



## National Unit Specification

### General information

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork (SCQF level 6)

**Unit code:** HK4N 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 Plastering and will develop the learner's craft skills in producing a plaster piece mould, producing enrichments from a flood and case moulds. This unit is designed to provide learners with competence in the use of tools and equipment to produce a plaster piece mould, producing enrichments from flood and case moulds and the ability to apply these skills in the workplace. It is also designed to enable learners to develop their understanding and use of plastering terminology, techniques and practices in producing a plaster piece mould, producing enrichments from a flood and case moulds and fixing plaster enrichments from a case mould.

### Outcomes

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

- 1 Identify and select terminology, techniques and construction practices used in producing a piece, flood and case moulds and fixing enrichments from a case mould.
- 2 Produce a cast from an original mould to produce plaster case and flood mould using flexible moulding compound.
- 3 Produce plaster enrichments from a prepared case mould and prepare, fix and finish plaster enrichments.

## National Unit Specification: General information (cont)

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork (SCQF level 6)

- 4 Produce a plaster piece mould.
- 5 Produce a plaster cast from a prepared piece mould.

### Credit points and level

2 National Unit credits at SCQF level 6: (12 SCQF credit points at SCQF level 6)

### Recommended entry to the unit

While entry is at the discretion of the centre, learners 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.

### 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.

Training and Assessment Programme (TAPs) has been developed for this unit and provides unit content and guidelines for learners and assessors. This unit is made up of a number of outcomes which include practical and knowledge assessment.

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

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

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork  
(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**

Identify and select terminology, techniques and construction practices used in producing a piece, flood and case moulds and fixing enrichments from a case mould.

#### **Performance criteria**

- (a) Identify and select terminology related to producing a piece, flood and case mould and fixing enrichments from a case mould.
- (b) Identify and select setting out techniques.
- (c) Identify and select construction practices.

### **Outcome 2**

Produce a cast from an original mould to produce plaster case and flood mould using flexible moulding compound.

#### **Performance criteria**

- (a) Prepare original mould and materials for casting.
- (b) Produce enrichment to given specification.
- (c) Set out and prepare original model to given specification.
- (d) Produce a plaster case to given specifications.
- (e) Set out original and construct a backing board/fence to receive flexible compound
- (e) Select, prepare and pour melting compound to manufacturer's instructions

### **Outcome 3**

Produce plaster enrichments from a prepared case mould and prepare, fix and finish plaster enrichments.

#### **Performance criteria**

- (a) Select and prepare casting materials.
- (b) Produce plaster enrichments in accordance with specification.
- (c) Prepare background to receive enrichments.
- (d) Measure, cut, fix and finish enrichments in accordance with the given specification.

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

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork  
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### **Outcome 4**

Produce a plaster piece mould.

#### **Performance criteria**

- (a) Prepare cast/model for piece moulding to given specification.
- (b) Identify, select and produce pieces for piece mould to given specification.
- (c) Produce a plaster case to given specification.

### **Outcome 5**

Produce a plaster cast from a prepared piece mould.

#### **Performance criteria**

- (a) Prepare piece mould for casting.
- (b) Produce a plaster cast from piece mould to given specification.

#### **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 Plastering 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, techniques and practices by defining terms, describing manufacturing and production 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 learner has achieved Outcomes 2, 3, 4, and 5 to the standards specified in the performance criteria. Learners will be required to produce and fix plaster enrichments from a case mould, produce a plaster flood mould and produce a plaster piece mould. Assessment of these outcomes will be evidenced through observation of work processes and assessment of the completed assessment. Learners must meet the given standards and tolerances during the practical assessment. The summary of standards checklist must be used to record this evidence. Assessment should be conducted under controlled, supervised conditions.

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

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork (SCQF level 6)

### Outcomes 2

Produce a cast from original mould and produce a plaster case mould using flexible moulding compound.

