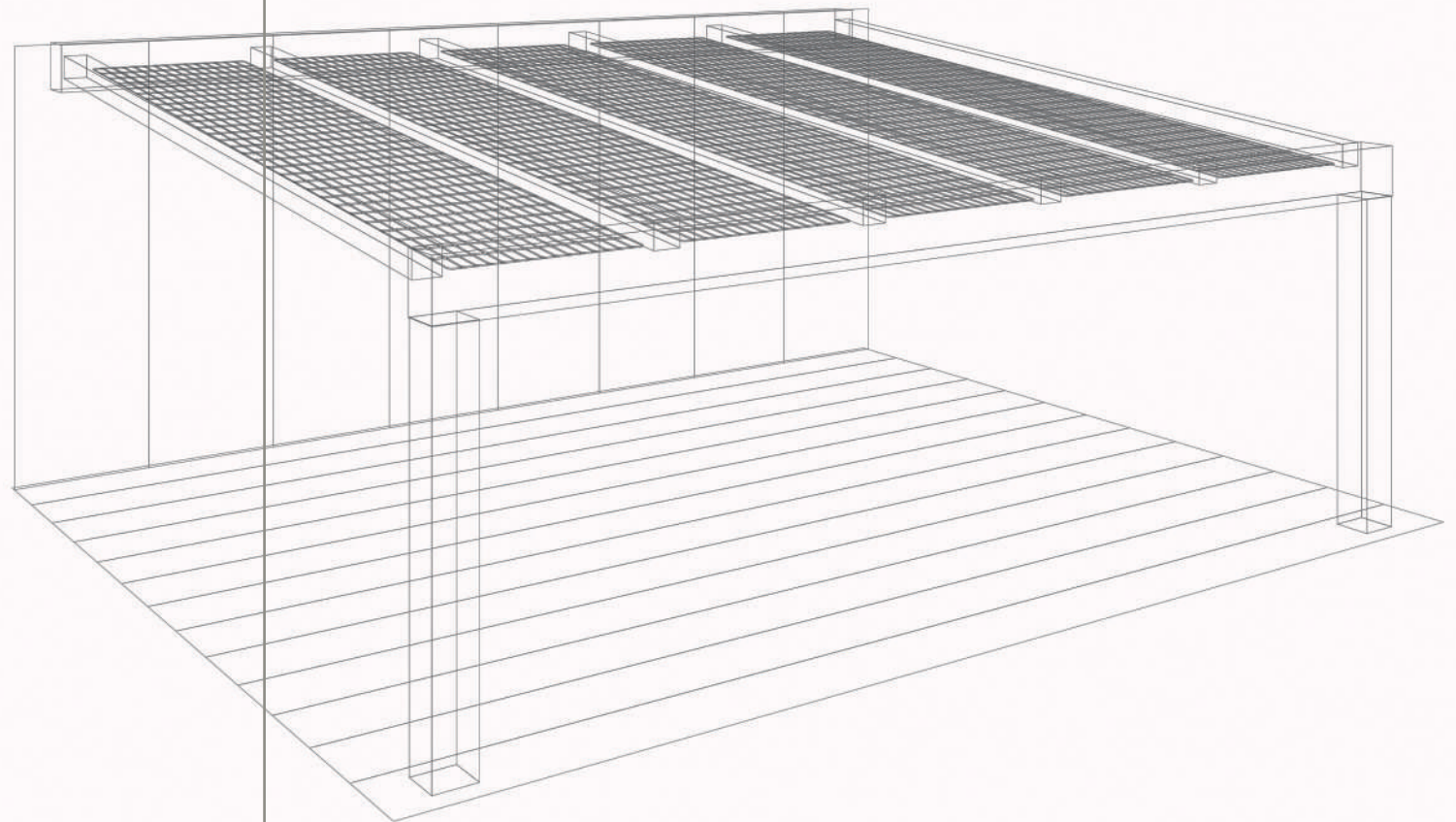


*New Generation
Solar Roof.
Sustainability,
efficiency, and design*





C3 Systems is highly committed to its human team, customers, surroundings, and the environment. Every year, we work with the goal of identifying and proposing measures that contribute to achieving sustainable, efficient, and balanced economic growth. Therefore, we carry out proper raw material management, preserve natural resources by promoting their responsible use, ensuring their supply, and conducting studies to improve and identify new opportunities for economic growth. Additionally, we develop innovative products in the environmental field and ensure the protection of people's health and quality of life.

Examine closely the present you are constructing, for it must resemble the future you dream of.

~Alice Walker~

SOLAR ROOF



e-Orbita LUZ solar roof on an aluminum structure in an outdoor residential property

It seamlessly integrates with the **Seeglass** and **Habitat** product range to create unique environments and become the best energy-efficient, intelligent, and sustainable solution.

The advanced technology with PERC cells captures and transforms energy into electricity, ensuring optimal performance and exceptional durability with a 30-year warranty.

