



## National Unit Specification: general information

**UNIT** Roofing: Fibre Cement Slating to Hip and Valley Dry Fix Details  
(SCQF level 6)

**CODE** F7D3 12

### SUMMARY

This Unit is suitable for candidates working towards a Modern Apprenticeship in roofing and will help develop the candidate's skills in Fibre Cement Slating to Hip and Valley Dry Fix Details. This Unit is designed to provide candidates with the competence in the use of tools and equipment to prepare, set out and cover hip and valley roofing in fibre cement slating with dry fix details and the ability to apply these skills in the workplace. It is also designed to enable candidates to develop their knowledge and understanding in roofing terminology and techniques related to fibre cement slating work.

### OUTCOMES

- 1 Demonstrate knowledge and understanding of terminology and techniques used in setting out hip and valley roofs with dry fix details.
- 2 Set out hip and valley roof with dry fix details.
- 3 Fix fibre cement slates to a hip and valley roof including dry fix details.

### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates undertaking the Professional Development Award in Roof Slating, Tiling and Cement Work at SCQF level 6 must meet the requirements of the Modern Apprentices which include being employed in the relevant craft industry.

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#### Administrative Information

**Superclass:** TG

**Publication date:** August 2009

**Source:** Scottish Qualifications Authority

**Version:** 01

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## National Unit Specification: general information (cont)

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### CREDIT VALUE

1 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

While there is no automatic certification of Core Skills or Core Skills components in this Unit, opportunities for the developing aspects of the following Core Skills are highlighted in the Support Notes of this Unit:

- ◆ *Problem Solving* at SCQF level 4
- ◆ *Numeracy* at SCQF level 4
- ◆ *Information and Communication Technology* at SCQF level 3
- ◆ *Working with Others* at SCQF level 4
- ◆ *Communication* at SCQF level 4

## **National Unit Specification: statement of standards**

### **UNIT        Roofing: Fibre Cement Slating to Hip and Valley Dry Fix Details (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 and techniques used in setting out hip and valley roofs with dry fix details.

##### **Performance Criteria**

- (a) Define terminology related to hip and valley roofs with dry fix details.
- (b) Describe details of fixing hip and ridge using dry fix method.
- (c) State materials suitable to form linings for open valleys.

#### **OUTCOME 2**

Set out hip and valley roof with dry fix details.

##### **Performance Criteria**

- (a) Set out and form open valleys to boarded and open raftered roof in accordance with given specification.
- (b) Set out hip and valley roof with dry fix details in accordance with given specification.
- (c) Comply with all health and safety requirements at all times.

#### **OUTCOME 3**

Fix fibre cement slates to a hip and valley roof including dry fix details.

##### **Performance Criteria**

- (a) Lay and fix fibre cement slates to hip and valley roof in accordance with given specification.
- (b) Fix roof light and slates around roof light.
- (c) Set out, mitre and fix ridging with dry fix details in accordance with the manufactures recommendations.
- (d) Comply with all health and safety requirements at all times.

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

### UNIT Roofing: Fibre Cement Slating to Hip and Valley Dry Fix Details (SCQF level 6)

#### EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required to demonstrate that the candidates have achieved this Unit to the standard specified in all the Outcomes and Performance Criteria. All working practices must be in line with relevant and current Health and Safety legislation and regulations.

Written and/or oral evidence is required for Outcome 1 which demonstrates that the candidate can describe the terminology, setting out techniques for hip and valley roofs with dry fix details. The evidence for this Outcome will take the form of a question paper and be obtained under open-book supervised conditions.

Performance and product evidence for Outcomes 2 and 3, supplemented with an assessor observation checklist, should be used to confirm the candidate has individually met the standards specified in the Performance Criteria and summary of standards.

Candidates must achieve the following standards.

#### Summary of standards (working towards industrial tolerances)

◆ Form valley with GRP	GRP fixed to manufacturer's instructions
◆ Felt roof — eave	Overhang 50 mm $\pm$ 5 mm
◆ Felt roof — hip	Cut straight with hip $\pm$ 5 mm
◆ Cover strip at hip	600 mm minimum — centred $\pm$ 10 mm on hip
◆ Felt roof — valley	Cut straight to outside edge of GRP $\pm$ 5 mm
◆ Fix felt	Fixed without tears or punctures
◆ Nail felt	Nailed correctly to rafters — correct nail spacings maintained
◆ Fix counter battens	Straight to rafters without splits
◆ Calculate gauge	States method correctly
◆ Cut under-eave slates	Slates cut to correct size — 2 mm
◆ Set out eave battens (three)	Battens set out to give overhang of 50 mm $\pm$ 5 mm
◆ Set out ridge course battens	Battens set out to give correct cover from ridge
◆ Set out battens to struck lines	Level $\pm$ 3 mm
◆ Fix battens	Battens nailed flush without splits
◆ Fix battens — hip and valley	Battens splay cut/mitred tight — 3 mm
◆ Form triple eave course	Correctly bonds slates
◆ Nail slates — correct gap	All standard slates double nailed
◆ Nail slates — correct gap	All double slates at hip/valley triple nailed
◆ Slates at valley	Cut straight without ragged edges
◆ Slates at valley	Overhang inside edge of GRP 50 mm $\pm$ 5 mm
◆ Slates at hip	Cut tight to hip — 6 mm
◆ Fix roof light	Roof light and flashing fixed to manufacturer's instructions
◆ Finish at ridge	Correct size of top slate used when covered with ridge
◆ Fix fibre cement — hip and ridge	Hip and ridge fixed to manufacturer's instructions
◆ Working area	Clean at all times
◆ Fix slates around roof light	Slates correctly bonded

