



National Unit Specification: general information

UNIT Surface Finishing to Masonry Walling (SCQF level 6)

CODE F2G2 12

SUMMARY

This Unit is suitable for candidates with limited experience in the construction and heritage industries and who wish to determine defectives in original materials and repair, and to repair defective background conditions to a suitable standard before applying surface finishes to walls. It also benefits candidates who wish to gain knowledge and understanding of masonry surface finishing.

The Unit would be beneficial for candidates who wish to work in the industrial field of conservation masonry.

OUTCOMES

- 1 Remove defective materials and build in required pieces of missing masonry.
- 2 Prepare background to take surface finishes.
- 3 Apply surface finishes mechanically and by hand.
- 4 Apply Lime wash and mineral paints to rendered finish of masonry wall.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at Higher (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.*

Administrative Information

Superclass: TG

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National Unit Specification: general information (cont)

UNIT Surface Finishing to Masonry Walling (SQCF level 6)

CORE SKILLS

There are opportunities to develop aspects of the Core Skill of Problem Solving in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

National Unit Specification: statement of standards

UNIT Surface Finishing to Masonry Walling (SQCF 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 the Scottish Qualifications Authority.

OUTCOME 1

Remove defective materials from masonry walling and build in missing masonry.

Performance Criteria

- (a) Appraise surfaces and finishes to identify the nature of the original historic fabric.
- (b) Identify the extent and method of removal of defective materials that will have minimum impact on the existing masonry walling.
- (c) Remove defective historic and modern materials without damaging surrounding masonry.
- (d) Source, prepare and build in replacements for missing pieces of masonry.
- (e) Build in pinnings, using appropriate materials.
- (f) Select, use, clean and store appropriately all tools used in the task.
- (g) Work in accordance with current health and safety legislation throughout.

OUTCOME 2

Prepare background of masonry walling to take surface finishes.

Performance Criteria

- (a) Identify an appropriate mortar type for background pointing repairs.
- (b) Flush and fully flush the background correctly using pinnings to flatten irregularities to receive applied finishes.
- (c) Apply finishing using appropriate techniques.
- (d) Protect and cure the finished coating appropriately.
- (e) Select, use, clean and store appropriately all tools used in the task.
- (f) Work in accordance with current health and safety legislation throughout.

OUTCOME 3

Apply surface finishes to the masonry walling.

Performance Criteria

- (a) Prepare backgrounds correctly to accept applied finishes.
- (b) Consolidate edges and prepare extant materials correctly.
- (c) Mix mortar consistent to a standard that is repeatable in accuracy of strength, colour and texture.
- (d) Apply multiple layers by hand and mechanical means to an even and consistent thickness.
- (e) Select, use, clean and store appropriately all tools used in the task.
- (f) Work in accordance with current health and safety legislation throughout.

National Unit Specification: statement of standards (cont)

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OUTCOME 4

Apply lime wash and mineral paints to rendered finish of masonry wall.

Performance Criteria

- (a) Apply decorative finishes to the finished coating correctly.
- (b) Apply lime wash and mineral paints correctly to the surface finishes.
- (c) Select, use, clean and store appropriately all tools used in the task.
- (d) Work in accordance with current health and safety legislation throughout.

EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required to demonstrate that the candidates have achieved all Outcomes and Performance Criteria.

Product evidence and performance evidence supported by an assessor observation checklist is required to show that the candidate has achieved the Unit to the standard specified in all Outcomes and Performance Criteria.

The evidence should be produced under controlled supervised conditions at appropriate points through out the Unit once candidates have had the opportunity to develop their knowledge and skills. Candidates will be given a clear brief and set practical exercises in real or simulated work place environments. The practical exercises will allow them to achieve all Performance Criteria and Outcomes.

The performance evidence must show that the candidate can:

- ◆ determine background characteristics and develop a repair strategy taking account of materials proposed and influences on success
- ◆ explain the condition of extant surface finishes and can work individually and in teams to remove extant historical and inappropriate repair materials with minimal associated damage to historic fabric on an area of 2 metres square
- ◆ source, prepare and build one replacement stone of 450 mm x 300mm
- ◆ source minimum of 3 number of salvaged pinnings and build in to stone walling in a vernacular context
- ◆ prepare stonework and mortar joints to receive applied surface finishes on whole area
- ◆ produce, with a high degree of accuracy, consistent mortars for applied surface finishing of walls to ensure accuracy of performance specifications, colour, texture and consistency of finished work
- ◆ conserve and consolidate edge details of extant materials, and prepare them for receiving applied surface finishes
- ◆ apply single or multiple coats of materials at a consistent and accurate thickness across a large surface area by hand and mechanical means on whole area
- ◆ apply finished coats to a consistent textural finish and where required work the surface with a variety of tools to provide flat, scraped, lined out or fine flat finishing either as final finished work or ready to accept lime wash or mineral paints

National Unit Specification: statement of standards (cont)

UNIT Surface Finishing to Masonry Walling (SQCF level 6)

- ◆ apply lime wash and mineral paints to whole area of surface finish
- ◆ complete all practical exercise to the standard specified in the Performance Criteria for each Outcome

The product evidence will be the candidates repair and surfaced masonry walling. Where it is impractical to store and keep the work of each candidates photographic evidence or video evidence will be acceptable.

