



## **National Unit specification: general information**

**Unit title:** Plastering: Complex External Plasterwork and Repairs

**Unit code:** H0C6 12

**Superclass:** TG

**Publication date:** January 2012

**Source:** Scottish Qualifications Authority

**Version:** 01

## **Summary**

This Unit is suitable for candidates working towards a Modern Apprenticeship in Plastering and will develop the candidates understanding of producing and repairing external plasterwork. This Unit is designed to provide candidates with competence in, preparing backgrounds, fixing metal trims, producing and repairing plain faced render, producing and repairing raised cement bands, producing and repairing dry and wet cast finishes, producing and repairing bullnose and ashlar finishes and will show the ability to apply these in the work place. It is also designed to enable candidates to develop their understanding of external plastering terminology, techniques and practices.

## **Outcomes**

- 1 Demonstrate knowledge and understanding of terminology, components, techniques, and practices used in external plasterwork.
- 2 Produce plain faced render, bullnose and ashlar finish to a solid background.
- 3 Produce dry cast finish to a metal lath background.
- 4 Produce wet cast finish to a solid background with raised bands around window opening.
- 5 Prepare and repair a range of external finishes.

## **Recommended entry**

While entry to this Unit 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.

## **General information (cont)**

### **Credit points and level**

1 National Unit 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**

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

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

### **Unit title: Plastering: Complex External Plasterwork and Repairs**

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, components, techniques, and practices used in applying and repairing external plasterwork.

##### **Performance Criteria**

- (a) Identify and explain the different types of external finishes correctly.
- (b) Identify and select different types of background preparations accurately.
- (c) Identify and explain the different methods of preparing backgrounds for repairs correctly
- (d) Calculate areas, perimeters, ratios, weight and cost accurately.
- (e) Identify health and safety issues when using external finishes.

#### **Outcome 2**

Produce plain faced render, bullnose and ashlar finish to a solid background.

##### **Performance Criteria**

- (a) Prepare background in accordance with given specification.
- (b) Measure cut and fix metal bead accessories to given specification.
- (c) Apply first coat to wall area and form key to given specification.
- (d) Apply straightening coat to wall area to produce a float finish to given specification.
- (e) Set out and mark stonework to given specification to form bull-nose and ashlar finish to given specification.
- (f) Comply with current health and safety requirements during all work methods and activities.

#### **Outcome 3**

Produce dry cast finish to a metal lath background.

##### **Performance Criteria**

- (a) Prepare background to receive metal lath to given specification.
- (b) Measure cut and shape metal lath to given specification.
- (c) Fix metal lath to timber/solid background to including overlaps to given specification.
- (d) Measure cut and fix metal bead accessories to given specification.
- (e) Apply first coat to wall area and form key to given specification.
- (f) Apply second coat and apply dash cast finish to wall area to given specification.
- (g) Comply with current health and safety requirements during all work methods and activities.

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

**Unit title:** Plastering: Complex External Plasterwork and Repairs

### **Outcome 4**

Produce wet cast finish to a solid background with raised bands around window opening.

#### **Performance Criteria**

- (a) Prepare background to given specification.
- (b) Measure, cut and fix metal bead accessories to given specification.
- (c) Apply first coat to wall area and form key to given specification.
- (d) Set out and form raised bands around window opening.
- (e) Apply second coat and apply wet cast finish to wall area to given specification.
- (f) Comply with current health and safety requirements during all work methods and activities.

### **Outcome 5**

Prepare and repair a range of external finishes.

#### **Performance Criteria**

- (a) Recognise and accurately mark out the extent of damage to plain faced render, raised cement bands, dry cast, wet cast, ashlar and bullnose finishes.
- (b) Recognise and accurately mark out the extent of damage to metal bead accessories.
- (c) Prepare background in accordance with given specification.
- (d) Select materials to match original work.
- (e) Carry our repair in accordance with given specification.
- (f) Comply with current health and safety requirements during all work methods and activities.

#### **Evidence Requirements for this Unit**

These Evidence Requirements will 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 preparing backgrounds, producing and repairing plain faced renders, producing and repairing raised cement bands, producing and repairing dry and wet cast finishes, producing and repairing bullnose and ashlar finishes, the instrument of assessment will be a question paper conducted in an open-book format.

Product and performance evidence is required to demonstrate that the candidate has achieved in Outcomes 2, 3, 4 and 5 to the standards specified in the Performance Criteria.

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

### Unit title: Plastering: Complex External Plasterwork and Repairs

Candidates will be required to prepare backgrounds, fix metal trims, applying first coats, straightening wall areas using lime cement sand mortar, form internal and external angles, form cement bands and to produce bull-nose and ashlar finishes. Produce smooth render, dry dash and wet dash finishes. Carry out repairs to dry and wet cast finishes, repairs to bullnose and ashlar finishes and repairs to raised cement bands. Candidates must demonstrate safe handling of tools and materials, an awareness of standards and tolerances and comply with workshop cleaning and maintenance and health and safety/Personal Protective Equipment regulations.

