



National unit specification

General information

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Unit code: H0HH 12

Superclass: TG

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Version: 02

Unit purpose

This unit is suitable for learners working towards a Modern Apprenticeship in Painting and Decorating and will develop the learner's craft skills in applying coatings to cementitious surfaces. This unit is designed to provide learners with competence in the use of tools and equipment to caulk, tape and repair plasterboard joints by hand method or machine application, Apply Coving, prepare cementitious masonry surfaces and apply fungicidal solutions sealers, primers and finishing coats to cementitious surfaces and the ability to apply these skills in the workplace. Learner will become familiar with defects, physical and chemical properties of cementitious surfaces. This unit will enable learners to develop their understanding and use of painting and decorating terminology, equipment, techniques and practices to apply surface coatings.

Outcomes

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

- 1 Demonstrate knowledge and understanding of applying surface coatings to cementitious surfaces.
- 2 Identify, repair/rectify defects on cementitious surfaces including small hole plasterboard repairs.
- 3 Prepare, caulk and tape plasterboard joints using fibre and paper tapes.
- 4 Apply metal Tapes and Angle beads to external corners, Fibre and paper tapes to internal corners.
- 5 Prepare cementitious surfaces and apply coating system as per manufacturer's specifications/guidelines.
- 6 Cut, fit and apply coving, Mitre internal and external Joints in preparation to receive new coating systems.

National unit specification: General information (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Credit points and level

1.5 National unit credits at SCQF level 6: (9 SCQF credit points at SCQF level 6)

Recommended entry to the unit

Entry to this unit is at the discretion of the centre.

Core Skills

Achievement of this unit gives automatic certification of the following:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 5

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.

The Training and Assessment Programme (TAP) for this unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessment should refer to the TAP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (<http://www.sqa.org.uk/sqa/46233.2769.html>).

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.

National unit specification: Statement of standards

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (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 applying surface coatings to cementitious surfaces.

Performance Criteria

- (a) Select correctly terminology and equipment to applying coatings.
- (b) Select correct preparation and application techniques.
- (c) Identify and select correct construction practices.
- (d) Identify a variety of surface types correctly.
- (e) Describe the chemical properties of a variety of surface types.

Outcome 2

Identify, repair/rectify defects on cementitious surfaces including small hole plasterboard repairs.

Performance Criteria

- (a) Identify defects on cementitious surfaces.
- (b) Select appropriate tools, materials and methods to repair/rectify defects on Cementitious surfaces
- (c) Repair/rectify defects on cementitious surfaces.
- (d) Repair small holes in plasterboard surfaces using appropriate current up to date techniques.

Outcome 3

Prepare, caulk and tape plasterboard joints using fibre and paper tapes.

Performance Criteria

- (a) Select appropriate tools and materials.
- (b) Mix joint filler and finishing material to correct consistency.
- (c) Apply fibre and paper tapes (minimum 4.8 m each), joint filler and joint cement to plasterboard.

National unit specification: Statement of standards (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Outcome 4

Apply metal Tapes and Angle beads to external corners, Fibre and paper tapes to internal corners.

Performance Criteria

- (a) Select appropriate tools and materials.
- (b) Mix joint filler and finishing material to correct consistency.
- (c) Apply metal Tapes and Angle beads to external corners (minimum 1 m each) as per manufacturer's specification.
- (d) Apply fibre and paper tapes to internal corners (minimum 2 m each) as per manufacturer's specification.
- (e) Prepare surface to receive new coating systems.

Outcome 5

Prepare cementitious surfaces and apply coating system as per manufacturer's specifications/guidelines.

Performance Criteria

- (a) Select appropriate tools and equipment.
- (b) Select surface coating systems as appropriate.
- (c) Prepare surface coatings in accordance with the manufacturers guidelines.
- (d) Apply surface coating systems in accordance with manufacturers' specifications.

Outcome 6

Cut, fit and apply coving, Mitre internal and external Joints in preparation to receive new coating systems.

Performance Criteria

- (a) Select appropriate tools and equipment, prepare surface as required.
- (b) Select appropriate application materials in accordance with manufacturer's specifications.
- (c) Measure, cut and mitre coving using tape, mitre box and saw (minimum 2 internal and external Joints).
- (d) Apply coving to designated area (minimum 2 metres).
- (e) Prepare coving to receive new coating systems.

National unit specification: Statement of standards (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

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 Painting and Decorating 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, equipment, techniques and practices. They will also be required to identify different surface types and their chemical properties. 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, 5 and 6 to the standards specified in the Performance Criteria. Learners will be required to identify surface defects and rectify them, prepare the surface area and apply coatings. Assessment of these Outcomes will be evidenced through observation of work processes photographic evidence and assessment of the completed work. Learners must meet the given standards and tolerances during the practical assessments. An assessor observation checklist must be used to record this evidence. Assessment should be conducted under controlled, supervised conditions. Learners can work in pairs during the practical assessments.

