



# **Assessor's Guidelines for the SVQ3 Fabrication and Welding Engineering SCQF level 6 (GL6F 23)**

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# About this guide

This guide provides some practical examples of how to assess your candidates for the **SVQ3 Fabrication and Welding Engineering SCQF level 6**. You may be able to think of other ways of assessing your candidates and recording your decisions about their competence.

Using assessments based on these examples does not guarantee successful verification — it is still your responsibility to ensure that internal quality assurance procedures are followed.

# Introduction

This introduction provides a brief overview of SVQs and how they are assessed in the workplace. If you are already familiar with the concept of SVQs, you may wish to go to the next section.

## About SVQs and the SCQF

Scottish Vocational Qualifications (SVQs) are work-based qualifications which set the level of occupational competence for each sector of the economy and are usually delivered in the workplace or in partnership with a college or other training provider. The qualifications have been designed by standards-setting bodies made up of experienced practitioners who represent employers, professional bodies, trade unions, education and voluntary organisations.

Each standards-setting body is responsible for developing national standards which define *what* employees (or potential employees) must be able to do, *how well*, and *in what circumstances*, to show that they are competent in their work.

Each SVQ which a standards-setting body develops has to fit into a broad framework which allows qualifications in the UK and throughout Europe to be compared.

There are SVQs for nearly all occupations in Scotland and they are available at SVQ levels 1–5. SVQs are currently notionally placed in the SCQF as the individual SVQs may be at differing SCQF levels and have differing amount of credit points, depending on the structure and context of the SVQ. SVQs are a means of recognising the skills and knowledge people need in employment, ie job competence. Successful completion of an SVQ provides clear evidence that the learner works to nationally recognised occupational standards.

Each Unit defines one aspect of a job or work-role, and says what it is to be competent in that aspect of the job. To be awarded a full SVQ, candidates must achieve each of the SVQ Units which make it up by demonstrating that they are competent in that aspect of the job. The Units which make up the SVQ can also be taken as freestanding awards. Some SVQs or SVQ Units are incorporated into other awards or programmes including HNCs and Modern Apprenticeships.

## **Explanation of levels**

<b>SVQ1 (SCQF level 4)</b>	Competence involves the application of knowledge and skills in the performance of a range of varied work activities, most of which may be routine or predictable.
<b>SVQ2 (SCQF level 5)</b>	Competence involves the application of knowledge and skills in a significant range of varied work activities, performed in a variety of contexts. At this level, there will be activities, which are complex or non-routine and there is some individual responsibility and autonomy. Collaboration with others, perhaps through membership of a work group or team, may often be a requirement.
<b>SVQ3 (either SCQF level 6 or 7)</b>	Competence involves the application of knowledge and skills in a broad range of varied work activities, most of which are complex and non-routine. There is considerable responsibility and autonomy, and control or guidance of others is often present.
<b>SVQ4 (either SCQF level 8 or 9)</b>	Competence involves the application of knowledge and skills in a broad range of complex technical or professional work activities, performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources is often present.
<b>SVQ5 (SCQF level 11)</b>	Competence involves the application of skills and a significant range of fundamental principles across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources feature strongly, as do personal accountability.

For further information on SCQF go to **[www.scqf.org.uk](http://www.scqf.org.uk)**.

## How are standards defined in SVQs?

All SVQs consist of standards which can be broken down into various parts.

**Units** define the broad functions carried out in the sector, and are made up of a number of **Elements**. These **Elements** describe the activities which employees have to perform, and will require candidates to demonstrate certain skills or Knowledge and Understanding.

The quality of performance in what people must be able to do — how well they have to perform — is described by **Performance Criteria**. These may also be called **statements of competence** or **what candidates should do**.

The section on **Knowledge and Understanding** says what candidates must know and understand, and how this knowledge applies to their jobs.

You may also come across standards containing statements on **scope**. These statements could, for example, list the equipment that candidates are expected to be familiar with and use in their occupational area.

Increasingly, you may see changes to this format as standards become more user-friendly and are written in plain English. For example, there may be some standards containing **Range Statements** or **Evidence Requirements**, but over time these should disappear. You may, however, find that information on the context, nature and amount of evidence which is required to prove competence (which used to be given in Range Statements and Evidence Requirements) is now defined in the **assessment guidance** for the qualification. Assessment guidance is drawn up by the awarding body and is packaged along with the standards to form the SVQ.

## Who is involved in SVQs?

There are several roles:

- ◆ **the candidate** the person who wants to achieve the SVQ (eg an employee)
- ◆ **the assessor\*** the person who assesses the candidates and decides if they are competent (eg supervisor)
- ◆ **the internal verifier\*** an individual nominated by the centre (eg a company) who ensures that assessors apply the standards uniformly and consistently (eg supervisor's line manager)
- ◆ **the External Verifier\*** an individual appointed by SQA who ensures that standards are being applied uniformly and consistently across all centres offering the SVQ

\*Assessors and verifiers in centres will be asked by SQA to prove they have the appropriate occupational competence to assess and verify the SVQ. Occupational competence has been defined by the standards-setting body in the Assessment Strategy for this SVQ(s) — see SQA’s website: [www.sqa.org.uk](http://www.sqa.org.uk).

Assessors and verifiers are also expected to obtain an appropriate qualification in assessment and verification — this can be the Learning and Development Units (the national standards for assessment and verification), or an alternative qualification which SQA also recognises.

## **The steps involved in assessing a candidate for an SVQ**

In deciding whether a candidate should achieve an SVQ, you will go through these stages:

- ◆ planning for assessment
- ◆ generating and collecting evidence of the candidate’s competence in the Units
- ◆ judging the evidence of the candidate’s ability and making an assessment decision based on the evidence
- ◆ recording the assessment decision and the candidate’s achievement

# 1 The SVQ3 Fabrication and Welding Engineering SCQF level 6

The SVQ in Fabrication and Welding has been developed by SEMTA the standards setting body for Science, Engineering and Manufacturing Technologies and is intended for people in employment.