#### Outcome 2

Summary of Standards	
Item	Measurement of standard
Background preparation	Checks for: plumb, suction, flatness, key. Appropriate action is taken to ensure sufficient key and suction is controlled to prevent excessive drying out of the first coat.
Bellcast	Cut to required length $\pm 4$ mm. Securely fixed to background using proprietary fixings. Level $\pm 4$ mm and straight throughout its length.
Expansion bead	Cut to required length $\pm 4$ mm. Securely fixed to background using proprietary fixings. Plumb $\pm 4$ mm and straight throughout its length.
First coat	Flat and free from heavy trowel marks, minimum thickness 6 mm.
Key	Overall surface evenly scratched to provide a strong key no misses. Key depth no more than half the thickness of coating.
Straightening coat	Screeds straight and plumb $\pm 4$ mm. Ruled in straight and flat $\pm 4$ mm.
Surface finish	Floated to a smooth even textured finish and uniform in colour, free from trowel or scour marks.
Ashlar joints	Level, plumb and straight $\pm 3$ mm.
Ashlar finish	Floated to a smooth even textured finish uniform in colour, free from trowel or scour marks.
Bull-nose finish (three coat work)	Uniform build up, fully closed in and brushed to achieve a sand stone texture finish uniform in colour. Free from heavy brush and scour marks.
Bull-nose joints	Level, plumb and straight $\pm 3$ mm.
Wastage	Kept to a minimum.
Work area	Clean at all times.
Health and safety	Complies at all times.

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

**Unit title:** Plastering: Complex External Plasterwork and Repairs

### Outcome 3

<b>Summary of standards</b>	
<b>Item</b>	<b>Measurement of standard</b>
Background preparation cleaned and prepared	Free from obstructions.
Measuring and cutting	Accurately $\pm 4$ mm with no ragged edges.
Fixing	Sheet taut and generally free from sagging with fixings at even centres (100 mm max) and no misses. Wire ties fully secure at centres not exceeding 150 mm.
Setting out/positioning of sheets	Uniform — at right angles to main supports.
Overlap	Minimum 25 mm side, 50 mm end, 75 mm return accurately cut $\pm 8$ mm.
Face of mesh	Uniform in direction outwards and downwards.
First coat	Flat and free from heavy trowel marks, minimum thickness 6 mm.
Key	Overall surface evenly scratched to provide a strong key no misses. Key depth no more than half the thickness of coating.
Straightening coat	Flat and free from heavy trowel marks, minimum thickness 6mm.
Aggregate	Sufficiently bedded to backing materials.
Surface finish	Uniform in texture, colour, generally free from misses ,sags and whip marks.
Wastage	Kept to a minimum.
Work area	Clean at all times.
Health and safety	Complies at all times.

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

**Unit title:** Plastering: Complex External Plasterwork and Repairs

### Outcome 4

<b>Summary of standards(candidates information only)</b>	
<b>Item</b>	<b>Measurement of standard</b>
Background preparation	Checks for: plumb, suction, flatness, key. Appropriate action is taken to ensure sufficient key and suction is controlled to prevent excessive drying out of the first coat.
Bellcast	Cut to required length $\pm 4$ mm. Securely fixed to background using proprietary fixings. Level $\pm 4$ mm and straight throughout its length.
Expansion bead	Cut to required length $\pm 4$ mm. Securely fixed to background using proprietary fixings. Plumb $\pm 4$ mm and straight throughout its length.
First coat	Flat and free from heavy trowel marks, minimum thickness 6 mm.
Key	Overall surface evenly scratched to provide a strong key no misses. Key depth no more than half the thickness of coating.
Raised cement bands	Uniform build up, fully floated to achieve a closed texture finish uniform in colour. Free from heavy and scour marks. Cut to given specification to leave a clean sharp edge.
Band face, ingoes and soffit	Square top, middle and bottom $\pm 3$ mm. Straight ,plumb and level $\pm 3$ mm.
Arrises and angles	Sharp with iminimal damage to arrises.
Straightening coat	Flat and free from heavy trowel marks, minimum thickness 6 mm.
Aggregate	Sufficiently bedded to backing materials.
Surface finish	Uniform in texture, colour, generally free from misses ,sags and whip marks.
Wastage	Kept to a minimum.
Work area	Clean at all times.
Health and safety	Complies at all times.

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

**Unit title:** Plastering: Complex External Plasterwork and Repairs

**Outcome 5**

<b>Summary of standards(candidates information only)</b>	
<b>Item</b>	<b>Measurement of standard</b>
Repair preparation (identification/removal)	The extent of damage to external finish is recognised, marked out and removed with minimum damage to surrounding work.
Background preparation	Mechanical key formed as required. Bonding agent applied per manufacturer's instructions. Edges of damaged area cut back to provide a key for jointing.
Expansion bead	The extent of damage marked out and removed. Insert new section to match existing
Bellcast	The extent of damage marked out and removed. Insert new section to match existing
Material selection	Correct materials chosen to carry out repair. Materials mixed too original ratios.
Backing coat	Applied to ensure full adhesion to background with no overlapping to existing surrounding areas.
Straightening coat	Straight and in line to match existing.
Surface finish	To match existing in texture, colour and aggregate finish. Free from trowel and scour marks. Free from bare areas of aggregate dash.
Surrounding areas	Adequately protected to minimise damage.
Wastage	Kept to a minimum.
Work area	Clean at all times.
Health and safety	Complies at all times.



