ft ² °F)	0,23
Light Reflection (external)	8%



TECHNICAL DATA SHEET



BACK TO START



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SKYLIGHT

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