



MCS Company Scheme Criteria for:

Metering Criteria

DRAFT Consultation Document

This document shows the Competence Criteria required to be met by a company undertaking the type of work detailed above.



These competencies have been identified from the current Qualifications Credit Units (QCF) devolved from the National Occupational Standards (NOS) to cover the range of work in the scope identified on the front page would normally undertake.

Anybody holding:

1. An approved certificate of competence in Meter Installation

Is likely to have met with all of the criteria presented within this document.

An Experienced Workers Route (EWR) will cover all the competencies outlined if taken in support of a EWR covering the same detail as titled on this document.

A full list of Qualifications that have been deemed to have met this criteria can be found at <http://www.microgenerationcertification.org/> along with access to EWR providers.

Please note anybody holding Technical Certificates are likely to have to demonstrate further compliance against this criteria.

Criteria Presentation

The criteria shown below in the following tables has been purposely presented in one of five categories:

1. Health and Safety – HS
2. Technical Skills – TS
3. Soft Skills – SS
4. Other – OT
5. Additional Information - AD

Where any box is blank these are intentionally blank.

By presenting the criteria within this format, it allows evidence to be collated for the Experienced Workers Route (EWR) options of evidencing compliance with the criteria.



Health and Safety Skills			
No.	Objective	No.	Criteria
Intentionally Blank			

Technical Skills			
No.	Objective	No.	Criteria
1	understand the requirements for metering renewable heat installations	1	Identify when metering is required.
		2	Identify types of heat meters and other system meters.
		3	Define the statutory legislation that applies to heat metering.
		4	Identify relevant industry guidance and standards (non-statutory).
2	Understand how to select heat meter and components.	1	Define the meaning of the following terms in relation to a heat meter.
		2	Range: (4 from the list below)
		3	Accuracy
		4	Resolution
		5	Qi
		6	Qp
		7	Qs
		8	Calibration
		9	Minimum temperature difference.
		10	Outline how pressure drop and liquid type affects heat metering arrangements
		11	Identify the key heat meter components and their functionality.
		12	Calculator (integrator)
		13	Flow sensors
		14	Temperature sensors as matched pair.
		15	Identify correct ancillary fittings
3	know where to position meters and their components	1	Identify correct metering component positioning arrangements
		2	Relevance of, and be able to identify sources of, flow disturbance
4	Know how to Install heat meters.	1	Define heat meter installation procedure.
		2	State importance of installing components in accordance with heat meter manufacturer instructions
		3	Correct orientation of flow sensor
		4	Correct alignment of flow sensor with direction of flow.
		5	Correct mounting of temperature sensors
		6	Maintaining the temperature sensor cable resistances



5	Understand how to commission the heat meter installation.	1	Specify the commissioning procedure in accordance with the manufacturer's instructions.
		2	Specify the handover procedure to the customer
		3	Explanation of operation and use of meter(s) including error codes
		4	Handover documentation
6	know how to Fault Find and Maintain heat meters	1	Understand servicing and maintenance requirements
		2	Visual inspections of components and mechanical connections
		3	Verification of absence of contaminants and composition of heat transfer liquid
		4	Review of integrator / calculator error / fault codes
		5	Obtain integrator / calculator readings
		6	Verification of integrator / calculator readings
		7	Verification that any anti-tampering features are intact
		8	Potential requirement for re-calibration in accordance with manufacturer's instructions

Soft Skills			
No.	Objective	No.	Criteria
Intentionally Blank			

Other			
No.	Objective	No.	Criteria
Intentionally Blank			

Additional Guidance			
Intentionally Blank			