

PV System - Installation Checklist

Installation Address	Inspection by			
	Date		Reference	

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

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

General installation (mechanical)

- ☐ Ventilation provided behind array to prevent overheating / fire risk
- ☐ Array frame & material corrosion proof
- ☐ Array frame correctly fixed and stable; Roof fixings weatherproof
- ☐ Cable entry weatherproof

Protection against overvoltage / electric shock

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

d.c. system

- ☐ Physical separation of a.c. and d.c. cables
- ☐ d.c. switch disconnecter fitted (to IEC60364-712.536.2.2)
- ☐ d.c. cables - protective and reinforced insulation (only relevant if required)
- ☐ All d.c. components rated for operation at max d.c. system voltage ($V_{oc\ stc} \times 1.25$)
- ☐ PV strings fused or blocking diodes fitted (only relevant if required)

a.c. system

- ☐ a.c. isolator lockable in off position only
- ☐ Inverter protection settings to local regulations

Labelling & identification

- ☐ General labelling of circuits, protective devices, switches and terminals (to IEC60364-6-61)
- ☐ PV system schematic displayed on site
- ☐ Protection settings & installer details displayed on site
- ☐ Emergency shutdown procedure displayed on site
- ☐ a.c. isolator clearly labelled
- ☐ d.c. isolator / junction boxes suitably labelled
- ☐ Signs & labels suitably affixed and durable