



MICROGENERATION INSTALLATION STANDARD: MCS 001-1

MCS Contractor Certification
Scheme Requirements

Part 1: Requirements for
MCS Contractors

This Standard has been approved by the Steering Group of the MCS.

REVISION OF MICROGENERATION INSTALLATION STANDARDS

Microgeneration Installation Standards will be revised by issue of revised editions or amendments. Details will be posted on the website at www.mcscertified.com

Technical or other changes which affect the requirements for the approval or certification of the product or service will result in a new issue. Minor or administrative changes (e.g. corrections of spelling and typographical errors, changes to address and copyright details, the addition of notes for clarification etc.) may be made as amendments.

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FOREWORD

The following document (MCS 001) contains provisions, which, through reference in this text, constitute normative or informative provisions of this document (MCS 001). At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties applying this document (MCS 001) shall investigate the possibility of applying the most recent editions of the documents referenced.

The following document is a minor update to MCS 001 issue 3.0. It is available for reference from the date of publication 10/11/2017. MCS Contractors of Microgeneration systems who wish to become certificated in accordance with MCS 001 may commence working in accordance with this standard from 10/11/2017. MCS Contractors who are certificated in accordance with MCS 001 must commence working in accordance with this update from the date of implementation (10/11/2017).

This standard is published in two parts, MCS 001-1 describing the requirements that MCS Contractors must meet and MCS 001-2 describing the process that Certification Bodies must follow to ensure the compliance of MCS Contractors with the scheme requirements. Both parts of this standard, read together, constitute MCS 001 and should be viewed as a single standard. Certification must not be awarded against a single part of this standard, but against MCS 001 in its entirety and hence certification documentation must refer either to “MCS 001” or to “MCS 001-1 and MCS 001-2”.

MCS Contractors who wish to demonstrate equivalence to PAS 2030 (e.g. for ECO or Green Deal work) to install microgeneration measures must be certificated to do so in accordance with MCS 023.

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1. INTRODUCTION

1.1 This certification Scheme provides an ongoing, independent, third party Compliance Assessment of MCS Contractors and technologies to ensure that the requirements of the appropriate standards are met and maintained. The procedural and system requirements to be met by MCS Contractors is described below, while the certification process is detailed in MCS 001-2.

2. SCOPE

2.1 The scope of this Scheme covers the requirements for MCS Contractors undertaking the supply, design, installation, set to work, commissioning and handover of the following Microgeneration technologies:

- Solar domestic hot water
- Solar PV
- Micro Wind
- Biomass
- Heat Pumps
- Micro Cogeneration

Note: Micro-Cogeneration includes heat-led and electricity-led systems.

2.2 This Scheme is open to any MCS Contractors undertaking the supply, design, installation, set to work, commissioning and handover of Microgeneration systems and technologies.

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3. DEFINITIONS

Accredited Certification Body	A body that is accredited in accordance with ISO / IEC 17065 conformity assessment by UKAS or an equivalent (i.e. a member of the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) and undertakes the Compliance Assessment of MCS Contractors against the requirements of this Scheme.
MCS Contractor	An organisation that is responsible for all of the following activities: supply, design, installation, set to work, commissioning and handover of Microgeneration systems and technologies.
Customer	The end-user for whom the Microgeneration installation will be carried out. In consumer contracts this may be the householder or property owner (e.g. a social or private landlord).
Compliance Assessment	The evaluation by an Accredited Certification Body which demonstrates the MCS Contractor complies with the requirements of this and the relevant technology MCS Installer Standards.
Nominee	The Nominee as defined in MCS 025.
Nominated Technical Person	The Nominated Technical Person(s) (NTP) as defined in MCS 025.

4. REQUIREMENTS FOR THE MCS CONTRACTOR

4.1 QUALITY MANAGEMENT SYSTEM

The MCS Contractor must have in place a maintained documented Quality Management System. This shall be commensurate with the needs of the Contractor's MCS business activities and include details of how the requirements of the relevant activities detailed below are met.

