



The Certification Mark for Onsite
Sustainable Energy Technologies

Microgeneration Installation Standard: MCS 001

Installer certification scheme requirements

Issue 1.5

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.microgenerationcertification.org

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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1. INTRODUCTION

This certification scheme provides an ongoing, independent, third party assessment of Installers of Microgeneration systems and technologies to ensure that the requirements of the appropriate standards are met and maintained. The certification process is detailed on page 10.

2. SCOPE

The scope of this scheme includes the supply, design, installation, set to work and commissioning of the following Microgeneration technologies:

- Solar domestic hot water
- Solar PV
- Micro Wind
- Micro Hydro
- Biomass
- Heat Pumps
- Micro CHP
- Renewable CHP
- Fuel cells

This scheme is open to any companies involved in the supply, design, installation, set to work and commissioning Microgeneration systems and technologies.

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3. DEFINITIONS

Accredited Certification Body	A body that undertakes the assessment of microgeneration installers in accordance with the requirements of this scheme and is accredited to do so in accordance with EN 45011 by UKAS or an equivalent (i.e. a member of the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA)).
Installation company	An organisation that is responsible for all of the following activities: supply, design or design review, installation, set to work and commissioning Microgeneration systems and technologies

4. APPLICATIONS TO JOIN THE SCHEME

Applications should be made to an accredited certification body operating this scheme, who will provide the appropriate application form and details of the applicable fees.

Applicants may apply for more than one Microgeneration technology.

5. ASSESSMENT

The assessment is conducted in two parts.

5.1 Office assessment

This is an assessment of the policies and procedures that the company has in place to meet the requirements of Appendix A.

This includes the contract review, design, installation, set to work and commissioning of the appropriate Microgeneration system and technology.

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Design is defined as the formulation of a written plan including a specific list of products and fixings to form a completed system for a defined Microgeneration technology. It includes extensions and alterations to existing Microgeneration systems.

All systems must be designed in accordance with the requirements set out in the appropriate Microgeneration Standards.

Where Companies do not engage in the design of Microgeneration systems, but work solely as an installer for a client who has already commissioned a system design; then the installer must be competent to review and verify that the design would meet the design requirements set out in the appropriate Microgeneration Standards and this should be recorded.

5.2 On site assessment

This is an assessment of an installation to review the work that has been undertaken against the system design and the procedures for the installation, set to work and commissioning of the system / technology. See also Appendix A.

Assessments start with an opening meeting to explain the purpose of the visit, the work that is to be assessed, the reporting method, the selection of the installation site(s) to be visited and the approximate time, place and purpose of a closing meeting.

An Assessment is an objective examination of a Company and the Microgeneration work that it has conducted to determine the technical competence of that Company to carry out work in accordance with the relevant standards(s). Assessments are conducted using elements of questioning and observation techniques.

5.3 General

Technical representatives from the Company must be present throughout the assessment process.

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At the end of assessment or surveillance visits a closing meeting is held to discuss any non-conformity or observation reports raised and the assessor's recommendation.

Where non-conformity reports are raised, they must be completed and returned to the Assessor with completed corrective and preventative actions within 45 days of an assessment or surveillance visit.

Where certification cannot be recommended at an initial assessment visit, a full or partial re-assessment will be required at additional cost.

5.4 Surveillance visits

Certification is maintained through at least one annual visit, referred to as "a surveillance", which is similar in format to Assessment. Surveillance ensures that the Company is continuing to comply with the requirements of the scheme.

Additional surveillance visit may be required;

- If substantiated complaints against the Company are received; or
- As a result of a significant number of non-conformities being raised during a visit (in this circumstance an additional visit may be required within 12 weeks of the original visit date). Where non-conformities cannot be resolved within this period the Company is suspended or withdrawn.

The certificate holder may be expected to bear the costs of investigating complaints and additional surveillance visits.

6. CERTIFICATION AND LISTING

Certificates are awarded to Companies when all assessment activities have been satisfactorily completed, the Assessor has recommended that certification is granted and any corrective and preventative actions are complete.

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Certificates contain the name and address of the Company, the Microgeneration technology(s) that have been assessed, a unique certificate reference number and the issue number and date.

Certificates are maintained and held in force subject to satisfactory completion of the requirements for maintenance of certification (see item 6), but remain the property of the Certification Body.

