



## Higher National Unit specification

### General information for centres

**Unit title:** Plastering: Forming Architectural Features

**Unit code:** F8R4 34

**Unit purpose:** This Unit is designed to enable the candidate to develop their knowledge, understanding and skills relevant to the production of templates to construct, cast, run and spin mouldings to form architectural features. The candidate will also enhance their practical experience in the producing of templates to assist with the setting out and production of architectural features.

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

- 1 Produce scale drawings of architectural features.
- 2 Construct a running mould.
- 3 Cast a fibrous plaster pediment.
- 4 Run a fluted column.
- 5 Spin a circular plaster capital.
- 6 Run a diminished plaster.

**Credit points and level:** 2 HN credit at SCQF level 7: (16 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 Plastering at SCQF 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, 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 was developed as part of the Professional Development Award in Plastering at SCQF level 7 and is aimed at candidates following a career in Plastering and with current industrial experience.

## General information for centres (cont)

**Assessment:** The candidate will be given the opportunity to enhance their skills and knowledge in plasterwork by learning about architectural features. Techniques and practices used to produce, construct, cast, run and spin mouldings to form architectural features should be integrated to the practical tasks undertaken. The principles of setting out for constructing, casting, running and spinning moulds should be explained throughout the practical activities. The learning and teaching approaches used should ensure that the candidate is acquiring the underpinning knowledge required for the Unit.

This Unit is assessed on the candidates actual performance of producing scale drawing, a running mould, casting, running and spinning architectural features in plasterwork and the ability to meet the Evidence Requirements in all Outcomes.

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. (See references at the end of support notes).

Evidence will be gathered through observation of work processes and assessment of the completed work. Assessment should be carried out under controlled, supervised conditions. Candidates must achieve all of the Knowledge and/or Skills and Evidence Requirements specified for each Outcome to gain this Unit. Centres may use the instruments of assessment which they consider to be most appropriate but are advised to use the Plasterwork 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 will be made available for external verification

## **Higher National Unit specification: statement of standards**

### **Unit title:** Plastering: Forming Architectural Features

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

### **Outcome 1**

Produce scale drawings of architectural features

#### **Knowledge and/or Skills**

- ◆ Geometrical setting out procedures
- ◆ Greek and Roman architecture
- ◆ Specifications for scale drawings

#### **Evidence Requirements**

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

- ◆ explain the geometry of setting out procedures for entasised column, diminishing pilaster and closed pediment
- ◆ outline the differences between greek and roman orders of architecture
- ◆ identify the various components of greek and roman orders of architecture
- ◆ produce scale drawings

All working practices must be in line with current and relevant Health and Safety Legislation and Building Regulations.

All the Evidence Requirements must be met and all items in the knowledge and skills covered. Evidence should be gathered through the production of an assignment outlining the processes related to the setting out of architectural feature work and the production of scale drawings. Assessment should be conducted under open-book supervised conditions.

#### **Assessment Guidelines**

In this 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:** Plastering: Forming Architectural Features

### Outcome 2

Construct a running mould

#### Knowledge and/or Skills

- ◆ Paper template
- ◆ Metal profile
- ◆ Running mould construction
- ◆ Safe Working Practices.
- ◆ Sustainability/Site Waste Management.
- ◆ Working to specifications and tolerances

#### Evidence Requirements

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

- ◆ make and use paper template
- ◆ make and use metal profile
- ◆ construct running mould in accordance with specification
- ◆ follow current safe working practices
- ◆ minimise the waste of materials throughout practical tasks
- ◆ work to specified tolerances identified in the specification

The following will assist the assessor in judging the candidate performance against the Evidence Requirements

Safe working practices relevant to the task	observed throughout
Template	to enable specified mould to be made
Correct sequence of work	observed throughout work
Profile	± 1mm
Stock	cut to size and shape +/- 2mm
Slipper	cut to size and shape +/- 2mm. square +/- 1mm
Handle	fitted and secured

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.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Plastering: Forming Architectural Features

### **Assessment Guidelines**

This Outcome is assessed on the candidates actual performance of producing a running mould 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 specification and tolerances required.

### **Outcome 3**

Cast a fibrous plaster pediment

#### **Knowledge and/or Skills**

- ◆ Piece mould construction
- ◆ Reverse mould
- ◆ Reinforcement materials
- ◆ Mixing plaster
- ◆ Casting techniques
- ◆ 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:

- ◆ assemble a piece mould
- ◆ prepare a reverse mould
- ◆ prepare reinforcement material
- ◆ mix plaster according to manufacturer instructions
- ◆ cast pediment
- ◆ remove cast, clean mould and store appropriately
- ◆ follow safe working practices
- ◆ minimise the waste of resources throughout practical tasks
- ◆ work to specified tolerances identified in the specification

## Higher National Unit specification: statement of standards (cont)

### Unit title: Plastering: Forming Architectural Features

The following will assist the assessor in judging the candidate performance against the Evidence Requirements.