The status of the documented system must be clear in terms of issue level and/or date.

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The MCS Contractor shall be a member of and, when dealing with domestic customers, shall have agreed to comply with a code of practice (Consumer Code) which is relevant to the scope of business in the microgeneration sector and which is approved by the Chartered Trading Standards Institute (CTSI). Where appropriate, the documented management system shall address the requirements of the Chartered Trading Standards Institute (CTSI) Approved Consumer Code.

4.2 MCS CONTRACTOR PERSONNEL

The MCS Contractor shall specify both a named individual "Nominee" and a named individual "Nominated Technical Person (NTP)". This can be the same individual if the Nominee is technically competent.

The responsibilities of the Nominee and the Nominated Technical Person(s) are set out in MCS 025.

The MCS Contractor may name an administrative contact person for the Accredited Certification Body to communicate with who is not the Nominee and whose responsibility would be coordination and communication.

The MCS Contractor shall document who is responsible for each activity and their deputy, where appropriate.

4.3 INTERNAL REVIEW

The Nominee shall conduct reviews sufficiently often to ensure the Quality Management System is effective (at least annually). The review shall involve relevant staff members and review the effect of each of the procedures and deal with any problems in the system.

Records of these reviews and corrective/preventive actions shall be kept by the MCS Contractor.

The reviews should consider and may be triggered by, as appropriate:

- Feedback from members of staff, customers and suppliers
- Complaints

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- Products
- External audits or Compliance Assessments
- A review of controlled documents held (currency and availability)
- Performance of suppliers and subcontractors
- Changes to MCS Contractor documents
- Changes to MCS Contractor structure or activity
- Changes to MCS scheme requirements
- Changes to regulatory requirements related to MCS activities
- Issues arising from inspections
- Any other issues with an impact on the Quality Management System

4.4 CORRECTIVE AND PREVENTATIVE ACTION

The MCS Contractor shall have procedures in place for corrective and preventive actions for problems and issues raised via:

- Internal review
- External audits or Compliance Assessments
- Inspection and measurements
- Complaints
- Health and safety incidents
- Product recall or rectification notices
- Changes to standards or regulations

4.5 DOCUMENT CONTROL

Documents produced by the MCS Contractor to meet the requirements of the Scheme shall be listed and controlled. Control shall include: a unique identity, status (issue number and/or issue date), appropriate page numbering, and approval.

Such documents shall be available at all locations where they are to be used. Superseded/obsolete documents shall be marked as such or removed from use and archived.

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Where documents are made available in an electronic form, accessibility and control must be appropriate to their use.

The MCS Contractor shall have a system for backup and retrieval of documentation whether in hard copy or electronic formats.

4.6 EXTERNAL DOCUMENTS

The MCS Contractor shall maintain copies of relevant external documents (including those MCS Scheme and installation documents, and other standards and guides relevant to the scope of approval). The MCS Contractor shall have a documented method/mechanism for ensuring they have access to the latest editions including any amendments.

The MCS Contractor shall have access to the most up to date copies of Building Regulations, Planning Regulations and Health and Safety Regulations.

4.7 SOFTWARE CONTROL

Where software is used for calculation or verification, a control process must be in place to ensure the correct version of software is being used. The MCS Contractor shall demonstrate how any software used, in accordance with the relevant MIS, is appropriate for the intended application.

4.8 CONTRACTS AND CUSTOMER REQUIREMENTS

A contract for the sale and installation of a system shall be entered into only between an MCS Contractor which is certified for the technology type(s) in the contract, and a Customer; and this MCS Contractor shall register the system on the MCS Installation Database under their MCS Contractor user account.

An MCS Contractor may carry out work under subcontract to another MCS Contractor in which case Clause 4.10 must be satisfied.

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Where the contract is for a Green Deal installation, the contract requirements in MCS 023 take precedent.

If the MCS Contractor obtains sales leads from any third party, the MCS Contractor must require that the third party complies with all the relevant requirements of the MCS standards and Chartered Trading Standards Institute Approved Consumer Code. The MCS Contractor will be responsible for any non-compliance.

