

### National Unit Specification: general information

**UNIT** Plastering: Cement Casting (SCQF level 6)

CODE F6RY 12

### **SUMMARY**

This Unit is suitable for candidates working towards a Modern Apprenticeship in Plastering and will develop the candidate's craft skills in cement casting. This Unit is designed to provide candidates with competence in the use of tools and equipment to cast cement and the ability to apply these skills in the workplace. It is also designed to enable candidates to develop their understanding and use of plastering terminology, techniques and practices.

#### **OUTCOMES**

- 1 Demonstrate knowledge and understanding of terminology, techniques and practices used in cement casting.
- 2 Set out and assemble wooden case mould for casting.
- 3 Prepare assembled wooden case for casting.
- 4 Produce cement casting.

#### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates undertaking the Professional Development Award in *Plastering* at SCQF level 6 must meet the requirements of the Modern Apprentices which include being employed in the relevant craft industry.

### **CREDIT VALUE**

0.5 credit at SCQF level 6 (3 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.

### **Administrative Information**

Superclass: TG

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

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### **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
- ♦ Numeracy at SCQF level 4
- ♦ *Communication* at SCQF level 4

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

### **UNIT** Plastering: Cement Casting (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, techniques and construction practices used in cement casting.

### **Performance Criteria**

- (a) Identify and select terminology related to cement casting correctly.
- (b) Identify and select setting out and assembly techniques correctly.
- (c) Identify and select construction practices correctly.

### **OUTCOME 2**

Set out and assemble wooden case mould for casting.

#### **Performance Criteria**

- (a) Clean and prepare all components in preparation for assembly
- (b) Assemble all components correctly before casting
- (c) Comply with current health and safety legislation during all work methods and activities

### **OUTCOME 3**

Prepare assembled wooden case for casting.

#### **Performance Criteria**

- (a) Prepare joints and surfaces correctly for casting.
- (b) Cut and prepare additional components required for casting accurately.
- (c) Comply with current health and safety legislation during all work methods and activities.

### **OUTCOME 4**

Produce cement casting.

#### **Performance Criteria**

- (a) Pour cement, position reinforcements and compact cement correctly.
- (b) Release cement cast correctly after appropriate curing time.
- (c) Clean and store wooden case mould correctly.
- (c) Comply with current health and safety legislation during all work methods and activities.

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

**UNIT** Plastering: Cement Casting (SCQF level 6)

### EVIDENCE REQUIREMENTS FOR THIS UNIT

These evidence requirements will me met by the completion of the Plastering Training and Assessment Programme (TAP)

Evidence is required to demonstrate that the candidate 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 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 defining terms, describing setting out techniques and identifying required 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 candidate has achieved Outcomes 2, 3 and 4 to the standards specified in the Performance Criteria. Candidates will be required to assemble a wooden case mould, prepare for and produce a cement cast. Assessment of these Outcomes will be evidenced through observation of work processes and assessment of the completed work. 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.

#### Outcome 2

Summary of standards (working towards industrial tolerances)		
Item	Measurement of standard	
Assemble case moulding	Correct components to assemble case moulding	
Distance pieces	At correct dimensions ±5 mm	
End housing In correct position ±5mm	At correct dimensions ±5 mm	
Softwood sides Kept clean at all times	At correct position ±5 mm	
Folding wedges	At correct dimensions ±5 mm s	
Timber base	At correct position ±5 mm	
Working area	Kept clean at all times	
Health and safety	Complies at all times	

### Outcome 3

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Clay joints	Sharp and evenly without misses
Apply release agent	Evenly without misses
Cut reinforcement	Correctly to dimensions ±7 mm
Place reinforcement	Correctly to dimensions ±7 mm
Working area	Kept clean at all times
Health and safety	Complies at all times

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

**UNIT** Plastering: Cement Casting (SCQF level 6)

### Outcome 4

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Cast cement model	Evenly and vibrate with no air holes
Pour cement to mould	level ±3 mm
Place reinforcement	Correctly in position ±5 mm
Compact cement	Correctly with no air holes
Cure cement cast	With appropriate action
Release cement case	Without damage
Release cast	Without damage
Clean case and store mould	Correctly cleaned and stored
Risk assessment activities	Safety boots and protective clothing to be worn at all
	times
	Barrier cream to be applied during the application
	process
	COSHH regulations to be adhered to throughout all
	mixing of materials and all practical
Method statement	Work area kept clean at all times
	Materials stacked safely at all times
	Tools and equipment handled safely at all times
	Tools and equipment stacked/stored safely at the end
	of each working day
	Professional conduct and waste disposal to conform
	with organisational requirements

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

**UNIT** Plastering: Cement Casting (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 20 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 Plastering 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 producing, a cement casting from a wooden case mould.

Candidates are required to develop their ability to produce a cement casting from a wooden case mould 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 production of cement castings from wooden case moulds. During the learning process, practical learning is fundamental as candidates must become proficient in terminology and construction practices relevant to wooden case moulds.

The knowledge and understanding for this Unit should be taught in tandem with the practical work. It follows therefore that the assessment of performance evidence and knowledge evidence should be carried out around the same time.

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 is required to develop their ability to set out and produce cement casts 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 cement casting. During the learning process, practical learning is fundamental as candidates must become proficient in terminology and construction practices relevant to setting out and producing cement casts.

### **National Unit Specification: support notes (cont)**

### **UNIT** Plastering: Cement Casting (SCQF level 6)

Opportunities should be taken throughout delivery of this Unit to meet the requirements if to 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

The Core Skill of *Problem Solving* at SCQF level 4 will be developed as candidates develop the ability to translate the information from the working drawings into practice and ensure that the correct materials and methods of application are used in the assembly, preparation and the production of a cement casting from a wooden case mould.

Numeracy at SCQF level 4 will be developed through the interpretation of information working drawings and the practical use of calculation and measuring required to complete the practical assessments for Outcomes 2, 3 and 4.

There will be opportunities for candidates to develop the Core Skill of *Communication* at SCQF level 4. Candidates will have the opportunity to develop written and/or oral communication skills for the knowledge part of the assessment for Outcome 1. As candidates complete practical assessment, 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 section 7 of the Plastering 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 plastering 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.

Although there are many opportunities within this Unit for teamwork (organising work areas and tools for example), candidates will be expected to work individually to demonstrate progress towards meeting the standards relating to all outcomes.

The candidate's knowledge and understanding of terminology, techniques and construction practices of assembling and preparing wooden case moulds to produce cement castings (Outcome 1) will be assessed through a question paper.

Evidence will be gathered for Outcomes 2, 3 and 4 through observation that the candidates have met the given standards and tolerances during the practical tasks/tests. The TAP summary of standards observation/operational checklist/record must be used to record this evidence.

### **National Unit Specification: support notes (cont)**

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### 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 etesting 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 our website www.sqa.org.uk/assessmentarrangements