<b>Summary of standards (working towards industrial tolerances)</b>	
<b>Item</b>	<b>Measurement of standard</b>
Model preparation	Cleaned without damage
Backing board	Base cut to given size $\pm 3$ mm
Model secured to base	Keyed surfaces with no gaps
Model sealed	Three coats of shellac each coat allowed to dry with no misses
Case reinforcing	Lath and scrim selected and cut to size $\pm 10$ mm
Material mixing/proportioning	Suitable consistency free from lumps/dry material
Case formed	Formed to given shape minimum thickness 20 mm
Case preparation	Three coats of shellac each coat allowed to dry with no misses, greased fully inside with no misses.
Pouring holes/funnels	Identify and correctly position to allow the release of gases
Melting P.P.E.	Select appropriate PPE according to manufacturer's instructions
Melting compound preparation	To manufacturer's instructions: cut into 25 mm cubes
Melt compound	To manufacturer's instructions : correct temperature
Pour melted compound	To manufacturer's instructions: correct temperature
Vinamould mould preparation	Vinamould cleaned and positioned correctly
Cast reinforcing	Lath and scrim selected and cut to size $\pm 10$ mm
Material mixing/proportioning	Suitable consistency free from lumps/dry material
Cast face	Cast free from air pockets, reinforcing and minimal blemishes

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

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork (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 Hard hat worn at all times High visibility vest worn at all times All other PPE as risk assessed
Method statement	Working area kept clean at all times Materials stacked safely at all times Tools handled correctly at all times Tools cleaned and stored safely at end of working day

### Outcome 2

Prepare and pour flexible moulding compound to produce a flood mould.

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Prepare original mould	Mould is fit for purpose and fully cleaned
Material mixing/proportioning	Suitable consistency free from lumps/dry material
Cast reinforcing	Lath and scrim selected and cut to size $\pm 10$ mm
Materials poured	Vibrated to minimise air pockets and flush with strike-offs $\pm 3$ mm
Cast face	Cast free from air pockets, reinforcing and minimal blemishes
Model preparation	Cleaned without damage
Backing board and fences constructed	Base cut to given size $\pm 3$ mm, fences constructed to given sizes $\pm 3$ mm
Model secured to base	Keyed surfaces with no gaps
Model, backing board and fences sealed	Three coats of shellac each coat allowed to dry with no misses
Fences secured in place	Secured to prevent movement and leakage of flexible compound
Melting PPE	Select appropriate PPE according to manufacturer's instructions
Melting compound preparation	To manufacturer's instructions: cut into 25 mm cubes
Melt compound	To manufacturer's instructions : correct temperature
Pour melted compound	To manufacturer's instructions: correct temperature and to given height
Backing case formed	To height of fences, flat and level
Reinforcement	Lath and scrim selected and cut to size $\pm 5$ mm
Material mixing/proportioning	Suitable consistency free from lumps/dry material

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

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork  
(SCQF level 6)

### Outcomes 3

Produce plaster enrichments from a prepared case mould and prepare, fix and finish plaster enrichments.

<b>Summary of standards (working towards industrial tolerances)</b>	
<b>Item</b>	<b>Measurement of standard</b>
<b>Produce enrichment from case mould</b>	
Enrichment preparation	Enrichments cleaned and keyed
Enrichment background	Keyed and measured out to identify correct method of planting enrichments (stretching, pinching)
Enrichments fixed	Enrichments planted securely $\pm 2$ mm
Enrichment mitres (internal, external)	Mitres in line $\pm 2$ mm
Finished lengths	Smooth, clean and sharp

<b>Summary of standards (working towards industrial tolerances)</b>	
<b>Item</b>	<b>Measurement of standard</b>
Health and safety	Complies at all times
Risk assessment	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	Working area kept clean at all times Materials stacked safely at all times Tools handled correctly at all times Tools cleaned and stored safely at end of working day

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

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork  
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### Outcomes 4 and 5

Produce a plaster piece mould and produce a cast form prepared mould.

