



National Unit Specification: general information

UNIT Stonemasonry: Cutting a Cyma Recta Moulding to Internal and External Mitres (SCQF level 6)

CODE F6RK 12

SUMMARY

This Unit is suitable for candidates working towards a Modern Apprenticeship in Stonemasonry and will develop the candidates craft skills in cutting cyma-recta mouldings to internal and external mitres. This Unit is designed to provide candidates with competence in the use of tools and equipment for the production of template and cutting of stone and the ability to apply these skills in the workplace. It is also designed to enable candidates to develop their skills and understand and use stonemasonry terminology, techniques and practices in cutting to ashlar stops and fillets.

OUTCOMES

- 1 Demonstrate knowledge and understanding of terminology, setting out techniques and construction practices used in stonemasonry.
- 2 Produce template for the cyma-recta mouldings.
- 3 Cut return mouldings forming internal and external mitres to ashlar stop.
- 4 Cut fillets to an ashlar stop and return moulding.

RECOMMENDED ENTRY

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

Administrative Information

Superclass: TG

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National Unit Specification: general information (cont)

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CREDIT VALUE

2 credits at SCQF level 6 (12 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

There is no automatic certification of Core Skills or Core Skill components in this Unit. Opportunities for developing aspects of the following Core Skills are highlighted in Support Notes of this Unit:

- ◆ *Problem Solving* at SCQF level 4
- ◆ *Working with Others* at SCQF level 4
- ◆ *ICT* at SCQF level 3
- ◆ *Numeracy* at SCQF level 4
- ◆ *Communications* at SCQF level 4

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 SQA.

OUTCOME 1

Demonstrate knowledge and understanding of terminology, setting out techniques and construction practices used in stonemasonry.

Performance Criteria

- (a) Identify and select terminology related to cyma-recta moulding and mitres.
- (b) Identify and select setting out techniques correctly.
- (c) Identify and explain sequence of operations correctly.

OUTCOME 2

Produce template for the cyma-recta mouldings.

Performance Criteria

- (a) Draw template in accordance with the given specification.
- (b) Produce template in accordance with the given specification.
- (c) Comply with current Health and Safety requirements during all work methods and activities.

OUTCOME 3

Cut cyma-recta moulding forming internal and external mitres to ashlar stop.

Performance Criteria

- (a) Cut cyma-recta accordance with the given specification.
- (b) Cut internal and external mitres in accordance with the given specification.
- (c) Maintain a clean work area throughout.
- (d) Comply with Health and Safety requirements at all times.

National Unit Specification: statement of standards

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OUTCOME 4

Cut fillets to an ashlar stop and return moulding.

Performance Criteria

- (a) Cut fillets to ashlar stop.
- (b) Cut fillets to return moulding.
- (c) Comply with current Health and Safety requirements during all work methods and activities.

EVIDENCE REQUIREMENTS FOR THIS UNIT

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

Evidence is required to demonstrate that the candidate has achieved this Unit to the standard specified in all Outcomes and Performance Criteria.

Written and/or oral recorded evidence is required to demonstrate that the candidate has achieved Outcome one to the standard specified in the Performance Criteria. Candidates will be required to demonstrate their knowledge of terminology, techniques and practices by defining terms, describing setting out techniques and identifying required stonemasonry practices. Assessment will take the form of a question paper which will be carried out under closed-book, controlled, supervised conditions.

Product and performance evidence is required to demonstrate that the candidate has achieved Outcomes 2, 3 and 4 to the standards specified in the Performance Criteria. Candidates will be required to cut a cyma-recta moulding forming an internal and external moulding incorporating fillets with an ashlar stop. Assessment of these Outcomes will be evidenced through observation of work processes and assessment of completed work pieces. Candidates must meet the given standards and tolerances during the practical assessments. An assessor observation checklist must be used to record this evidence. Assessment should be conducted under controlled, supervised conditions. Assessment of these Outcomes will be carried out in a workshop under controlled supervised conditions.