National Unit Specification: support notes

UNIT Surface Finishing to Masonry Walling (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 National Progression Award in Conservation of Masonry at SCQF level 6 and can also be delivered as a freestanding Unit.

Candidates successfully completing this Unit will possess the knowledge and understanding to be competent in the conservation, consolidation and repair and application of surface finishing to walls, including any background preparation and repair of masonry Units and components.

Candidates successfully completing this Unit will be given underpinning knowledge relating to practical applications and use of tools and equipment for careful removal of defective extant materials or repair materials; removal of defective and inappropriate joints; cutting and fitting replacement masonry and pinnings; and applying surface finishes by hand and mechanical means.

The Unit is appropriate to candidates from the construction and related service industries and trades. The skills are transferable within different working environments but the Unit is aimed at candidates whose normal place of work would be a site, a conservation project or a similar working environment.

The Unit is applicable to all areas of construction or other related industries but specifically includes the safe working practices associated with working with lime based mortars.

The Unit deals specifically with the application of surface finishing to walls, including any background preparation and repair of masonry Units and components where appropriate. Where this Unit is being taken as part of the National Progression Award in Conservation of Masonry SCQF level 6 that it is delivered after candidates have completed the following Units before undertaking this Unit:

XXXX XX	<i>Principles of conservation in the Built Heritage (SCQF level 6)</i>
XXXX XX	<i>Working with Traditional Mortars (SCQF level 6)</i>
XXXX XX	<i>Masonry Materials and Performance (SCQF level 6)</i>

This Unit may be assessed on a live project or alternatively on a simulation module incorporating a stone built structure.

All working practices must be in accordance with current and relevant health and safety legislation and regulations and the following acts in their most current form are relevant.

- ◆ Health & Safety at Work Act 1974
- ◆ The Personal Protective Equipment at Work Regulations 1992 (as amended)
- ◆ Provision and Use of Work Equipment Regulations 1998 (as amended)
- ◆ The Construction (Design & Management) Regulations 2007
- ◆ The Control of Substances Hazardous to Health 2002 (as amended)

National Unit Specification: support notes (cont)

UNIT Surface Finishing to Masonry Walling (SCQF level 6)

- ◆ The Lifting Operations and Lifting Equipment Regulations 1998(as amended)
- ◆ The Work at Height Regulations 2005
- ◆ The Management of Health and Safety at Work Regulations 1999 (as amended)
- ◆ The Manual Handling Operations Regulations 1992 (as amended)

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The achievement of skills and underpinning knowledge required for this Unit will be assisted by the provision of information sources in the form of: oral and/or written instructions; graphic and photographic materials; technical information and examples from manufacturers of limes, sands and pre-mixed mortars; codes of practice; building standards; statutory regulations; hands-on examination of sound and decayed lime-based finishes; hands-on exercises in removing and reinstating lime coatings; hands on exercises on surface finishings.

Teachers/Assessors should demonstrate practical elements step-by-step until the candidate feels competent enough to attempt them under assessment conditions. The requirement to adopt safe working practices and comply with safety legislation must be emphasised throughout.

It is recommended that this Unit be delivered in order of Outcomes as the order stated in the statement of standards is the logical order of the task of replacing materials, applying surface finishing's and appreciate results of material analysis as a tool.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

Aspects of the Core Skill of Problem Solving, that is, critical thinking, planning and organising, and reviewing and evaluating, could be effectively developed and enhanced in the Unit, which requires an application of theoretical knowledge to practical repair and finishing work. Identifying and examining the relevance of all factors at various stages of the process will be essential to successful achievement. Initially candidates will have to inspect masonry to determine the extent of defective background conditions. Analysing resource requirements and selecting appropriate surface finishes to complete repairs will involve a high level of critical thinking. Compliance with current regulations and codes of practice will underpin safe working practice as surface finishes are applied mechanically and manually using appropriate techniques. Formative group discussion of issues affecting the procedures involved in the preparation and application of masonry surface finishings will be useful to develop decision making although candidates should independently identify and determine best practice in solving problems. Discussions with the assessor could support and reinforce analytical evaluation of approaches and techniques used and offer opportunities to suggest possible improvements.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

It is recommended that Candidates be assessed on an Outcome by Outcome basis as this reflects how the work would progress in real working environment. How ever centres may chose to assess a combination of Outcomes on a single assessment occasion.

National Unit Specification: support notes (cont)

UNIT Surface Finishing to Masonry Walling (SCQF level 6)

In this Unit an appropriate instrument of assessment would be a series of practicable assignments which the candidates complete in a real or simulated workplace environment. The practical assignment should require candidates to remove defective material, prepare background, apply surface finishes and apply lime wash and mineral paints. In order to allow candidates to achieve all Outcomes and performance criteria candidates should be given a clear brief detailing the nature of the exercises involved.

Centre should retain observation check lists and product evidence in the form of either candidates completed work evidence, photographic or video evidence.

CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).