With a maximum energy-capturing capacity of 450Wp per solar glass, **e-Orbita LUZ** becomes one of the top solutions in energy efficiency and sustainability in the sector, created by C3 Systems.

e-Orbita LUZ is the new generation of solar ceiling with a technology that harnesses solar energy through the installation of a structure with solar glass, whether on the roofs of residential or commercial buildings, in homes, or in the HORECA sector.

Solar glass on the roof not only provides secure savings but also increases the property's value. Join the solar revolution and unlock the full potential of your roof. Illuminate your life, care for the planet, and build a greener future.

The sun is waiting for you, what are you waiting for?





ADVANTAGES OF THE SYSTEM

- Higher energy efficiency and tightness.
- It integrates seamlessly with **Seeglass** and **Habitat**
- Innovative architecture thanks to its straight-line design
- It creates new, more sustainable, and self-sufficient spaces
- Saves energy and electricity costs
- Integrated home automation for solar panel inverter control
- Extended durability thanks to its 30-year warranty
- Ideal for the HORECA sector, residential properties, or commercial buildings
- Capture, transform, and use energy according to your needs
- No need for sealing in the structure

CONFIGURATIONS

e-Orbita LUZ it's a versatile system that can be installed in more than 10 standard configurations. The specific configuration may vary depending on the type of location and the available attachment points in the installation.

Some examples of **e-Orbita LUZ** powers:

kw	N° panels	
4	4x2	3x3
6	7x2	5x3
8	9x2	6x3
10	11x2	7x3
14	16x2	11x3
18	20x2	14x3



SPECIFIC CHARACTERISTICS TO SOLAR ROOFS



INNOVATIVE ASSEMBLY SYSTEM BETWEEN PROFILES:

The system has been designed in such a way that it does not require sealing between profiles thanks to the clipping between profiles, making it one of the most cutting-edge solutions in the sector.



ARCHITECTURAL DESIGN WITH STRAIGHT LINES:

The attractive straight-line design of e-Orbita LUZ, along with its overhanging roof option without a gutter, adds great elegance, modernity, and a distinctive touch to the spaces.



CONCEALED SOLAR GLASS WIRING:

The roof is designed to discreetly integrate the wiring into the ceiling structure itself, providing a clean and aesthetic appearance. Seamlessly blend it into your environment without visible cables.



COVERS LARGE DIMENSIONS:

The system offers multiple options to fit your needs, where you can find standard configurations up to 23 m. in length. If you're looking for a more customized design, it can also be made to measure, creating the space you've always desired, without limits.

TECHNICAL SPECIFICATIONS OF THE STRUCTURE

	FIXED ROOF	
Standard lane width	1169 mm	
Standard projection	1 panel	2198 mm
	2 panels	4106 mm
	3 panels	6014 mm
Panel size	1904x1129 mm	
Slope	6° (10% ± 1%)	

DISTANCE BETWEEN STANDARD BEAM PILLARS
Without Seeglass enclosure
5000 mm.**
With Seeglass enclosure
3500 mm.**

**Without snow load.

DISTANCE BETWEEN REINFORCED BEAM PILLARS
Without Seeglass enclosure
6000 mm.**
With Seeglass enclosure
4500 mm.**



TECHNICAL SPECIFICATIONS OF SOLAR GLASS



HIGH POWER OUTPUT:

Solar glass stands out for its high output power, making it the most efficient option. The quality of the photovoltaic cells allows for maximum performance.



HIGHER ENERGY GENERATION:

The conversion efficiency of solar glass allows for greater energy generation, enabling the utilization of every available surface to capture sunlight and convert it into electricity.



CLASS A – AGAINST FIRE (FIREPROOF):

This classification ensures that the glass has a high fire resistance and can maintain its structural integrity during a fire, contributing to the safety of people and protecting property.



PERC CELL TECHNOLOGY WITH THE HIGHEST EFFICIENCY:

PERC cells achieve higher conversion efficiency, which means they can generate more electricity from the same amount of sunlight that falls on them.