## National Unit specification: support notes

### Unit title: Plastering: Complex External Plasterwork and Repairs

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 in Plastering at SCQF level 6.

The successful completion of this Unit will provide candidates with the required underpinning knowledge and skills relating to preparing backgrounds, fixing metal trims, applying two and three coats to wall areas using lime cement sand mortar, form internal and external angles, forming raised cement bands and producing a dry and wet dash finish. This Unit is designed to provide candidates with competence in preparing backgrounds, producing and repairing plain faced renders, producing and repairing dry and wet cast finishes, producing and repairing bullnose and ashlar finishes

The knowledge elements of this Unit will cover the following:

- ◆ Background preparation
- ◆ External plastering materials ( sands, cements, waterproofing, plasticisers and pigments)
- ◆ The use of metal trims (stop beads, bellcast beads, angle beads, expansion beads)
- ◆ Applying two coat work and three coat work
- ◆ Forming internal and external angles
- ◆ Forming cement bands
- ◆ Dry dashing
- ◆ Wet dashing
- ◆ Floating in surfaces
- ◆ Repairs to external cement finishes
- ◆ Forming bullnose and ashlar finishes
- ◆ IT at SCQF level 3

The practical section of this Unit will cover the following:

- ◆ Preparing backgrounds (absorption/suction control)
- ◆ Mixing ( sands, cements, waterproofing, plasticisers and pigments)
- ◆ Cutting, fixing, and plumbing/levelling metal trims
- ◆ Applying first coat (thickness/flatness/plumb)
- ◆ Forming a mechanical key (scratching)
- ◆ Applying straightening coats (thickness/flatness/plumb)
- ◆ Forming internal and external angles
- ◆ Forming bellcast
- ◆ Forming cement bands (around openings)
- ◆ Floating in surfaces
- ◆ Dry dashing

## National Unit specification: support notes (cont)

**Unit title:** Plastering: Complex External Plasterwork and Repairs

- ◆ Wet dashing
- ◆ Forming bullnose and ashlar finishes
- ◆ Repairs to external cement finishes
- ◆ Workshop health and safety (general health and safety PPE)
- ◆ Safe handling of tools and materials/COSHH (control of substances hazardous to health)
- ◆ Knowledge of standards/tolerances (training and assessment programme)
- ◆ Complying with workshop cleaning and maintenance
- ◆ Complying with health and safety/PPE regulations

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 should be provided with materials, photographs/visual aids, and student hand-outs in a classroom environment followed by lecturer led discussions on preparing backgrounds, repairing plain faced renders, repairing dry and wet cast finishes, repairing bull nosed ashlar safely and correctly.

The candidate should be introduced to a workshop environment where lecturer led demonstrations of preparing backgrounds, repairing plain faced renders, repairing dry and wet cast finishes, repairing bull nosed ashlar and to be carried out to the correct standards. The candidate should follow demonstrations which should be supported by classroom notes and group discussions and by the use of information and communications technology (ICT). Candidates may work in pairs to carry out the practical elements of this Unit.

Where appropriate, 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 Productive Working Practices*
- ◆ *Conform to General Workplace Health, Safety and Welfare*
- ◆ *Move, Handle and Store Resources*
- ◆ *Confirm Work Activities and Resources for the Work*
- ◆ *Develop and Maintain Good Working Relationships*
- ◆ *Confirm the Occupational Method of Work*

## National Unit specification: support notes (cont)

**Unit title:** Plastering: Complex External Plasterwork and Repairs

### Guidance on approaches to assessment for this Unit

Detailed assessment material for this Unit will be found in section 9 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.

The candidate's knowledge and understanding of terminology, techniques and construction practices and components related to external repairs will be assessed through a question paper.

Candidates will work in pairs. Evidence will be gathered for Outcomes 2, 3,4 and 5 through observation of work processes and assessment of the completed work pieces to ensure that the candidates have met the given standards and tolerances during the practical assessment. An assessor observation checklist should be used to record this evidence.

### 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 social software. 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)*.

### Opportunities for developing Core Skills

The Core Skill of *Problem Solving* at SCQF level 4 could be developed as candidates undertake this Unit. 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.

There are opportunities for candidates to develop the Core Skill of *Working with Others* at SCQF level 4, as this practical assessment may be carried out working in pairs. Candidates 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.

*Numeracy* at SCQF level 4 could be developed through measuring and costing exercises.

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 tasks, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

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

**Unit title:** Plastering: Complex External Plasterwork and Repairs

### **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)

## History of changes to Unit

Version	Description of change	Date

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