



## National Unit Specification: general information

**UNIT** Stonemasonry: Cutting Moulding on a Radius (SCQF level 6)

**CODE** F6PB 12

### SUMMARY

This Unit is suitable for candidates working towards a Modern Apprenticeship in Stonemasonry and will develop the candidates craft skills in cutting ovolo moulding on a radius on the underside of an arch stone to a specified size. The Unit is designed to provide candidates with competence in the use of tools and enable them to apply these skills in the workplace. It is also designed to enable candidates to develop their skills and understand and use of Stonemasonry terminology, techniques and practices.

### OUTCOMES

- 1 Identify and draw front face and section of arch stone and produce templates as per specification.
- 2 Apply and scribe face template onto the stone and cut down to size.
- 3 Apply and scribe section template and cut radial ovolo moulding onto underside of archstone.

### RECOMMENDED ENTRY

While entry 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.

### CREDIT VALUE

0.5 credit at SCQF level 6 (3 SCQF 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.*

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### Administrative Information

**Superclass:** TG

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## **National Unit Specification: general information (cont)**

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### **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
- ◆ *ICT* at SCQF level 3
- ◆ *Numeracy* at SCQF level 4
- ◆ *Communication* at SCQF level 4

## **National Unit Specification: statement of standards**

### **UNIT        Stonemasonry: Cutting Moulding on a Radius (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**

Identify and draw front face and section of arch stone and produce templates as per specification.

##### **Performance Criteria**

- (a) Identify and draw front face and section of arch stone to the given dimensions.
- (b) Produce templates in accordance with given specification.
- (c) Ensure minimal wastage of materials.

#### **OUTCOME 2**

Apply and scribe face template onto the stone and cut down to size.

##### **Performance Criteria**

- (a) Apply Face template onto stone and scribe on lines.
- (b) Cut stone to template.
- (c) Comply with current Health & Safety legislation during all work methods and activities.

#### **OUTCOME 3**

Apply and scribe section template and cut radial ovolo moulding onto underside of arch stone.

##### **Performance Criteria**

- (a) Apply section template onto bed joints of arch stone.
- (b) Cut radial ovolo moulding onto stone using section and reverse templates.
- (c) Comply with current Health & Safety legislation 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 the Outcomes and Performance Criteria.

Written and/or oral recorded evidence is required to demonstrate that the candidate has achieved Outcomes 1 and 3 to the standard set out in the Performance Criteria. Assessment will take the form of a question paper which will be open-book, under controlled supervised conditions.

## National Unit specification: statement of standards (cont)

### UNIT Stonemasonry: Cutting moulding on a Radius (SCQF level 6)

Performance evidence supported with an assessor observation checklist must be used to show that the candidate has achieved the practical elements of the Unit to the standard specified in Outcomes 1-3. Each candidate will be observed in their ability to carry out given tasks correctly and safely. Assessment of these Outcomes will be carried out in a workshop under supervised conditions.

Candidates must:

- ◆ Demonstrate knowledge of cutting mouldings on a radius.
- ◆ Draw face and section views of archstone and correctly annotate.
- ◆ Produce templates as per specification.
- ◆ Select appropriate tools for the task in hand.
- ◆ Maintain these tools to a good standard.
- ◆ Adopt the correct sequencing for hewing stone.
- ◆ Cut ovolo moulding with fillets to the underside of the stone as per specification.
- ◆ Finished stone to measure 250mm x 400mm Face and 250mm thick. (edge bedded).

Throughout all of the practical elements of this Unit candidates must:

- ◆ Select, use, clean and store appropriately all tools used.
- ◆ Work in accordance with the current health and safety legislation.

The evidence will be produced on several assessment occasions and should be carried out under supervised conditions. Candidates must be observed in the attainment of all Outcomes and Performance Criteria in the statement of the standards. An assessor observation checklist must be retained as evidence that the candidate has achieved all Outcomes and Performance Criteria.

#### Outcomes 3 and 4

<b>Summary of standards (working towards industrial tolerances)</b>	
<b>Item</b>	<b>Measurement of standard</b>
Stone size	Minimum 250 mm x 400 mm x 250 mm
Cut templates using correct equipment	+/- 1 mm
Fillets 10 mm	+/- 1 mm
Moulding 50 mm x 50 mm	+/- 1 mm
Templates-Joint, bed and reverse	+/- 1 mm
Templates	Fully annotated and referenced
Trueness – Joint, bed and reverse	+/- 1 mm
Risk Assessment	Safety Boots worn at all times Airstream Helmet worn at all times Boilersuit 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 Tools handled correctly at all times Tools Cleaned at Stored safely at the end of working day.

## **National Unit Specification: support notes**

### **UNIT        Stonemasonry: Cutting Moulding on a Radius (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 20 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 the process of using various tools for hand hewing stone to size of face template and cutting ovolo moulding using reverse templates and section onto underside of archstone. Also provide drawing and templates at per specification to enable to cut stone.

The Unit should be offered to candidates from the construction and related service 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.

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 achievement of skills and underpinning knowledge required for this Unit will be assisted by the provision of information sources in the form of:

- ◆ oral and /or written instructions
- ◆ graphic and photographic materials
- ◆ technical information
- ◆ hands-on task on uses of tools on stone to create radial ovolo moulding on stone

The teaching approach should ensure the candidate gains the underpinning knowledge required for the Unit. Teachers/Lecturers should demonstrate practical elements step by step until the candidate is competent to attempt tasks under assessment conditions. Effective questioning should be encouraged throughout, focusing on skills in Stonemasonry practices and underpinning knowledge related to Cutting mouldings on a radius. The requirement to adopt safe working practices and comply with safety legislation must be emphasised throughout.

It is recommended that this Unit be delivered in order of Outcomes as the order stated in the Statement of Standards.

## National Unit Specification: Support notes (cont)

### UNIT            Stonemasonry: Cutting Moulding on a radius (SCQF level 6)

Opportunities should be taken throughout the 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 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.

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

*Numeracy skills* at SCQF level 4 will be developed through the interpretation of information from working drawings and the practical use of calculation and measuring scales.

There will be opportunities for candidates 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 Outcomes 1.

### GUIDANCE ON APPROACHES TO ASSESSMENT OF THIS UNIT

Detailed assessment material for this Unit will be found in section 6 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.

The candidate's knowledge and understanding of terminology, techniques and construction practices of Stonemasonry will be assessed through a question paper.

Candidates should be given as much practice as possible in the use of tools required for cutting mouldings on a radius, prior to being set the assessment.

## **National Unit Specification: support notes**

### **UNIT            Stonemasonry: Cutting Moulding on a Radius (SCQF level 6)**

Evidence will be gathered for all Outcomes through observation that the candidates have met the given standards and tolerances during the practical assessment. An assessor observation checklist can be used to record this evidence.

In order to allow candidates to achieve all Outcomes and Performance Criteria candidates should be given a clear brief detailing the nature of exercises involved.

#### **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](http://www.sqa.org.uk/assessmentarrangements)