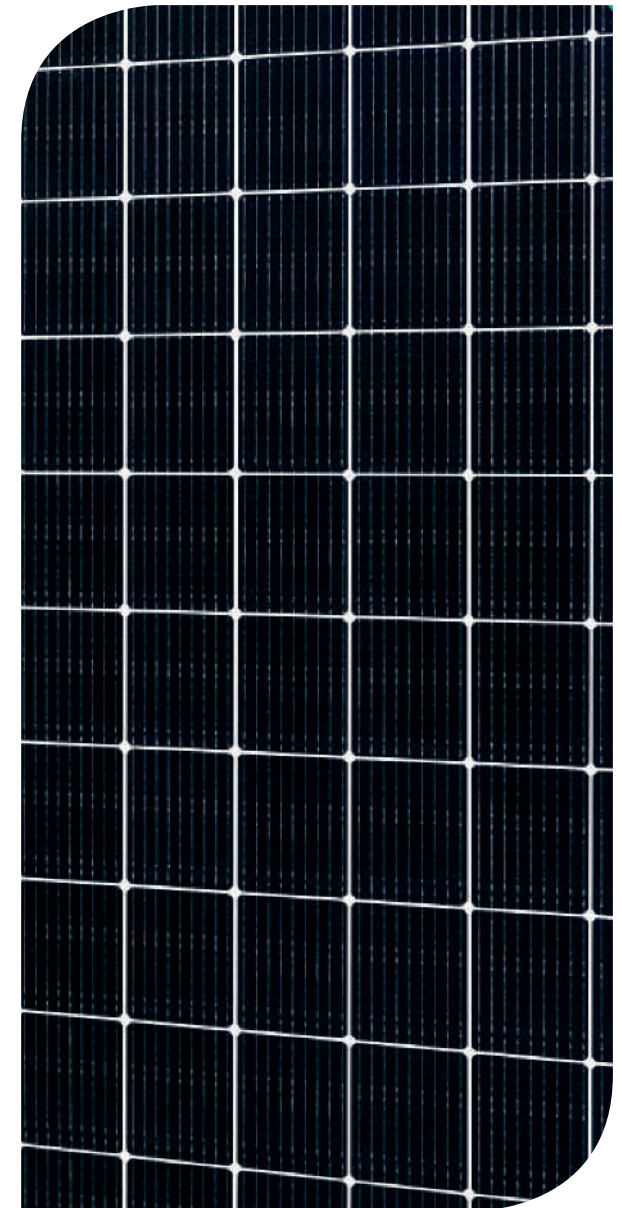
30-YEAR WARRANTY:

Photovoltaic solar glass has a 30-year warranty on power generation. In addition, it also has a 15-year warranty on its components.



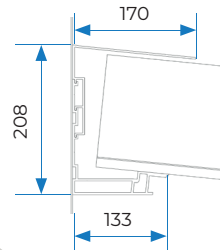
BIFACIAL SOLAR PANELS:

Bifacial solar panels emerge as an alternative that allows increasing the photovoltaic energy production by up to 30% of additional power thanks to the fact that both sides of the panel manage to absorb the sun's energy.

