

MICROGENERATION	INSTALLATION	STANDARD	: MCS 025
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MCS Installer Certification Scheme Competency Criteria Guidance This guidance has been approved by the Steering Group of the Microgeneration Certification Scheme.

This guidance was prepared by the Microgeneration Certification Scheme Competency Criteria Working Group

REVISION OF MCS GUIDANCE

MCS Guidance 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.

The issue number will be given in decimal format with the integer part giving the issue number and the fractional part giving the number of amendments (e.g. Issue 3.2 indicates that the document is at Issue 3 with 2 amendments).

Users of this guidance should ensure that they possess the latest issue and all amendments.

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FOREWORD

The MCS installer certification scheme is a company certification scheme and as such the company will be asked to demonstrate how they engage the services of individuals with the appropriate skills, competency and experience to fulfil each activity involved in the supply, design, installation, set to work and commissioning of microgeneration systems for which the company is seeking and / or maintaining certification.

The design of the scheme has intentionally been underpinned by the requirements of BS EN 45011:1998 (General requirements for bodies operating product certification systems) to allow a company to demonstrate its compliance with the scheme requirements.

This guidance identifies a number of key "roles" that a company will need to fulfil in order to meet with the requirements of the Scheme. It is important to clarify that this list of key "roles" is **not** exhaustive. Other positions may exist within a company; however, these roles have been selected to provide guidance on individual competency requirements.

These roles can be fulfilled by one individual or could be fulfilled by a number of individuals to suit the company's requirements.

This can be achieved by utilising a combination of competent individuals. The overall aims are:

- To make the Scheme accessible for all size companies with competent individuals whilst maintaining the quality and consumer/installer protection;
- To allow companies to demonstrate how individuals meet clearly defined competency requirements either by qualifications) or by following an Experienced Workers Route (EWR) designed to meet the same criteria
- To ensure that companies can select the appropriate skills set for the MCS certification scope they are seeking, and increase the scope to suit their needs;
- To give clarity by following this guidance that will assist in removing the uncertainty in terms of competency requirements and help to easily identify suitable and recognised training/assessment to meet learning requirements.

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1. INTRODUCTION

This guidance document should be read in conjunction with Section 5 and Appendix A of each of the MCS Installer Standards (MIS). It has been created to provide clarity for certified and applicant MCS installer companies and it sets out how the installer company may demonstrate their compliance.

This document is available for reference from 16th December 2013.

Installers of microgeneration systems who are certificated in accordance with the Scheme requirements may commence working in accordance with this document from 16th December 2013.

1.1 TABLE 1

MCS 025 is considered guidance and is no longer considered mandatory.

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2. COMPANY ROLES

Each role has been identified and where applicable suitable competencies or routes to achieve those competencies have been listed. The roles identified have each been defined within this guidance, and the associated competency requirements can be found at www.mcscertified.com

In addition, a *Competency Checker Tool* is available at the above location to enable a company to input the existing skills, qualifications and/or experience they hold for each role. Use of the Tool is optional.

Within the Competency Checker Tool, a qualification checking function allows installers to select qualifications already held by staff, and produces a report showing which roles or competencies these are likely to satisfy. The function is provided to assist companies when considering applications and/or training requirements for the Scheme

It is not mandatory to have any qualifications¹. The Competency Checker Tool also therefore contains an Experienced Workers Route (EWR) function, which assists installers to assemble any evidence they might have of ability to meet the roles and criteria.

Installers may choose to use the outputs from their use of one or both functions within the Tool, combined with any evidence they assemble, to demonstrate how they believe they meet the competency requirements.

The Tool is provided for assistance only, and as such, regardless of the output, it is not guaranteed that the company and/or individuals listed by that company hold the competencies required for the certification of that company within the scheme and/or their ongoing compliance.

Depending on the combination of qualifications and experience that the installer has assembled, the Certification Body will evaluate whether the roles and criteria have been met.

¹ Unless required by a statutory obligation

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As part of the Quality Management System that the installation company maintains in accordance with MCS 001, each role relevant to the scope of the installer's work shall be listed and the individual(s) fulfilling the activities within each role shall be identified.

