

## STEEL PV PANEL SUBSTRUCTURES

Congratulations on the installation of your new Solar Structure from Solar Structures. By following our maintenance instructions, we are sure you will have many years of happy usage from our structures.

## TYPICAL STRUCTURAL SPECIFICATIONS

Dimensions are site specific and dependent on the panel layout. Typical dimensions for our standard 15 panel deployment below:

Min height: 2.3m

Roof dimensions: c5.8m X c.5.1m

Size and roof pitch per site requirements and panel number and configuration

## TYPICAL PV SOLAR SPECIFICATIONS

This structure holds 15 solar panels with a rating of c.400W per panel, giving a total rating of 6KWp

## BUILDING CODES AND CE RATING

The 15 panel solar canopy is CE marked, complies with all applicable building codes and is compatible with all major PV panel manufacturers

# STEEL PV PANEL SUBSTRUCTURES

OWNER'S GUIDE AND WARRANTY  
INFORMATION



# OWNER'S GUIDE AND WARRANTY INFORMATION

## TABLE OF CONTENTS

SECTION	CONTENTS
1	SAFETY DECALS
2	INTRODUCTION
3	TECHNICAL SPECIFICATIONS
4	SAFETY PRECAUTIONS
5	OPERATING INSTRUCTIONS
6	MAINTENANCE
7	WARRANTY INFORMATION
8	DECLARATION OF CONFORMITY

## 1. SAFETY DECALS



1. Read the owner's manual carefully
2. Do not modify the structure in any way
3. The Structure should only be installed by authorised installers
4. Ensure that nuts are kept tight at all times
5. Do not go onto the roof of the structure as this could damage the PV panels and would create a fall-risk
6. Do not interfere with the cabling from the solar panels as this could create a risk of electric shock
7. Periodically undertake an inspection of the structure and the panels and inform your solar installer of any issues that might arise

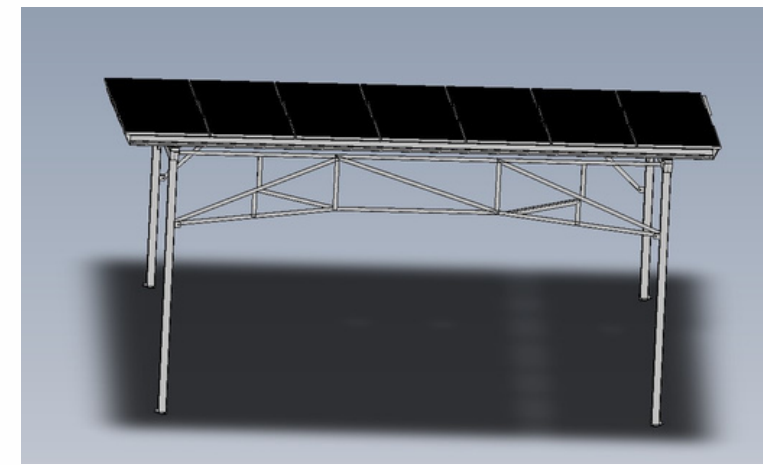
## 2. INTRODUCTION

Nualaíochtaí Míotal Teo. (Trading as 'Solar Structures') congratulates you on your choice of the steel substructure canopy. We are certain that you will be satisfied with the structure, and that you will have the pleasure of your investment for many years.

The standard steel frame Solar PV canopy allows you, the homeowner, to benefit from the an upgraded outdoor space while generating clean green energy from the Solar PV Panels.

We recommend that you read this owner's manual carefully, especially the safety instructions and the maintenance instructions. We are always happy to hear from you and we can be contacted at the contact details below:

