



National Unit specification: general information

Unit title: Carpentry and Joinery: Second Fixing (SCQF level 6)

Unit code: H0RP 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 is designed to introduce candidates to the use of a range of second fixings (finishings). Candidates will develop skills and techniques in the areas of door hanging, window fitting, ironmongery and work such as mitring and scribing architraves, skirtings and dados. This Unit is also designed to enable candidates to develop their knowledge and understanding in carpentry and joinery terminology, techniques and practices, and production of working drawings.

Outcomes

- 1 Demonstrate knowledge and understanding of terminology, joints, fixings and methods of work in relation to second fixing.
- 2 Prepare, fit and fix softwood joinery finishings.
- 3 Fit and hang a door with associated ironmongery.
- 4 Fit and fix high performance window including all internal finishings.

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 Apprenticeship which include being employed in the relevant craft industry.

General information (cont)

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Credit points and level

1 National Unit credits 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.*

Core Skills

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill None

Core Skill component Critical Thinking @ SCQF level 4

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: Second Fixing (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, joints, fixings and methods of work in relation to second fixing.

Performance Criteria

- (a) Define second fixing terminology correctly.
- (b) Draw details of joinery finishings accurately.
- (c) Identify joints and fixings for joinery finishings correctly.
- (d) Describe the methods of work for joinery finishings accurately.
- (e) Describe methods of fitting double glazed windows accurately

Outcome 2

Prepare, fit and fix softwood joinery finishings.

Performance Criteria

- (a) Prepare fit and fix joinery finishings around openings accurately.
- (b) Prepare fit and fix joinery finishings to walls accurately.
- (c) Comply with current health and safety regulations in all activities.

Outcome 3

Fit and hang a door with associated ironmongery.

Performance Criteria

- (a) Fit and edge hang a door correctly.
- (b) Fit and fix associated ironmongery correctly.
- (c) Comply with current health and safety regulations in all activities.

Outcome 4

Fit and fix a high performance window with all internal finishings.

Performance Criteria

- (a) Fit and fix a double glazed window correctly.
- (b) Fit and fix internal board and apron piece accurately.
- (c) Complete window reveals correctly.
- (d) Comply with current health and safety regulations in all activities.

National Unit specification: statement of standards (cont)

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Evidence Requirements for this Unit

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

Written and/or oral evidence is required for Outcome 1 which demonstrates that the candidate can produce technical notes associated with second fixings. Evidence for this Outcome will be obtained under closed-book supervised conditions.

Performance and product evidence for Outcomes 2, 3 and 4 supplemented with an assessor observation checklist should be used to confirm that the candidate has individually met the standards specified in the Performance Criteria and specification. Candidates must be assessed in a practical context within an area that allows facings, skirtings, dado rails, window and window sills to be fitted with chamfering and nail punching, dressing of end grain and the use of a joiner's stool or portable workbench.

Transfer datums must include: laser, spirit levels optical levels and plumb bob.

The candidate should be working towards the following standards:

Scribing, Mitring and fixing Mouldings

- ◆ Mitre joints tight fit — no gaps exceeding 1 mm
- ◆ Scribed joints tight fit — no gaps exceeding 1 mm
- ◆ Moulding scribe adjacent surface — no gaps exceeding 1 mm
- ◆ Moulding Parallel to Frame +/- 1 mm
- ◆ Moulding securely fixed and without defects that cannot be rectified

Hanging doors

- ◆ Hinges positioned to instructions — to within 2 mm
- ◆ Hinges flush and neatly recessed — no gaps exceeding 1 mm, flush within 1 mm
- ◆ Doors hung to correct hand
- ◆ Doors hung with a visual parallel gap not exceeding 2 mm internal doors, 3 mm external doors
- ◆ Doors hung without binding
- ◆ Arrises removed and no damage to door that cannot be rectified

Fitting Locks and Letterplates

- ◆ Locks/letter plates positioned to instruction within 4 mm
- ◆ All parts of lock and letter plates operate correctly and freely
- ◆ Recessing of any lock parts to have no gaps 0.5- 1 mm
- ◆ Letter plate/lock furniture fixed parallel/level — to within 1 mm
- ◆ Letter plate aperture free from defects that cannot be rectified
- ◆ All items securely fixed

National Unit specification: statement of standards (cont)

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Fitting Double glazed window and internal finishings

- ◆ Window to be correctly fixed in position using clips or direct fixing
- ◆ Window to operate freely with no binding
- ◆ Window to be parallel with reveals — to within 2 mm
- ◆ Window board to be fixed with chamfering and nails punched
- ◆ Apron piece scribed and fixed — no gaps exceeding 1 mm
- ◆ Internal reveals to be fixed using timber, timber products or plasterboard — no gaps exceeding 2 mm

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

National Unit specification: support notes

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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 80 hours.

