



Higher National Unit specification

General information for centres

Unit title: Bricklaying: Architectural Landscape Walling

Unit code: F8ME 34

Unit purpose: This Unit is designed to enable the candidate to develop their knowledge, understanding and skills relevant to the construction of architectural landscape walling. The candidate will also enhance their practical experience in architectural landscape walling.

On completion of the Unit the candidate should be able to:

- 1 Explain techniques used in architectural landscape walling
- 2 Set out and build composite walls in brick/block and random rubble stonework

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**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.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of centres. However it is recommended that candidates have completed the Professional Development Award in Bricklaying at SQF level 6 or have the equivalent level of industrial experience and prior learning.

Core Skills: There are opportunities to develop the Core Skills of *Communication*, *Numeracy*, *Working with Others* and *Problem Solving* all at SCQF level 5 and *Information and Communication Technology* at SCQF level 4 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed in the subject area of the Group Award to which it contributes. This Unit forms part of the Professional Development Award in Bricklaying at SCQF level 7 and is aimed at candidates following a career in brickwork and receiving complementary industrial experience.

General information for centres (cont)

Assessment: The candidates should be given the opportunity to further develop their skills in bricklaying by learning about architectural landscape walling and its principals of construction. Terminology used to construct architectural landscape walling should be integrated to the practical tasks undertaken, and the principles of architectural landscape walling should be explained as the architectural landscape walls are being built. This teaching approach should ensure the candidates are acquiring the underpinning knowledge required for the Unit.

This Unit is assessed on the candidates ability to explain and illustrate techniques used to set out and build architectural landscape walls and actual performance of setting out and building composite walls in brick/block and random rubble stonework and the ability to meet the evidence requirements in all Outcomes.

Evidence will be gathered through an assignment for Outcome 1 and observation of work processes and assessment of the completed work. Assessment should be carried out under controlled, supervised conditions. In order to achieve this Unit, candidates are required to present sufficient evidence that they have met all the Knowledge and/or Skills elements for each Outcome. Details of these requirements are given for each Outcome.

The assessment instruments used should follow the general guidance offered by the Scottish Qualifications Authority (SQA) assessment model and an integrative approach to assessment is encouraged. Centres may use the instruments of assessment which they consider to be most appropriate but are advised to use the Bricklaying Training and Assessment Programme (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.

Accurate records should be made of the assessment instruments used showing how evidence is generated for each Outcome and giving marking schemes, checklists and recorded candidate feedback. Records of candidates' achievements should be retained. These records must be made available for external verification.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Outcome 1

Explain techniques used in architectural landscape walling

Knowledge and/or Skills

- ◆ setting out techniques for architectural landscape walling
- ◆ methods, components used to construct composite walls in brick/block and random rubble stonework
- ◆ principles involved in the construction of composite walls in brick/block and random rubble stonework
- ◆ principles of maintaining bond/pattern in composite walls in brick/block and random rubble stonework
- ◆ principles of tying random stonework to brick/block walls
- ◆ safe working practices
- ◆ sustainability/site waste management

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ explain the setting out of architectural landscape walling outline the sequence of operations for constructing brick/block and random rubble stonework
- ◆ outline methods of maintaining bond/pattern in brick/block and random rubble stonework
- ◆ outline the methods used to tying walls together during the building of brick/block and random rubble stonework
- ◆ identify safe working practices relevant to architectural landscape walls
- ◆ outline methods used to minimise waste during construction of architectural landscape walls

All the evidence requirements must be met and all items in the Knowledge and/or Skills covered. Evidence should be gathered through an assignment outlining the processes, techniques, health and safety and sustainability requirements related to architectural landscape walls. Assessment should be conducted under open book supervised conditions.

Assessment Guidelines

In the assessment candidates will be required to complete an assignment based on drawings and specifications for an actual work project. This could be conducted as an in class assignment lasting up to three hours.

