



## National Unit Specification: general information

**UNIT**      Bricklaying: Cavity Walling (SCQF level 6)

**CODE**      F6MG 12

### SUMMARY

This Unit is suitable for candidates working towards a Modern Apprenticeship in Bricklaying and will develop the candidates craft skills in cavity walling. This Unit is designed to provide candidates with competence in the use of tools and equipment to set out and build cavity walls and the ability to apply these skills in the workplace. It is also designed to enable candidates to develop their skills and understanding and use bricklaying terminology, techniques and practices to set out and build cavity walls.

### OUTCOMES

- 1 Demonstrate knowledge and understanding of the terminology, techniques, practices and materials used in the construction of cavity walls.
- 3 Set out and build a straight length of cavity wall with a return corner.
- 4 Set out and build a cavity wall with partial fill insulation and movement joint.

### 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.*

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### Administrative Information

**Superclass:**      TG

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

**UNIT**      Bricklaying: Cavity Walling (SCQF level 6)

### **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**

### **UNIT        Bricklaying: Cavity Walling (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 the terminology, techniques, practices and materials used in the construction of cavity walls.

##### **Performance Criteria**

- (a) Identify and select the correct practices, terminology and techniques used in cavity walling.
- (b) Identify and select spacing, positioning and types of wall ties.
- (c) Identify the correct wall tie for specific cavity wall construction.
- (d) Identify and select correct positioning of damp proof courses used in cavity walling.

#### **OUTCOME 2**

Set out and build a straight length of cavity wall with a return corner.

##### **Performance Criteria**

- (a) Set out cavity wall with a return corner to the given specifications.
- (b) Build cavity wall with a return corner to the given specifications.
- (c) Position and space wall ties correctly.
- (d) Position damp proof courses correctly.
- (e) Comply with Health and Safety requirements during all work methods and activities.

#### **OUTCOME 3**

Set out and build a cavity wall with partial fill insulation and movement joint.

##### **Performance Criteria**

- (a) Set out cavity wall with partial fill insulation and movement joint to the given specifications.
- (b) Build cavity wall with partial fill insulation and movement joint to the given specifications.
- (c) Position and space wall ties and insulation correctly.
- (d) Position movement joint ties correctly.
- (e) Position damp proof courses correctly.
- (f) Comply with Health and Safety requirements during all work methods and activities.

## **National Unit Specification: statement of standards (cont)**

### **UNIT       Bricklaying: Cavity Walling (SCQF level 6)**

#### **EVIDENCE REQUIREMENTS FOR THIS UNIT**

These Evidence Requirements will be met by the completion of the Bricklaying Training Assessment Pack (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, practices and materials by defining positions of damp proof courses, identifying types of damp proof course, describe current regulations for wall tie spacing. This assessment will take the form of a question paper and will be conducted under controlled, closed-book supervised conditions.

Performance evidence is required to demonstrate that the candidate has achieved Outcomes 2 and 3 to the standards specified in the Performance Criteria. Candidates will be required to set out and build plumbing in a cavity wall, a straight length of cavity wall with a return corner, build a cavity wall with partial fill insulation and movement joint. Assessment of these Outcomes will be evidenced through observation of work processes and assessment of the completed workpieces. 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)

### UNIT Bricklaying: Cavity Walling (SCQF level 6)

#### Outcome 2

| <b>Summary of standards</b> (working towards industrial tolerances) |  |
|---|--|
| <b>Item</b>   | <b>Measurement of standard</b>   |
| External corner square  | ±5mm in 600mm length   |
| Overall length  | ±10mm  |
| Gauge from top of first course                                      | ±8mm in overall height   |
| Level   | ±8mm in overall height   |
| Plumb   | ±8mm in overall height   |
| Joint thickness   | ±5mm   |
| Wall tie spacing  | Conforms to building regulations   |
| Inner cavity  | Clean with no bridging   |
| Cavity width  | ±8mm   |
| Faceplane deviation   | ±8mm in overall height   |
| Thickness of joints   | ±5mm   |
| Vertical DPC  | Flush with reveal or +25mm   |
| Horizontal DPC  | Minimum of 150mm above ground level and flush to the face of wall plus 2mm<br>Minimum overlap 100mm  |
| Round key jointing  | Joints full, uniform, and to all arrises   |
| Face of bricks  | Facework clean, minimal smudging, no visual defects  |
| <b>Summary of standards</b> (working towards industrial tolerances) |  |
| <b>Item</b>   | <b>Measurement of standard</b>   |
| Health and safety   | Complies at all times  |
| Risk assessment   | Safety boots worn at all times<br>Hard hat worn at all times<br>High visibility vest worn at all times<br>All other PPE as risk assessed                                       |
| Method statement  | Working area kept clean at all times<br>Materials stacked safely at all times<br>Tools handled correctly at all times<br>Tools cleaned and stored safely at end of working day |