Details of the successful candidates and their sponsoring organisations are listed on the website at www.microgenerationcertification.org

7. MAINTENANCE OF CERTIFICATION

Certificates are valid from date of issue and are maintained and held in force subject to satisfactory surveillance assessments but remain the property of the Certification body.

8. CERTIFICATION MARK

The Supplier shall use the Certification Mark(s) only in accordance with the Certification Bodies' instructions

An example of the certification mark that can be used for this scheme is as follows:



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9. COMPLAINTS AND APPEALS

An assessed company may appeal against any decision of the Certification Body in respect of its certification.

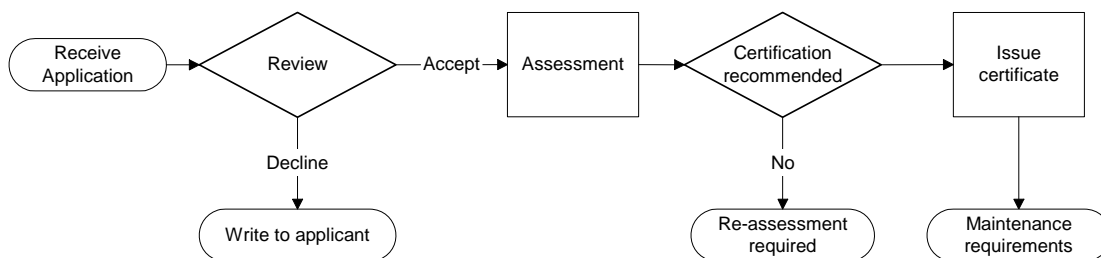
The appeal shall be made in writing, setting out clearly the grounds for such an appeal. Such an appeal shall be served on the Certification Body within twenty-one days of the date of notification of the decision being questioned. Any such appeal will be dealt with under the procedures published by the Certification Body, which shall be made available to the assessed company.

10. CHANGE OF DETAILS

The company shall give notice in writing to the Certification body of a change in legal constitution, trading or title, address, changes to technical staff, or other significant particulars and declarations upon which the current certificate was granted. Such notice shall be given to the certification body within thirty days of any change becoming effective.

Where the changes are such that the conditions under which certification was granted are significantly affected, the Company will be advised of the actions, and any associated fees, that will be required to be completed to maintain certification.

11. THE CERTIFICATION PROCESS



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12. ADDITIONAL INFORMATION

Please note that all details of applicants and certificate holders may be shared with the operator(s) of the Office of Fair Trading (OFT's) 'code of conduct' for the purposes of complaints handling and for compiling statistics on this scheme.

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APPENDIX A

This Appendix contains the requirements for Installation Quality Control (IQC) systems which are assessed as part of the certification process. The certification body will assess Installation Quality Control (IQC), as part of their process for ensuring that the certificated installation contractors meet and continue to meet the appropriate standards and scheme requirements. As a minimum, the certification body shall ensure that the installation contractor has addressed the requirements as detailed in Table 1 of this appendix through documented procedures and systems.

Table 1

Clause	Activity	Requirements
1.	Review of Company details/ Responsibility	<p>During assessment and surveillance visits, the assessor will check the details from the application form or certificate(s) to ensure that all details are correct. The Company is asked to specify a named individual "Nominee", whose responsibility shall be the control and overall supervision of all activities, which fall within the scope of the Scheme. This Nominee shall be the primary contact between the Company and the certification body.</p> <p>The Company shall document who is responsible for each activity and their deputy or nominee.</p>
2.	Review of Quality Management System / Quality Plan	<p>During the assessment the status of the Company's Quality Management System or Quality Plan will be reviewed as appropriate.</p>

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Clause	Activity	Requirements
3.	Action taken to resolve previous non-conformities	At the time of assessment, the Assessor shall review any previous non-conformities to ensure that the appropriate corrective and preventative actions have been taken and have been satisfactorily completed and implemented.
4.	Internal Review	The Nominee shall hold regular (at least quarterly) meetings with other staff members to review the effect of each of the Installation Quality Control procedures and deal with any problems in the system. Records of these meetings and corrective actions shall be kept by the Company and will be reviewed by Assessors.