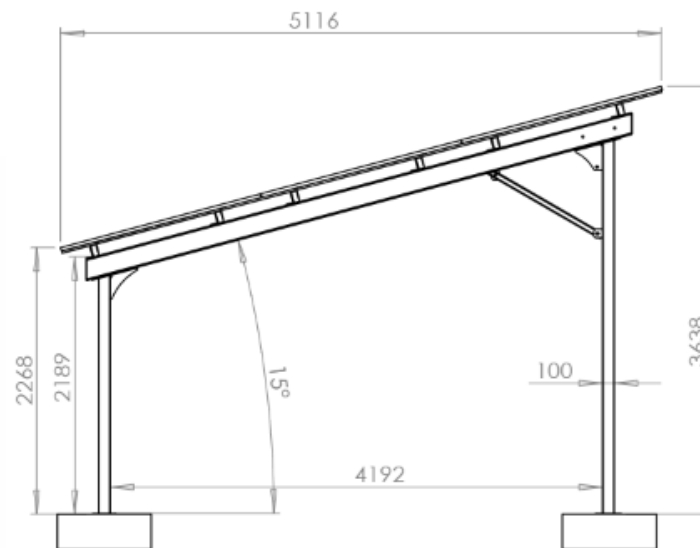
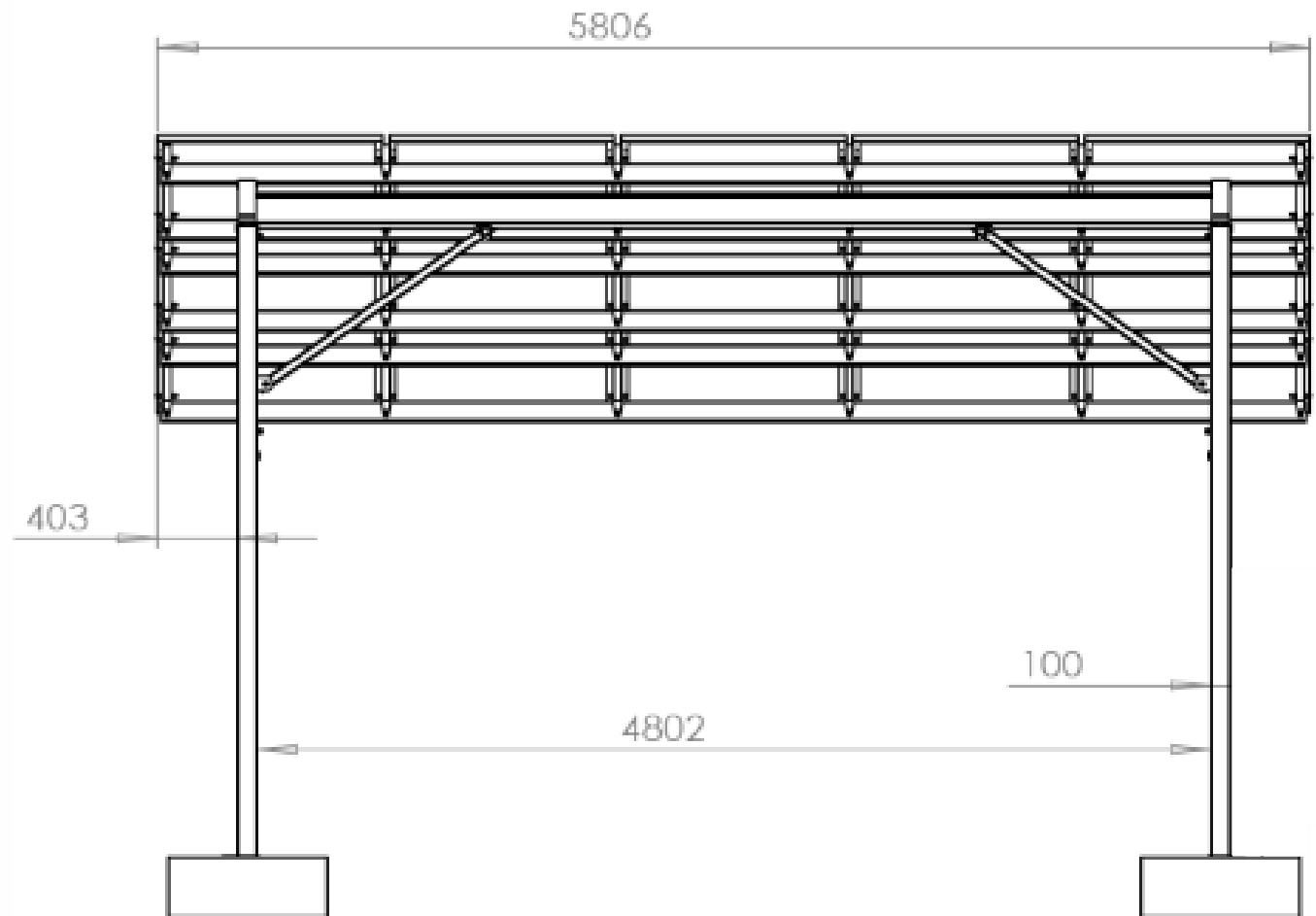
hi@solarstructures.ie  
+353 89 229 5091  
www.solarstructures.ie