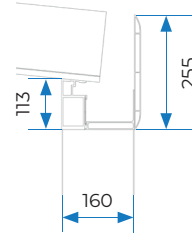


SECTIONS

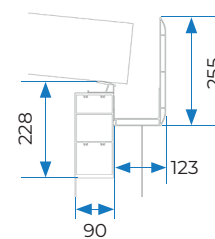
1 RIDGE PROFILE



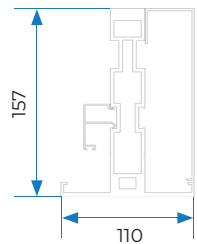
2 GUTTER + STD BEAM



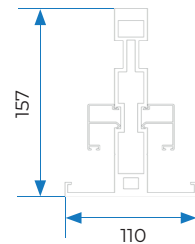
3 GUTTER + HEAVY BEAM



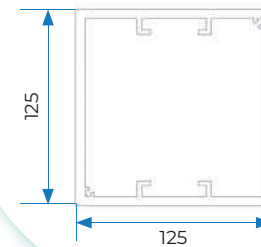
4 LATERAL GUIDE



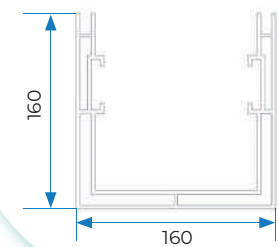
5 CENTRAL GUIDE



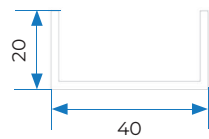
A2 CLOSED PILLAR PROFILE



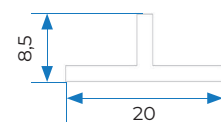
A2 U PILLAR PROFILE



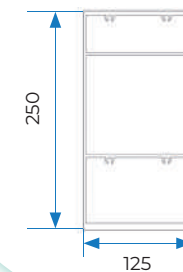
6 U SHAPE PROFIL



7 T SHAPE PROFIL



A2 BEAM PROFILE

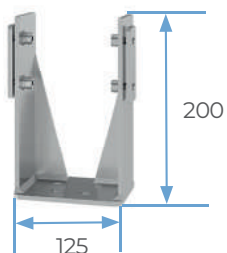


TO WALL CONFIGURATION

A - TYPE OF SUPPORT

A1 - Adjustable o Adjustable & Reinforced

A2 - Canopy



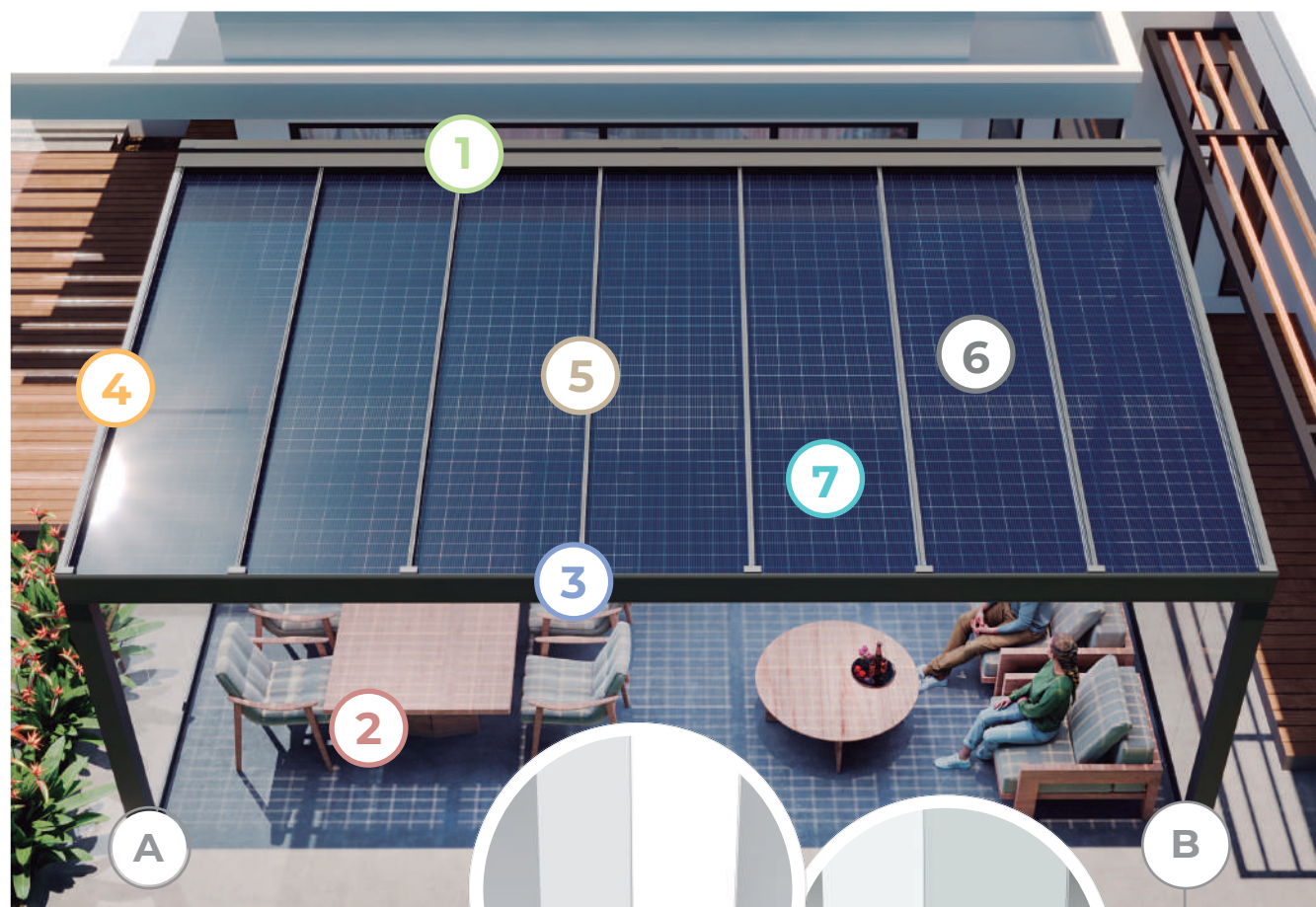
Adjustable support



Reinforced adjustable support

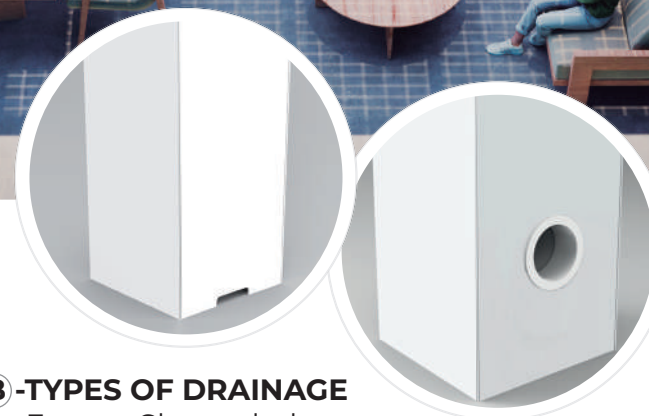


Canopy support



B - TYPES OF DRAINAGE

Free or Channeled



ISLAND CONFIGURATION

e-Orbita-luz features the innovative island configuration. The island option is supported by four pillars, facilitating an independent structure and eliminating the need to anchor to an existing wall. This provides an ideal solution for open areas, gardens, terraces, and parking lots.

The island configuration allows for harmonious integration into any environment, providing shade and protection while generating clean energy.



GABLE ROOF CONFIGURATION

e-Orbita-luz also offers the gable roof configuration, an elegant and efficient solution that combines traditional architectural design with advanced solar technology.

The gable roof configuration not only provides a classic, elegant aesthetic design but also enhances solar energy capture efficiency by offering a larger surface area exposed to sunlight.

Adaptable to various settings, from homes, terraces, or commercial buildings, its versatile design integrates perfectly into any architectural landscape.



*e-Orbita LUZ
structure with gable roof*



HOME AUTOMATION

e-Orbita LUZ solar roof offers the possibility, thanks to two leading home automation brands, **Nice** and **Somfy**, to incorporate lighting systems and integrate them with the various installed smart sensors for intelligent space control. Create the ideal ambiance wherever you are. Experience a unique blend of comfort, cutting-edge technology, and well-being. C3 Systems' quality in a highly sustainable and efficient system.