A company may choose to engage a single individual to be assigned across all roles if the person is competent for each identified role.

It is accepted that each role, with the exception of the Nominee, may be fulfilled by either one or more individuals. The individual competency requirements which underpin the roles are mandatory for companies certified under the Scheme. How a company chooses to fulfil this requirement is determined by the individual company and their own specific circumstances.

The relevant competencies can be demonstrated either through the attainment of nationally recognised qualifications and/or through the Experienced Workers Route evaluation undertaken by a Certification Body.

MCS Certification Bodies will determine whether an applicant is suitable to pursue the Experienced Workers Route.

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3. EXPERIENCED WORKERS ROUTE

The identified competency criteria provide a matrix of the knowledge required for a number of roles.

Some of this knowledge could be demonstrated through training and qualifications. However, the roles also allow for an "Experienced Workers Route" for individuals wishing to be assessed who do not hold or wish to gain the formal qualifications relevant to the technology concerned

The Experienced Workers Route is designed to take into account demonstrable experience and other evidence such as internal and external training completed (such as manufacturer's training).

This route will cover the same criteria as the approved qualification route and will be delivered in a similar way in terms of assessment outcomes.

All companies should consider which approach is best suited for their individual needs and circumstances.

To help installation companies determine whether they have suitable experience and / or qualifications to follow the "Experienced Workers Route", the installation company should consider the following.

	Category 1
Levels of	3 or more years in the area of work and role(s) as defined within this
experience and	document that they are making an application for.
competency	They will have supporting auditable evidence such as CV, appropriate witness testimony, documents that they have completed for client installations and / or qualifications. These individuals could have been away from the industry for a period of time but have kept up to date with the current scheme requirements.
Suitability to EWR	EWR is likely to be the most applicable route, proceed to evaluation by an MCS certification body

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	Category 2
Levels of	1 to 3 years in the area of work and role(s) as defined within this
experience and	document that they are making an application for.
competency	They will have supporting auditable evidence such as CV, appropriate witness testimony, relevant qualifications and or relevant competencies.
	These individuals will need to have been working in their current role without a break and be up to date with the current scheme requirements.
	There will be sufficient evidence in the form of a portfolio
	demonstrating auditable evidence relevant to the scope in which they are making an application for.
Suitability to EWR	It is expected that these individuals will have to complete a portfolio setting out how they believe that they have met the competency criteria required for the role(s) concerned. Consider utilising the Competency Checker Tool (CCT). If the portfolio is in place then proceed to evaluation by an MCS Certification Body.

	Category 3
Levels of	Less than 1 year in the area of work and role(s) as defined within this
experience and	document that they are making an application for. Considered as new
competency	entrants
Suitability to EWR	Unlikely to achieve recognition under EWR. Consider seeking a formal qualification and then pursuing an application under Category 2.

Any evidence submitted to the MCS Certification Body shall be sufficiently robust to allow an audit trail to be followed when the evidence is evaluated by the MCS Certification Body.

Companies wishing to explore the Experienced Workers Route should contact their MCS Certification Body, who will be able to provide guidance on the application process.

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4. INDIVIDUAL COMPETENCY ROLES

4.1 NOMINEE

The Nominee is ultimately the person responsible for ensuring that the company meets the MCS scheme requirements. This role **MUST** be fulfilled by a full-time senior employee of the company such as a Director. **This role can only be fulfilled by one individual.**

If the company uses sub-contractors for any work within the scope of the Scheme, the Nominee would be responsible for the supply and receipt of the formal sub-contractor agreements, and for ensuring that the subcontractors performance ensures that MCS requirements are being met.

They will work closely with the Nominated Technical Person(s), and they could be a Nominated Technical Person. Whilst no formal competencies have been defined for the Nominee role, the company shall set out what competencies they expect from this individual in accordance with their own company requirements.

However, as a minimum, the Nominee will be ultimately responsible for the company's quality management system, and associated policies and procedures.