These people may be working as apprentices or as mature employees seeking to formally recognise their practical experience. They will require skills and knowledge in health and safety and the ability to interpret engineering data and documents and managing their own work area in their place of employment. In addition they will also prove their competence in their chosen field of fabrication and welding engineering expertise.

The SVQ is designed to be assessed in the workplace, or in conditions of the workplace. Examples of the settings or centres in which the SVQ is likely to be delivered include employers premises, on-site operations and major construction operations.

## Structure of the SVQ

This section lists the Units which form the SVQ in Fabrication and Welding Engineering.

### Mandatory Units — Candidates must complete all of the following Units

SQA ref	SCQF level	SCQF credit points	SSC ref	Title
HE9D 04	5	5	SEMMAN123-01	Complying with Statutory Regulations and Organisational Safety Requirements
HE9C 04	5	5	SEMMAN23-02	Using and Interpreting Engineering Data and Documentation
FR0T 04	5	5	SEMMAN3-03	Working Efficiently and Effectively in Engineering

## Optional Units — Candidates must complete one Pathway

<b>Pathway 1 — Pipe and Tube Fabrication</b>				
Candidates must complete 3 mandatory Units and 5 optional Units (1 Unit from Group A, 1 Unit from Group B, 2 Units from Group C and 1 Unit from Group D)				
<b>SQA ref</b>	<b>SCQF level</b>	<b>SCQF credit points</b>	<b>SSC ref</b>	<b>Title</b>
<b>Group A — 1 Unit</b>				
H1VW 04	6	47	SEMFWE322	Marking out Components for Metalwork
H1VX 04	6	49	SEMFWE327	Developing and Marking out Templates for Metalwork
<b>Group B — 1 Unit</b>				
HF2X 04	6	35	SEMFWE333	Cutting and Shaping Materials using Portable Thermal Cutting Equipment
HF2Y 04	6	32	SEMFWE334	Cutting Materials using Saws and Abrasive Discs
<b>Group C — 2 Units</b>				
H1W1 04	6	40	SEMFWE344	Forming Pipework by Machine Bending
HF30 04	6	40	SEMFWE345	Producing Pipe Fabrications
H1W3 04	6	36	SEMFWE337	Producing and Finishing Holes using Drilling Machines
<b>Group D — 1 Unit</b>				
HF31 04	6	36	SEMFWE328	Joining Fabricated Components using Mechanical Fasteners
H1W5 04	6	49	SEMFWE346	Producing Socket and Flange Fillet Welded Joints in Pipe using a Manual Welding Process
HF32 04	6	38	SEMFWE329	Bonding Engineering Materials using Adhesives
HF33 04	6	29	SEMFWE339	Slinging, Lifting and Moving Materials and Components

<b>Pathway 2 — Manual Welding</b>				
Candidates must complete 3 mandatory Units and 1 optional Unit				
<b>SQA ref</b>	<b>SCQF level</b>	<b>SCQF credit points</b>	<b>SSC ref</b>	<b>Title</b>
H1VN 04	6	57	SEMFWE304	Welding Materials by the Manual Metal Arc Process
HE8W 07	6	57	SEMFWE305	Welding Materials by the Semi-automatic MIG/MAG and Flux Cored Arc Processes
HF34 04	6	57	SEMFWE306	Welding Materials by the Manual TIG and Plasma Arc Welding Process
HE8X 04	6	57	SEMFWE307	Welding Materials by the Manual Oxy/Fuel Gas Welding Process
HF35 04	6	64	SEMFWE308	Welding Pipe/Tube using Multiple Manual Arc Welding Processes
HF36 04	6	64	SEMFWE309	Welding Plate using Multiple Manual Arc Welding Processes

<b>Pathway 3 — Welding Machine Setting and Operating</b>				
Candidates must complete 3 mandatory Units and 2 optional Units (1 Unit from Group A and 1 Unit from Group B)				
<b>SQA ref</b>	<b>SCQF level</b>	<b>SCQF credit points</b>	<b>SSC ref</b>	<b>Title</b>
<b>Group A — 1 Unit</b>				
HF37 04	6	48	SEMFWE310	Preparing Mechanised Arc Welding Equipment for Production
HF38 04	6	48	SEMFWE311	Preparing Resistance Spot, Seam and Projection Welding Machines for Production
<b>Group B — 1 Unit</b>				
H1WF 04	6	40	SEMFWE316	Welding Materials with Mechanised Arc Equipment
HF39 04	6	40	SEMFWE317	Welding Materials using Resistance Spot, Seam and Projection Welding Machines

<b>Pathway 4 — Plateworking (3mm upwards)</b>				
Candidates must complete 3 mandatory Units and 6 optional Units (1 Unit from Group A, 1 Unit from Group B, 2 Units from Group C and 2 Units from Group D)				
<b>SQA ref</b>	<b>SCQF level</b>	<b>SCQF credit points</b>	<b>SSC ref</b>	<b>Title</b>
<b>Group A — 1 Unit</b>				
H1VW 04	6	47	SEMFWE322	Marking out Components for Metalwork
H1VX 04	6	49	SEMFWE327	Developing and Marking out Templates for Metalwork
<b>Group B — 1 Unit</b>				
H1W7 04	6	30	SEMFWE332	Cutting Plate and Sections using Shearing Machines
HF2X 04	6	35	SEMFWE333	Cutting and Shaping Materials using Portable Thermal Cutting Equipment
HF2Y 04	6	32	SEMFWE334	Cutting Materials using Saws and Abrasive Discs
HE8Y 04	6	44	SEMFWE366	Operating CNC Fabrication Equipment
<b>Group C — 2 Units</b>				
HF3A 04	6	36	SEMFWE335	Bending and Forming Plate using Press Brakes or Bending Machines
H1W9 04	6	36	SEMFWE336	Forming Platework using Power Rolling Machines
H1W3 04	6	36	SEMFWE337	Producing and Finishing Holes using Drilling Machines
HF3C 04	6	40	SEMFWE338	Producing Platework Assemblies
<b>Group D — 2 Units</b>				
HF31 04	6	36	SEMFWE328	Joining Fabricated Components using Mechanical Fasteners
H1WB 04	6	50	SEMFWE331	Producing Fillet Welded Joints using a Manual Welding Process
HF33 04	6	29	SEMFWE339	Slinging, Lifting and Moving Materials and Components