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Prepare original mould	Mould is fit for purpose and fully cleaned
Material mixing/proportioning	Suitable consistency free from lumps/dry material
Cast reinforcing	Lath and scrim selected and cut to size $\pm 10$ mm
Materials poured	Vibrated to minimise air pockets and flush with strike-offs $\pm 3$ mm
Cast face	Cast free from air pockets, reinforcing and minimal blemishes
Model preparation	Cleaned without damage
Backing board and upright constructed	Base cut to given size $\pm 3$ mm, upright cut to given size $\pm 3$ mm and upright set at an angle of $90^\circ \pm 3$ mm and wadded to base
Model secured to base	Keyed surfaces with no gaps
Model sealed	Three coats of shellac each coat allowed to dry with no misses
Positioning of clay fences	Positioned as to eliminate undercuts
Pieces formed	Individually formed as required, splayed backs for ease of removal from case, minimum thickness 20 mm
Pieces preparation	Three coats of shellac each coat allowed to dry with no misses, greased fully with no misses. Pieces assembled around model for case production
Case reinforcing	Lath and scrim selected and cut to size $\pm 10$ mm
Material mixing/proportioning	Suitable consistency free from lumps/dry material
Case formed	Formed to given shape minimum thickness 20 mm
Case preparation	Three coats of shellac each coat allowed to dry with no misses, greased fully inside with no misses.
Mould assembled	Greased fully with no misses.
Cast reinforcing	Lath and scrim selected and cut to size $\pm 10$ mm
Materials poured	Vibrated to minimise air pockets and flush with strike-offs $\pm 3$ mm
Cast face	Cast free from air pockets, reinforcing and minimal blemishes
Health and safety	Complies at all times
Risk assessment	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	Working area kept clean at all times Materials stacked safely 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:** Plastering: Producing and Fixing Moulded Plasterwork (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 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 Plastering 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 associated with producing and fix plaster enrichments from a case mould, produce a plaster flood mould and produce a plaster piece mould.

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 producing and fix plaster enrichments from a case mould, produce a plaster flood mould and produce a plaster piece mould. 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 their ability in producing and fixing plaster enrichments from a case mould, producing a plaster flood mould and producing plaster piece 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 producing and fixing plaster enrichments from a case mould, producing a plaster flood mould and producing plaster piece mould. During the learning process, practical learning is fundamental as learners must become proficient in terminology and construction practices relevant to producing and fixing plaster enrichments from a case mould, producing a plaster flood moulds and producing plaster piece mould.

## National Unit Support Notes (cont)

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork (SCQF level 6)

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

Opportunities should be taken whenever possible throughout the delivery of this unit to evidence the competencies associated with the generic Units related to the Plastering 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 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.

The learner's knowledge and understanding of terminology, techniques and construction practices of plastering will be assessed through a question paper (Outcome1)

Learners should be given as much practise as possible in producing and fixing plaster enrichments from a case mould, produce a plaster flood mould and produce a plaster piece mould and should progressively develop both skills and understanding before each assessment. Evidence will be gathered for Outcomes 2, 3, 4 and 5 through observation that the learners have met the given standards and tolerances during the practical assessment. The TAP summary of standards observation/operational checklist/record must be used to record this evidence. Assessment should be conducted under controlled, supervised conditions.

### 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](http://www.sqa.org.uk/e-assessment).

## **National Unit Support Notes (cont)**

**Unit title:** Plastering: Producing and Fixing Moulded Plasterwork  
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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 Organising and Critical Thinking will be developed as learners 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 production of case, flood and piece mould and the set out and fix plaster enrichments.

Opportunities also arise for learners 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 will be developed through the interpretation of information working drawings and the practical use of calculation and measuring scales required to complete the practical assessments for Outcomes 1, 2 and 3.

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 Outcomes 1. As learners complete practical tasks, they should be expected to communicate with others using the correct terminology suited to the workplace.

The Core Skill of Problem Solving at SCQF level 4 could 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.

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 components Critical Thinking at SCQF level 4 embedded.	01/06/17

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## General information for learners

### **Unit title:** Plastering: Producing and Fixing Moulded Plasterwork (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.

This unit is designed to provide you with the knowledge and skills in the use of tools and equipment to produce a case mould, flood mould, piece mould and setting out and fixing plaster enrichment and the ability to apply these skills in the workplace.

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 task 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 half brick walling which in turn will further develop your skills and knowledge.

You will be required to demonstrate knowledge gained of producing different types of moulds including case, flood and piece the producing, setting out and fixing plaster enrichments and their preparation and construction, health and safety issues and calculations of areas and materials.

Components of the Core Skill of Problem Solving at SCQF level 4, such as Planning and Organising and Critical Thinking will be developed as you 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 production of case, flood and piece mould and the set out and fix plaster enrichments.

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 your area of work.

Numeracy at SCQF level 4 will be developed through the interpretation of information working drawings and the practical use of calculation and measuring scales required to complete the practical assessments for Outcomes 1, 2 and 3.

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 and as you complete practical tasks, you will be expected to communicate with others using the correct terminology suited to the workplace.

The Core Skill of Problem Solving at SCQF level 4 could be developed as you 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.

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.