



National Unit specification: general information

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Unit code: H0RL 12

Superclass: TG

Publication date: March 2012

Source: Scottish Qualifications Authority

Version: 01

Summary

This Unit is suitable for candidates working towards a Modern Apprenticeship in Carpentry and Joinery and will develop the candidates craft skill in traditional panelling. This Unit is designed to develop the candidate's competence in the use of tools and equipment to manufacture and install a traditional panel and the ability to apply these skills in the workplace. It is also designed to enable candidates to develop their knowledge and understanding in carpentry and joinery terminology, techniques, practices, production of working drawings and costing.

Outcomes

- 1 Demonstrate knowledge and understanding of terminology, components and design in relation to traditional wall panelling.
- 2 Produce a cutting list, a detailed setting out rod and costing for traditional wall panelling.
- 3 Manufacture a traditional wall panel.
- 4 Install traditional wall panelling.

Recommended entry

While entry is at the discretion of the centre, candidates undertaking the Professional Development Award in Carpentry and Joinery at SCQF level 6 must meet the requirements of the Modern Apprentices which include being employed in the relevant craft industry.

Credit points and level

1 National Unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6*)

**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.*

General information (cont)

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Core Skills

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill None

Core Skill component Critical Thinking @ SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit Specification.

National Unit specification: statement of standards

Unit title: Carpentry and Joinery: Panelling and Installation (SCQF level 6)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Demonstrate knowledge and understanding of terminology, components and design in relation to traditional wall panelling.

Performance Criteria

- (a) Define traditional wall panelling terminology accurately.
- (b) Identify traditional wall panelling components correctly.
- (c) Sketch appropriate joint details for traditional wall panelling accurately.

Outcome 2

Produce a cutting list, a detailed setting out rod and costing for traditional wall panelling.

Performance Criteria

- (a) Compile an accurate and legible cutting list of materials and components.
- (b) Produce an accurate setting out rod from given specification.
- (c) Produce joint design details on the rod
- (d) Calculate materials and costs accurately from the cutting list allowing for wastage.

Outcome 3

Manufacture a traditional wall panel.

Performance Criteria

- (a) Mark out the panelling from the workshop rod.
- (b) Manufacture the outer frame using woodworking machines and power hand tools.
- (c) Profile the panels using woodworking machines and power hand tools.
- (d) Assemble the complete framework.
- (e) Comply with current health and safety regulations in all activities.

National Unit specification: statement of standards (cont)

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Outcome 4

Install traditional wall panelling.

Performance Criteria

- (a) Plan the positions of rails and trims to allow discreet fixing.
- (b) Seal the back of wall panels prior to installation.
- (c) Fix the wall panelling to timber grounds, using secret fixing method.
- (d) Fit and fix the skirting, capping and bolection moulding.
- (e) Comply with current health and safety regulations in all activities.

Evidence Requirements for this Unit

These Evidence Requirements will be met by the completion of the Carpentry and Joinery Training and Assessment Programme (TAP).

Evidence is required to demonstrate that the candidates have achieved this Unit to the standard specified in all Outcomes and Performance Criteria. All working practices must be in line with relevant and current Health and Safety legislation and regulations. A risk assessment and method Statement must be completed prior to any practical activities taking place.

Written and/or oral recorded evidence is required to demonstrate that the candidate has achieved Outcome 1 which demonstrates the candidates understanding of terminology, function of components and joint design associated with traditional wall panelling. The evidence will take the form of a question paper and sketches.

This must be obtained under closed-book supervised conditions.

Product evidence is required to demonstrate the candidate has achieved Outcome 2 to the standards specified in the Performance Criteria. The cutting list is completed with the materials calculated correctly from the workshop rod allowing for wastage. The cutting list must be compiled accurately and legibly using terminology that is technically correct throughout. Material costs must be calculated accurately.

Performance and product evidence for Outcomes 3 and 4, supplemented with an assessor observation checklist should be used to confirm the candidate has individually met the standards specified in the Performance Criteria and specification. This must be obtained under supervised conditions.

National Unit specification: statement of standards (cont)

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Setting out and marking out

- ◆ Setting out rods, preparing cutting lists and marking out components
- ◆ Components are set out and marked accurately within 0.5 mm
- ◆ Components are positioned and proportioned accurately within 0.5 mm
- ◆ Joints are positioned and proportioned accurately within 0.5 mm
- ◆ Cutting list for all components correct for all items
- ◆ Ironmongery schedule correct for all items

Manufacture

- ◆ Frame size accurate within 2 mm of rod
- ◆ Joints tight fitting, no gaps exceeding 0.5 mm
- ◆ Frame square across diagonals within 2 mm
- ◆ Frame free from twist
- ◆ Surface of frame suitable for applied finish

Installation

- ◆ Fix panel ensuring plumb and level
- ◆ Ensure all fixings are concealed

National Unit specification: support notes

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

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 has been developed as a mandatory Unit in the Professional Development Award in Carpentry and Joinery at SCQF level 6.

The successful completion of this Unit will provide candidates with the required underpinning knowledge and skills relating to terminology, components and design in relation to, setting out, marking out and constructing traditional wall panelling along with associated equipment.

This Unit would be offered to candidates working towards a Modern Apprenticeship in Carpentry and Joinery. The skills and knowledge and understanding are transferable within different working environments but the Unit is primarily aimed at candidates whose normal place of work would be a site, workshop, or similar environment.