<b>Pathway 5 — Sheet Metalworking (3mm or less)</b>				
Candidates must complete 3 mandatory Units and 6 optional Units (3 Units from Group A, 2 Units from Group B and 1 Unit from Group C)				
<b>SQA ref</b>	<b>SCQF level</b>	<b>SCQF credit points</b>	<b>SSC ref</b>	<b>Title</b>
<b>Group A — 3 Units</b>				
H1VW 04	6	47	SEMFWE322	Marking out Components for Metalwork
HE90 04	6	49	SEMFWE323	Cutting Sheetmetal to Shape using Hand and Machine Tools
HE91 04	6	50	SEMFWE324	Forming Sheetmetal using Hand and Machine Tools
<b>Group B — 2 Units</b>				
HE92 04	6	47	SEMFWE325	Producing Sheetmetal Assemblies
HE93 04	6	38	SEMFWE326	Heat Treating Materials for Fabrication Activities
H1VX 04	6	49	SEMFWE327	Developing and Marking out Templates for Metalwork
<b>Group C — 1 Unit</b>				
HF31 04	6	36	SEMFWE328	Joining Fabricated Components using Mechanical Fasteners
HF32 04	6	38	SEMFWE329	Bonding Engineering Materials using Adhesives
HF0J 04	6	38	SEMFWE330	Joining Materials by Resistance Spot Welding
H1WB 04	6	50	SEMFWE331	Producing Fillet Welded Joints using a Manual Welding Process
HF33 04	6	29	SEMFWE339	Slinging, Lifting and Moving Materials and Components
HE8Y 04	6	44	SEMFWE366	Operating CNC Fabrication Equipment

<b>Pathway 6 — Structural Steelwork</b>				
Candidates must complete 3 mandatory Units and 6 optional Units (1 Unit from Group A, 1 Unit from Group B, 2 Units from Group C and 2 Units from Group D)				
<b>SQA ref</b>	<b>SCQF level</b>	<b>SCQF credit points</b>	<b>SSC ref</b>	<b>Title</b>
<b>Group A — 1 Unit</b>				
H1VW 04	6	47	SEMFWE322	Marking out Components for Metalwork
H1VX 04	6	49	SEMFWE327	Developing and Marking out Templates for Metalwork
<b>Group B — 1 Unit</b>				
H1W7 04	6	30	SEMFWE332	Cutting Plate and Sections using Shearing Machines
HF2X 04	6	35	SEMFWE333	Cutting and Shaping Materials using Portable Thermal Cutting Equipment
HF2Y 04	6	32	SEMFWE334	Cutting Materials using Saws and Abrasive Discs
HE8Y 04	6	44	SEMFWE366	Operating CNC Fabrication Equipment
<b>Group C — 2 Units</b>				
HE94 04	6	38	SEMFWE340	Forming Structural Sections using Machines
HE95 04	6	40	SEMFWE341	Producing Structural Steel Ancillary Components
HE98 04	6	42	SEMFWE342	Producing Major Structural Components/Sub-assemblies
H1W3 04	6	36	SEMFWE337	Producing and Finishing Holes using Drilling Machines
<b>Group D — 2 Units</b>				
HF31 04	6	36	SEMFWE328	Joining Fabricated Components using Mechanical Fasteners
H1WB 04	6	50	SEMFWE331	Producing Fillet Welded Joints using a Manual Welding Process
HF33 04	6	29	SEMFWE339	Slings, Lifting and Moving Materials and Components
HE9A 04	6	42	SEMFWE343	Erecting Structural Steelwork

## **An Assessment Strategy for the SVQ**

As part of their review of the SVQ, the standards-setting body SEMTA has developed an Assessment Strategy which defines a range of requirements:

- ◆ the occupational expertise of assessors and verifiers
- ◆ a definition of simulation
- ◆ definition of the workplace
- ◆ information on a model of independent assessment or external quality control

The relevant parts of the Assessment Strategy are published on SQA's website ([www.sqa.org.uk](http://www.sqa.org.uk)), and both SQA and centres must comply with these requirements.

## **Why would people be interested in the SVQ?**

People will take SVQs for a variety of reasons: to gain promotion, to prove their job competence, or for personal development. There will be other reasons too. One of the first things to do is to find out why your candidates want to do the SVQ, and to advise them of the appropriateness of the qualification. If anyone is acting as a coach or mentor to your candidates, they might help you to do this.

# How do candidates begin?

## Choosing the SVQ

You should make sure that candidates get guidance before starting out on an SVQ — they need advice to ensure that their existing job remit, skills, experience, and their plans for progression, are matched to the SVQ selected. It does not have to be you as the assessor, who carried out the matching process, but whoever has responsibility for this should ensure that the assessment opportunities available to the candidate are also considered.

