



National unit specification

General information

Unit title: Stonemasonry: Random Rubble Walling against a Block Backing with Returns (SCQF level 6)

Unit code: HK4X 46

Superclass: TG

Publication date: June 2017

Source: Scottish Qualifications Authority

Version: 02

Unit purpose

This unit is suitable for learners working towards a Modern Apprenticeship in Stonemasonry and will develop the learners craft skills in random rubble walling. This unit is designed to provide learners with competence in the use of tools and equipment to set out, build and point random rubble walling and the ability to apply these skills in the workplace. It is also designed to enable learners to develop their understanding and use of stonemasonry terminology, components, techniques and practices to set out and build random rubble walling with returns.

Outcomes

On successful completion of the unit the learner will be able to:

- 1 Identify and select appropriate terminology, components and construction practices used in setting out and building of random rubble walling.
- 2 Set out and build random rubble walling against block backing with returns
- 3 Point random rubble walling.

Credit points and level

1 National unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6)

Recommended entry to the unit

Entry is at the discretion of the centre.

National unit specification: General information (cont)

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Core Skills

Achievement of this unit gives automatic certification of the following Core Skills component:

Complete Core Skill None

Core Skill component Critical Thinking at SCQF level 4

There are also opportunities to develop aspects of Core Skills which are highlighted in the support notes of this unit specification.

Context for delivery

If this unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

The Training and Assessment Programme (TAP) for this unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (<http://www.sqa.org.uk/sqa/46233.2769.html>).

Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

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

Identify and select appropriate terminology, components and construction practices used in setting out and building of random rubble walling.

Performance Criteria

- (a) Define appropriate terminology relating to random rubble walling.
- (b) Identify and select setting out techniques.
- (c) Identify and select components and construction practices.

Outcome 2

Set out and build random rubble walling against block backing with returns.

Performance Criteria

- (a) Set out walling in accordance with the given specifications.
- (b) Build random rubble walling in accordance with the given specifications.
- (c) Build walling plumb, level and aligned including quoins.

Outcome 3

Point random rubble walling.

Performance Criteria

- (a) Point joints and beds.
- (b) Gently apply soft brush to remove excess mortar.

National unit specification: Statement of standards (cont)

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Evidence Requirements for this unit

Evidence is required to demonstrate that learners have achieved all Outcomes and Performance Criteria.

These Evidence Requirements will be met by the completion of the Stonemasonry Training and Assessment Programme (TAP).

Evidence is required to demonstrate that the learner has 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 learner has achieved Outcome 1 to the standard specified in the Performance Criteria. Learners will be required to demonstrate their knowledge of terminology, components, techniques and practices by defining terms, describing setting out techniques and identifying required components and construction practices. 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 learner has achieved Outcomes 2 and 3 to the standards specified in the Performance Criteria. Learners will be required to build random rubble walling with returns against block backing.

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

Outcomes 2 and 3

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Length of straight 2015 mm	±5 mm
Length of return 1010 mm	±5 mm
Height 940 mm	±5 mm
Check corner for plumb	±5 mm
level	±5 mm
Internal and external returns square	±5 mm
Bonding correct	Yes/No
Joint thickness not exceeding 20 mm	Yes/No
No stones with greater height than length	Yes/No
Surface finish Uniform	Yes/No
Face of stone	Clean

National unit specification: Statement of standards (cont)

Unit title: Stonemasonry: Random Rubble Walling against a Block Backing with Returns (SCQF level 6)

Summary of standards (working towards industrial tolerances) (cont)	
Item	Measurement of standard
Pointing — neat flush finish	Yes/No
Health and safety	Complies at all times
Risk Assessment	<ul style="list-style-type: none">◆ 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	<ul style="list-style-type: none">◆ Working area kept clean at all times◆ Materials stacked correctly at all times◆ Tools handled correctly at all times◆ Tools cleaned and stored safely at end of working day



National unit Support Notes

Unit title: Stonemasonry: Random Rubble Walling against a Block Backing with Returns (SCQF level 6)

Unit Support Notes are offered as guidance and 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 a mandatory unit in the Professional Development Award in Stonemasonry at SCQF level 6.

