

SQA/SNIJIB



Training and Assessment Programme for SVQ 3 Domestic Plumbing and Heating

An Introduction

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General introduction

This training and assessment programme (TAP) contains all the necessary information and documentation to enable a centre to offer the SVQ 3 in Domestic Plumbing and Heating. The TAP supports and is the vehicle to achieve the National Occupational Standards (NOS) as determined by the Sector Skills Council (SSC) for the plumbing industry in Scotland.

The SVQ Unit titles are shown below for the award. Each SVQ Unit title is supported by one or more syllabus documents to allow a logical teaching and assessment process to take place.

Group Award code: GK71 23

Unit number	NOS	Mandatory or Optional	Unit title
H94X 04	SUMBSE01	Mandatory	Apply health and safety and environmental legislation in the building services engineering sector
H94Y 04	SUMBSE02	Mandatory	Establish and maintain relationships in the building services engineering sector
H950 04	SUMBSE03	Mandatory	Coordinate a work site in the building services engineering sector
H98E 04	SUMBSE04	Mandatory	Perform electrical work on mechanical building services systems
H98F 04	SUMPH04	Mandatory	Install and test domestic plumbing and heating systems
H98G 04	SUMPH05	Mandatory	Service and maintain domestic plumbing and heating systems
H98H 04	SUMPH06	Mandatory	Inspect and pre-commission domestic plumbing and heating systems
H98J 04	SUMPH07	Mandatory	Commission domestic plumbing and heating systems
H98K 04	SUMPH08	Mandatory	Decommission domestic plumbing and heating systems
H98L 04	SUMPH09	Mandatory	Install sheet weathering protection
H98M 04	DPHFCA	Mandatory	Domestic Plumbing and Heating Final Competence Assessment
Optional			
F9H9 04	SUMPH 04/05/06/07/08	Optional	Install and Commission Fuel Systems: Gas
F9HA 04	SUMPH 04/05/06/07/08	Optional	Install and Commission Fuel Systems: Oil
F9HC 04	SUMPH 04/05/06/07/08	Optional	Install and Commissioning Fuel Systems: Solid Fuel
F9HD 04	SUMPH 04/05/06/07/08	Optional	Emergent Technologies

The syllabus documents set out in detail the work that has to be undertaken. They also indicate sections of work to be undertaken within a prescribed period of time prior to assessment. Shown below are the units matched against the location of the relevant syllabus documents.

Units and Associated Syllabus Documents:

H94X 04 Apply health and safety and environmental legislation in the building services engineering sector

Section: **Health and Safety**

Stage 1 Syllabus Codes H.S.1.1–H.S.11

Section: **Environmental Legislation**

Stage 1 Syllabus Codes H.S.E.L. 1.1–1.3

Stage 2 Syllabus Codes H.S.E.L. 2.1

H94Y 04 Establish and maintain relationships in the building services engineering sector

H950 04 Coordinate a work site in the building services engineering sector

Section: **Maintain Working Relationships**

Syllabus Codes MWR 2.1–2.2

Section: **Coordinate a work site**

Syllabus codes MWR 2.3–2.4

H98E 04 Perform electrical work on mechanical building services systems

Section: **Electrical work**

Stage 2/3 Syllabus Codes ES 1.01–ES 2.7

H98F 04 Install and test domestic plumbing and heating systems

H98G 04 Service and maintain domestic plumbing and heating systems

H98H 04 Inspect and pre-commission domestic plumbing and heating systems

H98J 04 Commission domestic plumbing and heating systems

H98K 04 Decommission domestic plumbing and heating systems

Section: **Hot and Cold Water Systems**

Stage 1 Syllabus Codes HC1.1–1.4: HC2.1–2.4

Stage 2 Syllabus Codes HC3.1–3.4: HC4.1–4.2 and Assignment

Section: **Central Heating Systems**

Stage 1 Syllabus Codes CH 1.1–CH 1.4

Stage 2 Syllabus Codes CH 2.1–CH 2.6: CH 3.1–3.2 and Assignment

Section: **Above and Below Ground Drainage**

Stage 1: Syllabus Codes D1.1– D1.4: D2.1–2.3 and Assignment

Section: **Practical Pipework Installation (formative)**

Stage 1: Syllabus Codes PP1 1.1–1.5

Section: **Installation Practice**

Stage 2: Syllabus Codes SUMPH04; SUMPH05; SUMPH06; SUMPH07; SUMPH08.

Section: **Fuels, Ventilation and Combustion**

Stage 2/3 Syllabus Codes FVC 1.1–1.12

H98L 04 Install sheet weathering protection

Section: **Install Weathering systems**

Stage 1 Syllabus Codes IWS 1.1–1.5

Stage 2 Syllabus Codes IWS 2.1–2.2

H98M 04 Domestic Plumbing and Heating Final Competence Assessment

FCA Syllabus code — Electrical test

FCA Syllabus code — Gas, oil, solid fuel test

FCA Syllabus code — Unvented Hot Water Test

FCA Syllabus code — Backflow Prevention Test

Optional Units

F9H9 04 Install and Commission Fuel Systems: Gas

F9HA 04 Install and Commission Fuel Systems: Oil

F9HC 04 Install and Commissioning Fuel Systems: Solid Fuel

F9HD 04 Emergent Technologies

Assessment in the above optional unit competence areas must meet the minimum standards laid down by industry recognised bodies approved to register operatives in the listed competence area.