### Example

The SVQ at level 3 could be used for a recently recruited Apprentice Fabricator/Welder. The candidate may have successfully completed a Full Time College Engineering Course comprising of an NC in Fabrication and Welding Engineering and a SVQ level 2 in Performing Engineering Operations and wish to progress further. The choice of route is a decision between the employer and the employee. The SVQ would be designed around the candidate's employer's main interest and the equipment that is available. The previous qualifications gained along with the SVQ3 would allow the employee to be registered as a Modern Apprentice. In addition, Core Skills and additionality must also be achieved. An example of a potential pathway for the SVQ at level 3 would be:

- ◆ Complying with Statutory Regulations and Organisational Safety Requirements
- ◆ Using and Interpreting Engineering Data and Documentation
- ◆ Working Efficiently and Effectively in Engineering
- ◆ Marking out Components for Metalwork
- ◆ Cutting and Shaping Materials Using Portable Thermal Cutting Equipment
- ◆ Bending and Forming Plate Using Press Brakes or Bending Machines
- ◆ Producing Platework Assemblies
- ◆ Producing Fillet Welded Joints Using a Manual Welding Process
- ◆ Slinging, Lifting and Moving Materials and Components

All parties need to know and understand their roles and responsibilities and a clear training plan needs to be established to outline clear timescales and review dates. Only when all these arrangements are agreed by everyone involved and documented in an assessment plan should the training and assessment for the SVQ commence.

## 2 Preparing to assess the SVQ

This section offers practical advice on how to begin to go about assessing your candidates for the SVQ. This advice is offered as examples of good practice — you may develop your own approaches to assessing your candidates which also work well.

### Your role and your candidate's role

Assessing the SVQ will involve several stages. Both you and the candidate should be clear on your roles in the assessment process before you begin.

#### Your role

- ◆ ensure candidates understand what is to be assessed and how it is to be assessed
- ◆ ensure the conditions and resources required for assessment are available
- ◆ help candidates to identify and gather evidence
- ◆ observe and record candidates carrying out the activities described in the standards — records should say what has been observed, how it was carried out, and what it demonstrates
- ◆ assess products of the candidate's own work
- ◆ question candidates and record results
- ◆ help candidates to present evidence
- ◆ authenticate the evidence candidates provide
- ◆ judge evidence and make assessment decisions
- ◆ identify gaps or shortfalls in candidates' competence
- ◆ provide feedback to candidates throughout the assessment process
- ◆ record achievement

#### Candidates' role

- ◆ prepare for assessment — become familiar with the standards, what is to be assessed and how it is to be assessed
- ◆ help to identify sources of evidence and how these could be assessed
- ◆ carry out activities, and/or produce products of own work, and/or answer questions
- ◆ gather and present evidence
- ◆ receive and act on feedback from the assessor

## Planning

In planning for assessment, you will find it helpful to meet with your candidate and plan what is to be assessed, in what way, and when and where the assessment is to take place. This discussion can be confirmed in the form of an agreed assessment plan between you and your candidate.

You should treat assessment plans as working documents — they can be updated and changed as you review progress with your candidate.

As you are planning assessment, don't forget to make the most of opportunities to *integrate* assessment. This means planning to assess an activity which draws on the contents of different Units or Elements. It can be a practical and cost-effective way of assessing your candidate's competence.

If you are a new assessor working towards your Learning and Development Units (the national standards in assessment and verification) you will need copies of completed assessment plans as part of your evidence.

To help you plan for assessment, we have produced an assessment plan which covers part of Unit HF2X 04. **Please note that the example does not cover all the performance contained in HF2X 04 that is required for competence and is for illustrative purposes only.**

You will notice that we have included spaces to enter dates when the assessment plan has been reviewed. Any gaps identified during these reviews should be discussed with your candidates and noted for action in the assessment plan.

## Assessment plan

HF2X 04		Cutting and Shaping Materials Using Portable Thermal Cutting Equipment				
Elements						
Activities	Performance Criteria (PC)	Method of assessment/ sources of evidence	Date of assessment	Evidence already available	Links to other Units (PC and range)	
Prepare for activities by wearing appropriate PPE.	1	Observation		Assessor checklist	HE9D 04	
Select gases, assemble and connect and ensure equipment is in working order by lighting flame.	1, 2	Observation		Assessor checklist/oral questions	HE9D 04	
Use the equipment to produce straight line and circular cuts on plate.	3	Observation		Assessor checklist	HE9D 04, HE9C 04, FR0T 04	
Produce straight line and circular cuts on plate that are free from defect and meet the tolerance specified.	4	Product evaluation		Job card/inspection report	HE9C 04	
Check when cutting that a suitable cut surface is maintained.	5	Personal statement(s)		Job card	HE9C 04, FR0T 04	
Carry out a leak check on equipment and report if necessary.	1, 6	Observation/ witness statement		Assessor checklist/job card	FR0T 04	

Activities	Performance Criteria (PC)	Method of assessment/ sources of evidence	Date of assessment	Evidence already available	Links to other Units (PC and range)
Extinguish flame, turn off gases, purge hoses and store hoses and equipment safely	1, 7	Observation		Assessor checklist/oral questions	HE9D 04, HE9C 04, FR0T 04
<b>Questioning for Knowledge and Understanding not apparent from performance to be identified from 2nd review</b>					

<b>Assessor's signature</b>	<u><i>Martin Douglas</i></u>	<b>1st review due</b>	<u>16/6/16</u>
<b>Candidate's signature</b>	<u><i>James Gordon</i></u>	<b>2nd review due</b>	<u>14/7/16</u>
<b>Date of agreement</b>	<u>16/5/16</u>	<b>Date of completion</b>	<u></u>

## Selecting methods of assessment

The methods of assessment you use should be valid, reliable and practicable.

- ◆ By *valid* we mean that the assessment method should be appropriate to the standards.
- ◆ By *reliable* we mean that the assessment method should ensure consistent results when used with different candidates, different assessors and on different occasions.
- ◆ By *practicable* we mean that the method ensures that the assessment makes best use of available resources, equipment and time.

Before you assess a candidate, you must make sure that the methods of assessment you have chosen to use, along with any assessment materials (such as questions and sample answers) have been agreed within your centre through its system of internal quality assurance. This system is often called *internal verification* — its purpose is to help to ensure that assessment methods are valid, reliable and practicable.