The successful completion of this unit will provide learners with the required underpinning knowledge and skills relating to setting out techniques and construction practices and components associated with setting out and building of random rubble walling.

This unit should be offered to learners 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 learners whose normal place of work would be a site, workshop, or similar environment.

The unit deals with setting out and building random rubble walling with returns. It should be delivered as part of a structured programme of training and orientated to the context of the learner'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 approaches to delivery of this unit

The learner is required to develop the ability to set out and build random rubble walling 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 building of random rubble walling. During the learning process, practical learning is fundamental as learners must become proficient in terminology and construction practices relevant to random rubble walling.

National unit Support Notes (cont)

Unit title: Stonemasonry: Random Rubble Walling against a Block Backing with Returns (SCQF level 6)

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

Guidance on approaches to assessment of this unit

Detailed assessment material for this unit will be found in Section 2 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 learner's knowledge and understanding of terminology, techniques and construction practices and components related to setting out and construction of random rubble walling will be assessed through a question paper.

Learners should be given as much practise as possible in setting out and building of random rubble walling prior to being set the assessment. Evidence will be gathered for Outcomes 2 and 3 through observation of work processes and assessment of the completed workpiece to ensure that the learners have met the given standards and tolerances during the practical assessment. An assessor observation checklist should be used to record this evidence.

Opportunities for 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 learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

National unit Support Notes (cont)

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Opportunities for developing Core and other essential skills

Components of the Core Skill of Problem Solving at SCQF level 4, such as Planning and Organisation and Critical Thinking will be developed as learners undertake this unit. Learners 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 this practical assessment may be carried out working in pairs, as part of teaching and learning. Learners 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 also arise for learners to develop the Core Skill of Information and Communication Technology (ICT) at SCQF level 3 by researching Health and Safety legislation affecting their area of work.

Numeracy at SCQF level 4 could be developed 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 2.

There will be opportunities for learners to develop the Core Skill of Communication at SCQF level 4. Learners will have the opportunity to develop written and/or oral communication skills for the knowledge part of the assessment for Outcome 1. As learners complete practical tasks, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

This unit has the Critical Thinking component of Problem Solving embedded in it. This means that when learners achieve the unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4.

History of changes to unit

Version	Description of change	Date
02	Core Skills component Critical Thinking at SCQF level 4 embedded.	01/06/17

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General information for learners

Unit title: Stonemasonry: Random Rubble Walling against a Block Backing with Returns (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

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This unit is will enable you to understand the terminology, components and construction practices used in setting out and building of random rubble walling. It will also provide you with the skills to set out build and point random rubble walling.

You will also be provided with the knowledge to allow you to appreciate the reasons for carrying out the practical work in the manner directed and the reasons for using specific tools, materials, components and equipment.

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 will be looked at in accordance with current safety codes of practice and regulations.

There will be a series of training exercises followed by some practical tasks based assessment and multi choice knowledge assessment. Completion of the unit will provide you with the basic skills necessary to enable you to progress to more complex aspects of Stonemasonry which in turn will further develop your skills and knowledge.

During practical activities you must comply with all aspects of Health and Safety. This includes wearing appropriate personal protective equipment (PPE) and compiling risk assessment and method statements for each practical assessment. This will be assessed on an on-going basis for performance evidence.

Health and Safety is an extremely important part of this programme. Achievement of a unit will not be awarded where practical assessment are not carried out in a safe manner — even if the other standards have been met.

In order to successfully complete the programme, you must learn to think, work and behave in a safe manner, and be aware of the safety of others.

Components of the Core Skill of Problem Solving at SCQF level 4, such as Planning and Organisation and Critical Thinking will be developed as learners undertake this unit. Learners 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.

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

Numeracy at SCQF level 4 could be developed through the interpretation of information from 3 dimensional working drawings and the practical use of calculation and measuring scales required.

There will be opportunities to develop the Core Skill of Communication at SCQF level 4. You will have the opportunity to develop written and/or oral communication skills for the knowledge part of the assessment. As you complete practical tasks you will be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

This unit has the Critical Thinking component of Problem Solving embedded in it. This means that when you achieve the unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 4.