



National Unit specification: general information

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

Unit code: H08N 12

Superclass: TG

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Summary

This Unit is suitable for candidates working towards a Modern Apprenticeship in Bricklaying and will develop the candidate's skills and knowledge in thin joint masonry construction. This Unit is designed to provide candidates with competence in the use of tools and equipment to set out and build thin joint masonry structures and the ability to apply these skills in the workplace.

Outcomes

- 1 Demonstrate knowledge and understanding of terminology, setting out techniques and construction practices used in thin joint masonry.
- 2 Calculate material and component requirements for thin joint masonry.
- 3 Set out and build a cavity wall with door and window openings in thin joint masonry.
- 4 Set out and build a solid wall in thin joint masonry.

Recommended entry

While entry 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 Apprentice which include being employed in the relevant craft industry.

General information (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

Credit points and level

1 National Unit credit 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

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
- ◆ Information Communication Technology at SCQF level 3

National Unit specification: statement of standards

Unit title: Bricklaying: Erect Thin Joint Masonry Structures
(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, setting out techniques and construction practices used in thin joint masonry.

Performance Criteria

- (a) Identify and select terminology related to thin joint masonry correctly.
- (b) Identify and select construction practices associated with thin joint masonry correctly.

Outcome 2

Calculate material and component requirements for thin joint masonry.

Performance Criteria

- (a) Calculate materials required to complete work in thin joint masonry correctly.
- (b) Calculate components required to complete work in thin joint masonry correctly.

Outcome 3

Set out and build a cavity wall with door and window openings in thin joint masonry

Performance Criteria

- (c) Set out wall in accordance with the given specifications.
- (d) Build wall in accordance with the given specifications.
- (e) Comply with current Health and Safety and sustainability requirements during all work methods and activities.

Outcome 4

Set out and build a solid wall in thin joint masonry

Performance Criteria

- (a) Set out wall in accordance with the given specifications.
- (b) Build wall in accordance with the given specifications.
- (c) Comply with current Health and Safety and sustainability requirements during all work methods and activities.

National Unit specification: statement of standards (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

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 candidates have 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 1 to the standard specified in the Performance Criteria. Candidates will be required to demonstrate their knowledge of terminology, techniques and practices by successful completion of a question paper relating to thin joint masonry construction. This assessment will be conducted under controlled closed-book supervised conditions.

Written and/or oral recorded evidence is required to demonstrate that the candidate has achieved Outcome 2 by calculating materials and components required for thin joint masonry. This assessment will take the form of a question paper and will be conducted under controlled, closed-book supervised conditions. A centre supplied calculator may be used to carry out this Outcome.

Performance evidence is required to demonstrate that the candidate has achieved Outcome 3 and 4 to the standards specified in the Performance Criteria. Candidates will be required to set out and build both a cavity wall with door and window openings in thin joint masonry blockwork and a solid wall in thin joint masonry blockwork.

Assessment of these Outcomes will be evidenced through observation of work processes and assessment of the completed work. Candidates must meet the given standards during the practical activity. An assessor observation checklist must be used to record this evidence. Assessment should be conducted under controlled, supervised conditions.

Outcome 3: Cavity Wall with Door and Window Opening

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Setting out openings	±6mm
Setting out overall length	±8mm
Gauge	±5mm
Plumb	±5mm
Level	±8mm
Bond	Maintained
Faceplane front	±6mm
Faceplane Rear	±8mm
Joint thickness	Acceptable standard
Perpends	±5mm

National Unit specification: statement of standards (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

Joint finish	Full, no gaps
Vertical DPC	Flush or + 25mm
Movement control mesh	Positioned as specified with 100 mm laps where necessary
Sills -projection	±4mm
Sills –horizontal DPC	Flush
Lintels equal bearing	Equal rests
Thin joint compliant wall ties	To building regulations
Cavity insulation	Positioned as specified, no gaps
Cavity	Clean with no bridging
Cavity width	±8mm
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 clear at all times
Materials	Stacked safely at all times
Tools and equipment(during working)	Handled correctly at all times
Tools and equipment (after work)	Cleaned and stored safely
Sustainability	
Waste	Kept to a minimum at all times.
Recycling	Materials recycled whenever possible.
Waste disposal	Waste disposed correctly/appropriately