Clause	Activity	Requirements
5.	Document Control	<p>The Company shall have a master list or equivalent document which details all documents and data associated with the installation process including and material specifications. As a minimum, the list shall contain the document reference, issue status, number of pages and approval authorisation.</p> <p>All documents and data shall have a unique identity and page number on every page, be authorised for use by representatives of the Company and be available at all locations where they are to be used. Superseded/obsolete documents shall be removed from all points of issue. The Company shall document procedures, which determine how the above requirements are managed.</p> <p>Note: Documented procedures are acceptable in electronic form.</p> <p>Procedures shall also identify the method for back up and retrieval of documentation and data, whether in hard copy or electronic formats.</p> <p>The Company shall maintain copies of relevant national and international standards associated with the installation(s) and have a documented method/mechanism for ensuring that they have access to the latest editions including any amendments.</p> <p>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</p>

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Clause	Activity	Requirements
5.	Document Control	The company shall have access to and demonstrate that they work to the most up to date copies of building regulations, planning regulations and Health and Safety Regulations.
6.	Customer requirements and contracts	<p>The Company shall review orders, contracts or tenders to ensure that:</p> <ul style="list-style-type: none"> -The requirements are adequately defined for each installation for quantity, packaging, delivery etc. -The Company has the resource and capability to meet the order/contract requirements. Where the time scales cannot be met, the Company shall detail when the order/contract will be fulfilled. <p>Records of this activity shall be maintained for all orders/contracts and tenders.</p> <p>A process shall also exist for managing amendments to contracts / orders.</p> <p>The company shall have a process for ensuring relevant planning and building control requirements are addressed appropriately</p>

Clause	Activity	Requirements
7.	Purchasing	<p>The Company shall identify his suppliers of designs, products and materials which are incorporated into the final installation, including packaging.</p> <p>A master list of suppliers shall be established to identify their address, location, 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.</p> <p>Purchase orders for materials shall clearly identify the part number, class, grade, species (timber), size, finish, trade name and any other details quoting (where necessary), tolerances or relevant installation standards.</p>
8.	Review of Product Specification	Check that no changes have occurred that should have been notified to the Certification body
9.	Action on Non-conforming material	The Company shall document procedures to ensure that any material which is deemed to be non-conforming, has been adequately identified (including by physical location), such that it is prevented from unintended use or packaged with conforming material. The procedures shall identify the actions necessary for the non-conforming material to be scrapped, re-worked or re-graded including labelling and authorisation requirements.

Clause	Activity	Requirements
10.	Inspection and in process testing	<p>All stages of the Installation, inspection and testing is required to be carried out under controlled conditions and shall include:</p> <p>Incoming inspection - 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 inspection records exist including a statement of acceptance or rejection of products/materials and the basis for this decision.</p> <p>In Process and Final Inspection – Installations shall be inspected in process and at final inspection to ensure that the requirements of the standards or specifications are met.</p> <p>The Company shall have processes to ensure that all notifiable work under the building regulations have been appropriately notified and managed</p>
11.	Equipment	<p>The Company shall ensure that suitable equipment exists for the control and measurement of the installations and that it is calibrated and labelled to indicate its calibration status. A record shall be kept of all equipment, which is used by the Company. The record shall include the serial number or number allocated by the Company, 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.</p>

Clause	Activity	Requirements
12.	Storage, handling, packaging and transportation	The Company shall carry out under controlled conditions storage, handling, packaging, and transportation of the products to prevent damage or deterioration.
13.	Certification Marks	The use of the appropriate Mark on the product/installation and on any stationery will be reviewed to ensure that approval has been granted by the Certification body for the intended use.
14.	Records	<p>Records related to installation and inspection must be kept by the Company for a minimum of two years, subsequent to their examination and approval.</p> <p>Contract related records must as a minimum contain details of customer reference, dates, quantities and details of all installations supplied. The Company must keep these records for a minimum of five years.</p>
15.	Complaints	<p>The Company shall manage complaints under controlled conditions and shall keep a log /register of any complaints received and the corrective and preventative actions taken to satisfy the complaint and where necessary the complainant.</p> <p>All complaints must be dealt with in a timely and effective manner.</p>
16.	Corrective / Preventive action	The Company shall have procedures for corrective and preventive actions

Clause	Activity	Requirements
17.	Training and competence	All staff employed in installation activities must have received adequate training in each of the areas/operations in which they are involved. The Company must have a training record for each employee which details methods of training and approved areas of operation. These should identify the training authority and be signed by the employee as well as the training authority.
18	Health and Safety	The company must have a health and safety policies and procedures to ensure all installations are conducted safely.
19.	Audit testing	Where requested, the Company shall provide details of recent or current installations as required by the Certification body. The contractor shall arrange access to installations selected by the assessor.

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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	25/02/09