



Higher National Unit specification

General information for centres

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

Unit code: F8P7 34

Unit purpose: This Unit is designed to enable candidates to produce and apply technical information on the construction requirements for purpose-made fitment construction. The Unit will give practical skills and competence in the setting out and manufacture of a fitment with a splayed or curved outline. The candidate will develop knowledge of how to recognise and apply all current legislation and health and safety regulations associated with the construction of purpose-made fitments.

On completion of the Unit the candidate should be able to:

- 1 Demonstrate knowledge and understanding of the construction requirements for purpose-made fitments.
- 2 Produce a workshop rod and a cutting list for the construction of a fitment with a splayed or curved outline.
- 3 Manufacture a fitment of shaped outline with a drawer.

Credit points and level: 1 HN credit at SCQF level 7 (8 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit will be at the discretion of the centre. It would be beneficial if candidates have successfully completed the Professional Development Award (PDA) in Carpentry and Joinery at SCQF level 6 (G9AR 46) or have the equivalent level of industrial experience and prior learning.

Core Skills: There are opportunities to develop the Core Skills of *Problem Solving* and *Communication* at SCQF level 5, and *Information and Communication Technology* and *Numeracy* at SCQF level 4 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes. This Unit was developed as part of the Professional Development Award in Carpentry and Joinery at SCQF level 7 and is aimed at candidates following a career in Carpentry and Joinery and receiving complementary industrial experience.

General information for centres (cont)

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

Assessment: This Unit is assessed on the candidate's knowledge and actual performance of complex stairs construction. The Unit will be achieved when the candidate presents sufficient evidence of the Knowledge and/or Skills and Evidence Requirements as specified for each of the Outcomes.

It would be possible to combine assessment of Outcomes 2 and 3, or to break this assessment down into separate assessment events that assess each Outcome separately. The assessment instrument used should follow the assessment guidelines specified for each of the Outcomes. Centres may use the instruments of assessment which they consider to be most appropriate but are advised to use the Carpentry and Joinery Training and Assessment Programme (TAP) SCQF level 7 which has been developed centrally by SQA. Any other instruments of assessment used must be comparable to the TAP 7.

Accurate records should be made of the assessment instruments used showing how evidence is generated for each Outcome and given marking schemes, checklists and recorded candidate feedback. Records of candidates' achievements should be retained. These records must be made available for external verification.

Higher National Unit specification: statement of standards

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

Unit code: F8P7 34

The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Outcome 1

Demonstrate knowledge and understanding of the construction requirements for purpose-made fitments

Knowledge and/or Skills

- ◆ CAD or manual drawing
- ◆ Proportional sketching
- ◆ Construction details
- ◆ Section, plan and elevation details
- ◆ Traditional and modern fitment manufacture
- ◆ Traditional and modern jointing details
- ◆ Joint specification for specific situations
- ◆ Fitment materials and components
- ◆ Current Health and Safety legislation
- ◆ Associated health hazards and their prevention

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ specify and accurately draw **three** joints for specific use in traditional purpose-made fitments
- ◆ specify and accurately draw **three** joints for specific use in modern purpose-made fitments
- ◆ accurately describe **three** health hazards and **three** preventative measures to be taken associated with the construction of purpose-made fitments, relevant to current COSHH Regulations

The evidence will be gathered under closed-book, supervised conditions.

Assessment Guidelines

Outcome 1 shall be closed-book and may include a combination of matching exercises and restricted response questions and drawings which must satisfy the Evidence Requirements.

Higher National Unit specification: statement of standards (cont)

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

Outcome 2

Produce a workshop rod and a cutting list for the construction of a fitment with a splayed or curved outline

Knowledge and/or Skills

- ◆ Interpretation of specifications and workshop drawings
- ◆ Setting out methods and procedures
- ◆ Traditional and modern jointing details
- ◆ Workshop rod production
- ◆ Cutting list production
- ◆ Current Health and Safety legislation
- ◆ Sustainability considerations

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can accurately interpret a given workshop drawing and specification to produce a workshop rod +/- 1mm of the given specification. The cutting list should be completed with materials calculated from the given specification and working drawing of a domestic fitment. The cutting list should have an allowance for wastage and should be accurate and legible and technically correct throughout. The cutting list should be consistent in its description of measurement and units used.

Assessment Guidelines

Candidates will be required to individually produce an accurate workshop rod and cutting list to generate practical evidence for the setting out of a fitment with a splayed or curved outline, in accordance with the specification and tolerances required for this Outcome. Candidates should be provided with drawings and specifications for the practical task and assessment should be carried out in a suitable workshop environment. This could be combined with assessment of Outcome 3.