Higher National Unit specification: statement of standards (cont)

Unit title: Bricklaying: Architectural Landscape Walling

Outcome 2

Set out and build composite walls in brick/block and random rubble stonework

Knowledge and/or Skills

- ◆ setting out techniques for composite walls in brick/block and random rubble stonework
- ◆ understanding of composite walls in brick/block and random rubble stonework
- ◆ ability to maintain bond/pattern in composite walls in brick/block and random rubble stonework
- ◆ ability to tie-in random stonework to brick/block walls
- ◆ safe working practices
- ◆ sustainability/site waste management
- ◆ working to specifications/tolerances

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ set out and build composite walls in brick/block and random rubble stonework
- ◆ maintain bond/pattern throughout the construction of composite walls in brick/block and random rubble stonework
- ◆ follow current safe working practices
- ◆ minimise the waste of materials throughout practical work
- ◆ work to specified tolerances identified in the specification

The following will assist the assessor in judging the candidate performance against the evidence requirements:

The sequence of setting out is appropriate	as specified
Correct sequence of work	observed throughout
Dry bonding	checked before commencement of work
Setting out	± 4mm
Gauge in overall height	± 4mm
Level of top course	± 4mm
Plumb in overall height	± 4mm
Joint finish	no gaps
Facework	clean no smudging
Full beds and joints	throughout
Rear brickwork	flush
Correctly bonded	
Minimise waste	
Leave job in tidy condition	
Wears appropriate Personal Protective Equipment (PPE)	at all times
Current Health and Safety legislation	complies at all times

Higher National Unit specification: statement of standards (cont)

Unit title: Bricklaying: Architectural Landscape Walling

Evidence will be gathered through observation of work processes and assessment of the completed work. Assessment should be carried out under controlled, supervised conditions. In order to achieve this Outcome, candidates are required to present sufficient evidence that they have met all the knowledge and/or skills elements. An assessor observation checklist should be completed to ensure that the candidate has met the required specification and tolerances and this observation checklist should be retained as evidence.

Assessment Guidelines

This Outcome is assessed on the candidates' actual performance of setting out and building composite walls in brick/block and random rubble stonework to a given specification and required tolerances.

Candidates should be provided with drawings and specifications for the practical task. Assessment should be carried out in a suitable workshop environment. Timing for this assessment should be determined prior to commencement. An observation checklist should be completed to ensure the candidate has evidenced all the knowledge and skills included in this Outcome to the specifications and tolerances required.

Administrative Information

Unit code:	F8ME 34
Unit title:	Bricklaying: Architectural Landscape Walling
Superclass category:	TG
Original date of publication:	August 2010
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History of changes:

Version	Description of change	Date
02	Update to method of construction method and assessment guidance	June 2010

Source: SQA

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Higher National Unit specification: support notes

Unit title: Bricklaying: Architectural Landscape Walling

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 7 and may be delivered in a sequence suitable to individual candidates and centres.

This Unit is designed to enable the candidate to develop their knowledge, understanding and skills relevant to setting out and building composite walls in brick/block and random rubble stonework.

Candidates following a career in brickwork and with current industrial experience will benefit from undertaking this Unit.

The knowledge and skills for this Unit should be incorporated with modern methods of setting out and building composite walls in brick/block and random rubble stonework. Terminology commonly associated with bricklaying should also be used throughout this Unit.

It is vitally important that candidates gain an understanding and knowledge of the sequencing of operations with regard to setting out and building composite walls in brick/block and random rubble stonework.

Current Health and Safety, sustainability and waste management issues should be fully emphasised throughout the delivery of this Unit.

Working to specified tolerances and methods of checking completed work should be demonstrated and undertaken by the candidate.

Guidance on the delivery and assessment of this Unit

The principles and methods of setting out and building composite walls in brick/block and random rubble stonework should be demonstrated to the candidate before summative assessment takes place.

The differing constraints candidates could encounter on site with various construction methods with regard to setting out and building composite walls in brick/block and random rubble stonework should be fully explained.

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.

Higher National Unit specification: support notes (cont)

Unit title: Bricklaying: Architectural Landscape Walling

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.

Working tolerances should be explained as being the minimum standard which will be accepted and candidates should be encouraged to evaluate their own work.

Opportunities for developing Core Skills

Communication skills at SCQF level 5 may be developed by the completion of the assignment for Outcome 1 and formative assessments undertaken prior to summative assessment.

The delivery and assessment of this Unit may contribute towards the component 'Written communication' of the Core Skill of *Communication* at SCQF level 5 particularly in Outcome 2 where the requirement for assessment is in the form of a scaled drawing and question paper. As candidates complete the practical tasks in Outcomes 1 and 2 they may also contribute to the component of 'Oral communication' as they should be expected to communicate with others using correct terminology, tone and style suited to the workplace.

Components of the Core Skill of *Problem Solving* at SCQF 5, such as 'Planning and organising' and 'Critical thinking', could 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.

