



PROJECT DATA

Project	Roosevelt Island lighthouse - Restoration
City	Roosevelt Island, NY
Country	USA
Company	Thomas A. Fenniman Architect
Contact	Thomas A. Fenniman

This quotation is based on the information provided by Thomas A. Fenniman Architect. We have considered a total area of integration of **155 sqft** for this *Building Integration Photovoltaic* solution, leading a nominal power of **1.48 kWp**.

We have provided several options in terms of size and thickness that could be modified and customized if client would prefer a different option. Anyway, this quotation is merely a product description and pricing proposal. The client is responsible to establish the structural needs of the architectural photovoltaic glazing for the given project according to full system structural calculations and local building codes.

The following document shows:

- Quotation.
- Terms & Conditions.
- Annex 1. Technical Data Sheet.





QUOTATION

CRYSTALLINE SILICON TECHNOLOGY

Based on your requirements, please find below your quotation.

■ PHOTOVOLTAIC GLASS QUOTATION

	Thickness (in)	Length (in)	Width (in)	Power (Wp/unit)	Quantity (pcs)	Unit Price (\$/unit)	Subtotal (\$)	
GL.01	LAM 0.7"	98	41	185	8	2,176.50	\$16,686.52	\$107.69
TOTAL					8		\$16,686.52	\$107.69

global leader in building integrated photovoltaic glass





1 9 1 1 0 6 - J L 0 1



TERMS & CONDITIONS

Terms and Conditions:

- **V.A.T. not included**
- Valid until: **30 days**
- Delivery Terms (Incoterms 2010): **EX-WORKS** (our factory)
- Payment terms: A/ 100% Prepayment

Unless otherwise stated, this quote does not include:

- Work management and assistance at the jobsite.
- Transportation costs.
- Profiles and structural fixing systems for the glass (to be defined according to the project).
- Special packaging for particular transportation.
- Installation of materials.
- Structural design and calculus.
- Execution of the electrical design.
- Supply of electrical wiring for interconnection between units.
- Permits, authorizations and/or other certifications.
- Packaging recycling
- All any other item not stated in this quote.

General note:

This quote has been calculated based on the information and drawings provided. Should the items quoted in this document change in nature, size, quantities, and/or result modified after the quote is calculated, such quote may vary too.

November 6th, 2019

global leader in building integrated photovoltaic glass

3





1 9 1 1 0 6 - J L 0 1



ANNEX 1

TECHNICAL DATA

General note for Amorphous Silicon Technology:

The nominal power of PV modules indicates the power generated under Standard Test Conditions (STC). Photovoltaic modules may produce more current and/or voltage under actual operating conditions than in Standard Test Conditions. The electrical characteristics are within $\pm 10\%$ of the indicated I_{sc} and V_{oc} values under STC. Electrical parameters, shown in the data sheet are considered **after light-soaking degradation process**. The uncertainty of the measurements can be established in $\pm 4,72\%$.

global leader in building integrated photovoltaic glass



SPAIN (Avila) • C/ Río Cea 1, 46 • 05004 • +34 920 210 050 • info@onyxsolar.com • www.onyxsolar.es
UNITED STATES (New York) • 79 Madison Avenue, Ste. #640 • NY 10016 • +1 917 261 4783 • usa@onyxsolar.com • www.onyxsolar.com



TECHNICAL DATA - GL.01

PHOTOVOLTAIC GLASS		98 x 41
GL.01.TRAPEZOIDAL		6" Mono Crystalline
Electrical data test conditions (STC)		
Nominal peak power	185	P _{mpp} (Wp)
Open-circuit voltage	27	V _{oc} (V)
Short-circuit current	8.93	I _{sc} (A)
Voltage at nominal power	22	V _{mpp} (V)
Current at nominal power	8.39	I _{mpp} (A)
Power tolerance not to exceed	±10	%
STC: 1000 w/m ² , AM 1.5 and a cell temperature of 25°C, stabilized module state.		
Mechanical description		
Length	98	inches
Width	41	inches
Thickness	0.70	inches
Surface area	19.05	sqf
Weight	156.11	Lbs
Cell type	6" Mono	Crystalline
No PV cells / Transparency degree	42	25%
Front Glass	5/16"	Tempered Glass Low-Iron
Rear Glass	5/16"	Temp. Planibel dark blue
Thickness encapsulation	1,80 mm	EVA Foils
Category / Color code		
Junction Box		
Protection	IP65	
Wiring Section	2,5 mm ² or 4,0 mm ²	
Limits		
Maximum system voltage	600	V _{sys} (V)
Operating module temperature	-40...+85	°C
Temperature Coefficients		
Temperature Coefficient of P _{mpp}	-0,451	%/°C
Temperature Coefficient of V _{oc}	-0,361	%/°C
Temperature Coefficient of I _{sc}	+0,08	%/°C