There are both benefits and challenges when you are assessing SVQs in the workplace, or in conditions of the workplace. When you select methods of assessment, you should try to offer the candidate the benefits of workplace assessment and minimise any potential difficulties.

The benefits might be:

- ◆ evidence arising naturally from the candidate's normal work
- ◆ much of the evidence based on work that the candidate is familiar with, eg location and use of components
- ◆ evidence from colleagues/supervisors in the form of testimony
- ◆ opportunities for direct observation (could be a benefit or a challenge)
- ◆ candidates can progress at their natural pace (could be a benefit or a challenge)
- ◆ familiarity between the candidate and the assessor (could be a benefit or a challenge)

The challenges might be:

- ◆ the greatest challenge is the safety of the candidate. Candidates who do not possess appropriate skills and knowledge at level 3 could pose a risk to themselves and others in a workplace.
- ◆ pressure of work
- ◆ shift working
- ◆ difficulties in arranging assessment of knowledge and understanding

## Methods of assessment

Assessment may involve a range of assessment methods. For SVQs, some of the most commonly used methods are observation, product evidence, and questioning.

### Observation

Observation by an assessor is considered to be the most valid and reliable method of assessment. It can be organised in a variety of ways:

- ◆ working alongside the candidate
- ◆ arranging to visit when naturally-occurring activities are carried out by the candidate
- ◆ arranging for activities to take place

Observation by the assessor can often be supplemented by other types of assessment methods such as questioning. For example, it may be appropriate to ask oral questions of candidates as they carry out naturally-occurring activities.

### Product evidence

As candidates work towards achieving the SVQ, they will produce evidence in the form of products of their work. The nature of this evidence can vary widely depending on what the candidate's job entails, but examples of product evidence include:

- ◆ NDT report coming from the Producing Fillet Welded Joints Using a Manual Welding Process Unit
- ◆ Inspection report of a completed component coming from the Producing Platework Assemblies Unit

## Questioning

Candidates have to show that they can meet the knowledge specifications for the SVQ. For this SVQ, Knowledge and Understanding is specified for each Unit. Much of a candidate's knowledge and understanding will be apparent from what they do or produce as part of their work, but this will not always be the case, and questioning can be a useful way of confirming what candidates know and understand.

Questions can be asked in a variety of forms, such as oral questions, short answer written questions, and multiple choice.

You should be careful that the method of questioning does not go beyond the competence required for the SVQ and become a barrier to fair assessment. For example, some candidates will feel more comfortable with oral questions than written.

For example, when observing candidates it is clear if they are wearing appropriate PPE but it is only by questioning them that you can establish if they understand the potential risks and why the PPE reduces but does not eliminate risk.

## Other methods of assessment

These methods, like questioning, are often used for authentication. See Section 3 for more about authenticating candidates' evidence.

### Personal statements

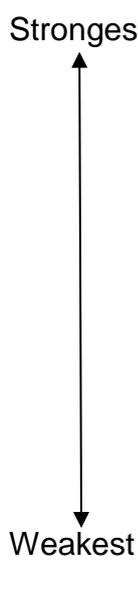
You might sometimes find it helpful to ask a candidate to give an account of why they did an activity in a certain way or how they produced a product of their work. This is often referred to as a *personal statement*. You should take care to ensure that by asking candidates to produce such statements, you are not asking them to demonstrate competence beyond what is required by the standards. You should also be selective in the use of personal statements, and make sure they have not been produced as a substitute to a more valid, reliable and practical method of assessment.

For example a candidate may select a particular tool for a task and the assessor may seek an explanation of the reasons for its selection.

### Witness testimony

For practical reasons, you may not be able to observe all the activities carried out by your candidates, but might feel that other people may be able to provide a statement on what your candidates have been doing or producing as part of their work. Statements of this kind are called *witness testimony*, and are often used to support other evidence produced by candidates. If witness testimony is used, you should, ideally, identify witnesses and opportunities for using their testimony as part of assessment planning.

You should bear in mind that the weight of the evidence will vary, depending on the knowledge and expertise of the person providing the witness testimony. You will have to take these factors into account as you make your judgement.

 <p>Strongest</p>	Someone with considerable occupational expertise in the candidate's area of work and who is familiar with the standards. This person may also be an assessor or internal verifier qualified with the L and D Units, A/V Units or 'D-Units'.
	Someone with considerable occupational expertise in the candidate's area of work and who is familiar with the standards.
	Someone with considerable occupational expertise in the candidate's area of work, but with no knowledge of the standards.
	Someone who may be a colleague of the candidate, but with no knowledge of the standards.
	Weakest

Witness testimony is unlikely to be sufficient in itself for a decision about the candidate's competence, and would normally be supplemented by questioning candidates.

## **Simulation**

*Simulation* is any structured assessment exercise involving a specific task which reproduces real-life situations.

On some occasions, it may not be practical to assess a candidate in real work. Examples might be where the standards require candidates to carry out emergency or contingency procedures, or where client confidentiality is an issue, or where a candidate's job role does not cover all aspects of the qualification.

SEMTA has defined what it regards as simulation, and has specified in the standards when simulation is and is not acceptable. The standards also state when candidates must demonstrate competence in the workplace.

For more details on simulation and what constitutes performance in the workplace, look at the Assessment Strategy on SQA's website: [www.sqa.org.uk](http://www.sqa.org.uk).

## **Other sources of evidence**

Other sources of evidence can be previous experience or learning, case studies or assignments.

SQA's *Guide to Assessment* (see section 5) has more advice on methods of assessment and how to ensure that your assessment is valid, reliable and practicable.

### 3 Generating evidence

The methods of assessment you use should generate sufficient evidence to demonstrate the candidate's competence.

We described earlier the circumstances in which you might choose to use different methods of assessment. Starting on the next page, this section gives you examples of forms which you can use to record and present evidence of:

- ◆ observation (by the assessor)
- ◆ questions and candidate responses
- ◆ personal statement (produced by the candidate)
- ◆ witness testimony

There are blank forms which you can copy and use in assessment in Appendix 1.