They will be required to attend the management review meetings in line with the scheme requirements. They can delegate the day-to-day activities of each area of operation to a suitably competent individual, as Identified within this guidance document

Important – The named Nominee shall be notified to the Certification Body, if the named Nominee changes this is considered by the scheme as a material change and as such the change **shall be notified to the Certification Body** within 8 weeks.

Any failure to notify a material change may result in a review of certification status and certified scope of the company by the Certification Body.

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4.2 NOMINATED TECHNICAL PERSON(S)

Nominated Technical Person(s) are responsible for all technical aspects on behalf of the company within the scope of its MCS certification.

The company shall assign a named person to the role as a Nominated Technical Person for each technology for which they are applying for or are maintaining their certification.

One or more individuals may fulfil the role of Nominated Technical Person for one or more of the technologies within the scope of the company's certification. The details of the Nominated Technical Persons(s) shall be documented within the company's quality management system along with records of their competencies and on-going training records.

The Nominated Technical Person(s) will ensure that all installation operations for which their company is certified are conducted correctly in accordance with current regulations and scheme requirements. They will be responsible for determining which level of Designer, Structural Engineer, Civil Engineer, or any of the specialised roles are required for each installation.

It is expected that this person may also act in many of the other roles within the company or may manage others such as sub-contractors. Where they manage others, they will ensure that the relevant competencies in line with the identified competencies, qualifications and/or Experienced Workers Route are met.

Typically, their role will include technical quality assurance audits on employees and sub-contractors installing under the scope of the Scheme.

The MCS installation company must have in place with the Nominated Technical Person(s) a contract or agreement that clearly details the amount of time they are engaged with the company on a monthly basis. The agreement will clearly state the geographic location(s), duration, start dates and their duties.

If the Nominated Technical Person(s) is/are sub-contracted to work for the company they will be required to spend an "appropriate" amount of time working for the company. This will be proportionate to the number of installers and installations being conducted by the company. Fig 001 is a guide of appropriate timescales.

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Average Per Mon		onth	
IF: No. of Installations		5-10	>10
AND/OR: No. of Installers		2-5	>5
THEN: No of days worked by each Nominated Technical Person	4	5-15	>15

Each Nominated Technical Person may be responsible for up to a maximum of 50 competent installers working on behalf of the company. However, this ratio may need to be reduced due to geographical spread or a wide range of technologies being installed.

Important - Each Nominated Technical Person shall be notified to the Certification Body, if the named Nominated Technical Person changes this is considered by the scheme as a material change and as such the change **shall be notified to the Certification Body** within 10 days.

Any failure to notify a material change may result in a review of the company's certification by their Certification Body.

4.3 ADMINISTRATOR

The Administrator is responsible for ensuring that the company's quality management system is implemented correctly including all policies, procedures and supporting documentation that must meet the MCS scheme requirements.

Any person working in this role shall work closely with others within the company such as the Nominee and the Nominated Technical Person(s).

Whilst no formal competencies have been defined for this role, the elected person must have a working knowledge of the company's quality management system.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the administrator role is/are changed.

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4.4 HEALTH AND SAFETY CO-ORDINATOR

The Health and Safety Co-ordinator is responsible for health, safety and environmental issues on behalf of the company. They will be competent in health, safety and environmental aspects of the company's work. They will ensure that all their company's installation activities are conducted correctly in accordance with current health and safety legislation.

This role is defined to identify the senior person responsible for all Health and Safety compliance. All other individuals are expected to comply with all relevant Health and Safety in their respective areas. The Health and Safety Co-ordinator will co-ordinate any health and safety-specific actions and or updates required for the company.

Dependent upon the number of employees working on behalf of the company (directly employed or sub-contractors), the role and responsibilities of the Health & Safety Co-ordinator will differ.

For further guidance please refer to the Health and Safety Executive's website - www.hse.gov.uk

The company shall determine how it meets the requirements of this legislation. Given the potential differences in requirements between a small to a large company, the company must decide and demonstrate to the Certification Body how it complies with their obligations and requirements in a reasonable and practicable way.

Whilst a key role within the process, ultimate responsibility for compliance will rest with the Nominee. Therefore, there is no requirement for the company to notify the Certification Body if the elected person(s) performing the Health and Safety Co-ordinator role is/are changed.

