

CUSTOMER INFORMATION SHEET

GROUND & AIR SOURCE HEAT PUMPS

NICEIC Package Includes:

Training Materials, Powerpoint, Assessment Materials

Code	Core Assessments	Practical provisions page(s)
HP01	Ground and Air heat pumps	See Appendix 1

Introduction

All NICEIC paperwork is designed to offer maximum flexibility, maintain ease and fluidity of the assessment process and to minimise the amounts of paperwork required.

Each centre is unique in the way it presents its practical provision; as a result the paperwork may not be ideally formatted with regard to running order or task content. It is acceptable for the running orders to be altered slightly to 'better suite' the provision and layout at an individual centre; such changes must be minimal and alterations made only with the **written permission of NICEIC Certification** (this excludes any appliance identification numbers and so on which may be added to the paperwork without permission being sought).

Certificate of Competence

A certificate of Competence will be issued if a candidate can meet the requirements laid down within this document. Certificates of Competence will be valid for the time period specified on it.

Heat Pump (non-refrigerant circuits)

Heat Pump appliances with an output of up to 45kWth. This includes the majority of Heat Pump systems currently installed within the British Isles. It will also cover the fundamental principles of heat pump system design, installation, commissioning, servicing and fault finding. It is not intended to cover every aspect of every possible scenario. N.B. Large commercial systems.

Candidate Pre-requisites

The candidate is required to hold:

- N/SVQ Level 2/3 in Plumbing or equivalent earlier certification that provides evidence of competence; or
- N/SVQ Level 2/3 in Heating and Ventilating (Domestic Installation) or equivalent earlier certification that provides evidence of competence; or
- N/SVQ Level 2/3 in Heating and Ventilating (Industrial and Commercial Installation) or equivalent earlier certification that provides evidence of competence; or
- N/SVQ Level 2/3 in Oil-Fired Technical Services or equivalent earlier certification that provides evidence of competence; or
- N/SVQ Level 2/3 in Gas Installation and Maintenance or equivalent earlier certification that provides evidence of competence.

In addition, (if the competence is not included in the above qualifications) current certification in the following:

- Water Regulations/Water Byelaws (WRAS or equivalent)
- Unvented Domestic Hot Water Storage Systems (not required for HP)
- Energy Efficiency for Domestic Heating (C&G 6084 or equivalent)

Note: Stand alone Vocationally Related Qualifications (technical certificates) are not acceptable as an alternative to the NVQ awards listed above.

Appendix 1; HP Practical Provision

The assessment area must simulate a real working environment, i.e. an environment in which real work activities take place under real working conditions in keeping with real commercial situations. The assessment task must be undertaken using fit-for-purpose tools and equipment, full-size components. The physical resources and practical assessment facilities must be maintained in a fit for purpose condition and updated as directed by NICEIC certification.

	Initial
Task instructions and tools are available to each candidate.	✓
Appropriate sets of manufacturers' instructions, MCS documents and normative reference documents.	✓
ASHP working installed system connected to an emitter circuit radiators or UFH.	✓
GSHP this can be a rig or a complete system but must allow the trainee to be able to flush ground loops. The system must also incorporate an emitter circuit radiators or UFH.	✓
As a minimum the facility for the candidate to make a connection, of the type used for connecting the heat pump unit to the hydraulic emitter circuit.	✓
3 test sampling bottles to test glycol.	✓
1 fill flush pump suitable for ground loop flushing.	✓
1 refractrometer.	✓
1 hydraulic pump.	✓
All the faults that are listed in the maintenance assessment paper.	✓
PPE to include goggles and gloves and any other items identified as required by the manager of the assessment centre.	✓
Appropriate handover documentation that must align with the requirements of the Microgeneration Certification Scheme (MCS) Microgeneration Installation Standard: MIS 3005.	✓