#### Outcome 3

| <b>Summary of standards</b> (working towards industrial tolerances) |   |
|---|---|
| <b>Item</b>   | <b>Measurement of standard</b>  |
| Overall length  | ±10mm   |
| Gauge   | ±8mm  |
| Level   | ±8mm  |
| Plumb each point (brickwork)  | ±8mm  |
| Faceplane (brickwork)   | ±8mm  |
| Horizontal DPC  | Positioned as specified flush with face +2mm<br>No tears with minimum lap 100mm |
| Vertical DPC anti-cold bridge                                       | Positioned as specified flush with reveal or +25mm                              |
| Cavity insulation ties  | Positioned to manufacturer's instructions                                       |
| Perpends  | No deviation exceeding 5mm  |
| Faceplane (blockwork)   | ±10mm   |

|                               |   |
|-------------------------------|---|
| Plumb each point (blockwork)  | ±10mm   |
| Level (blockwork)             | ±10mm   |
| Gauge (blockwork)             | ±10mm   |
| Cavity insulation slabs/batts | Positioned to manufacturer's instructions           |
| Face of bricks                | Facework clean, minimal smudging, no visual defects |
| Brickwork square key recessed | Full and neat with even depth ±3mm                  |
| Blockwork flush from trowel   | No open joints                                      |
| Cavity                        | Clean with no ties bridged                          |
| Overall cavity wall width     | ±8mm  |
| Movement joint                | Position as specified, free from mortar and debris  |
| Movement joint ties           | Position as specified                               |

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

#### UNIT Bricklaying: Cavity Walling (SCQF level 6)

| Summary of standards (working towards industrial tolerances) |  |
|--|--|
| Item   | Measurement of standard  |
| Health and safety  | Complies at all times  |
| Risk assessment  | Safety boots worn at all times<br>Hard hat worn at all times<br>High visibility vest worn at all times<br>All other PPE as risk assessed                                       |
| Method statement   | Working area kept clean at all times<br>Materials stacked safely at all times<br>Tools handled correctly at all times<br>Tools cleaned and stored safely at end of working day |

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

### **UNIT      Bricklaying: Cavity Walling (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 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 cavity wall construction.

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 cavity wall construction including damp proof courses, wall ties, cavity insulation, movement joints. 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 their ability to set out and build cavity walling in safe manner at all times and, therefore, it is anticipated that the majority of the learning will take place in a workshop/site environment. The terms used in cavity wall construction should be integrated to the practical activities as they are undertaken, and the basic principles of such explained as each workpiece is being built. This teaching approach should ensure the candidate is acquiring the underpinning knowledge required for the Unit.

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

## National Unit Specification: support notes (cont)

### UNIT      Bricklaying: Cavity Walling (SCQF level 6)

There are opportunities for candidates to develop co-operative working skills, particularly in Outcomes 2 and 3 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.

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 Outcomes 2 and 3, as these practical assessments should be carried out in pairs. Candidates can agree responsibilities and provide support and information to each other during the practical assessments.

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 could be enhanced through the interpretation of information from dimensional working drawings and the practical use of calculation to ascertain the quantities of materials required for Outcomes 2 and 3.

There will be opportunities for candidates to develop the Core Skills of *Communications* at SCQF level 4. 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 sections three and five 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 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: support notes (cont)**

### **UNIT        Bricklaying: Cavity Walling (SCQF level 6)**

The candidates' knowledge and understanding of terminology, techniques and construction practices of bricklaying will be assessed through a question paper.

Candidates should be given as much practise as possible in cavity wall construction, prior to being set the assessment. Evidence will be gathered for Outcomes 2 and 3 through observation that the candidates have met the given standards and tolerances during the practical assessment. 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 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](http://www.sqa.org.uk)).

## History of changes to Unit

| Version | Description of change                                     | Date       |
|---------|---|------------|
| 02      | Amended to incorporate specific cavity wall construction. | 19/12/2016 |
|         |   |            |
|         |   |            |
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