

Part 1 – Declaration of Works

Installation Details:

Applicant Name*	Earnest Customer
Installation Address	1, Sunnyside Mews Oaklawn Estate Dublin 49 Co Dublin
Installation Eircode	E49 PL42
Installation MPRN	123456789

**This will be the person claiming the SEAI grant*

System Details

Solar PV System Size	4.27 kWp*	Battery Storage (if applicable)	7.2 kW 6.6 kWh
Solar PV System Annual Estimated Yield	4500 kWh**	Method of Yield Calculation (e.g. PVSyst)	PvSyst
Hot Water Diverter Installed?	Y/N? YES		

** Total DC Installed Capacity at STC – (Nameplate Capacity, NOT Flash Test)*

*** AC kWh based on estimated calculation*

Renewable Installer Details (MUST BE ON THE SEAI SOLAR PV INSTALLER REGISTER)

Renewable Installer Name	Joe Bloggs
Renewable Installer Identification Number	987654321

Registered Electrical Contractor Details (REC WHO COMPLETED THE SAFE ELECTRIC FORM)

REC Safe Electric Identification Number	123456
Safe Electric Certificate Serial Number	654321
Safe Electric Certificate Date	20/05/2052

ESB Networks NC6 Form Submission Date	20/04/2052
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Property year of Construction (see BER Cert)	25/06/1905
Total cost of installation (including VAT)	€ 6,500.00

System Components

Component	Make	Model	Rating	Quantity
Solar PV Modules	Longi	LR6-60PB-305M	305 Wp at STC	14
Mounting System	Renusol	Variosole	N/A	
Inverter	Solis	Solis-RH1-3.6K-48ES	3600 kW	1
Energy Meter	Eastron	SDM 120A MID	N/A	1
Battery Energy Storage System	Pylontech	US2000B Plus DC Connected <input checked="" type="checkbox"/> <input type="checkbox"/>	2.4 kW 2.2 kWh	3

Date of Works Completion			
<p>By signing this Declaration of Works, the undersigned declares that;</p> <ul style="list-style-type: none"> • The Solar PV system (and, if applicable, battery system) has been installed and commissioning at the above Installation Address on the Date of Works Completion • All works indicated are fully compliant with SEAI Domestic Solar Photovoltaic - Code of Practice for Installers, SEAI Renewable Installer Register Terms and Conditions and SEAI Solar PV Installer Register Terms and Conditions. • The electrical installation has been installed in accordance with ET101:2008 and a Safe Electric certificate ('RECI cert') has been issued by a Registered Electrical Contractor for the electrical installation • I have been paid in full or an agreed payment schedule contract is in place by the homeowner for the works described. • I have completed an Inspection, Test and Commissioning Report for this solar installation and have given it to the homeowner • I have provided the homeowner with the required documentation to complete their grant application 			
Signed	Date		

Part 2 – Inspection, Test and Commissioning Report

Test Report for grid-connected photovoltaic systems

according to EN 62446, Annex A

Customer:

Customer Name:

Earnest Customer

Customer Address:

1, Sunnyside Mews, Oaklawn Estate, Dublin 49, Co Dublin

Customer Eircode:

E49 PL42

Installation Contractor:

Company Name:

Joe Goes Solar Ltd.

Company Representative:

Joe Bloggs

Company Address:

Unit 15 Sunshine Ind. Est, Ballygobackwards, Clongone, Co Dublin

PB System Description:

PV Module:

Manufacturer:	<u>Longi</u>	Module Type:	<u>Mono</u>
PV Module Performance:	<u>305W</u>	Number of Modules:	<u>14</u>
Short Circuit Current I _{sc} (A):	<u>9.94</u>	MPP Current (A):	<u>9.24</u>
Open Circuit Voltage Voc (V):	<u>40.2</u>	MPP Voltage (V):	<u>33</u>

PV Inverters:

Manufacturer:	<u>Solis</u>	Inverter Type:	<u>Solis-RH1-3.6K-48ES</u>
AC Nominal Power (W):	<u>3600</u>	Inverter Quantity:	<u>1</u>
AC Maximum Power (W):	<u>4000</u>	DC Maximum Power (W)	<u>5000</u>

Test Date: _____
 Next Test Date: _____

Test Reason: Initial Inspection
 Retesting

Electrical Certs:
 Safe Electric Cert Number: 654321

Test Record Sheet Cert Number:

DC Test Results:

RE: _____ Loop: _____ RCDx1: _____ RCDx5: _____

Design, construction, inspection and testing

I/we, the responsible person(s) for the design, construction, inspection and testing of the electrical system (as specified by the signature(s)), details of which are described above, have inspected and tested the design and structure with suitable skill and care and confirm that the said words, for which I/we am/are responsible, were carried out to the best of our knowledge and expertise.

