



Solar Installation Day Checklist

What to check before, during and after · Engineer-written, MCS-referenced

solar-tech-support.co.uk

Standards: MIS 3002:2025 (Solar PV) & MIS 3012:2025 (Battery) — mandatory for MCS-certified installers. Free at mcs-certified.com/standards-tools-library/

Statute: EaWR 1989 · BS 7671:2018+A3:2024 · Part P · EREC G98/G99 · CDM 2015

1 · BEFORE THEY START

1	<p>MCS certification is current and covers the work being done</p> <p>Verify at mcs-certified.com/find-an-installer/ on the day. Solar PV (MIS 3002) and battery storage (MIS 3012) are separate accreditations — check both if both are being installed. If installer does not hold battery MCS certification, check with your chosen export provider whether this affects export payment eligibility — requirements vary.</p> <p>MCS Scheme Rules 2025</p>
2	<p>Access method (scaffold/ladders) matches the quote</p> <p>If scaffold was quoted and not provided, raise it before work begins.</p>
3	<p>Kit matches the quote, DNO notification and mounting system</p> <p>Compare panels, inverter and battery against quote and DNO notification. Also check the mounting system — rails, hooks and clamps should match the MCS design certificate. Substitutions invalidate the DNO notification and can affect MCS certificate and SEG eligibility.</p> <p>MIS 3002:2025 s3.1.5–3.1.6</p>
4	<p>Before/after photos taken at the outset</p> <p>Photograph roof, loft interior and consumer unit before work begins. Essential evidence if a pre-existing condition dispute arises.</p>
	<p>G99 written approval in hand if combined inverter capacity exceeds 3.68 kW (16A/phase)</p> <p>▲ >3.68 kW combined — must see this document before work starts</p> <p>Applies to total combined capacity at the property — existing plus new. G98 notification is not sufficient above this threshold. Setting an export limit of 3.68 kW does NOT allow use of G98 — the threshold is based on rated capacity, not configured limit. G99 fast-tracks are available for some capacities but still require prior written approval before work starts. For G99 installs: post-install commissioning documents must also be submitted to the DNO to make the connection valid — ask to be CC'd on that email.</p> <p>MIS 3002:2025 s3.1.5 MIS 3012:2025 s3.1.7 EREC G99</p>

2 · ROOF & MOUNTING

R1	<p>Tile hooks correct type and pre-drilled — adjustable hooks for undulating roofs</p> <p>Screw holes must be pre-drilled before the hook screw goes in. Forcing screws without pre-drilling can split the roof rafter — check the loft after hooks are in. Tiles must sit flush. On older undulating roofs, adjustable height hooks should have been identified at survey stage.</p> <p>MIS 3002:2025 s3.9.1 MCS 012</p>
R2	<p>Tiles/slates notched or flashed where lifted</p> <p>Where tiles are lifted for hooks, notch or flash to prevent gaps greater than those pre-existing the installation.</p> <p>MIS 3002:2025 s3.9.7</p>
R3	<p>Panels not within 400mm of roof edge (unless specific measures taken)</p> <p>Edge zone requires additional fixings for wind uplift, ridge tile security, rainwater run-off and snow injury prevention.</p> <p>MIS 3002:2025 s3.9.6</p>
R4	<p>Loft checked — no split rafters, breathable membrane intact</p> <p>After hooks are in: look for screws through the membrane and split rafters. Both are structural/moisture issues.</p>
R5	<p>Rails straight and parallel before panels are fitted</p> <p>A bowed rail creates uneven loading. Straightforward to correct before panels go on — difficult after.</p>
R6	<p>Panels level and aligned across the array</p> <p>Misaligned panels indicate a rushed crew — a useful proxy for the care taken on work you cannot see.</p>
R7	<p>DC wiring cable-tied to rail — no loose cables anywhere</p> <p>Panel cables carry live DC voltage any time there is daylight. Loose cables chafe, wear through insulation and arc. RC62:2023 identifies loose DC cabling as a leading cause of PV fires.</p> <p>MIS 3002:2025 s3.6.3–3.6.4 RC62:2023 (FPA/MCS/SEUK)</p>
R8	<p>Bird proofing uses perimeter clips only — not screwed into panels or roof</p> <p>Screwing into roof coverings creates slow leaks. Screwing into panel frames voids the panel manufacturer warranty. Correct method: perimeter clips clamped to the panel frame only, without penetrating it.</p> <p>MIS 3002:2025 s3.9.1</p>