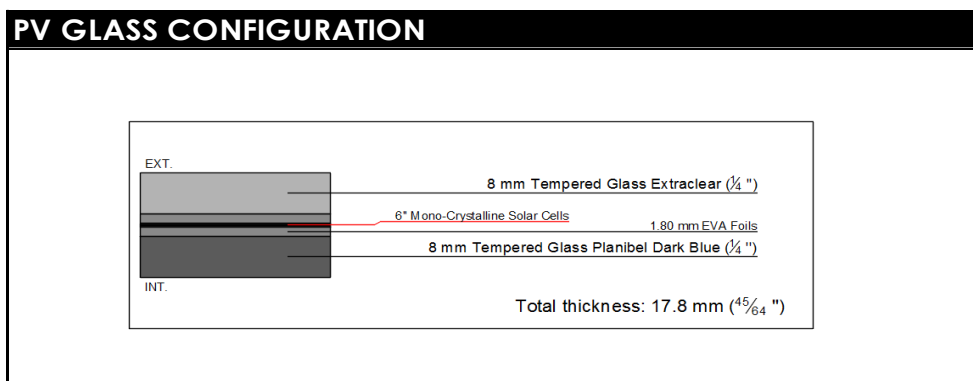
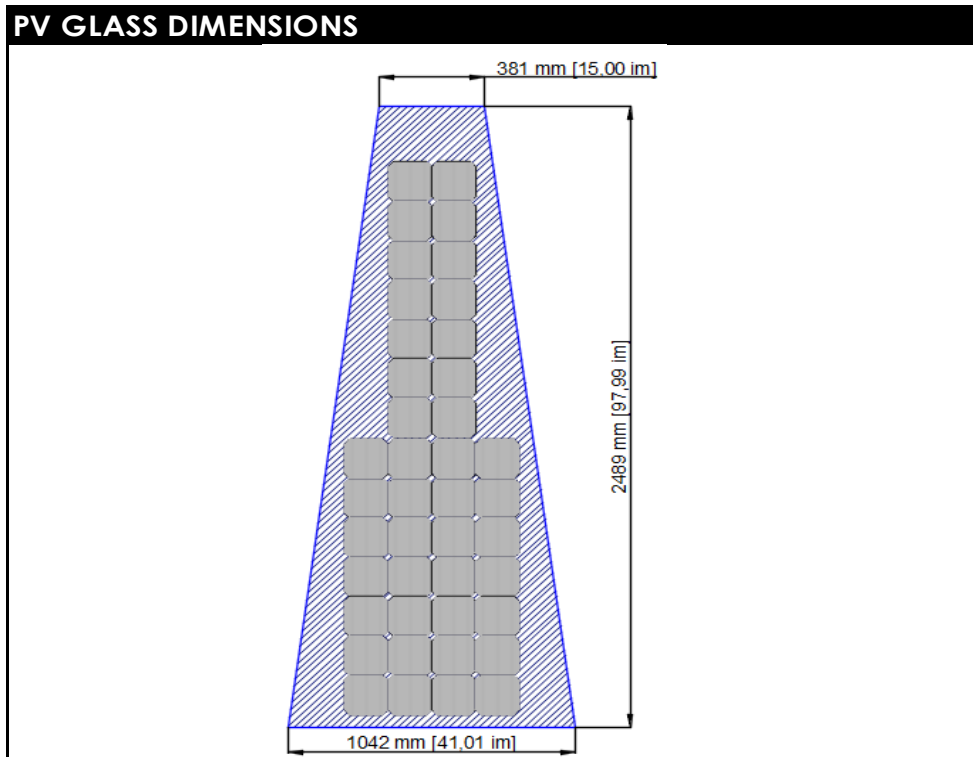
*All technical specifications are subject to change without notice by Onyx Solar

global leader in building integrated photovoltaic glass





TECHNICAL DATA - GL.01



GLASS PROPERTIES	Onyx Equivalent Glass
Light Transmission	25%
U-value [Btu/h ft ² °F]	0.92
Peak Power [Wp/sqf]	9.7

global leader in building integrated photovoltaic glass