Higher National Unit specification: statement of standards (cont)

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

Outcome 3

Manufacture a fitment of shaped outline with a drawer

Knowledge and/or Skills

- ◆ Interpretation of specifications and workshop drawings
- ◆ Jointing details
- ◆ Marking out procedures
- ◆ Fitment manufacture and assembly methods
- ◆ Materials and components
- ◆ Formers
- ◆ Laminate and saw kerfs bending
- ◆ Shaped block work
- ◆ Tools and equipment
- ◆ Sequencing of work activities
- ◆ Setting up and operating woodworking machinery and power tools.
- ◆ Minimising wastage of material.
- ◆ Current Health and Safety regulations

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ accurately mark out components from a setting out rod
- ◆ accurately shape and joint components
- ◆ accurately assemble the fitment of shaped outline with a drawer in accordance with given workshop drawing and specification.
- ◆ comply with current Health and Safety regulations in all activities

Summary of standards

Carcase

Overall height — $\pm 5\text{mm}$

Overall width — $\pm 5\text{mm}$

Overall depth — $\pm 5\text{mm}$

Edgings are close fitting and secure

Joints

80% of joints — no gaps exceeding 2mm

Splay/curved front and former within 2mm

Surface finish — no surface blemishes

Drawer

80% of joints — no gaps exceeding 2mm

Overall length $\pm 3\text{mm}$

Overall width $\pm 2\text{mm}$

Overall height — $\pm 2\text{mm}$

Free running on rails, drawers and ironmongery fittings

Edgings are close fitting and secure

Higher National Unit specification: statement of standards (cont)

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

The evidence will be gathered under supervised conditions. An assessor observation checklist should be completed to ensure that the candidate has met the required specification and tolerances and this observation checklist should be retained as evidence.

Assessment Guidelines

The candidate will provide sufficient practical performance evidence necessary to mark out and manufacture the purpose made fitment in accordance with the Evidence Requirements. Candidates should be provided with drawings and specifications for the practical task and assessment should be carried out in a suitable workshop environment. This could be combined with Outcome 2.

Administrative Information

Unit code	F8P7 34
Unit title:	Carpentry and Joinery: Purpose-Made Fitment Construction
Superclass category:	TG
Original date of publication:	August 2010
Version:	01

History of changes:

Version	Description of change	Date

Source: SQA

© Scottish Qualifications Authority 2010

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

Higher National Unit specification: support notes

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit was developed as an optional part of the Professional Development Award in Carpentry and Joinery at SCQF level 7 and is aimed at candidates following a career in Carpentry and Joinery and receiving complementary industrial experience.

The Unit is intended to equip candidates with all necessary underpinning knowledge and skills related to designing, manufacturing, jointing and assembling purpose-made fitments.

In Outcome 1, using previously gained competences, the candidate could be guided to the technical and constructional aspects associated with jointing details specific to both traditional and modern purpose-made fitments. Materials and components should include natural materials, man-made products, adhesives, ironmongery etc Candidates should also be given guidance on health hazards associated with materials used for the construction of purpose-made fitments relevant to current COSHH Regulations, and preventative measures to be taken in accordance with current building regulations. Visual aids, exemplars and photographs could be used to enhance the learning process.

In Outcome 2 candidates could be introduced to traditional and modern forms of purpose made fitment construction. The production of the workshop rods in this Outcome should be the basis of the practical work in Outcome 3. Emphasis should be placed on the accuracy of setting out these rods.

In Outcome 3 it should be stressed to the candidates how important it is to have an accurate workshop rod and work from it. Tutors should highlight the use of templates and router jigs in the manufacture of components. Candidate's previous knowledge of fitments should be further developed for the production of a fitment with a splayed or curved outline. The fitment may be manufactured having a splayed or curved outline with a drawer for reception, library or bar counter. Exemplar drawings and or visual aids could be used to enhance the learning process.

Health and Safety and Sustainability are integral and key to the construction industry therefore throughout the Unit emphasis will be placed where appropriate on the application of Health and Safety and Sustainability. Safe working practices should be looked at in accordance with current safety codes of practice and regulations. Sustainability should include reference to criteria affecting sustainability, impact of not implementing sustainability on the environment and the legislation promoting sustainability. Emphasis should be placed on appropriate areas such as waste management and effective sourcing and use of materials.

Where feasible, centres should also incorporate modern methods of construction used in industry. Candidates should be made aware of current industry practice and emerging practice or technology which may become conventional in the future.

Higher National Unit specification: support notes (cont)

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

GUIDANCE ON THE DELIVERY AND ASSESSMENT OF THIS UNIT

As part of the Professional Development Award (PDA) in Carpentry and Joinery at SCQF level 7, this Unit may be delivered in a sequence suitable to individual candidates and centres. When completing this Unit as part of the PDA it is recommended that, where possible, opportunity is taken to integrate aspects of Constructional Technical Communication Skills (DW4D 34).