R9	<p>MC4 connections: correct crimp tool used, glands tightened with MC4 spanners</p> <p>MC4s must be crimped with the correct MC4 crimp tool — not pliers. Badly crimped connections are a fire risk. Glands must be tightened with MC4 spanners to correct torque — hand-tight allows water ingress even if it looks secure. Ask the roofer to show both tools before starting.</p> <p>MIS 3002:2025 s3.6.4 RC62:2023</p>
R10	<p>Fire performance of roof maintained</p> <p>Installer must confirm installation has not reduced the roof fire class rating. Ask which fire class the mounting kit is rated to.</p> <p>MIS 3002:2025 s3.8.1 Approved Document B</p>

3 · ELECTRICS & BATTERIES

E1	<p>Inverter mounted on heatproof material with adequate clearance</p> <p>Must not be on timber, plasterboard or uPVC. Heatproof backplate required. Minimum clearances per manufacturer's manual.</p> <p>MIS 3012:2025 s3.7.10</p>
E2	<p>EPS/UPS has dedicated earth — neutral-earth bond relay confirmed</p> <p>▲ Non-negotiable if EPS/backup fitted</p> <p>Island-mode systems require dedicated earth, N-E bond relay at one point only, and all live conductors isolated from grid on switchover. On many modern hybrid inverters the N-E bond relay is built into the inverter — confirm this in the manufacturer's documentation. If property has TT earthing (common in rural areas), existing earth electrode may be used — must be explicitly confirmed by the electrician.</p> <p>MIS 3012:2025 s3.5.5–3.5.11 BS 7671</p>
E3	<p>RCD/RCBO protecting solar/battery circuit is bidirectional</p> <p>▲ Amendment 3:2024 — in force 31 July 2024</p> <p>BS 7671:2018+A3:2024 Reg 530.3.201 (in force 31 July 2024) requires bidirectional protective devices where supply can appear on either side. A standard unidirectional RCBO is not compliant. Reg 551.7.1 also requires the RCD to disconnect all live conductors including neutral.</p> <p>BS 7671:2018+A3:2024 Reg 530.3.201 Reg 551.7.1</p>
E4	<p>Cabling tidy — conduit where exposed, penetrations sealed, underground in conduit/armoured</p> <p>Cables through building fabric must be sealed. Exposed surface cables in conduit or trunking. Underground runs must use conduit or armoured cable.</p> <p>MIS 3002:2025 s3.6.5</p>
E4a	<p>DC isolators are DC-rated, lockable and correctly rated for array voltage</p> <p>DC isolators typically have black handles; AC isolators red — useful quick check. Both must be lockable in the open position (BS 7671 Reg 537.2.2.2). Built-in inverter isolators are usually not lockable — a separate external lockable DC isolator is required if not. Standard residential DC isolators are 450V 16A — large arrays can approach 600V DC, requiring a higher-rated device. Check array open-circuit voltage on the system schematic.</p> <p>BS 7671 Reg 537.2.2.2 BS 7671 Section 712 BS EN 60947-3</p>
E4b	<p>SPDs fitted — or written refusal obtained from you</p> <p>BS 7671 Reg 443.4.1: SPDs shall be provided unless owner explicitly declines in writing. If AC side requires SPDs, DC-side SPDs must also be fitted using DC-rated devices.</p> <p>BS 7671 Reg 443.4.1 Reg 712.443.101 MIS 3002:2025 s3.3.3</p>
E5	<p>Dual-supply warning labels at all four required locations</p> <p>▲ Four specific locations — not just the inverter</p> <p>(1) Origin of installation (2) Meter position if remote (3) Consumer unit (4) All isolation points. With battery installed: PAS 63100:2024 composite battery+solar symbol required at origin.</p> <p>BS 7671 Reg 514.15.1 PAS 63100:2024 MIS 3012:2025 s4.2.1</p>
E6	<p>Battery location reviewed for insurance, fire safety and temperature performance</p> <p>Insurers increasingly require batteries installed outside — confirm your insurer's requirements before install. If outside: many batteries de-rate below ~10°C and may stop charging at 0°C. Datasheets show minimum operating temp but not the higher de-rating threshold. Check if battery has self-heating. Some manufacturers also prohibit direct sunlight.</p> <p>MIS 3012:2025 s3.7.1–3.7.5, s3.8.1–3.8.3 PAS 63100:2024</p>
E7	<p>Batteries properly racked with manufacturer clearances observed</p> <p>Wall-mounted rack or approved stackable brackets required. Units must not be stacked unsupported. Clearances are a warranty condition.</p> <p>MIS 3012:2025 s3.7.6–3.7.7 BS EN 62109-1</p>
E8	<p>Arc fault detection (AFCI) enabled in inverter</p> <p>Where AFCI is present it must be enabled — mandatory under MIS 3002:2025, not optional.</p> <p>MIS 3002:2025 s3.6.7</p>