### 3. TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	STEEL SUBSTRUCTURE PERGOLA / CAR PORT
HEIGHT (REAR)	3638MM
HEIGHT (FRONT)	2189MM
WIDTH	5116MM
LENGTH	5806MM
NUMBER OF PV PANELS	15
PV PANEL WATTAGE	400W
TOTAL STRUCTURE WATTAGE	6KWP

NB: Solar Structures reserves the right to modify the construction and/or technical specifications without warning and without rights to changes on already delivered and installed products



TALK TO US AT

Solar Structures,  
 Gortrea  
 Portumna  
 Co. Galway  
 089-229 5091  
[hi@solarstructures.ie](mailto:hi@solarstructures.ie)  
[solarstructures.ie](http://solarstructures.ie)

## 4. SAFETY PRECAUTIONS

Solar Structures does not take responsibility for damages that may occur to property, persons or other equipment, because of our structures NOT being used as described in this manual, or because of safety precautions NOT being followed, nor in the case of our structures being installed by unauthorised installers. Our structures are designed and fabricated to meet all Eurocode standards in place at the time of installation.

### **Important!**

Always make sure that the structure is installed by authorised installers and that the foundations match our specifications.

### **Dangerous areas**

Solar Structures has given the safety of the homeowner the highest priority, but it is still impossible to secure oneself of every danger in every context. Therefore, we have highlighted some of the danger areas with our Solar PV pergolas.

Installation:

- Our Structures should only be installed by authorised installers
- The Structure should not be modified in any way

The Structure is made from galvanised steel and requires maintenance periodically. The steel purlins can also bow slightly, but any major bowing or cracking should be notified to our team by email.

If you, the homeowner is in any doubt about any element of the structure, please get in touch with our team.

### **Foundations:**

Our specifications for the foundations are based on the standard installation and it is very important the foundations are prepared according to our specifications.

Any modifications to the structure could have an impact on the wind resistance of the structure and would require larger foundations due to the added wind resistance of modified structure.

### **Design load of PV Panels**

Our structures are designed to hold solar PV panels. They are not designed to carry the weight of people or items on them. All climbing on the structures is to be strongly avoided as this could damage the solar panels and electrical system, in addition there is a risk of falling from the structure causing long-term damage and injury.

### **Storm conditions**

Our structures are designed to withstand normal storm conditions per the Eurocode standards in place at the present time, however hurricanes and exceptional major storm events are not covered by the warranty period.

If notice is given of any major storms approaching, the homeowner should take normal precautions to ensure that debris would not damage the structure or nearby properties.

In addition, the homeowner should inspect the structure and ensure that any loose nuts are tightened.

No work should be attempted during the storm and after the storm has passed the structure should be inspected and any loose nuts tightened.

## 5. OPERATING INSTRUCTIONS

Our structures are designed to be used by the homeowner for a variety of purposes including a cover over a patio area, a carport, a veranda, etc.

We hope you have many years of happy experiences from our outdoor structures.

## 6. MAINTENANCE

In order to ensure that your structures remain in great condition, we recommend that the structure in its entirety be inspected fully on an yearly basis..

We would recommend that the nuts be inspected every 6 months and any nuts tightened. We would also recommend that the homeowner does this before any major storms and after the storms have passed.

## 6. MAINTENANCE (CONTINUED)

We do not recommend that the structure be modified in any way as this could have a serious impact on the wind resistance of the structure.

Any major cracking in the foundations should be investigated and if required new foundations might need to be installed. We supply very detailed specifications on the foundations and any divergence from the minimum recommended foundations is not recommended.

Any major items of doubt should be reported to our team at Solar Structures and we can help advise on the best course of action.

## 7. WARRANTY

Thank you for purchasing a Solar Structures product. Nuálaíochtaí Míotal Teo. (Trading as 'Solar Structures'), Cuan Ros-a-Mhíl, Conamara, Co. Galway, Ireland prides itself on delivering a safe, durable and reliable structure.

Subject to hereunder provided, the sellers (Solar Structures) undertake to correct either by repair or at their election by replacement any defect of material or workmanship which occurs in any of its goods within the periods detailed in the table across after delivery and installation of such goods to first user.