The integration of lighting in the system includes:

- LED lights in beams and ridge profile

Furthermore, there are two color options:

- Warm white (3000K), neutral white (4000K)
- RGB

Create customizable scenarios by programming the ambient lighting.

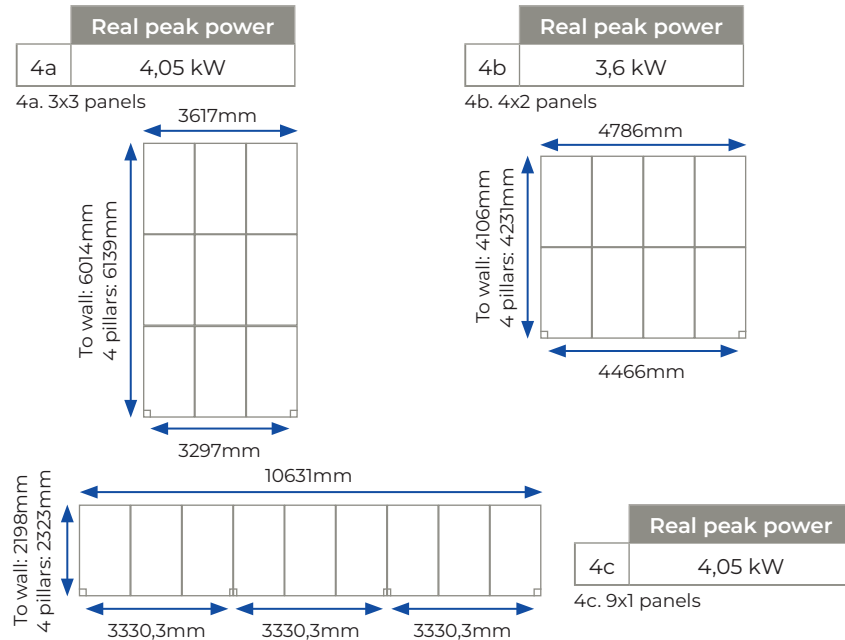
All of this and more at the touch of a button.

Smart spaces for smart people.

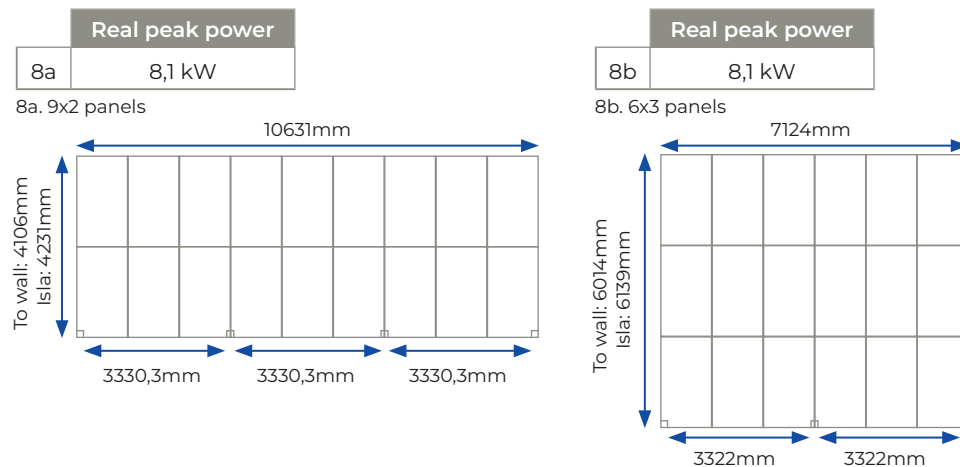
An innovative system designed with you in mind.