The Unit could be delivered through a series of lectures and formative theory and practical demonstrations/examples which will involve the candidate carrying out the activities outlined in the Outcomes. Candidates should be encouraged to use visual evidence from the internet, textbooks and notes which illustrate the design and manufacture requirements of purpose-made fitments.

Outcome 1 could be delivered with the candidates working individually to generate the relevant evidence. Assessment of Outcome 1 shall be closed-book and may include a combination of matching exercises and restricted response questions. These should be carried out under normal exam conditions.

In Outcome 2 and 3 candidates will work individually, to generate practical evidence in fitment construction complemented by the lecturer's guidance and instruction in the production of jigs, templates, and safety procedures. A project brief and checklist outlining the work to be undertaken for each Outcome could be used to cover the Performance Criteria.

If feasible, site visits or information about modern and potential future methods of construction would be beneficial. This approach could be used to enhance the candidate's experience and understanding of how their skills and knowledge might be applied in real industry situations.

Centres may use the instruments of assessment which they consider to be the most appropriate but are advised to use the Carpentry and Joinery Training and Assessment (TAP) at SCQF level 7 which has been developed centrally by SQA. Any other instruments of assessment used must be comparable to the TAP 7.

Higher National Unit specification: support notes (cont)

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

Opportunities for developing Core Skills

There are opportunities to develop the Core Skill of *Problem Solving* at SCQF level 5. Candidates will need to take account of a range of factors in order to work efficiently and safely, such as the choice of tools, appropriate materials, safety issues, safety equipment and sustainability. Individual discussions with assessors and the use of role play will enhance the evaluation of efficient working practices.

There are opportunities to develop the Core Skill of *Communication* at SCQF level 5 throughout this Unit by the candidates describing various aspects for the manufacture of a fitment with shaped outline and a drawer. Candidates will interpret specifications, workshop drawings and the workshop rod, effectively communicating component sizes and joint details required for product manufacture. As candidates complete practical tasks, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

There are opportunities to develop the Core Skill of *Information and Communication Technology* at SCQF level 4 in Outcome 1 where the candidates will be encouraged to access information through internet research. They could also be encouraged to word process responses for formative assessments and could use digital images as part of their evidence.

There are opportunities to develop the Core Skill of *Numeracy* at SCQF level 4 through the interpretation of information from 3 dimensional working drawings and the practical use of calculation and measuring scales.

Open learning

Although this Unit could be delivered in part by distance learning, it would require considerable planning by the centre to ensure the sufficiency and authenticity of candidate evidence. Arrangements would have to be made to ensure that:

- ◆ candidates have access to a suitable workshop with suitable equipment and tools
- ◆ health and safety considerations are fully taken into account
- ◆ the practical activities are supervised by a responsible person and clearly recorded (using an assessment checklist for the assessor)
- ◆ the assessor is, at some point, able to question the candidate on that performance
- ◆ assessment is carried out under the stated conditions

For information on open learning arrangements, please refer to the SQA guide *Assessment and Quality Assurance of Open and Distance Learning* (www.sqa.org.uk)

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website

www.sqa.org.uk/assessmentarrangements

General information for candidates

Unit title: Carpentry and Joinery: Purpose-Made Fitment Construction

This Unit has been designed to further your career in the construction industry by developing your competence and improving your knowledge of purpose-made fitment manufacture. It has been written as part of the Professional Development Award (PDA) in Carpentry and Joinery at SCQF level 7, and is for experienced crafts persons working as carpenters and joiners.

Outcome 1 will develop your knowledge and understanding of purpose-made fitment construction. You will be assessed using a combination of matching exercises and restricted response questions. These exercises and questions will include drawing and identifying traditional and modern joints and describing health hazards and preventative measures taken to avoid these hazards. These should be carried out under supervised exam conditions.

In Outcome 2 you will be asked to carry out a practical exercise. This will include the production a workshop rod and a cutting list for the construction of a fitment with a splayed or curved outline. You will be assessed against how well you carry out this work to the set specification and tolerances.

In Outcome 3 you will be asked to carry out a practical exercise. This will include the manufacture of a fitment of shaped outline with a drawer. You will be assessed against how well you carry out this work to the set specification and tolerances.

On successful completion of this Unit you should be able to produce technical information associated with the constructional requirements for purpose-made fitments, and be able to set out and manufacture a purpose-made fitment with a splayed or curved outline with a drawer. You will also learn about current building regulations and health and safety legislation associated with this type of fitment construction.

While you are studying this Unit you will also be encouraged to develop your Core Skill in *Information and Communication Technology* by using the internet and word processing technical notes. You will also have the opportunity to develop your other Core Skills of *Communication*, *Problem Solving* and *Numeracy* associated with this Unit.

If you successfully complete this Unit and the full PDA at SCQF level 7, you will not only have advanced your craft skills, but will also automatically receive some credit for your achievement if you progress on to the HNC Construction.