4.5 SALES PERSON(S)

The Sales Person(s) is/are responsible for sales and marketing issues on behalf of the company. They will have knowledge and understanding of the Consumer Protection Legislation and the code of practice (consumer code) which is relevant to the scope of business in the Microgeneration sector and which is approved by the Trading Standards Institute (TSI).

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Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the Sales Person role is/are changed.

4.6 DESIGN ACTIVITIES

All companies should verify that the Designer(s) meet the relevant competencies regardless of employment status. Responsibility for the overall compliance of the installation to all applicable legislation, manufacturer's instructions and scheme requirements remains with the MCS certified company.

4.6.1 DESIGNER(S) (FULL SCOPE)

The Designer(s) (Full Scope) is/are responsible for full or complex design on behalf of the company, and this could be for domestic or commercial installations. The complexity will determine level of design required. This person will be experienced and competent in design principles and have knowledge and understanding of design requirements within the MCS scope(s) in order to specify appropriate specialised and reliable systems.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the Designer role is/are changed.

4.6.2 DESIGNER(S) LIMITED SCOPE

The Designer(s) Limited Scope is/are responsible for limited or non-complex elements of the design on behalf of the company.

They will have sufficient experience in design principles and have knowledge and understanding of design requirements within the MCS scope(s) in order to specify appropriate, specialised and reliable systems.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) is/are changed.

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4.7 ELECTRICAL COMPETENCIES

The Person(s) responsible for electrical competencies is/are responsible for the installation and commissioning of all electrical work on behalf of the company. They will be competent in their field of work. They will be experienced in working principles and have sound knowledge and understanding of current legislation and system requirements, including health & safety.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the electrical competencies role is/are changed.

4.8 PLUMBING COMPETENCIES

The Person(s) responsible for plumbing competencies is/are responsible for the installation and commissioning of all plumbing work on behalf of the company. They will be competent in their field of work. They will be experienced in working principles and have sound knowledge and understanding of current legislation and system requirements, including health & safety.

The Plumbing competencies have intentionally been separated from the HVAC Engineer(s) roles as the listed competencies may well be different.

Where the company undertakes plumbing work in relation to the scope of work covered by the MCS installation, they will be required to demonstrate the use of a competent engineer(s) for any associated work.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the plumbing competencies role is/are changed.

4.9 HEATING COMPETENCIES

The Person(s) responsible for heating competencies is/are responsible for the installation and commissioning of all heating and combustion ventilation work on behalf of the company. They will be competent in their field of work. They will be experienced in working principles and have

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sound knowledge and understanding of current legislation and system requirements, including health & safety.

The Heating competencies role has intentionally been separated from the Plumbing Engineers(s) role as the listed competencies may well be different.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the heating competencies role is/are changed.

Important note – Installation and servicing of all gas appliances can only be undertaken by a competent person listed within a company holding a current and relevant registration with the Gas Safe Register.

4.10 REFRIGERATION COMPETENCIES

The Person(s) responsible for Refrigeration competencies is/are responsible for the storage, installation and safe handling of all refrigerant used on behalf of the company. They will be qualified and competent in their field of work. They will be experienced in working with refrigerants and have sound knowledge and understanding of current legislation and health & safety requirements.

The Refrigeration competencies role has intentionally been separated from other HVAC engineer(s) roles as the listed competencies may well be different.

Where the company undertakes refrigeration work in relation to the scope of work covered by the MCS installation, they will be required to demonstrate the use of a competent engineer(s) for any associated work.

Important note – A legal requirement is specified in the GB Fluorinated Greenhouse Gases Regulations, 2008 stating that "All personnel that carry out "refrigerant handling activities" on HFC equipment containing 3 kg or more (including installation, maintenance, leak testing, refrigerant recovery etc.) must hold a suitable qualification."

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All companies that employ qualified personnel in order to carry out installation, servicing or maintenance of Refrigeration / Air Conditioning (RAC) equipment containing F Gases must hold a company certificate. This includes sole traders as well as larger contractors. It also includes operators that employ in-house qualified staff.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the refrigeration competencies role is/are changed.

