



National Unit Specification: general information

UNIT Bricklaying: Circular Walls (SCQF level 6)

CODE F6MH 12

SUMMARY

This Unit is suitable for candidates working towards a Modern Apprenticeship in Bricklaying and will develop the candidates craft skills in building circular walls. This Unit is designed to provide candidates with competence in the use of tools and equipment to set out and build circular walls 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 bricklaying terminology, techniques and practices, produce sketches and set out and build circular walls.

OUTCOMES

- 1 Demonstrate knowledge and understanding of terminology, setting out techniques and construction practices associated with setting out and building circular walls.
- 2 Set out and build a circular wall in header bond using special radial bricks with attached pier.

RECOMMENDED ENTRY

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

CREDIT VALUE

2 credits at Higher (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.*

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
- ◆ Working with others at SCQF level 4
- ◆ 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 associated with setting out and building circular walls.

Performance Criteria

- (a) Define terminology related to circular walling correctly.
- (b) Describe setting out techniques and methods for maintaining faceplane for circular walls.
- (c) Identify and explain construction practices for circular walls correctly.

OUTCOME 2

Set out and build a circular wall in header bond using special radial bricks with attached pier.

Performance Criteria

- (a) Set out piers and circular wall in accordance with the given specification.
- (b) Build circular wall in accordance with the given specification.
- (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 Bricklaying Training and Assessment Programme (TAP).

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

Written and/or recorded oral evidence is required to demonstrate that the candidate has achieved Outcome 1 to the standard specified in the Performance Criteria. Candidates will be required to demonstrate their knowledge and understanding of terminology, techniques and practices by defining terms, describing setting out techniques, identifying construction practices and determining quantities of special bricks. This assessment will take the form of a question paper and will be conducted under controlled, closed-book supervised conditions.

Product and performance evidence is required to demonstrate that the candidate has achieved Outcome 2 to the standards specified in the Performance Criteria. Candidates will be required to build a one brick thick wall curved on plan with attached piers. Assessment of this Outcome will be evidenced through observation of work processes and assessment of the completed workpiece. Candidates must meet the given standards and tolerances during the practical assessment. An assessor observation checklist must be used to record this evidence. Assessment should be conducted under controlled, supervised conditions.

National Unit Specification: statement of standards (cont)

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Outcome 2

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Setting out radius	±5mm
Gauge	±5mm
Pier level BOE all sides	±3mm
Plumb	±5mm
Joint thickness	±3mm
Faceplane using template/trammel	±5mm
Pier square diagonals first course	±3mm
Projecting bricks	Equal projection ±3mm
Projecting bricks plumb up face	±5mm
Face of bricks	Clean, minimal smudging, no visual defects
BOE facework	Good selection of bricks essential, clean, a little smudging permissible
BOE regular joint size	±3mm
Perpends	No deviation exceeding 5mm
Half round jointing	Joints full and to all arrises
Header bond	As specified
Stretcher bond	As specified
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 safely at all times Tools handled correctly at all times Tools cleaned and stored safely at end of working day

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 in Bricklaying 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 building circular walls with specific knowledge and skills in setting out and maintaining faceplane and determining quantities of radial bricks for circular walls.

This Unit would 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 setting out and building circular walls with decorative attached piers. 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. Aspects of this Unit could be integrated with *Bricklaying: Piers* (SCQF level 6).

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 is required to develop the ability to set out and build circular walls in a safe manner at all times and, therefore, it is anticipated that the majority of learning will take place in a workshop/site environment.

Practical demonstrations underpinned by effective questioning techniques should focus on key skills, construction practices, techniques and underpinning knowledge related to the setting out and forming of circular walls. During the learning process, practical learning is fundamental as candidates must become proficient in terminology and construction practices relevant to opening in walls.

National Unit Specification: support notes (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 to develop the Core Skill of *Working with Others* at SCQF level 4, particularly in Outcome 2, as this practical assessment may be carried out working in pairs, as part of teaching and learning. 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.

Numeracy at SCQF level 4 could be enhanced through the interpretation of information from the practical use of calculation and measurement required for teaching and learning assessments for Outcome 2.

There will be opportunities for candidates to develop the Core Skills of *Communications* at SCQF level 4. Candidates will have the opportunity to develop written and/or oral and graphical communication skills for the knowledge part of the assessment. 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 for this Unit will be found in section six of the Bricklaying 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 Bricklaying 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 candidates' knowledge and understanding of terminology, techniques and construction practices associated with setting out and building circular walls will be assessed through a question paper.

Candidates should be given as much practise as possible in setting out and building curved walls on plan prior to being set the assessment. Evidence will be gathered for Outcomes 2 through observation and that the candidates have met the given standards and tolerances for the assessment. An assessor observation checklist must be used to record this evidence.

National Unit Specification: support notes (cont)

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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 communications 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)*.

CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs (www.sqa.org.uk)*.