Guidance on the content and context for this Unit

This Unit has been developed as a mandatory Unit in the Professional Development Award (PDA) in Carpentry and Joinery at SQF level 6, which is a mandatory component of the Modern Apprenticeship in Carpentry and Joinery.

The successful completion of this Unit will provide candidates with the required underpinning knowledge and skills relating to second fixing terminology, joints, fixings and methods of work.

The Unit will be offered to candidates from the construction and related services industries. 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 the theory and practice associated with developing knowledge and understanding of Carpentry and Joinery second fix activities. It is further enhanced by other PDA Units dealing with Carpentry and Joinery, eg *First Fixing*; *Craft Projects*; *Building Craft Science* and *Materials Products and Finishes* at SCQF level 6. It is recommended that this Unit 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. Safe working practices should be looked at in accordance with current 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.

Guidance on learning and teaching approaches for this Unit

The following information may be helpful with regard to specific Outcomes.

Outcome 1

The candidate should be given the opportunity to further develop their skills with visual aids, electronic presentations, DVDs, books, classroom exercises and discussion with candidates, about the various materials used and where they would appear in relation to their position within the building. The function of each component should be thoroughly demonstrated and discussed. The Outcome should also cover the terminologies used by the carpenter and joiner for modern and traditional methods of construction.

National Unit specification: support notes (cont)

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Outcome 2

This Outcome covers all of the practical aspects of the finishing processes for: skirtings, facings, dadoes, door checks/stop, base blocks, mouldings and shelving. Good practices are also covered for punching nails below the surface, chamfering, dressing end grain, gluing and nailing. Mitres and scarf jointing should be demonstrated. Practical activities should be lecturer led with the demonstration of good practices, followed by the candidate attempting the practical activity associated with the assessments.

Outcome 3

This Outcome covers edge hanging a door with butt hinges, fitting appropriate ironmongery for a range of finishing tasks, dressing of screws and uniformity of fitting ironmongery in an organised manner. The practical activities should be lecturer led with a demonstration on how to hinge and hang a door to a frame that has been fitted followed by the candidates attempt. Also a range of ironmongery should be used and fitted by the candidate to include some of the following: butt hinges, mortice dead locks, latch lever locks, ball catches, cylinder night latch, letter plates and slip bolts.

Outcome 4

This Outcome covers fitting and fixing of a double glazed window (timber, UPVC or composite window) and all internal finishings. The practical activities should be lecturer led with a demonstration on how to fix a window in position followed by the candidates attempt. A range of materials can be used for internal finishings such as timber, sheet material or UPVC. window boards and reveals. window to be fitted behind DPC. To prevent any bridging which would allow ingress of water, students should have the knowledge of sealants and draught proofing around windows for traditional and modern method of construction

Where appropriate, opportunities should be taken throughout delivery of this Unit to meet the requirements of the generic Units of 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) provide 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 practise as possible, prior to being set assessment tasks.

National Unit specification: support notes (cont)

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A suitable method of assessing the candidates' knowledge and understanding second fixing would be through a multiple choice question paper and a series of drawings of various joints.

A suitable method of assessing Outcomes 2, 3 and 4 would be through observation of a series of practical activities. An assessor observation checklist 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

There are opportunities for the Core Skill of *Problem Solving* to 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 choice of tools, appropriate materials, safety issues, safety equipment sustainability and control of waste.. Individual discussions with assessors and the use of role play will enhance the evaluation of efficient working practices. *Problem Solving* may also be developed throughout practical tasks as candidates should be expected to adopt a suitable sequence of work for the second fixings.

There are opportunities for candidates to develop the Core Skill of *Working with Others* at SCQF level 4, particularly for Outcome 2 3and 4 as these are practical assessments. Candidates can agree on the utilisation of hand tools, cordless power tools, materials and workshop equipment, together with providing support and information to each other during the individual practical activities.

Opportunities may also arise for candidates to develop the Core Skill of *Information and Communication Technology (ICT)* at SCQF level 3 by the use of internet search for ironmongery, door types, window types and fixings.

The Core Skill of *Numeracy* at SCQF level 4 could be developed through the interpretation of information from three dimensional working drawings and the practical use of calculation and measuring scales.

Candidates will have the opportunity to develop the Core Skill of *Communication* at SCQF level 4 throughout practical tasks, as they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

National Unit specification: support notes (cont)

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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 4.

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

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