Preparation of reverse mould	shellac, grease, no misses
Scrim cut to size	+/-10mm
Wood lath cut to size	+/-5mm
Plaster mixed	correct consistency and free from lumps/dry material.
Cast face	free from air holes. No scrim showing
No damage to reverse mould.	
Average thickness	15-20mm
Adopts a practicable sequence of operations	
Minimises waste of material	
Satisfies current safety regulations	

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 casting a fibrous plaster pediment 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 specification and tolerances required.

## Outcome 4

Run a fluted column

### Knowledge and/or skills

- ◆ Prepare bench
- ◆ Prepare materials
- ◆ Muffle mould
- ◆ Run core
- ◆ Prepare core
- ◆ Reinforcing material
- ◆ Safe working practices
- ◆ Sustainability/site waste management

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Plastering: Forming Architectural Features

### **Evidence Requirements**

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

- ◆ prepare bench surface
- ◆ prepare material for running core
- ◆ muffle running mould
- ◆ prepare reverse mould
- ◆ cut reinforcement to size
- ◆ produce a run cast over a core
- ◆ follow current safe working practices
- ◆ minimise the waste of materials throughout practical tasks
- ◆ work to specified tolerances identified in the specification

All working practices must be in line with current and relevant Health and Safety Legislation and Building Regulations.

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 casting a fibrous plaster pediment 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 specification and tolerances required.

## **Outcome 5**

Spin a circular plaster capital

### **Knowledge and/or skills**

- ◆ Bench preparation
- ◆ Core preparation
- ◆ Using centre pin/gig stick
- ◆ Safe working practices
- ◆ Sustainability/site waste management

## Higher National Unit specification: statement of standards (cont)

**Unit title:** Plastering: Forming Architectural Features

### Evidence Requirements

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

- ◆ prepare bench surface for given task
- ◆ prepare core for given task
- ◆ set out pivot point for spinning capital mould
- ◆ mix material according to instructions
- ◆ remove run capital from core
- ◆ follow current safe working practices
- ◆ minimise the waste of materials throughout practical tasks
- ◆ work to specified tolerances identified in the specification

All working practices must be in line with current and relevant Health and Safety Legislation and Building Regulations.

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 spinning a circular plaster capital to 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 specification and tolerances required.

## Outcome 6

Run a diminished plaster

### Knowledge and/or skills

- ◆ Bench preparation
- ◆ Specifications for running rules
- ◆ Hinged moulds
- ◆ Techniques using hinged moulds
- ◆ Safe working practices
- ◆ Sustainability/site waste management



## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Plastering: Forming Architectural Features

### **Evidence Requirements**

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

- ◆ prepare bench surface
- ◆ set out and fix running rules
- ◆ mix material
- ◆ run diminished pilaster
- ◆ cut to required length +/-3mm
- ◆ run moulding to be free from holes/lines score marks
- ◆ follow current safe working practices
- ◆ minimise the waste of materials throughout practical tasks
- ◆ work to specified tolerances identified in the specification

All working practices must be in line with current and relevant Health and Safety Legislation and Building Regulations.

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 running a diminished plaster to 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 specification and tolerances required.

## Administrative Information

**Unit code:** F8R4 34

**Unit title:** Plastering: Forming Architectural Features

**Superclass category:** TG

**Original date of publication:** August 2010

**Version:** 01

### History of changes:

Version	Description of change	Date

**Source:** SQA

© Scottish Qualifications Authority 2010

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

## Higher National Unit specification: support notes

### Unit title: Plastering: Forming Architectural Features

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

This Unit has been designed to allow candidates to develop knowledge, understanding and skills in Forming Architectural Features in Plastering including:

- ◆ produce scale drawings of architectural features
- ◆ construct a running mould
- ◆ cast a fibrous plaster pediment.
- ◆ run a fluted column
- ◆ spin a circular plaster capital
- ◆ run a diminished pilaster

These Outcomes require the candidate to produce scale drawings for entasised column, diminished pilaster and closed pediment; manufacture a running mould for a Doric Capital; prepare a plaster piece mould, casting materials and cast a fibrous plaster mould of a pediment; run a fluted column over a core; spin a circular capital over a plaster core and run a diminished pilaster using a hinged mould.

Candidates will be required to demonstrate their knowledge of terminology, geometry, production of templates, setting out techniques and construction practices by successful completion of an assignment related to architectural features in plastering. This assessment will be conducted under controlled, closed-book supervised conditions.

All equipment should be supplied for the candidate to use in order to complete all Outcomes. It is fundamental to this Unit that professional discussions on appropriate setting out techniques, construction practices and sequences of forming architectural features in plastering and that the candidate is given time to develop their methodology prior to assessment.

This Unit has been developed to allow candidates to gain knowledge, understanding and skills required to produce architectural features in plastering to a high standard of finish. This will improve the candidate's ability to undertake complex architectural features in plastering to a high standard.

## **Higher National Unit specification: support notes (cont)**

### **Unit title: Plastering: Forming Architectural Features**

This Unit will be undertaken in a situation where candidates will be expected to acquire underpinning knowledge and skills relating to architectural features in plastering and is complemented by other Units dealing with related aspects of plastering. The competences and underpinning knowledge gained in successfully completing this Unit would be transferable across a range of disciplines within the Professional Development Award in Plastering at SCQF level 7.

