

National Unit Specification: general information

UNIT Construction Crafts: Bench Joinery (Intermediate 2)

CODE DX0J 11

COURSE Construction Crafts (Intermediate 2)

SUMMARY

This Unit is a mandatory Unit within the *Intermediate 2 Construction Crafts Course* and has been designed to be taken as part of that Course.

The Unit is suitable for candidates with no previous bench joinery experience and may also provide progression for candidates who have successfully completed the *Intermediate 1 Construction Crafts Course* or Units.

The Unit is based on practical workshop activities. It requires the candidate to fabricate a dressed timber frame. The timber frame will employ a variety of different constructional joints and candidates will spend some time in mastering the techniques involved in cutting and shaping timber to form such joints. The complexity of jointing techniques employed in this Unit will allow candidates who have prior experience of bench joinery at Intermediate 1 level to extend their skills.

Candidates will be required to correctly select and properly maintain tools for joinery activities. They will also develop safe working practices and general skills that will enhance employability in any vocational area.

Candidates who achieve this Unit should feel confident in widening their experience in joinery by taking other Intermediate 2 Units in this trade area.

OUTCOMES

- 1 Select, use and manage hand tools, equipment and materials.
- 2 Fabricate a variety of timber joints.
- 3 Manufacture a dressed timber frame.

Administrative Information

Superclass: TG

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National Unit Specification: general information (cont)

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RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following, or equivalent:

- ◆ *Intermediate 1 Construction Crafts: Site Carpentry and Bench Joinery Unit*
- ◆ *Intermediate 1 Construction Crafts: Carpentry and Joinery Techniques Unit*

CREDIT VALUE

1 credit at Intermediate 2 (6 SCQF credit points at SCQF level 5*).

**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

There is no automatic certification of Core Skills in this Unit.

Opportunities for developing aspects of Core Skills are highlighted in *Guidance on Learning and Teaching Approaches for this Unit*.

National Unit Specification: statement of standards

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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 the Scottish Qualifications Authority.

OUTCOME 1

Select, use and manage hand tools, equipment and materials.

Performance Criteria

- (a) Selection of tools, equipment and materials is appropriate for the work to be carried out.
- (b) Tools, equipment and materials are handled and transported correctly.
- (c) Tools, equipment and materials are positioned correctly in the work area in accordance with good practice.
- (d) Tools, equipment and materials are stored correctly after use.
- (e) Health and safety requirements are complied with during all activities.

OUTCOME 2

Fabricate a variety of timber joints.

Performance Criteria

- (a) Machine dressed materials are marked out to given sizes and within a prescribed tolerance.
- (b) Materials are converted to given sizes using a range of hand tools to within prescribed tolerances.
- (c) A variety of jointing exercises is carried out using hand tools to prescribed tolerances.
- (d) A quality check is carried out on the finished work against the prescribed standards and tolerances.

OUTCOME 3

Manufacture a dressed timber frame.

Performance Criteria

- (a) A workshop rod is produced for a given frame design and within prescribed tolerances.
- (b) Frame components are marked out accurately prior to tool application, and within prescribed tolerances.
- (c) Frame is assembled and fixed to a given specification, prescribed standards and tolerances.
- (d) A quality check is carried out on the finished work against the prescribed standards and tolerances.
- (e) Health and safety requirements are complied with during all activities.

National Unit Specification: statement of standards

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EVIDENCE REQUIREMENTS FOR THIS UNIT

Performance evidence is required to show that all Outcomes and Performance Criteria have been achieved.

Performance evidence will be supported by an assessor checklist. This evidence will be generated from an integrated assignment consisting of practical activities carried out in supervised workshop conditions. The evidence may be gathered at different points throughout the Unit. The practical activities will cover:

- ◆ selecting the correct tools, equipment and materials for particular tasks
- ◆ transporting tools, equipment and materials and positioning them correctly between tasks
- ◆ using the tools and equipment in a correct and safe manner and using them solely for the purpose for which they are designed
- ◆ storing tools and equipment correctly after use
- ◆ returning surplus materials to store correctly
- ◆ production of a suitable workshop rod and within given tolerances
- ◆ measuring out accurately and setting out the lengths of timber required in the fabrication of the frame
- ◆ marking, cutting, shaping and jointing of timbers correctly and within given tolerances
- ◆ constructing to prescribed tolerances, a jointed timber frame incorporating a minimum of two of the following joint types: a bridle joint, a through mortice and tenon joint, a corner halving, a through haunched mortice and tenon joint and a stub tenon joint
- ◆ candidates carrying out a quality check on their own work before submitting for final assessment
- ◆ candidates maintaining a clean and tidy workplace and adhering to health and safety requirements throughout all activities

The NAB item for this Unit provides an assessor checklist and details of the practical assignment which exemplify the national standard. Centres wishing to develop their own assessments should refer to the NAB to ensure a comparable standard.

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 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

The content in this Unit covers practical joinery activities at an introductory level. The candidate will learn how to make a variety of standard joints in dressed timber. To this end they must develop the ability to select and use a variety of tools and equipment correctly and safely. It is therefore important that the learning takes place in a supervised workshop/site environment.

During the process of practical work the candidate will become accustomed to the use of joinery terms and will be able to demonstrate knowledge and understanding of these terms in everyday practice.

A number of joints will be used in the manufacture of the frame for Outcome 3. These may include a bridle joint, a through mortice and tenon joint, a corner halving, a through haunched mortice, a tenon joint and a stub tenon joint. A minimum of two joints will be used for assessment purposes, but candidates will learn how to fabricate a wider range of joints during this Unit.

Candidates should be taught good joinery working practices for each stage of the overall process. They should learn how to carry out a quality check on their own work at intermediate stages as well as at the completion of the end product. The exercises on timber joints (Outcome 2) should be viewed as an integral part of the ultimate end product — the dressed timber frame. In this way the interim checks will go a long way to ensuring a satisfactory overall exercise.

It is envisaged that a number of candidates may have little or no experience of working with the range of tools and materials associated with this Unit. Some candidates may have experience of carpentry and joinery work at Intermediate 1, but a number may be starting their joinery experience with this Intermediate 2 Unit. For the latter group of candidates it is important to ensure that they appreciate the reasons for carrying out the various tasks in the manner directed by teachers/lecturers. They will learn the reasons for using specific tools for specific materials. They will also learn the value of good health and safety practice in joinery work and the importance of Personal Protective Equipment (PPE).

Candidates should become aware of the importance of being considerate to others and of working in a safe and methodical manner. The maintenance of a clean and tidy work area includes the positioning of tools and materials before, during and after use.

Candidates should learn about waste minimisation and sustainability. In a practical way they can contribute to this by careful use of materials and by promptly returning surplus materials to the store.

Outcome 1 requires the candidate to select tools, and to handle, transport, position, and store both tools and materials. Materials used will, almost exclusively, be pre-dressed softwoods. Tools and equipment likely to be used will include: setting out tools, clamps, square and pencil, marking gauge, mortice gauge, claw hammers, saws, chisels, the hand plane and hand drills.