E9	<p>WiFi/monitoring credentials set with you — tested before crew leave</p> <p>Credentials must not be left as factory defaults. Test every login before the crew leave. MIS 3002:2025 s3.7.6 MIS 3012:2025 s3.6.2</p>
E10	<p>Charge/discharge schedule set (especially if on cheap overnight tariff) — error log cleared</p> <p>Starting without a charge schedule means paying peak rate to fill the battery on night one. Ask installer to clear commissioning fault codes.</p>

4 · POST-INSTALL TESTS

T1	<p>Kettle test — check smart meter shows minimal grid draw</p> <p>With sun out or battery charged, there should be little grid draw when kettle is on. Full load from grid = likely CT clamp direction error.</p>
T2	<p>Energy flow direction correct in monitoring app</p> <p>Run a load and check the app. Consumption should draw from solar/battery; export should flow out when generation exceeds demand. Reversed = CT clamp wrong way.</p>
T3	<p>EPS backup tested — installer simulates grid loss</p> <p>If EPS/UPS fitted, insist on a grid-loss simulation test on the day. Do not accept 'we'll test it later'.</p>
T4	<p>EV charger — 10 min run, no trips, solar configuration verified</p> <p>Check no breakers trip under sustained load. If solar-compatible charger, confirm it is configured correctly — an unconfigured solar charger will charge from the grid regardless of available solar generation.</p>
T5	<p>Smart meter records some export — photograph the reading</p> <p>Any correctly-configured system will export something during the day. Photograph export reading — useful for SEG application.</p>
T6	<p>Battery balance charge on day one — normal behaviour</p> <p>Day 1 grid draw during solar = normal (BMS balance charge). Day 2 grid draw during active solar = contact installer.</p>
T7	<p>Panel string map received — matches monitoring layout</p> <p>Confirm monitoring channels match physical layout. Essential for future fault diagnosis, especially with microinverters/optimisers.</p>

5 · DOCUMENTS — BEFORE THE VAN LEAVES

You are entitled to all of these. Under MIS 3002:2025 Appendix C and MIS 3012:2025 s4.1.1 the installer must provide a complete document pack at handover. **Do not make final payment until this list is complete.** MCS/HIES/RECC-registered installers cannot withhold certificates as a means of recovering payment — contact MCS on 0333 103 8130. ★ = legal requirement or critical item