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 the delivery and assessment of this Unit**

Centres may use the instruments of assessment which they consider to be most appropriate but are advised to use the Plastering Training and Assessment (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.

Where this Unit is incorporated into other Group Awards it is recommended that it be delivered in the context of the specific occupational area(s) that the award is designed to cover. Details on approaches to assessment are given under Evidence Requirements and Assessment guidelines under each Outcome in the Higher National Unit specification: statement of standards section. It is essential that these sections be read carefully before proceeding with assessment of candidates.

Most of this Unit will be completed in a situation with candidates carrying out the procedures outlined in the Outcomes. Learning should be enhanced by the use of ICT, DVDs and hands-on experience and experience from the workplace.

Demonstrations and professional discussions by tutors/trainers especially in the application of practical aspects of these Outcomes should reinforce and augment the candidate's previous knowledge. Safety factors should be highlighted where applicable during practical activities.

Candidates should be given as much practise as possible in plastering techniques and setting out techniques, prior to being set the assessments. Candidates will work individually during all Outcomes.

Evidence will be gathered through observation of work processes and assessment of completed work, to confirm that the candidate has met the given standards and tolerances. An assessor observation checklist should be used to record this evidence. Assessment should be conducted under controlled, supervised conditions.

Where available, evidence from the workplace can also be incorporated to enhance the learning Outcomes, provided that this evidence is appropriate and authenticated as the student's own work.

It is the responsibility of the centre to satisfy themselves that the portfolio of evidence submitted for assessment is entirely original and solely the respective student's work.

## Higher National Unit specification: support notes (cont)

### Unit title: Plastering: Forming Architectural Features

Throughout the Unit emphasis will be placed, where appropriate, on the application of Health and Safety and Sustainability. Safe working practises should be looked at in accordance with current safety codes of practise and regulations. Sustainability should include reference to criteria affecting sustainability, impact of not implementing sustainability on the environment and the legislation promoting sustainability.

#### *Opportunities for developing Core Skills*

*Communication* skills at SCQF level 5 may be developed by the completion of the assignment for Outcome 1. Candidates are required to produce a written assignment outlining the processes, techniques, health and safety and sustainability requirements related to a range of external rendering and floor finishes.

*Information and Communication Technology* at SCQF level 4 may be developed by the candidates' carrying out individual research of modern and traditional architectural feature work techniques and practices, health and safety legislation and sustainability relating to the task.

*Problem Solving* at SCQF level 5 could be developed as candidates compare and contrast modern and traditional features. 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.

*Numeracy* could be developed at SCQF level 5 when taking off dimensions from working drawings, measuring, calculating and setting out.

### 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, or on video) for the assessor
- ◆ the assessor is, at some point, able to question the candidate on that performance (face to face, by telephone, online)
- ◆ the open-book assignment is conducted in a supervised environment

### 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)

## **General information for candidates**

### **Unit title:** Plastering: Forming Architectural Features

This Unit is designed to further your career in the construction industry by making you more competent and enhance your knowledge of architectural features in plastering. It will also give you a further appreciation through technical information and appropriate manufacturers information. The Unit will also allow you to get experience hands on in order to appreciate plastering at an advanced level.

#### **Outcome 1**

You are required to produce scale drawings of architectural features.

- ◆ read and interpret drawings
- ◆ carry out the geometrical setting out
- ◆ produce scale drawings
- ◆ knowledge of architectural features

Your work will be assessed via an assignment

#### **Outcome 2**

You are required to construct a running mould for a Doric capital

- ◆ read and interpret drawings
- ◆ carry out the geometrical setting out
- ◆ produce a template
- ◆ produce stock, slipper and handle
- ◆ assemble running mould

#### **Outcome 3**

You are required to cast a fibrous plaster pediment from a piece mould.

- ◆ read and interpret drawings
- ◆ prepare plaster piece mould
- ◆ prepare casting material
- ◆ cast fibrous plaster pediment
- ◆ remove cast from piece mould

#### **Outcome 4**

You are required to run a fluted column over a plaster core.

- ◆ read and interpret drawings
- ◆ prepare bench
- ◆ setting up muffle plate
- ◆ prepare materials
- ◆ run a plaster core
- ◆ prepare core
- ◆ run cast of a fluted column

## General information for candidates (cont)

**Unit title:** Plastering: Forming Architectural Features

### Outcome 5

You are required to spin a circular plaster capital.

- ◆ read and interpret drawings
- ◆ prepare bench
- ◆ set up centre point
- ◆ set up muffle plate
- ◆ spin core
- ◆ prepare core
- ◆ spin plaster capital
- ◆ remove capital from core

### Outcome 6

You are required to run a diminished pilaster.

- ◆ read and interpret drawings
- ◆ prepare bench
- ◆ set out running rules
- ◆ prepare hinged moulds
- ◆ prepare materials
- ◆ run diminished pilaster
- ◆ cut to required length
- ◆ remove from bench

Your work will be assessed via an observation/operational checklist to provide evidence that you completed work meets the required specification and tolerances for all practical Outcomes.

There are opportunities to develop the Core Skills of *Communication*, *Numeracy*, 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.