The 'Accessing information' component of the Core Skill *Information and Communication Technology* at SCQF level 5 could be developed as candidate's research Health and Safety legislation affecting their area of work and that of those around them.

The Core Skill of *Working with Others* at SCQF level 5 could also be developed in this Unit in the practical work where candidates can work in pairs. *Working with Others* involves the ability to work with others to plan, agree, and take responsibility for tasks; to support co-operative working in appropriate ways; and to review the effectiveness of one's own contribution.

The components 'Using numbers' and 'Using graphical information' of the Core Skill of *Numeracy* at SCQF level 5 could be developed in this Unit. Candidates will be required to interpret sizes and measurements, read and produce accurate drawings and templates and transfer information accordingly.

Higher National Unit specification: support notes (cont)

Unit title: Bricklaying: Architectural Landscape Walling

Open learning

Although this Unit could be delivered by distance learning, it would require a considerable degree of planning by the centre to ensure the sufficiency and authenticity of candidate evidence. Arrangements would have to be made to ensure that:

- ◆ the practical activities would have been supervised by a responsible person and clearly recorded (using an assessment checklist for the assessor)
- ◆ the assessor is, at some point, able to question the candidate on that performance
- ◆ production of drawings is carried out under the stated conditions

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 alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on SQA's website: www.sqa.org.uk.

General information for candidates

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This Unit is designed to further your career in the construction industry by developing your competent and enhancing your knowledge of architectural landscape walling. It will give you a further appreciation of architectural landscape walling through technical information and scale drawings. The Unit will also allow you to gain hands on experience in order to appreciate brick/blockwork at an advanced level.

Outcome 1

You are required to explain and illustrate techniques used to architectural landscape walling through the production of an assignment outlining the processes related to architectural landscape walling. Assessment will be conducted under open book supervised conditions.

Topics relating to this Outcome will include:

- ◆ composite walling
- ◆ classification of composite walls (random rubble un-coursed and coursed, squared rubble)
- ◆ random rubble built to courses
- ◆ squared rubble
- ◆ effects of poor quality pointing
- ◆ protection of new work
- ◆ prevention of saturation
- ◆ durability
- ◆ methods of bonding
- ◆ principles of tying random stonework to brick/block walls
- ◆ safe working practices
- ◆ sustainability/site waste management

You will have to demonstrate the required techniques in setting out composite walls in brick/block and random rubble stonework and demonstrate your understanding of the traditional techniques and modern techniques of setting out and building composite walls in brick/block and random rubble stonework.

You will learn about sustainability issues and how new materials, techniques and systems can have an impact on improving the sustainability in general and you will comply with current Health and Safety regulations and legislation throughout.

Explain and illustrate techniques used to set out and build composite walls in brick/block and random rubble stonework.

You will be assessed by the completion of an assignment in which you will be required to describe in detail and illustrate the methods used to set out and build composite walls in brick/block and random rubble stonework. You will give detail sequence of operations required to set out and build composite walls in brick/block and random rubble stonework.

The assessment for this Outcome will be open book and will be carried out in a supervised environment. You will have access to your own notes that you have prepared personally for your own use. You will not be permitted to bring textbooks, handouts or other materials that you have not prepared yourself.

General information for candidates (cont)

Unit title: Bricklaying: Architectural Landscape Walling

Outcome 2

You are required to set out and construct composite walls in brick/block and random rubble stonework, drawings and suitable materials will be provided. You will be required to demonstrate your knowledge and skills by showing that you can:

- ◆ read and interpret drawings
- ◆ construct composite walls in brick/block and random rubble stonework to given specifications and tolerances
- ◆ follow safe working practices by wearing appropriate PPE, maintaining the work environment in a safe manner and working within the parameters of the Centre risk assessments for given task
- ◆ demonstrate knowledge of sustainability
- ◆ show recognition of tolerances and processes
- ◆ demonstrate knowledge of modern brick/block/stonework techniques

You will be assessed in supervised workshop conditions to specified tolerances contained in an observation checklist. These tolerances should be fully explained and available prior to you commencing the assessment. You will be required to work individually for the assessment and where required in pairs. You will receive both oral and written feedback on your performance from the assessor.

There are opportunities to develop the Core Skills of *Communication*, *Numeracy*, *Working with Others* and *Problem Solving* all at SCQF level 5 and *Information and Communication Technology* at SCQF level 4 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.