The MCS Contractor shall have procedures in place to handle enquiries, produce quotes and accept orders/contracts. Where relevant, these must also comply with the Chartered Trading Standards Institute Approved Consumer Code of which the MCS Contractor is a member.

Customers must be provided with system performance estimates in line with the relevant Microgeneration Installation Standard prior to the award of a contract.

The MCS Contractor shall review orders, contracts or tenders to ensure that:

- The requirements are adequately defined for each installation.
- The MCS Contractor has the resource and capability to meet the order/contract requirements. Where the time scales cannot be met, the MCS Contractor shall detail when the order/contract will be fulfilled.
- Responsibility for planning and building control compliance is clearly identified.

Records of this activity shall be maintained for all orders/contracts and tenders.

A process shall also exist for managing amendments to contracts/ orders.

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4.9 PURCHASING

The MCS Contractor shall identify their suppliers of designs, products, services and materials required for installation works.

A master list of suppliers shall be established to identify their address, contact details and the service or products/materials supplied. The method for adding or removing suppliers and products/materials from the master list shall be established e.g. previous dealings/past history, product approval. Ad hoc suppliers should be added as required e.g. emergency sourcing of parts.

Purchase orders, Confirmation of Order, Delivery Note or Invoice shall clearly identify the product, service or materials to be supplied (e.g. part numbers, grade, product standard etc).

4.10 SUBCONTRACTING

In installations for private customers, any work within the scope of the Scheme not undertaken by employees of the MCS Contractor shall be managed through a formal subcontract agreement between the two parties in accordance with the policies and procedures employed by the MCS Contractor. These procedures shall ensure that the subcontractor undertakes the work in accordance with the requirements of the relevant installation standard.

In other situations, (for example new builds, or for commercial customers), it is permissible for the physical installation, setting to work and commissioning to be undertaken by others (i.e. not subcontracted to the MCS Contractor) provided that:

- (a) A contract between the MCS Contractor and the commercial client details obligations on the client to include that evidence of skills and training of those employed by the client to do elements of work not undertaken by the MCS Contractor, are to be made available to the MCS Contractor to ensure that the requirements of this standard are complied with and that access to the site for training and supervision, in accordance with the following sections is agreed in advance.
- (b) The MCS Contractor provides additional product-specific training for those undertaking the work not undertaken by the MCS Contractor.

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- (c) The MCS Contractor assesses a sample number of installations under the contract which is not less than the square root of the number of installations rounded up to the nearest whole number (e.g. a new build site of 50 installations then a minimum of 8 are assessed).
- (d) The MCS Contractor assumes responsibility at handover that the installation is in full compliance with the relevant standards.

4.11 INSPECTION OF GOODS RECEIVED

All products and materials are checked to ensure that the correct product/material has been supplied and the quantities are correct. Any critical measurements should be identified, and records should indicate acceptance or rejection of products/materials. Where products or materials are rejected, the basis for this shall be recorded and steps shall be taken to prevent their unintended use. The MCS Contractor shall take action to arrange replacement or other suitable steps to address the identified problem.

4.12 CONTROL OF WORK IN PROGRESS

During the installation process, inspections shall take place to ensure that the requirements of the standards or specifications are met.

Commissioning and handover shall be completed in accordance with the relevant installation standard. In completing the handover, the MCS Contractor shall confirm that all notifiable work under the Building Regulations has been conducted as agreed in the contract (see Clause 4.8).

4.13 TEST AND MEASUREMENT EQUIPMENT

The MCS Contractor shall ensure that suitable equipment exists for the testing and measurement of the installations and that it is calibrated and labelled to indicate its calibration status. A record shall be kept of all such equipment, which is used by the MCS Contractor. The record shall include the serial number or number allocated by the MCS Contractor, scale and frequency of checking/calibration along with suitable objective evidence to demonstrate that the equipment is capable of the accuracy which is required for the specified measurements.