Test Result:

No defects were found Defects were found

The Photovoltaic system complies with the standards of electrical engineering

Signature/Tester _____

Date _____

Remarks:

Inspection test report

according to EN 62446, Annex B

Testing:

Test Date: _____

Signature/Tester: _____

Inspected circuits (fill out one sheet for large systems and for separate inspections per inspection):

Design and installation of the PV generator

- The DC system was generally designed, selected and set up in accordance with the requirements in DIN VDE 0100 (IEC 60364) and in particular in accordance with DIN VDE 0100-712 (IEC 60364-7-712)
- The DC components were measured for DC operation
- The DC components are rated for the maximum current and maximum voltage
- Protection is provided by application of class II or equivalent insulation on the DC side
- PV strand cables, PV generator cables and PV DC main cables have been selected and constructed so that the risk of earth faults and short circuits is reduced to a minimum (DIN VDE 0100-712 para. 522.8.1)
- The wiring system has been selected and constructed so that it can withstand expected external influences such as wind, ice temperature and solar radiation (DIN VDE 0100-712. 522.8.3)
- AC and DC cables are physically separated
- Systems without strand overcurrent protective device: Strand cables are designed so that they can take up the highest combined leakage current of parallel lines (DIN VDE 0100-712 para.433)
- Systems with strand overcurrent protective device: Overcurrent protective devices are set correctly (DIN VDE 0100-712)
- There are DC load break switches installed on the DC side of the inverter (DIN VDE 0100-712 para. 536.2.2)

PV System/overvoltage protection/electric shock

- The inverter has a simple separation between the AC side and the DC side
- Alternatively: A residual device is installed in the circuit and corresponds to a type B RCD (DIN VDE 0100-712 para. 413.1.1.1.2)

Special factors of PV system – AC circuit

- Devices for disconnecting the inverter are provided on the AC side
- Separating and switching devices are connected so that the PV installation is connected on the “load” side and the public supply on the “sources” side (DIN VDE 0100-712 par., 536.2.2.1)

Protection settings of the inverter are programmed according to local regulations

Marking and labelling of the PV system

All circuits, protection devices, switches and terminals have appropriate markings

All DC connection boxes (PV sub-generator connection box and PV generator connection box) bear a warning that the active parts present in the connection box are supplied by a PV generator and may still be live after the shutdown of PV inverters and public supply

The AC main switch has a clear inscription

Warnings are present for the double supply at the point of interconnection

The protection settings of the inverter and details of the installation are provided on site

The procedures for emergency shutdown are provided on site

All signs and markings are suitable and permanently attached.

General (mechanical) installation of the PV system

Ventilation is provided behind the PV generator to prevent overheating/reduce the fire risk

The frame and materials are properly attached and stable; the roof fasteners are weather-resistant

The cable routing is weather-resistant

Notes:

Test Report for grid-connected photovoltaic systems

according to EN 62446, Annex C

Test

String		1	2	3
PV generator	Module			
	Quantity			
PV generator parameters	Voc (STC)			
	Isc (STC)			
Protection device (branch fuse)	Type			
	Rated Value (A)			
	DC rating (A)			
	Capacity (kA)			
Wiring	Type			
	Phase conductor (mm ²)			
	Earth conductor (mm ²)			
Testing and Measurement of the strand	Voc (V)			
	Isc (A)			
	Irradiance			
Polarity monitoring				
Array Insulation Resistance	Test Voltage (V)			
	Pos – Earth (MΩ)			
	Neg – Earth (MΩ)			
Earth continuity (where fitted)				

Switchgear functioning correctly				
Inverter Make/Model				
Inverter Serial Number				
Inverter functioning correctly				
Loss of mains test				

Notes:

Part 3 – Completion Checklist

The Installer must confirm that all the below documentation is complete, and has been provided to the homeowner

Required Document for Grant	Tick if Provided
Declaration of Works – Completed and signed by the Installer	
Inspection, Test and Commissioning Report (EN 62446)	
Safe Electric ('RECI') Certificate – Completed and signed by a Registered Electrical Contractor	
Submitted ESB Networks NC6 Form	
Building Energy Rating (BER) Certificate for the Property	
Invoice describing the works	
Photographs of the installation	
a. Mounting system as installed	
b. PV Module Array as installed	
c. PV Module Nameplate	
d. Inverter as installed – showing isolators	
e. Consumer Unit with Solar PV MCB/RCD and Solar PV Meter	
f. Battery Energy Storage System as installed (IF APPLICABLE)	

Required Document for Homeowner	Tick if Provided
Datasheets for Solar PV Modules, Inverters, and Battery Energy Storage System	
Warranties for Solar PV Modules, Inverters, Mounting System	
O&M Manual for Homeowner	
Basic start up, shut down, safety, operation and maintenance instructions	
Estimation of system performance calculated using common estimator tools and databases such as PVSyst, PVSol, PVGIS or other equivalent, considering the actual location, orientation, pitch, location and over shading conditions of the PV modules	