National Unit Specification: statement of standards (cont)

UNIT Stonemasonry: Cutting a Cyma Recta Moulding to Internal and External Mitres (SCQF level 6)

Outcome 2, 3 and 4

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Minimum stone size	400 mm x.300 mm x.200 mm
Cyma-recta.60 x.60 mm	±1 mm
Fillets 10 mm x 10 mm	±1 mm
Templets comply Joint and reverse	±1 mm
External mitre	±1 mm
Internal mitre	±1 mm
Ashlar stop	±1 mm
Spalls 2	Not to exceed 10 mm
Health and safety	Complies at all times
Risk Assessment	Safety boots worn at all times Hard hat worn at all times High visibility vest worn at all times All other PPE as risk assessed
Method Statement	Working area kept clean at all times Materials stacked correctly at all times Tools handled correctly at all times Tools cleaned and stored safely at end of working day

National Unit Specification: support notes

UNIT Stonemasonry: Cutting a Cyma Recta Moulding to Internal and External Mitres (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 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 in stonemasonry at SCQF level 6.

The successful completion of this Unit will provide candidates with the required underpinning knowledge and skills relating to setting out techniques and construction practices associated with cutting of mouldings that are being returned to ashlar stops and incorporate fillets in the moulding.

This Unit should 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 returned mouldings and ashlar stopped mouldings. 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 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.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The candidate should be given the opportunity to further develop the skills of cutting and correct sequence of work to minimise time spent on the cutting techniques. The terms used for cutting mouldings should be integrated to the practical assessments as it is undertaken, and the basic principles of such explained as the work piece is being produced. This teaching approach should ensure the candidate is acquiring the underpinning knowledge required for the Unit.

Teachers/Lecturers should demonstrate practical elements step by step until they feel that the candidate is competent to attempt tasks under assessment conditions. Effective questioning should be encouraged throughout, focusing on skills construction practices and underpinning knowledge related to cutting mouldings.

National Unit Specification: statement of standards (cont)

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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 General Workplace Safety
- ◆ Confirm Work Activities and Resources for the Work
- ◆ Develop and Maintain Good Working Relationships
- ◆ Confirm the Occupational Method of Work
- ◆ Conform to Efficient Working Practices
- ◆ Move and Handle Resources

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

Components of the Core Skill of *Problem Solving* at SCQF level 4 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 choice of tools, appropriate materials, safety issues, safety equipment and sustainability. Individual discussions with assessors will enhance the evaluation of efficient working practices.

There are opportunities for candidates to develop the Core Skill of *Working with Others* at SCQF level 4, particularly in Outcomes 2,3 and 4 as this practical assessment may be carried out individually, but working in pairs when lifting and man handling stone units. Candidates can agree responsibilities and provide support and information to each other during the assessments. After assessment, they should be encouraged to consider how effectively they supported each other.

Opportunities also arise for candidates to develop the Core Skill of *Information and Communication Technology* at SCQF level 3 by researching Health and Safety legislation affecting their area of work.

Numeracy at SCQF level 4 will be developed through the interpretation of information from 3 dimensional working drawings 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 the candidate to develop the Core Skill of *Communication* at SCQF level 4 candidates will have the opportunity to develop written and/or oral communication skills for the knowledge part of the assessment for Outcome 1. As candidates complete practical tasks, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Detailed assessment material can be found in section 7 of the Stonemasonry Training and Assessment Programme (TAP). Centres may use the instruments of assessment which they consider to be most appropriate but are advised to use the stonemasonry 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.

National Unit Specification: statement of standards (cont)

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Candidates should be given as much practise as possible in cutting and roughing down techniques, prior to being set the assessment tasks/tests. Evidence will be gathered for Outcomes 2, 3, and 4 through observation that the candidates have met the given standards and tolerances during the practical tasks/tests. An assessor observation checklist/record can be used to record this evidence. Assessment should be conducted under controlled, supervised conditions.

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 e-checklists. 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)*.

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