

# **CUSTOMER INFORMATION SHEET**

## **SOLAR THERMAL HOT WATER**

### **NICEIC Package Includes:**

Training Materials, Powerpoint, Assessment Materials

Code	Core Assessments	Practical provisions page(s)
STHW01	Solar Thermal Hot Water	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.

### **Solar Thermal Hot Water systems (STHW)**

Systems up to 20m<sup>2</sup> of solar collector area. The majority of small scale Solar Thermal Hot Water systems currently installed within the British Isles. It will also cover information required to design, install, commission, service and fault find. It is not intended to cover every aspect of every possible scenario i.e. large multi array collectors.

### **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 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: STHW 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
Ensure correct task instructions and tools are available to each candidate.	✓
Appropriate sets of manufacturers' instructions, and normative reference documents (including MCS documents).	✓
Electrical components and commissioning rig (control board layout, training (photo cell not required)).	✓
Drain Back a complete system with at least 3 installation defects from section 3 of the candidate job sheet answer paper rational. Able to demonstrate setting of the system fluid level.	✓
Roof installation to demonstrate fitting a flat plate collector.	✓
Fully filled pressurised system with at least 3 installation defects from section 3 candidate job sheet answer paper rational.	✓
3 fluid samples for refractometer test.	✓
Selection of suitable and unsuitable roof fittings. Scope: single lap and double lap roofing systems, flat roof, and wall or ground fixing systems for Flat plate collectors and evacuated tubes.	✓
Selection of suitable and unsuitable pipe insulation materials with regard to System operating temperatures, efficiency and performance, exposure to ultra-violet rays/light and adverse weather vermin attack.	✓
PPE to include goggles and gloves and any other items identified as required by the manager of the assessment centre.	✓
A provision to enable the candidate to Diagnose the cause of a minimum of FOUR separate faults and rectify TWO separate faults from the lists provided in section E of the assessor checklist.	✓