- ◆ Secure slates with rivets
- ◆ Secure slates with rivets — hip/valley
- ◆ Health and safety
- ◆ Risk assessment
  
- ◆ Method statement

All standard slates secured with one rivet  
Slates secured with two rivets where possible  
Complies at all times  
Safety boots, high visibility vest and hard hat worn at all times  
Working area clean at all times  
Materials stacked correctly at all times  
Tools cleaned and stored safely at end of working day

## National Unit Specification: support notes

### UNIT      Roofing: Fibre Cement Slating to Hip and Valley Dry Fix Details (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 a mandatory Unit in the Professional Development Award (PDA) in Roof Slating, Tiling and Cement Work at SCQF level 6.

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. It should be delivered as part of a structured programme of training and orientated to the context of the candidates work and area of responsibility.

The successful completion of this Unit will help provide candidates with the required underpinning knowledge and skills relating to the terminology, preparation and application of fibre cement slates to a hip and valley roof with dry fix details.

The context of this Unit allows for a holistic integrated approach into other Units within the PDA in Roof Slating, Tiling and Cement Work. Therefore there are opportunities to integrate this Unit with aspects of *Roofing: Regular Sized Slating to Battened Gable to Gable Roofs* and *Roofing: Fibre Cement Slating Hip and Valley Mitred Details* at SCQF level 6.

Health and Safety and Sustainability are integral and key to the Construction Industry and so 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 legislation affecting the conservation of the environment and its relevance to this trade and to the construction industry in general. Attention should also be drawn to the dangers of not implementing this legislation.

#### GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The learning environment for this Unit will be a combination of classroom and workshop based learning. The knowledge element of this Unit would be taught in a classroom environment and put into practice in the workshop in conjunction with practical Outcomes.

The candidate should be given the opportunity to further develop their skills through visual aids, electronic presentations, DVDs, e-learning, reference books, classroom exercises and group discussions.

Candidates should be encouraged to consider basic risk assessment **prior** to any practical activities taking place.

## National Unit Specification: support notes (cont)

### UNIT        Roofing: Fibre Cement Slating to Hip and Valley Dry Fix Details (SCQF level 6)

#### Outcome 1

It would be beneficial for candidates to sketch various elements related to fibre cement hip and valley roofs with eg eaves, verge, ridge, hip and valley details. This will help reinforce candidates' underpinning knowledge for this Unit.

#### Outcomes 2 and 3

It is recommended that candidates work in pairs for these Outcomes. Candidates should be encouraged in self and peer evaluation of work and achievement of standards.

Candidates should be made fully aware of current regulations and legislation in relation the roofing activities contained within this Unit.

It would be beneficial for lecturers to reinforce the appropriate disposal and re-use of roofing materials for sustainability considerations.

Candidates could take the opportunity to use spreadsheets to compile and record information related to material estimating.

Lecturers should provide candidates with constructive feedback in relation to performance and the standard achieved. Areas for improvement should be clearly identified.

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 Efficient Working Practices*
- ◆ *Conform to General Workplace Safety*
- ◆ *Move and Handle Resources*
- ◆ *Confirm Work Activities and Resources for the Work*
- ◆ *Develop and Maintain Good Working Relationships*
- ◆ *Confirm the Occupational Method of Work*

#### OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

There are opportunities to develop aspects of the Core Skill of *Problem Solving* at SCQF level 4. 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 and the use of role play will enhance the evaluation of efficient working practices.

*Numeracy* skills at SCQF level 4 could be developed through roofing calculations for area and material estimating.

Opportunities also arise for candidates to develop the Core Skill of *Information and Communication Technology* at SCQF level 3 through researching roofing terminology and techniques on the internet, spreadsheets for materials information, e-learning and e-assessment.

## National Unit Specification: support notes (cont)

### **UNIT**      Roofing: Fibre Cement Slating to Hip and Valley Dry Fix Details (SCQF level 6)

There are opportunities for candidates to develop the Core Skill of *Working with Others* at SCQF level 4 through working in pairs for Outcomes 2 and 3. Candidates can agree responsibilities and provide support and information to each other during the practical group activities.

Candidates will have the opportunity to develop *Communication* skills at SCQF level 4 throughout practical tasks, as 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**

Section 11 of the Roof Slating, Tiling and Cement Work Training and Assessment Programme (TAP) provides detailed assessment material for this Unit. It is 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. It is expected that candidates will be given as much practice as possible, prior to being set assessment tasks.

For Outcome 1 a suitable method of assessing the candidates knowledge and understanding of terminology, setting out and roofing in relation to hip and valley roofs with dry fix details would be through a question paper incorporating multiple choice questions, short answer questions and sketches.

For Outcomes 2 and 3 the candidates ability to set out and fibre cement slate a hip and valley roof with dry fix details will be assessed through practical activities. An assessor observation checklist can be used to ensure and record that the candidates have met the given standards and tolerances during the practical activity.

### **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 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)*.

### **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](http://www.sqa.org.uk/assessmentarrangements)