### Product warranty periods

PART:	YEARS COVERED	WHAT IS COVERED?
TIMBER STRUCTURAL PARTS	12 YEARS	THIS COVERS FOR ANY MAJOR DEFECT IN THE TIMBER SUCH AS MAJOR CRACKING OR ROTTING.
GALVANISED STEEL COMPONENTS – BRACKETS, FOOT PADS, ETC.	15 YEARS	THIS COVERS NO RUST THROUGH, CRACKING OR BENDING.

The terms goods when used in this document means the article or articles described in Invoices as sold by the sellers but does not include equipment or proprietary parts or accessories not manufactured by the sellers. The sellers, however, undertake to pass on so far as they legally can to the first user the benefit of any warranty given to the sellers by the suppliers of such equipment, parts or accessories.

This understanding shall not apply to:-

- A)Any goods that have been sold by the first user.
- B)Any goods which have been injured by unfair wear and tear, neglect or improper use.

C)Any goods the identification marks of which have been altered or removed.

D)Any goods that have not received normal maintenance such as wood stain treatment, tightening of bolts, nuts, connections and fittings etc.

E)The affixing of anything to the structure that would negatively impact its wind resistance.

F)Any goods that have been altered or repaired other than on instruction or with the written approval of the seller or to which any part not manufactured or having written approval by the sellers have been fixed.

G)Any second-hand goods or parts thereof.

H)Any damage to the goods by severe weather / climate events beyond the levels detailed in the applicable Eurocode.

Any allegedly defective part or parts must be notified to the seller in writing. No claim for repair or replacement will be entertained unless upon discovery of the alleged defect written notification is sent to the Sellers giving, at the same time, the name of the Buyer from whom the goods were purchased and the date of purchase / installation, together with full details of the alleged defect and the circumstances involved, also the serial number of the structure etc.

## 7. WARRANTY (CONTINUED)

The sellers shall be under no liability to their Buyers and first or subsequent users of their goods or to any other person or persons for loss or damage howsoever arising in respect of either personal injuries or for arising out of, or in any other way connected with or arising from the manufactures sale, handling, repair, maintenance, replacement or use of its goods or the failure or malfunction of any of its goods.

Representation and/or warranties made by any persons (including Buyers and employees and other representatives of the Seller) which are inconsistent or conflicting with these conditions are not binding upon the sellers unless given in writing and signed by a director of sales.

In no event under this warranty shall recovery of any kind be greater than the amount of the purchase price of the Solar Structures product sold.

### Claims

If you wish to make a claim under the warranty:

1.Immediately, send us (Solar Structures) details of the allegedly defect part by email to our contact details as detailed on our website: **[solarstructures.ie](http://solarstructures.ie)**

2.We shall then normally ask you to complete a warranty claim form with more detail about the structure, including the name of the Buyer from whom the goods were purchased and the date of purchase / installation, together with full details of the alleged defect and the circumstances involved, also the serial number of the structure etc.

3.We shall then, if applicable, organise a site visit to inspect the structure and resolve / repair the defect.

## TALK TO US AT

Solar Structures,  
Gortrea,  
Portumna,  
Co. Galway  
089-229 5091

[hi@solarstructures.ie](mailto:hi@solarstructures.ie)  
[solarstructures.ie](http://solarstructures.ie)

**NUÁLAÍOCHTAÍ MIOTAL  
TEORANTA (TRADING AS  
'SOLAR STRUCTURES')**

Gortrea, Portloma,  
Co. na Gaillimhe,  
Republic of Ireland

**solar**   
**structures**

Tel. No.: (+353) 89-229 5091  
Email: hi@solarstructures.ie  
Web: solarstructures.ie

---

## EU Declaration of Conformity



1. Nuálaíochtaí Miotal Teoranta (T/A 'Solar Structures')
2. SSSP2 - Galvanised Steel substructure Solar PV Pergola /Carport
3. 22103.100 - 24103.999
4. Ruairí Ó Néill

### EN:

**Declaration of Conformity** The Company Solar Structures (1) hereby certifies that the structure stipulated, Galvanised Steel Substructure Solar PV Pergola/Carport (2), identified by a serial number included between the values 22103.100 to 24103.999(3) complies with the following:

European Directives and Eurocodes:  
IS EN 1990 Basis of Structural Design  
IS EN 1991 Actions on Structures  
IS EN 1993 Design of Steel Structures  
IS EN 1995 Design of Timber Structures  
IS EN 1997 Geotechnical design

Responsible Ruairí Ó Neill (4), authorised to manufacture the technical files.

**Ruairí Ó Néill (CEO, Solar Structures)**

**Date: 10/02/2022**