The Unit deals with theory and practice associated with the construction of traditional wall panelling. There would be opportunity to integrate aspects of this Unit with others in the Carpentry and Joinery PDA. It should be delivered as part of a structured programme of training and orientated to the context of the candidate's work and area of responsibility.

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. Safety working practices should comply 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.

Outcome 1

Terminology and components could include those indicated below.

Terminology: traditional wall panelling, dado panelling, spandrel panelling, planted mouldings, solid mouldings, raised panels, raised and fielded panels, secret fixings, capping, skirting, return ends, joint design, shrinkage, moisture content.

Components: stiles, rails, muntins, raised and fielded panels, margins, bolection beads, apron piece, skirting.

Joint details: haunched mortice and tenon, stub tenon, grooves, rebates, slot screw.
Fixing methods: interlocking grounds, also known as spilt or hook battens, keyhole plates, screws and wooden plugs.

National Unit specification: support notes (cont)

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Work methods and activities should be encouraged in terms of:

- 1 Sequencing operations.
- 2 Minimising wastage of materials.
- 3 Satisfying current safety regulations.

Throughout this Outcome the use of woodworking machinery and power tools should be encouraged when it is safe to do so.

All activities should comply with current health and safety and building regulations. At the time of writing these include: HSW (Health and Safety at Work etc.) Act; COSHH (Control of Substances Hazardous to Health) Regulations; PUWER (Provision and Use of Work Equipment Regulations).

Guidance on learning and teaching approaches for this Unit

Candidates must be given the opportunity to further develop their skills in Carpentry and Joinery by learning about panelling and installation.

Candidate centred learning and teaching approach are encouraged with candidates actively participating in practical activities after lecturer demonstration of key construction practices and principles.

The use of effective questioning techniques to confirm understanding of salient learning objectives should be central to learning and teaching approaches used in classrooms or workshops.

Candidates should be encouraged to learn at their own pace with e-learning opportunities available to suit their preferred learning style.

The use of e-learning as a teaching tool should be adopted by lecturers wherever possible to enable candidates to develop at their own pace using preferred learning styles.

Learning and Teaching approaches should ensure that candidates are acquiring the underpinning knowledge required for the Unit in tandem with undertaking practical workshop activities.

The tutor should demonstrate the correct method of marking out stiles and rails in pairs to ensure accuracy and re-enforce the importance of using face side and edge marks, the need to protect the timber from accidental damage during the manufacturing and assembly processes should also be stressed to candidates.

During delivery of the practical components of this Unit, candidates should understand the importance of Health and Safety regulations and legislation relating both to working practices within the construction environment, as well as those specific to any practical task they are requested to carry out, such as emphasising the importance of carrying out risk assessments, following method statements and using the correct PPE at all times.

National Unit specification: support notes (cont)

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Opportunities should be taken throughout delivery of this Unit to meet the requirements of the PDA generic Units and the Training and Assessment Programme including:

- ◆ *Conform to Productive Working Practices*
- ◆ *Conform to General Workplace Health, Safety and Welfare*
- ◆ *Move, Handle and Store Resources*
- ◆ *Confirm Work Activities and Resources for the Work*
- ◆ *Develop and Maintain Good Working Relationships*
- ◆ *Confirm the Occupational Method of Work*

Guidance on approaches to assessment for this Unit

The Carpentry and Joinery Training and Assessment Programme (TAP) provides detailed assessment material for this Unit. It is advised to use the TAP which has been developed centrally by SQA. Any other instruments of assessment used must be comparable to the TAP and have been through prior verification. It is expected that candidates will be given as much practice as possible, prior to being set assessment tasks.

A suitable method of assessing underpinning knowledge and understanding in Outcome 1 would be through multiple choice questions and classroom based assignments with given scenarios about defective timbers and components.

A series of practical activities will allow evidence to be gathered for Outcomes 2, 3 and 4 through observation that the candidates have met the given standards and tolerances. An assessor observation checklist/record can be used to record this evidence.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

Components of the Core Skill of *Problem Solving*, such as Planning and Organising and Critical Thinking will be developed as candidates undertake this Unit. Candidates will need to take account of a range of factors in order to work efficiently and safely, such as the interpretation of drawings, choice of tools and appropriate materials, application of scientific principles, risk assessments, health, safety and welfare and a sustainable approach. Individual discussions with assessors will enhance the evaluation of productive work practices.

National Unit specification: support notes (cont)

Unit title: Carpentry and Joinery: Panelling and Installation
(SCQF level 6)

Opportunities also arise for candidates to develop the Core Skill of *Information and Communication Technology (ICT)* at SCQF level 3 by researching Health and Safety legislation affecting their area of work, manufacturer's instructions and specifications, and in the use of spread sheets to produce cutting lists.

Numeracy at SCQF level 4 could be enhanced through the knowledge evidence in setting out traditional wall panelling and the practical use of calculation and measuring scales required for teaching and learning assessments for Outcomes 2, 3 and 4.

There will be opportunities for candidates to develop the Core Skills of *Communications* at SCQF level 4 through the knowledge part of the assessment for Outcomes 1 and 2. As candidates complete practical tasks in Outcomes 3 and 4, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace while interpreting drawings.

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 5.

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

History of changes to Unit

Version	Description of change	Date

© Scottish Qualifications Authority 2012

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.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Business Development and Customer Support team, telephone 0303 333 0330.