	<p>DNO G98 notification or G99 approval</p> <p>Confirm kit list matches what was installed. For G99: commissioning documents must also be submitted to the DNO after install — the connection is not formally valid until received. Ask to be CC'd on that email.</p>
	<p>MCS certificate (within 10 working days)</p> <p>Must list the equipment actually installed. Separate certificates for solar PV and battery storage if installer holds both accreditations.</p>
	<p>Electrical certificate — Part P / Building Warrant</p> <p>Legal requirement for all notifiable electrical work. Must reference BS 7671:2018+A3:2024. Without this, installation is unregistered — affects insurance and future property sale.</p>
	<p>Signed installer declaration</p> <p>Confirms installation meets MIS 3002/3012. Must include components list, performance estimate and recommended inspection interval.</p>
	<p>System schematic + emergency shutdown procedure</p> <p>Panel string map forms part of the schematic. Both must be physically affixed to the wall near the inverter — installation-specific, not generic templates. Shutdown procedure must reference your actual isolator locations.</p>
	<p>SPD fitted — or written refusal if declined</p> <p>Both parties keep a copy of written refusal. Confirm DC-side SPDs also fitted if AC side requires them.</p>
	<p>All component serial numbers</p> <p>Panels, inverter, battery, optimisers. Register with manufacturer where required — not all manufacturers require registration. Check each warranty document for timeframe.</p>
	<p>Warranty documentation for all components</p> <p>Check whether registration is required and within what timeframe. Some warranties are only valid once registered.</p>

★	<p>IBG certificate — term matches your quote</p> <p>Deposit reference ≠ full IBG. After install, the IBG provider must be notified to activate the workmanship guarantee. Verify the term on the certificate matches your quote — if quote said 10 years, certificate must say 10 years, not 5 or 2.</p>
✓	<p>Operating manuals for all components</p> <p>Must cover on/off/reset and how to force-charge from grid during off-peak. Get PDFs — do not accept 'it's online'.</p>
★	<p>Login credentials — tested before crew leave</p> <p>User IDs and passwords for monitoring portal, battery app and device web interfaces. Test every one before the crew leave.</p>
✓	<p>Panel string map (forms part of schematic)</p> <p>Which panels on which string, which monitoring channel maps to which panel. Must be affixed with the schematic near the inverter.</p>
✓	<p>Customer maintenance schedule</p> <p>Checks you should carry out yourself, their frequency, and who to contact. Required under MIS 3002:2025 s3.7.5.</p>
✓	<p>Commissioning checklist (signed)</p> <p>MIS 3012:2025 Appendix A (Parts 1–4) for battery. MIS 3002:2025 s4.1 for solar. Ask for a signed copy.</p>
★	<p>Building control notifications (x2 or combined)</p> <p>One for solar under building regulations; one for electrical under Part P. A new radial is installed as a minimum — notifiable works are essentially guaranteed on every install.</p>
✓	<p>Installer direct contact details</p> <p>Direct contact for post-install issues, not just a general enquiries number.</p>

6 · AFTER INSTALL — FIRST STEPS

- **Apply for an export tariff immediately**
Every day without one is income you cannot recover. You need your MCS certificate and, for G99, your export MPAN. Octopus are the market leaders but other providers are available.

- **Move to a time-of-use import tariff**
Octopus Go, Agile or Intelligent Octopus allow cheap overnight battery charging — this is where most battery savings come from.

- **Tell your home insurer**
Some policies require notification of solar/battery as a change. Check your policy wording.

- **First sunny day: compare generation against estimated yield**
If significantly below the installer's estimate on a clear day, raise it with the installer. Check the generation graph for unexplained dips (overheating or overvoltage tripping).

- **Register equipment with manufacturers where required**
Not all manufacturers require registration — check the warranty documentation for each component.

Found a problem?

First point of call is always your installer — they have a contractual and regulatory obligation to rectify defects. For an independent second opinion or if the installer is unresponsive, STS can carry out a full post-install remote snag inspection for £145 — covering configuration, monitoring data, performance and key checks from this list. Visit solar-tech-support.co.uk to book.