4.11 SPECIALIST ROLE(S)

The Specialist Engineer(s) roles cover a number of areas identified on behalf of the company.

The company will be required to demonstrate that the individuals engaged within the specialist areas are competent in their individual fields of work for example Geothermal Surveyors.

The Experienced Workers Route **may not be** available for such specialist engineers, if in any doubt the company should request that any identified competencies for the any specialist roles are evaluated by their Certification Body for compliance.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the specialist role is/are changed.

4.11.1 GROUND WORKING ENGINEERS

They will be experienced and have a sound knowledge of excavation and re-instatement, including plant operation (if applicable). They will ensure that work is conducted correctly in accordance with current regulations and health & safety legislation.

Where the company undertakes any groundwork in relation to the scope of work covered by the MCS installation, they will be required to demonstrate the use of a competent engineer(s) for any associated work.

4.11.2 GEOLOGICAL SURVEYING ENGINEERS

Note - Further development to be included as criteria is developed

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4.11.3 STRUCTURAL ENGINEER(S)

The Structural Engineer is responsible for all structural impact issues on behalf of the company. They will be competent in their field of work, including building design. They will ensure that any proposed work is assessed and the structural impact is evaluated in order to ensure that structural integrity is maintained.

The MCS installation company will be responsible for all aspects of the work they undertake within the scope of their MCS certification, and therefore engage the services of an appropriately qualified structural engineer for any job where it might reasonably be expected that such expertise would be required.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the structural engineer(s) role is/are changed.

4.11.4 ROOFING COMPETENCIES

The Person(s) responsible for roofing work is/are responsible for roof work on behalf of the company. They will be competent in their field of work. They will be experienced and have a sound knowledge of approved fixing methods and materials, including weather proofing and structural impact. They will ensure that roof work is conducted correctly in accordance with current regulations and health & safety legislation.

Where the company undertakes roofing work in relation to the scope of work covered by the MCS installation, they will be required to demonstrate the use of a competent engineer(s) for any associated work.

Whilst a key role within the process, the ultimate responsibility for compliance will rest with the Nominee, therefore there is no requirement for the company to notify the Certification Body if the elected person(s) performing the roofing competencies role is/are changed.

4.11.5 GEOTHERMAL DRILLING ENGINEERS

Note - Further development to be included as further detail is developed.

4.11.6 ENVIRONMENTAL SURVEYS ENGINEERS

Note - Further development to be included as further detail is developed.

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5. INNOVATIVE SYSTEMS

As new technologies are developed and/or improvements are identified to existing technologies it is likely that installation techniques within the scope of the Microgeneration Certification Scheme (MCS) may change before the criteria designated for roles are updated.

Part of the Scheme's role is to support new innovations. The MCS Change Process has been designed such that it can also support the development of standards for innovative technologies, where appropriate. Where such standards are developed, this Guidance will be updated with any additional or revised roles and competency criteria as required.

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6. BUILDING REGULATIONS COMPLIANCE

This Guidance document defines the roles within a company so that each role can be filled with individual(s) demonstrating their competencies against set criteria.

This will enable a company to demonstrate how it is complying with the MCS scheme requirements in relation to ensuring that the certified company has the competencies to undertake the work required.

Where possible the competencies have been aligned with the requirements under the Building Regulations. However, as these requirements can differ across the UK in their implementation and requirements, MCS Installation companies shall ensure that, in accordance with the Scheme requirements, they comply with the Building Regulations in the location at which the work is undertaken.

Successful evaluation of competency under the MCS scheme does not confer immunity from any legal obligations under the Building Regulations in the location where the work is undertaken. As such the MCS installation company must ensure that they are aware of their obligations and these are fulfilled by the MCS installation company in full (e.g. "Notifying" work or obtaining a "Building Warrant").

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7. AMENDMENTS ISSUED SINCE PUBLICATION

Document Number	Amendment Details	Date
1.0	Initial publication	16th December 2013
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1.2	Rebranding of document, update of email and website addresses and cosmetic changes.	20 th June 2019

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