METHOD STATEMENT · UNITED KINGDOM · 2026

Rooftop Solar PV Installation Method Statement

UK template for a domestic / commercial rooftop solar PV method statement — MCS, WAHR 2005, BS 7671 + IET Code of Practice for Grid-Connected Solar PV, DC isolation and battery safety.

A solar PV installation method statement has to satisfy three regulatory regimes at once: work at height (WAHR 2005), electrical safety (Electricity at Work Regs 1989 / BS 7671 with the IET Code of Practice for Grid-Connected Solar PV Systems), and — where MCS-certified for the Smart Export Guarantee or for finance — the MCS 005 installer standard and MCS 020 standard for the system itself. The document must sequence the install end-to-end (scaffold / fall-arrest, roof penetration, rail installation, panel placement, DC string, isolator, inverter, AC tie-in, commissioning) and address the two emerging high-consequence risks: DC arc faults and lithium-ion battery storage where in scope.

Document structure a reviewer expects

1. **Scope and system specification**
   Address, system size in kWp, panel make / model / count, inverter make / model, battery if in scope (capacity, chemistry), G98 or G99 reference.
2. **Access and work-at-height method**
   Scaffold / MEWP / harness — with WAHR reg 6 hierarchy justification; fragile-roof assessment under HSG33.
3. **Structural load assessment**
   Reference to the structural calculation / surveyor's certification for the array dead load and uplift on the roof structure.
4. **Roof penetration and weathering**
   Fixing pattern, flashing detail, manufacturer-specific kit, NHBC / LABC compliance where new-build.
5. **DC string design and isolation**
   String sizing, DC isolator type / location / labelling, SPD type, earthing and equipotential bonding to the MET.
6. **Inverter installation and AC tie-in**
   Inverter location (ventilation, ambient temperature), AC isolator, MCB rating, RCD where required, consumer unit modification.
7. **Battery storage (where in scope)**
   PAS 63100 / MCS 029 compliance, location, ventilation, fire detection, EPO, manufacturer commissioning checklist.
8. **Commissioning and testing**
   Insulation resistance, polarity, open-circuit voltage and short-circuit current per string, AC voltage and earth-loop impedance, inverter G98 / G99 commissioning.
9. **Handover documentation**
   Electrical installation certificate to BS 7671, MCS certificate, system diagram, DNO notification (G98 simple, G99 formal), user manual.

10. **Emergency and isolation procedure**
Sequence-of-isolation for fault, fire service access, EPO procedure, labelling on consumer unit cover.

Common reasons reviewers reject this document

- Fragile-roof risk not assessed under HSG33.
- DC and AC isolation conflated or DC isolator not labelled / not accessible to the fire service.
- Surge protection device omitted — assessment is silent on BS EN 61643-11 selection.
- No structural load calculation referenced for the array on the existing roof.
- Battery section absent or generic where a BESS is included in the design.
- G98 / G99 reference missing — DNO has no record of the application.

UK regulation reference

Work at Height Regulations 2005 SI 2005/735

The hierarchy of control for work at height — applies for the duration of the rooftop install.
https://www.legislation.gov.uk/uksi/2005/735/contents/made

Electricity at Work Regulations 1989 SI 1989/635

Statutory framework for electrical work; BS 7671 is the de facto means of compliance.
https://www.legislation.gov.uk/uksi/1989/635/contents/made

BS 7671 — IET Wiring Regulations (18th Edition, current amendment) BS 7671

The recognised standard for electrical installation work in the UK.
https://electrical.theiet.org/bs-7671/

IET Code of Practice for Grid-Connected Solar PV Systems IET CoP

The de facto reference for DC string design, isolation, SPD and earthing for PV systems.
https://electrical.theiet.org/guidance-codes-of-practice/

HSG33 — Health and safety in roof work HSE HSG33

The standard reference for roof access and fragile-roof work.
https://www.hse.gov.uk/pubns/books/hsg33.htm

Engineering Recommendation G98 / G99 ENA EREC G98 / G99

DNO connection rules for embedded generation; G98 for ≤16 A per phase, G99 above.
https://www.energynetworks.org/industry-hub/resource-library

PAS 63100 — Electrical installations — Battery energy storage in dwellings PAS 63100

Standard for residential battery storage installation — location, fire safety, EPO.
https://www.bsigroup.com/

Frequently asked questions

Do I need MCS certification to install solar PV in the UK?
Legally no, but the homeowner / commercial client cannot claim the Smart Export Guarantee or most finance / grant routes without an MCS-certified install and MCS 005 / MCS 020 compliance. In practice all but the most niche off-grid installs are MCS-certified, and the method statement is written to satisfy the MCS auditor as well as the regulator.

How do I isolate a DC PV string safely?

Via the DC isolator(s) located close to the array — never by disconnecting a connector under load. The IET Code of Practice for Grid-Connected Solar PV requires the DC isolator to be of the correct type, rated for the open-circuit voltage and short-circuit current, accessible and clearly labelled. Disconnecting connectors under load creates a sustained arc that has caused multiple roof fires.

Does the method statement need to cover battery storage?
Yes, where a BESS is in scope. The document extends to PAS 63100 for residential, MCS 029 for installer competence, and the IET Code of Practice for Electrical Energy Storage Systems. Battery location, ventilation, fire detection and the emergency power-off are all named.

What's the difference between G98 and G99?
G98 is the simplified notification process for embedded generation up to 16 A per phase (around 3.68 kW single-phase, 11 kW three-phase); G99 is the formal application for anything above. The method statement names which the install falls under and references the application / commissioning notification to the DNO.

Who can sign off the electrical installation certificate?
A competent electrician who is BS 7671-qualified and registered with a recognised competent-person scheme (NICEIC, NAPIT, ELECSA, Stroma) for solar PV. The MCS installer must additionally hold MCS 005 installer competence.