

PV System - Installation Checklist

Installation Address:	Inspection by:
Date:	Reference:

General Installation (electrical – ref IEC60364-6-61)

<input type="checkbox"/>	Equipment compliant with standards, correctly selected & not damaged
<input type="checkbox"/>	Equipment accessible for operation, inspection & maintenance
<input type="checkbox"/>	Equipment and accessories correctly connected
<input type="checkbox"/>	Particular protective measures for special location
<input type="checkbox"/>	Equipment and protective measures appropriate to external influences
<input type="checkbox"/>	System installed to prevent mutual detrimental influence
<input type="checkbox"/>	Conductors connected and identified
<input type="checkbox"/>	Conductors selected for current carrying capacity and voltage drop
<input type="checkbox"/>	Conductors routed in safe zone or protected against mechanical damage
<input type="checkbox"/>	Presence of fire barriers, seals and protection against thermal effects

General installation (mechanical)

<input type="checkbox"/>	Ventilation provided behind array to prevent overheating / fire risk
<input type="checkbox"/>	Array frame & material corrosion proof
<input type="checkbox"/>	Array frame correctly fixed and stable; Roof fixings weatherproof
<input type="checkbox"/>	Cable entry weatherproof

Protection against overvoltage / electric shock

<input type="checkbox"/>	Live parts insulated, protected by barrier / enclosure, placed out of reach or Class II
<input type="checkbox"/>	Array frame equipotential bonding present (only relevant if required)
<input type="checkbox"/>	Surge protection devices present (only relevant if required)
<input type="checkbox"/>	RCD provided (only relevant if required)
<input type="checkbox"/>	Frame correctly integrated with existing LPS installation

D.C. system

<input type="checkbox"/>	Physical separation of A.C. and D.C. cables
<input type="checkbox"/>	D.C. switch disconnecter fitted (to IEC60364-712.536.2.2)
<input type="checkbox"/>	D.C. cables - protective and reinforced insulation (only relevant if required)
<input type="checkbox"/>	All D.C. components rated for operation at max D.C. system voltage ($V_{oc\ stc} \times 1.25$)
<input type="checkbox"/>	PV strings fused or blocking diodes fitted (only relevant if required)

A.C. system

<input type="checkbox"/>	A.C. isolator lockable in off position only
<input type="checkbox"/>	Inverter protection settings to local regulations

Labelling & identification

<input type="checkbox"/>	General labelling of circuits, protective devices, switches and terminals (to IEC60364-6-61)
<input type="checkbox"/>	PV system schematic displayed on site
<input type="checkbox"/>	Protection settings & installer details displayed on site
<input type="checkbox"/>	Emergency shutdown procedure displayed on site
<input type="checkbox"/>	A.C. isolator clearly labelled
<input type="checkbox"/>	D.C. isolator / junction boxes suitably labelled
<input type="checkbox"/>	Signs & labels suitably affixed and durable

PV Array Test Reports

Report reference number:	Contractors Name & Address: <i>3-e Electrical Ltd Pwllheli, LL53 5UE</i>
Installation address:	
Test date:	Signature:
Description of work under test:	Test Instruments:

String		1	2	3		
Array	Module					
	Quantity					
Array parameters	Voc(stc)					
	Isc(stc)					
Protective device	Type					
	Rating (A)					
	d.c. rating (A)					
	Capacity (kA)					
Wiring	Type					
	Phase (mm)					
	Earth (mm)					
String test	Voc(stc)					
	Isc					
	Irradiance W/m ²					
	Module Temp °C					
Polarity check						
Earth Continuity (where fitted)						
Connected to inverter (serial No.)						
Array insulation resistance Ref IEC 60364-713-04 Test method: Annex-1	Test Voltage					
	Pos-Earth (MΩ)					
	Neg-Earth (MΩ)					
Comments:						