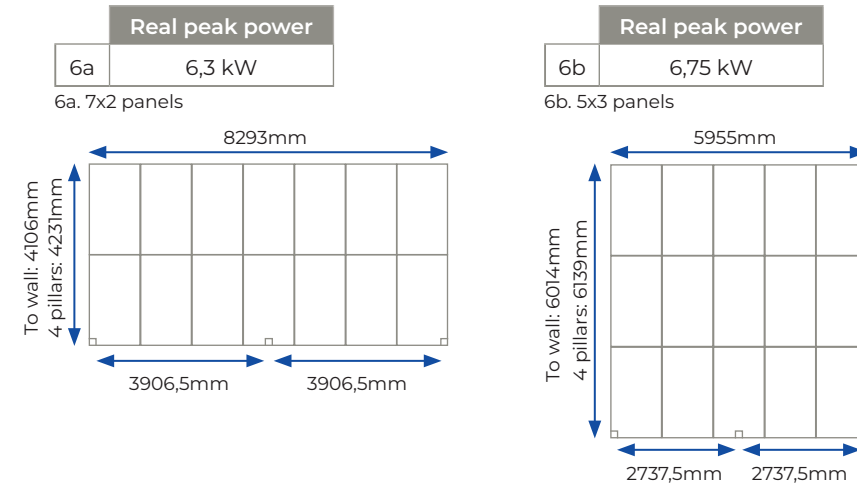
4KW



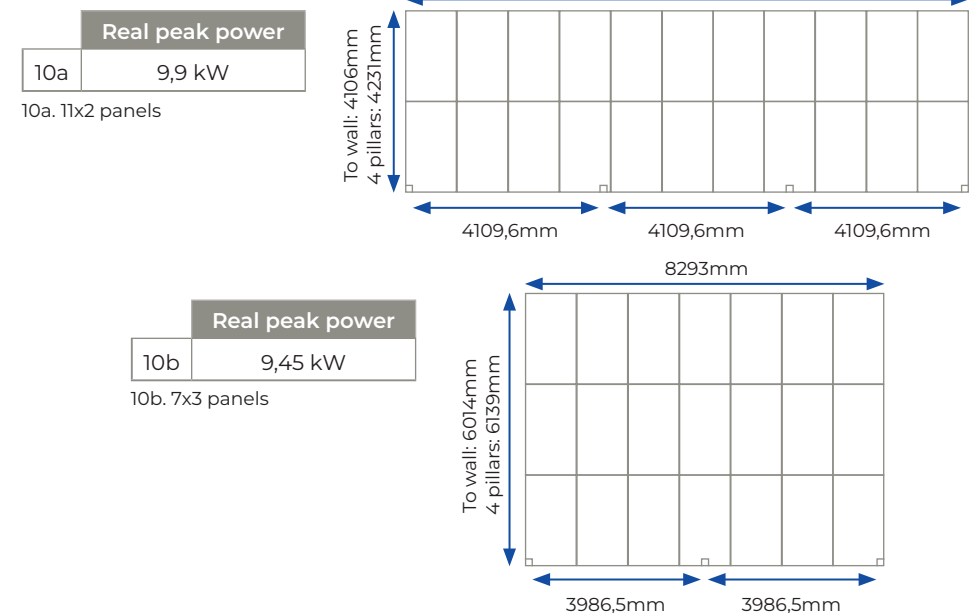
8KW



6KW



10KW

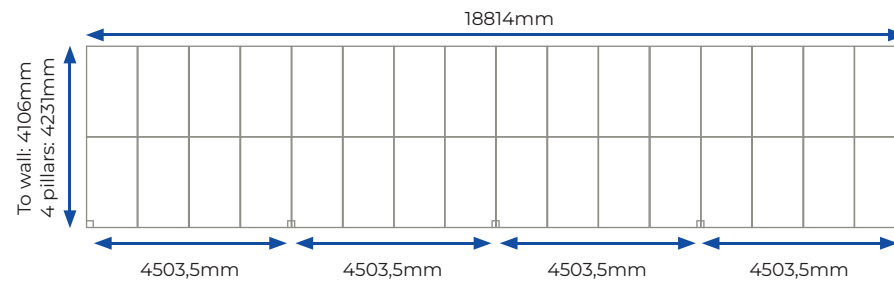


14KW

Real peak power

14a	14,4 kW
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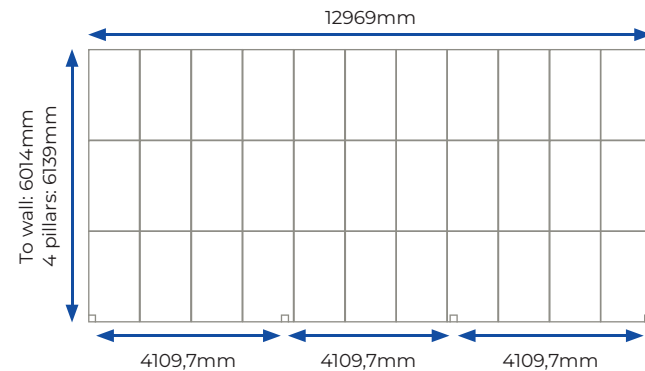
14a. 16x2 panels



Real peak power

14b	14,85 kW
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14b. 11x3 panels