## **Observation**

For observation, note that the form asks you to record the skills and activities observed. This helps you to make a judgement on how the activity was carried out and what it demonstrates.

## Observation record

**Unit/Element(s)** Slinging, Lifting and Moving Materials and Components

**Candidate** James Gordon

**Evidence index number** 1

**Date of observation** 19 June 2016

<b>Skills/activities observed</b>	<b>Performance Criteria covered</b>
<p>In preparation for marking out a RSJ. Due to its size and weight, it required to be lifted onto the marking table. James correctly used all relevant PPE.</p> <p>He checked the drawing for the estimated weight of the joist and ensured that the slings and lifting machine available were capable of the lift by checking the S.W.L.s. James had to ask the tradesman about the weight as it was not on the drawing.</p> <p>He ensured that the slings were correctly positioned and asked a colleague for assistance during the lift — he also ensured that the area was clear of other workers.</p> <p>He correctly operated the lifting machine and observed all safety procedures for a successful lift.</p>	1, 2, 3, 4, 5, 6

### **Knowledge and Understanding apparent from this observation**

I asked James questions about the inspection of lifting machines and equipment in relation to the frequency of inspections, who carried them out and how the results were recorded. He correctly answered the questions.

### **Other Units/Elements to which this evidence may contribute**

Units HE9D 04, HE9C 04 and FR0T 04

### **Assessor's comments and feedback to candidate**

I praised James for having the confidence to ask for assistance from his tradesman to get the weight of the joist.

Commended James on a good assessment — the activity will be referenced against the Unit standards and we would look at what was covered in the Mandatory Units at review.

I can confirm the candidate's performance was satisfactory.

**Assessor's signature** Martin Douglas      **Date** 19/06/16

**Candidate's signature** James Gordon      **Date** 19 June 2016

## **Questions and candidate responses**

This form can be used to record any questions you might ask the candidate to establish what they know and understand. You should note the candidate's responses on this form too.

Note that there is a space near the top of the form for you to record when, where, how and why you asked the questions.

Where you want to give the candidate written questions, this form could also be used.

## Record of questions and candidate's answers

<b>Unit</b>	Slinging, Lifting and Moving Materials and Components
<b>Element(s)</b>	
<b>Evidence index number</b>	2
<b>Circumstances of assessment</b>	
Oral questioning during observation.	
<b>List of questions and candidate's responses</b>	
<b>Q</b>	What information is available on the drawing relating to the RSJ?
<b>A</b>	The drawing gives you the sizes — you can then read the weight per metre from the steelwork tables.
<b>Q</b>	What PPE should always be worn when you are using lifting equipment?
<b>A</b>	Overalls, safety boots, safety hat and gloves are needed due to my work regulations.
<b>Q</b>	Who is able to carry out an inspection of a wire sling?
<b>A</b>	The insurance inspector comes in about every 6 months.
<b>Q</b>	Should you use a wire sling that has some frayed strands?
<b>A</b>	It depends on how much of the sling is frayed but I would prefer not to use it anyway as its capacity must be lower.
<b>Q</b>	
<b>A</b>	

**Assessor's signature** Martin Douglas      **Date** 19/06/16

**Candidate's signature** James Gordon      **Date** 19 June 2016

## **Candidate's personal statement**

If a personal statement is being used as evidence, it should be completed by the candidate. The statement should record what they did, how and why they chose to carry out an activity or produce work in a certain way. Where other people may have been present during an activity and they may be able to provide witness testimony, the candidate should record how the statement links to other evidence in the column provided.

## Personal statement

Date	Evidence index number	Details of statement	Links to other evidence (enter numbers)	Unit, Elements, Performance Criteria, Performance statements, scope covered
19/6/16	3	<p>I was unsure how to find the weight of the joist so I asked my tradesman if he knew where I could get it.</p> <p>He gave me a loan of his copy of the steelwork tables and showed me how to find the weight of my joist.</p>	4	HF33 04 09 — K7, K9, K19

Candidate's signature James Gordon

Date 19 June 2016

## **Witness testimony**

Remember when you begin to use witness testimony that it must be capable of being authenticated — even if the testimony itself is being used to authenticate a candidate's claim to competence.

To make sure the witness testimony is genuine, you must ensure that you have a record of who is acting as a witness, their relationship to the candidate (eg supervisor, client) address, telephone number and the date. There are spaces for this information in the form.

## Witness testimony

<b>SVQ title and level</b>	SVQ3 Fabrication and Welding Engineering SCQF level 6
<b>Candidate's name</b>	James Gordon
<b>Evidence index no</b>	4
<b>Index no of other evidence which this testimony relates to (if any)</b>	3
<b>Element(s)</b>	
<b>Date of evidence</b>	19 June 16
<b>Name of witness</b>	Davie Roger
<b>Designation/relationship to candidate</b>	Supervisor
<p><b>Details of testimony</b>            James asked me how to find the weight of a joist that he was going to lift on to the marking table as the drawing only gave him its sizes.</p> <p>I gave him my copy of the steelwork tables and showed him how to work it out.</p> <p>He asked me to check his sums when he was finished — he got the correct answer.</p>	

I can confirm the candidate's performance was satisfactory.

**Witness's signature** Davie Roger                      **Date** 19 June 16

**Witness** (please select the appropriate box):

- Holds L and D Unit 9D/9D1, A1/A2 or D32/D33 qualifications
- Is familiar with the SVQ standards to which the candidate is working

## Filling the gaps

There may come a time when your candidate has provided evidence for most of the Unit (or SVQ), but there are some gaps. For example, you may find that certain situations, such as handling contingencies, have not arisen during assessment. Often these will relate to dealing with health and safety issues, or unexpected problems with workflow like delays in receiving information from another part of the organisation.