Outcome 4: Solid Wall

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Setting out in overall length	±8mm
Gauge	±5mm
Plumb	±5mm
Level	±8mm
Bond	Maintained
Faceplane	±6mm
Joint thickness	Acceptable standard
Perpends	±5mm
Joint finish	Full no gaps
Movement control mesh	Positioned as specified with 100 mm laps where necessary
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

National Unit specification: statement of standards (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

Method Statement	
Working area	Kept clear at all times
Materials	Stacked safely at all times
Tools and equipment (during working)	Handled correctly at all times
Tools and equipment (after work)	Cleaned and stored safely
Sustainability	
Waste	Kept to a minimum at all times.
Recycling	Materials recycled whenever possible.
Waste disposal	Waste disposed correctly/appropriately

National Unit specification: support notes (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (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 40 hours.

Guidance on the content and context for this Unit

This Unit has been developed as an optional Unit in the Professional Development Award in Bricklaying at SCQF level 6.

The successful completion of the Unit will provide candidates with the required knowledge and skills relating to setting out, building techniques and construction practices associated with building thin joint masonry with specific knowledge and skills in specialist tools, equipment, jointing techniques and calculation of materials and components.

This Unit would be offered to candidates working towards a Modern Apprenticeship in Bricklaying and will develop the candidates craft skills and knowledge in thin joint masonry. 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 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 comply 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

Guidance on learning and teaching approaches for this Unit

Candidates must be given the opportunity to further develop their skills in bricklaying by learning about build thin joint masonry and its principles.

Candidate centred learning and teaching approaches are encouraged with candidates actively participating in practical activities after lecturer demonstration of key construction practices and principles.

The use of effective questioning techniques to confirm understanding of salient learning objectives should be central to learning and teaching approaches used in classrooms or workshops.

National Unit specification: support notes (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

Candidates should be encouraged to learn at their own pace with e-learning opportunities available to suit their preferred learning style.

The use of e-learning as a teaching tool should be adopted by lecturers wherever possible to enable candidates to develop at their own pace using preferred learning styles.

Candidate is required to develop the knowledge and skills to set out and build thin joint masonry 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 thin joint masonry. During the learning process, practical learning is fundamental as candidates must become proficient in terminology and construction practices relevant to thin joint masonry.

Calculation and estimating methods should be fully practiced prior to candidates undertaking Outcome 2.

There are opportunities for candidates to develop co-operative working skills as the 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.

Candidates could be introduced to construction site practices through reference to manufacturer video productions and internet web sites detailing best practice and construction techniques.

Opportunities should be taken throughout delivery of this Unit to meet the requirements of the PDA generic Units and the Training and Assessment Programme including:

- ◆ Confirm Work Activities and Resources for the Work
- ◆ Develop and Maintain Good Working Relationships
- ◆ Confirm the Occupational Work Method
- ◆ Conform to Productive Working Practices
- ◆ Move & Handle Resources
- ◆ Conform to General Workplace Health, Safety and Welfare

National Unit specification: support notes (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

Guidance on approaches to assessment for this Unit

Detailed assessment material for this Unit will be found in 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 and components related thin joint masonry will be assessed through a closed-book question paper.

Candidates will demonstrate their ability to calculate required materials and components for thin joint masonry by calculating the materials and components required for the practical exercise in Outcome 3.

Candidates should be given as much practise as possible in thin joint masonry techniques, prior to being set the assessment. Evidence will be gathered for Outcome 3 and 4 through observation that the candidates have met the given standards and tolerances during the practical assessments. An assessor observation checklist should 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

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 productive working practices.

There are opportunities to develop the Core Skill of Working with Others at SCQF level 4, particularly in Outcomes 3 and 4 as these practical assessments should be carried out in pairs or in teams. Candidates can agree responsibilities and provide support and information to each other during the practical group activities.

National Unit specification: support notes (cont)

Unit title: Bricklaying: Erect Thin Joint Blockwork Masonry Structures (SCQF level 6)

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, manufacturer's instructions, specifications and interpretation of drawings.

There may be opportunities to develop ICT skills at SCQF level 3 where Centres opt to use e-assessment, e-portfolios and /or online learning materials

Numeracy at SCQF level 4 will be enhanced through the knowledge evidence in calculation of materials and components for the assessment for Outcome 2

It could be further enhanced 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 Outcome 3 and 4.

There will be opportunities for candidates to develop the Core Skills of Communications at SCQF level 4 through the knowledge part of the assessment for Outcome 1. As candidates complete practical tasks in Outcome 3 and 4, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

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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