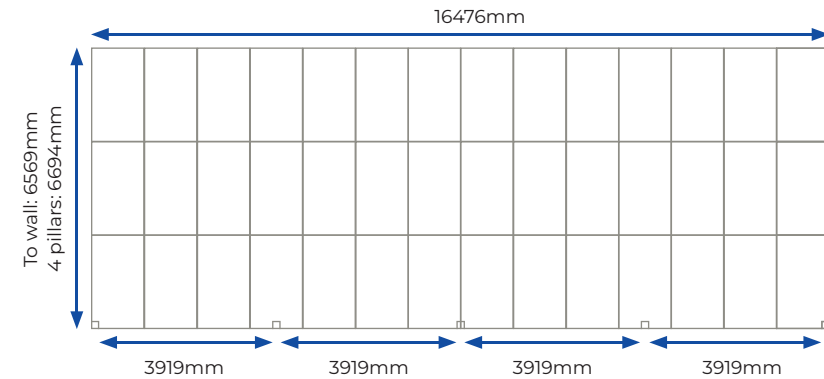


18KW

Real peak power

18a	18,9 kW
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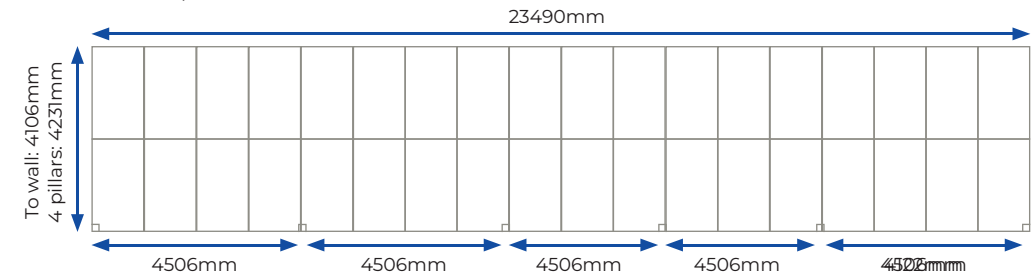
18a. 14x3 panels



Real peak power

18b	18 kW
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18b. 20x2 panels



e-Orbita luz is available in all finishes from the RAL range, textured, and matte. Visit our website to explore our extensive range of finishes.



The aluminum profiles used in the manufacturing of these items comply with:

ALLOYS

They are extruded in compliance with Standard UNE EN 12020-1. They correspond to extruded aluminum alloy 6063 with T5 heat treatment. They meet the composition requirements as specified in Standard UNE-EN 573-3. They also meet the dimensional tolerances as specified in Standard UNE-EN 755-2.

SURFACE FINISHING – PAINTING

The painted profiles are treated in facilities authorized for the use of the QUALICOAT Quality Mark for PAINTING, COATING, and POWDER COATING OF ALUMINUM FOR ARCHITECTURE, in compliance with the specifications of the QUALICOAT Quality Mark Guidelines.



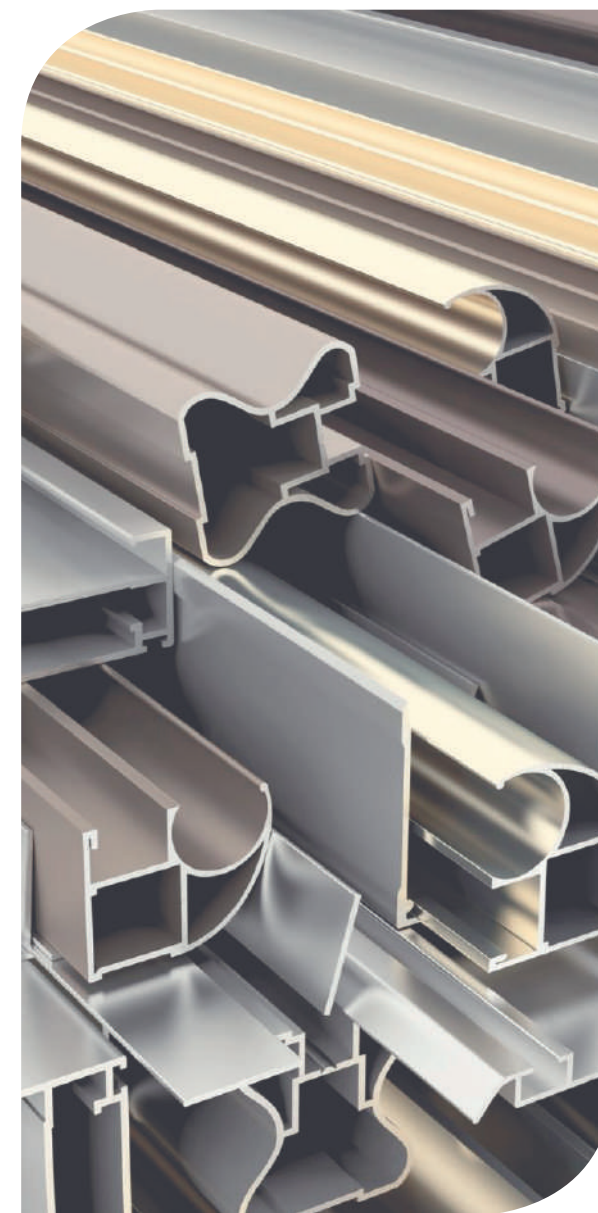
Why should we use aluminum for the windows of the future? **FOR ITS ENVIRONMENTAL ADVANTAGE**

It is the only material for glass systems that is 100% recyclable and can be used again and again.

It is the only material that is 100% sustainable and effectively recyclable.

The mineral from which it is made is available in virtually unlimited quantities

It is the only material that supports a 100% recycling economy.








Certifications

APPROVAL AND TESTS

e-Orbita LUZ has the test certificates from an accredited laboratory, established by national and international legal regulations, issued by the respective certification bodies.

This certification ensures that by choosing C3 Systems, S.L. products, you are acquiring a quality product with all the necessary guarantees.