In this SVQ, such gaps are likely to occur in generating evidence for:

- ◆ HE9D 04 Complying with Statutory Regulations and Organisational Safety Requirements PC 3 — follow organisational accident and emergency procedures.

You may be able to overcome these by:

- ◆ The candidate should be encouraged to complete personal statements detailing the identification of qualified first aiders and first aid facilities, the procedures to be followed in the event of injury and the procedures to be followed in the event of a dangerous occurrence or hazardous malfunction supplemented by oral questioning during observation assessment.
- ◆ With regard to following procedures in the event of fire and evacuation of premises the employer has a duty to arrange a fire test and evacuation at fixed periods and the candidate should arrange for a witness testimony to be included in his portfolio again supplemented by oral questioning.

## Guidance and support to candidates

At all times during the assessment process — from planning through to making your assessment decision — feedback should be ongoing, clear and constructive. Feedback should be given against the national standards by relating it to the evidence provided, including the knowledge specifications.

Where there are any shortfalls in a candidate's competence, you should discuss these with your candidate and make plans for re-assessment.

## Judging candidate evidence and making an assessment decision

In judging candidate evidence, you must be satisfied that your candidates can work consistently to the required standard, and that the evidence they have produced is their own. You must consider whether your candidate understands and applies the knowledge evidence and how this links to performance evidence.

Evidence must:

- ◆ be relevant to the SVQ
- ◆ be authentic
- ◆ show current competence
- ◆ be sufficient to help you form a decision about the candidate's competence

### **Insufficient evidence**

You have to judge whether the candidate has produced enough evidence required by the standards for you to reach a decision about their evidence.

Where there is insufficient evidence, you should say this to your candidate. You should tell them that it is not that they are not yet competent — there is simply not enough evidence on which to make a decision.

In this situation, your feedback to your candidates must help them produce more evidence and/or plan for further assessment.

### **Authenticating candidates' evidence**

Authentication is required where you have not observed candidates' performance at first hand.

You can check whether a candidate has produced evidence which they claim shows their competence by questioning them or, if this is appropriate, asking them to produce a personal statement, using witness testimony, or seeking peer reports from other colleagues of the candidate.

### **Example**

An example of this is where a candidate may appear to be following safe working practices, but only by questioning them will you be able to ascertain if they know why they are required to do things in this way.

## 4 Recording achievement

You should retain all evidence — clearly referenced — for internal and external verification.

The candidate's evidence is normally kept in a file, often called a *portfolio*. These documents help you and your candidates to collect, present and cross-reference the evidence to the national standards. They are also a means of recording your assessment decisions, and they tell an External Verifier what stage a candidate has reached in achieving the SVQ.

Recording documents do not need to be paper-based — it is possible to use an electronic format for collecting and structuring the evidence. Whatever format you and your candidates choose to use, the documents must show what evidence was generated, the assessment decisions you made, how the evidence meets the standards, and where the evidence can be located. You should avoid photocopying items simply to put them in a portfolio — a clear explanation of where the evidence can be found (for example, in a filing cabinet) may be sufficient for the External Verifier to follow it up and include it in the visit.

There are various reasons why record-keeping is so important:

- ◆ it provides a way of tracking a candidate's progress in achieving an SVQ
- ◆ it helps candidates to make claims for certification of their competence
- ◆ internal verifiers and External Verifiers use the records to sample assessment decisions
- ◆ it helps us to monitor the quality assurance of our qualifications

If your candidates' evidence is incomplete, or cannot be located, or if there is inaccurate cross-referencing to the standards, there is a risk that an internal verifier or External Verifier will be unable to confirm your assessment decisions.

To help you and your candidate present evidence and record your assessment decision, we have provided examples of the forms which you and your candidate might use to compile the portfolio.

- ◆ Completing the Unit progress record
- ◆ Using the evidence index
- ◆ Completing the Element achievement record

These forms are also used in SQA's portfolio.

## **Completing the Unit progress record**

You should complete this form each time your candidate achieves a Unit from the SVQ by adding your signature and the date next to the relevant Unit.

At this stage, candidates should make sure they have completed the recording documents correctly and that their evidence can be easily located. Only then should they circle the relevant Unit number at the top of the form. This enables both of you to see at a glance what stage the candidate is at in their SVQ.

## Unit progress record

**Qualification and level** SVQ3 Fabrication and Welding Engineering SCQF level 6

**Candidate** James Gordon

To achieve the whole qualification, you must prove competence in three **mandatory** Units and six **optional** Units.

### Unit checklist

<b>Mandatory</b>	HE9D 04	HE9C 04	FR0T 04		
<b>Optional</b>	H1VW 04	HF2X 04	H1W1 04	HF30 04	HF33 04

### Mandatory Units achieved

<b>Unit number</b>	<b>Title</b>	<b>Assessor's signature</b>	<b>Date</b>
HE9D 04	Complying with Statutory Regulations and Organisational Safety Requirements	<i>Martin Douglas</i>	23/07/16
HE9C 04	Using and Interpreting Engineering Drawings and Documents	<i>Martin Douglas</i>	27/07/16

### Optional Units achieved

<b>Unit number</b>	<b>Title</b>	<b>Assessor's signature</b>	<b>Date</b>
H1VW 04	Marking out Components for Metalwork	<i>Martin Douglas</i>	25/07/16

## Using the index of evidence

The purpose of the index of evidence is to help you locate and work through the candidate's evidence. It should give you a summary of what evidence the candidate has collected, and where (eg in a portfolio) it can be found.

The index of evidence should be completed by entering:

- ◆ the index number for each piece of evidence
- ◆ a description of each piece of evidence
- ◆ the place or location where it can be found
- ◆ the initials of the internal verifier and the date (if they have sampled the candidate's evidence)

Ideally, it should be candidates themselves (with your support and encouragement) who complete the index.