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4.14 STORAGE, HANDLING, PACKAGING AND TRANSPORTATION

The MCS Contractor shall ensure that, where storage, handling, packaging, and transportation of products takes place, it is done in a manner that protects the product from potential damage or minimises deterioration.

4.15 RECORDS

The MCS Contractor shall retain all key records for a minimum of six years.

Records for each installation shall include the following, where relevant:

- Survey documents
- Quotations
- Orders/Contracts
- Commissioning checks
- Relevant certification
- Notifications under relevant local building regulations
- Copies of MCS Certificates generated through the MCS Installation Database (MID)
- Subcontract arrangements as defined in MCS 025
- Records identifying the individuals involved with the installation as defined in MCS 025
- Records demonstrating how the design and installation requirements for each MIS have been met.

Records relating to the Quality Management System shall include at least the following:

- Internal review records
- Formal evidence of Competence
- Subcontract arrangements
- Equipment calibration
- Complaint records

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4.16 COMPLAINTS

The MCS Contractor shall have a written procedure for managing complaints and shall keep a record of any complaints received (justified or otherwise) and the corrective and preventative actions taken to satisfy the complaint. All complaints shall be dealt with in a timely and effective manner taking in to account the MCS Complaint Guidelines and the Chartered Trading Standards Institute Approved Consumer Code.

4.17 TRAINING AND COMPETENCE

All staff employed in design, installation, set to work and/or commissioning activities must have received adequate training, and be able to demonstrate competence in, each of the areas/operations in which they are involved.

The MCS Contractor must have a record for each individual which details how competence related to MCS activities is demonstrated against the competence criteria.

The technical competencies required for MCS Contractors are outlined in Appendix A of each installation standard. Further guidance on the various roles can be found in MCS 025.

4.18 HEALTH AND SAFETY

The MCS Contractor must have health and safety policies and procedures in place, including risk assessment, to ensure all installations are conducted safely.

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AMENDMENTS ISSUED SINCE PUBLICATION

Document no.	Amendment details	Date
1.1	'UK' removed from Scheme name; 'Department of Trade and Industry' MCS mark replaced by 'BERR' MCS mark	11/01/2008
1.2	Revision details added; website address updated from ukmicrogeneration.org to microgenerationcertification.eu; BRE Certification Limited mark replaced by BRE Global mark	25/02/2008
1.3	Gemserv details added as Licensee. Document reformatted to reflect brand update. References to BERR updated to DECC, MCS logo updated accordingly. Website and email addresses updated to reflect new name.	01/12/2008
1.4	Quality review.	10/01/2009
1.5	MCS Mark updated	25/02/2009
2.0	Standard re-ordered to aid understanding; Enhanced requirements around contracting and sales activities	01/12/2011
2.1	Update clause 5.2 referencing MCS 023	28/01/2013

2.2	Update to Clause 12 and Clause 1 in Appendix A both referencing Trading Standards Institute in place of the OFT	01/04/2013
2.3	Updates to Clause 8: Contracts and Customer Requirements	20/11/2013
2.4	Updates to Clause 8: Contracts and Customer Requirements	21/11/2014
2.5	Update to definitions	01/05/2015
3.0	Updates to Clauses 2.1, 2.2, 3.0, 10 sections 2: MCS Contractor Responsibilities, 7: Software Control, 10: Subcontracting, 12: Control of work in progress; 15: Records, 16: Complaints, 17: Training and Competence.	16/12/2016
3.1	Separation into two parts MCS 001-1 and MCS-001-2. Updates to Foreword and Introduction in both parts, Updates to Definitions in both parts. In MCS 001-1: updates to Appendix A Clause 3 Internal Review. In MCS 001-2: inclusion of 5.2 Initial Compliance Assessment Site Eligibility, Updates to Clause 5.4.1, Updates to Clause 5.4.5, inclusion of Appendix A process for selecting annual surveillance site.	10/11/2017
3.2	Rebranding of document, update of email and website addresses and cosmetic changes.	18/06/2019