HIGHEST RATING IN TESTS*			
			
Wind resistance UNE EN 1932:2014 CLASS 6 - 101 km/h	Water tightness UNE EN 14963:2007 210 l/m ² x hour	Snow resistance UNE EN 12833 160 kg/m ²	Top load resistance EP 00001:2024 800 N/m ²
 *Tests obtained according to maximum measurements (6500x4800x2425mm)			

Maximum energy capture capacity 450 Wp per photovoltaic solar glass.



Quality assurance and safety warranty for products from manufacturers in the metal industry, including those for metal structures.



CE Rated

All our systems are certified by an official laboratory and comply with the requirements of the European Commission to bear the CE Mark. We have all the tests and certificates that meet this regulation, and we have a computer tool that makes it easier for the workshop to obtain this label.



30-year warranty*

e-Orbita LUZ has a 30-year warranty on power generation and a 15-year warranty on components.

*(Refer to the sales conditions).

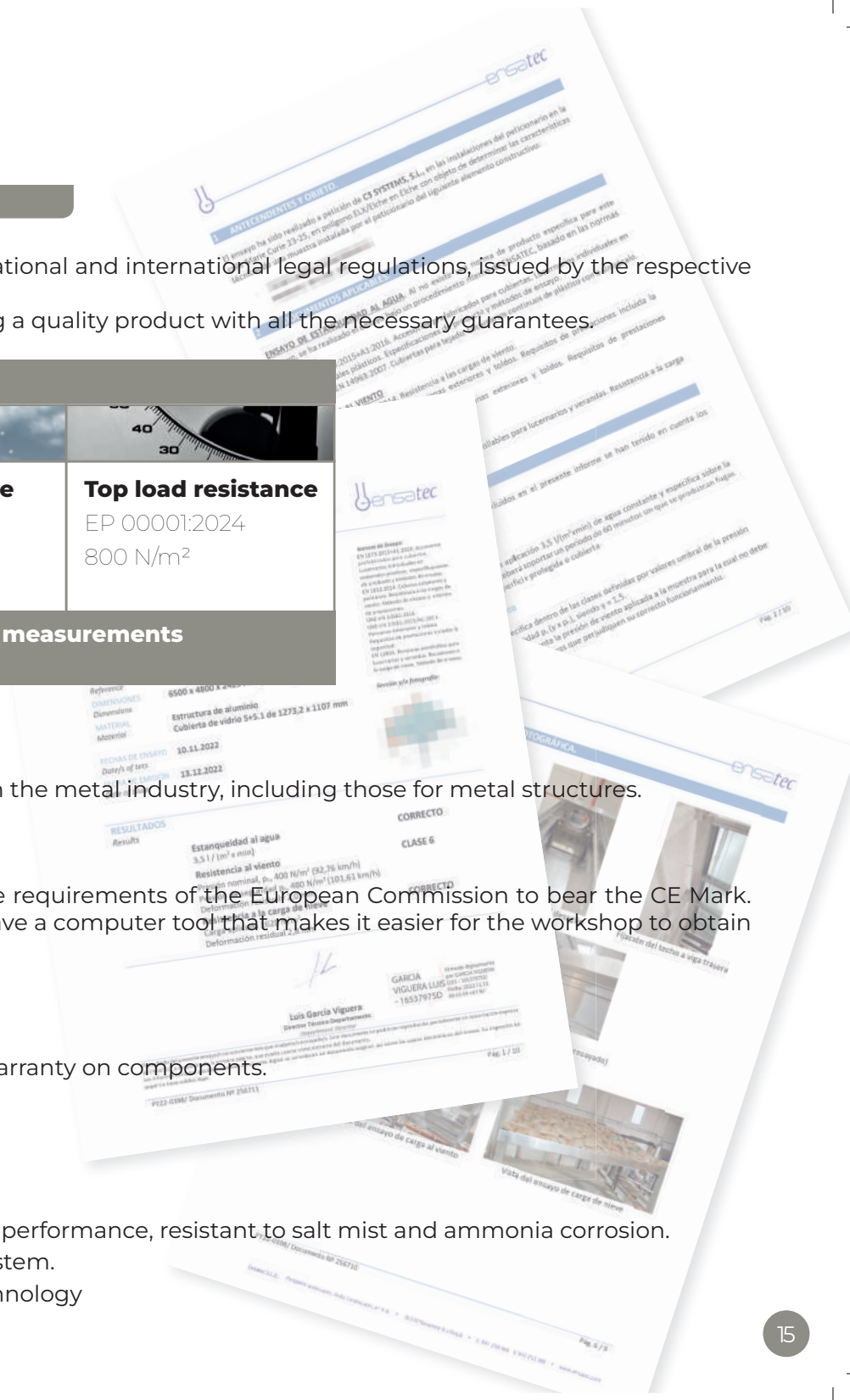


Photovoltaic frameless solar glass

Compliance with new international standards 180/IEC. Excellent low-light performance, resistant to salt mist and ammonia corrosion.

Certified by the international quality and environmental management system.

Application Class: A | Electrical Safety Class: II | Fire Class: A | PERC cell technology





 CATÁLOGO



 CATALOGO



 KATALOG



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MADE IN SPAIN



ED. 3 - 2024

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