You must make sure that the information in the evidence index is accurate when your candidates' portfolios are presented for assessment and verification — particularly the information about where the evidence can be located. This is important because we suggest that anything which has been produced as day-to-day work is kept in its normal location, but anything which has been produced through assessment for the SVQ, eg observation checklists, is filed in the candidate's portfolio. In this way, your candidate can avoid having to photocopy work products just for the sake of including them in a portfolio. It also means that evidence produced as a result of assessment is kept safely in a central file.

If the index of evidence is not completed with an accurate description and location of the evidence, there is a risk that an internal verifier or External Verifier might be unable to confirm your assessment decisions.



## **Completing the Element achievement record**

To help you and your candidates cross-reference the evidence to the standards of the SVQs, we have provided records similar to those produced in the SQA portfolio. Use one record for each Element. The grids should be completed by:

- ◆ entering the evidence index number in the first column
- ◆ giving a brief description of the evidence in the second
- ◆ ticking the relevant boxes for the Performance Criteria (or statements of competence as they are sometimes known)
- ◆ entering the areas of knowledge and understanding the piece of evidence covers

If integrated assessment is used (linking PC or Elements across different Units) the evidence should be cross-referenced back to the relevant Units.

We have provided a completed example to show how to use the record.

# Element achievement record

Unit HF33 04 Slinging, Lifting and Moving Materials and Components

Evidence index no	Description of evidence	PC/performance statements						Areas of Knowledge and Understanding/scope																			
		1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1	Observation checklist	✓	✓	✓	✓	✓	✓																				
2	Questions and answers							✓	✓	✓				✓	✓	✓	✓	✓		✓					✓		
3	Personal statement													✓		✓											✓
4	Witness testimony															✓											✓

**Unit** HF33 04 Slinging, Lifting and Moving Materials and Components

**Notes/comments**

This evidence also contributes to that for Units HE9D 04, HE9C 04 and FR0T 04

The candidate should continue to produce evidence to complete the Unit. (MD 23/6/2016)

The candidate has satisfied the assessor and internal verifier that the performance evidence has been met.

**Candidate's signature** James Gordon

**Date** 23/6/16

**Assessor's signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_

**Date** \_\_\_\_\_

# 5 Further information

## What else should I read?

The publications listed here provide additional information on how to implement SVQs. Details of these and other SQA publications are available on our website at **www.sqa.org.uk** on the 'Publications, Sales and Downloads' section. They can be ordered from SQA's Business Development and Customer Support Team — telephone 0303 333 0330. Please note that there may be a charge for some of these publications.

*Assessor/Verifier Units: assessment guidance*

*External Verification: A Guide for Centres*

*Guide to Assessment*

*Introduction to Assessment Arrangements for Schools and Colleges*

*SQA's Quality Framework: a guide for centres*

*Operational Help Centre*

The Operational Guide for Centres has been replaced by the online Operational Help Centre on **www.sqa.org.uk**

# **Appendix 1: Blank recording forms**

## Unit progress record

Qualification and level \_\_\_\_\_

Candidate \_\_\_\_\_

To achieve the whole qualification, you must prove competence in xx **mandatory** Units and xx **optional** Units.

### Unit checklist

<b>Mandatory</b>							
<b>Optional</b>							

### Mandatory Units achieved

Unit number	Title	Assessor's signature	Date

### Optional Units achieved

Unit number	Title	Assessor's signature	Date





**Unit**

**Element**

**Notes/comments**

The candidate has satisfied the assessor and internal verifier that the performance evidence has been met.

**Candidate's signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**Assessor's signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**Internal verifier's signature** \_\_\_\_\_

**Date** \_\_\_\_\_

## Assessment plan

Units					
Elements					
Activities	Performance Criteria (PC)	Method of assessment/ Sources of evidence	Date of assessment	Evidence already available	Links to other Units (Performance Criteria and Range)
Questioning for Knowledge and Understanding not apparent from performance to be identified from 2nd review					

Assessor's signature \_\_\_\_\_

1st review due \_\_\_\_\_

Candidate's signature \_\_\_\_\_

2nd review due \_\_\_\_\_

Date of agreement \_\_\_\_\_

Date of completion \_\_\_\_\_

**Personal statement**

<b>Date</b>	<b>Evidence index number</b>	<b>Details of statement</b>	<b>Links to other evidence (enter numbers)</b>	<b>Unit, Elements, Performance Criteria, Performance statements, scope covered</b>

**Candidate's signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**Observation record**

**Unit/Element(s)** \_\_\_\_\_

**Candidate** \_\_\_\_\_

**Evidence index number** \_\_\_\_\_

**Date of observation** \_\_\_\_\_

<b>Skills/activities observed</b>	<b>Performance Criteria covered</b>

**Knowledge and Understanding apparent from this observation**

**Other Units/Elements to which this evidence may contribute**

**Assessor's comments and feedback to candidate**

I can confirm the candidate's performance was satisfactory.

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## Witness testimony

<b>SVQ title and level</b>	
<b>Candidate's name</b>	
<b>Evidence index no</b>	
<b>Index no of other evidence which this testimony relates to (if any)</b>	
<b>Element(s)</b>	
<b>Date of evidence</b>	
<b>Name of witness</b>	
<b>Designation/relationship to candidate</b>	
<b>Details of testimony</b>	

I can confirm the candidate's performance was satisfactory.

**Witness signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Witness** (please select the appropriate box):

- Holds L and D Unit 9D/9D1, A1/A2 or D32/D33 qualifications
- Is familiar with the SVQ standards to which the candidate is working

**Record of questions and candidate's answers**

<b>Unit</b>	
<b>Element(s)</b>	
<b>Evidence index number</b>	
<b>Circumstances of assessment</b>	
<b>List of questions and candidate's responses</b>	
<b>Q</b>	
<b>A</b>	

**Assessor's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Candidate's signature** \_\_\_\_\_ **Date** \_\_\_\_\_