Guidance for assessors

Delivery and assessment schedule guidelines

A holistic approach has been adopted for the practical aspects of the SVQ. Units with work of a practical nature have been integrated to reflect a more realistic environment. Guidance and working drawings have been included for these parts of the course. The exception to this is the installation work which is planned for Year 2. Parameters are provided for practical installation work instead of specific assessments, as each centre will have different facilities which will determine the precise detail.

Reference has been made within the syllabus sections above as to when it would be anticipated that parts of the course would be offered, ie Stage 1, Stage 2, Stage 3, etc. However this is for general guidance and Centres should programme a logical teaching and learning framework based on their experience of candidate attendance patterns, industry requirements, etc.

Assessment

Each syllabus Document sets out in detail the course content as it has been matched to the National Occupational Standard (NOS). The assessments are based on the Syllabus documents which satisfy the criteria of the NOS.

Usually, theory aspects of the programme will be assessed using the SOLAR online system. See www.sqasolar.org.uk or your centre's SQA Co-ordinator or SOLAR Administrator for more information.

Assignments

The Units listed below have three individual assignments attached to them (see individual syllabus documents).

- H98F 04** Install and test domestic plumbing and heating systems
- H98G 04** Service and maintain domestic plumbing and heating systems
- H98H 04** Inspect and pre-commission domestic plumbing and heating systems
- H98J 04** Commission domestic plumbing and heating systems
- H98K 04** Decommission domestic plumbing and heating systems

These assignments are intended to bring together aspects of the Units holistically. It is anticipated that they will be undertaken when learners are fully prepared to attempt them.

The following Units have further assignments as part of the assessment process:

- H94Y 04** Establish and maintain relationships in the building services engineering sector
- H950 04** Coordinate a work site in the building services engineering sector

These further assignments will generate the main source of evidence for assessment purposes in these two Units.

As part of the induction to each Unit learners should be introduced to, and made aware of, the assignments to give direction and motivate learning. Assignment guidelines and specifications are contained in relevant Units in the TAP.

Practical assessments

In practical areas, the installation pipework during Year 1 will be of a formative nature in preparation for the summative work of Year 2. The Install Sheet Weathering Protection work of Year 1 and Year 2 is both formative and summative. Formative assessment has to be undertaken and a record kept. Marking schedule and learner feedback sheets are included in the TAP for this purpose.

Further information and practical drawings are contained in this.

Assessor guidance: learner feedback

Assessment of related knowledge and understanding

In some cases, competence may be demonstrated by performance alone. In others, however, performance alone is not sufficient and learners will need to provide evidence to demonstrate coverage of related knowledge and understanding. Short assignments/assessments/practical work will therefore be required to allow learners to show that they have the necessary knowledge and understanding.

This related knowledge and understanding can be given in the form of learner feedback detailing any areas of improvement that would be required or could be used to give positive feedback as a method of learner encouragement in particular skills. The learner feedback can be used to provide feedback for both formative and summative tasks.

Oral questions can be used in conjunction with written and practical tasks. For example, in cases where a learner's written response is insufficient, or practical work requires improvement, the assessor may ask questions to confirm knowledge and understanding and continue with practical work to increase the learner's performance in the assigned practical area.

Assessors must inform learners as soon possible of their achievement in any assessments, and give advice and guidance to enable learners to meet the required standards on subsequent assessment occasions.

The lecturer can give a brief feedback at the time of any practical test/tasks as acceptable evidence that the learner has met the criteria or requires extra support.

Information for learners

SVQ 3 Plumbing

This information should be read in conjunction with your college/centre induction material.

Welcome to the SVQ 3 in Plumbing and congratulations on gaining employment as an apprentice plumber. You are now about to embark on three years of part-time study at your college or training centre. With the right attitude and endeavour you will, during this time, gain the necessary qualifications to allow you to practice as a plumber on completion of your apprenticeship.

Your activity and performance during your apprenticeship is monitored by the various concerned parties:

Your employer

The company that has employed you is investing a lot of time and finance in your training and education as a plumber, and therefore has a vested interest in your performance 'off the job'.

Your managing agent

This is the organisation (possibly SNIPEF) that funds the 'off the job' part of your training. Their representatives will monitor your progress through a series of interviews with you and college/centre staff.

The Scottish Qualifications Authority (SQA)

SQA is responsible for certification of the SVQ (Scottish Vocational Qualification). It ensures that the correct standards are being met and maintained by the various colleges/centres offering the SVQ.

Scottish and Northern Irish Joint Industry Board (SNIJIB)

Membership of SNIJIB consists of representatives of SNIPEF and Unite the Union. Their main functions are the maintenance of the National Working Rules, the registration of apprentices, grading and registration of employees, the resolution of disputes and the operation of various industry schemes. SNIJIB jointly award the SVQ with SQA.

The SVQ level 3 in Plumbing is a competence-based course derived from the National Occupational Standards (NOS) as set out by the Sector Skills Council (SSC). The subject areas of the course are shown below:

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