National unit specification: Statement of standards (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Outcome 2

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Select all tools, equipment and material required to apply tapes to plasterboard joints	
Mix joint filler for 'bedding tapes' to suitable consistency	<ul style="list-style-type: none"> ◆ Caulking material mixed to correct consistency
Prepare new plasterboard surface for Taping	<ul style="list-style-type: none"> ◆ Repair small holes ◆ All Nail heads filled ◆ Suitable tapes selected for joints ◆ Joint tape prepared ◆ Open joint pre-filled ◆ Apply material to joint area ◆ Fix fibre and paper tapes to joints neatly and correctly ◆ Fix fibre and paper tapes to internal corners neatly and correctly ◆ Fix metal tapes and angle beads to external corners neatly and correctly ◆ Tapes firmly bedded with no evidence of bubbling or lifting
Mix joint finish material	<ul style="list-style-type: none"> ◆ Material mixed to correct consistency ◆ Material applied to complete joint area using correct tool/s ◆ Material smoothed out to required finish ◆ All tools washed clean after use

National unit specification: Statement of standards (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Outcomes 2, 3 and 4

Summary of standards (working towards industrial tolerances)	
Item	Measurement of standard
Prepare a cementitious masonry surface (by hand method)	
Select all Tools, Equipment and Materials required to prepare surface area	<ul style="list-style-type: none"> ◆ All tools correctly selected
Prepare surface area by Abrading, Scraping and Wire Brushing to remove all traces of Mould, Algae and any Friable materials	<ul style="list-style-type: none"> ◆ Surface area prepared using various methods to remove all contaminations
Apply Fungicidal Wash to appropriate area after preparation	<ul style="list-style-type: none"> ◆ Select correct tools for application ◆ Fungicidal wash applied correctly
Prepare a cementitious masonry surface (by power wash)	
Select correct Equipment required to prepare surface area	<ul style="list-style-type: none"> ◆ Correct equipment selected
Check Appliance, hoses and any tool attachments for defects prior to use	<ul style="list-style-type: none"> ◆ Appliance, hoses and attachments correctly checked for defects ◆ Any defects identified and reported
Set up appliance ready for use	<ul style="list-style-type: none"> ◆ Appliance set up correctly
Operate appliance correctly to clean and remove surface defects	<ul style="list-style-type: none"> ◆ Appliance operated correctly to remove defects ◆ Finished surface free from any damage ◆ All equipment dismantled and stored correctly after completion

National unit specification: Statement of standards (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Outcome 5

Summary of standards (working towards industrial tolerances) (cont)	
Item	Measurement of standard
Using a suitable surface area complete the following by applying masonry sealer coat (by brush and roller)	
Select correct brush and roller required to apply Masonry Sealer	<ul style="list-style-type: none"> ◆ Correct brush and roller selected for application of sealer
Prepare material for use	<ul style="list-style-type: none"> ◆ Open, Stir and Decant material (thin if required)
Apply Masonry Sealer to suitable surface area	<ul style="list-style-type: none"> ◆ Even coating obtained ◆ Good cutting in technique ◆ Good laying off technique ◆ Good sequence of work adopted ◆ Excessive bits and nibs avoided ◆ Fat edges/Wet edge build up avoided ◆ Surrounding area free from damage
Using a suitable surface area complete the following by applying masonry coating (by brush and roller) — two coats	
Select correct brush and roller required to apply Masonry Coating	<ul style="list-style-type: none"> ◆ Correct brush and roller selected for application of sealer
Prepare material for use	<ul style="list-style-type: none"> ◆ Open, Stir and Decant material (thin if required)
Apply Masonry Coating to suitable surface area	<ul style="list-style-type: none"> ◆ Even coating obtained ◆ Good cutting in technique ◆ Good laying off technique ◆ Good sequence of work adopted ◆ Excessive bits and nibs avoided ◆ Fat edges/Wet edge build up avoided ◆ Surrounding area free from damage

National unit specification: Statement of standards (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Outcome 6

Summary of standards (working towards industrial tolerances) (cont)	
Item	Measurement of standard
Using a suitable surface area complete the following preparation and application of plasterboard coving	
Select correct tools, materials and equipment required to apply Plasterboard Coving	<ul style="list-style-type: none"> ◆ Correct tools, materials and equipment selected for application of plasterboard coving
Prepare material for use	<ul style="list-style-type: none"> ◆ Material Measured and cut to required size ◆ Application material mixed to required consistency
Apply coving to selected area	<ul style="list-style-type: none"> ◆ Coving fixed securely ◆ Internal/external corners suitably mitred ◆ Prepared to take paint system ◆ Coving free from damage
Health and safety	<ul style="list-style-type: none"> ◆ Complies at all times
Risk assessment	<ul style="list-style-type: none"> ◆ Wear safety boots at all times ◆ Hard hat worn as required ◆ High visibility vest worn as required ◆ All other PPE as per risk assessment
Method statement	<ul style="list-style-type: none"> ◆ 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

Learners must adhere to relevant Health and Safety and Environmental regulations and legislation relating both to working practices within the construction environment, as well as those specific to any practical task they are requested to carry out (such as emphasising the importance of selecting and using the correct PPE at all times, keeping waste to a minimum at all times, recycling and disposal of waste).



National unit Support Notes

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (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 10 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 Painting and Decorating at SCQF level 6.

The successful completion of this unit will provide learners with the underpinning knowledge and skills relating to the preparation and coating of cementitious surfaces. Learners will be required to demonstrate their knowledge of terminology relating to the chemical properties of cementitious surfaces which should include — acidity, alkaline, inertness, soluble salts and efflorescence. Learners should also be able to identify the following surface defects — settlement cracks, efflorescence, moss and lichen, nail-heads, defective pointing, saponification, spalling, open joints and to establish the correct way to rectify each defect.

Evidence will be required to demonstrate that the learner is aware of the preparation processes required for loose friable surfaces, unpainted brickwork, new plasterboard and new plaster. In addition to this the learner will also require to identify the following materials — stabilising solution, fungicidal solution, degreasing agents, primers, two pack fillers, and plaster/cellulose based fillers.

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 regulation. These practices will be further reinforced by the completion of risk assessments and method statements carried out during the practical test. Sustainability should include reference to the criteria affecting sustainability, the impact of not implementing sustainability on the environment and the legislation promoting sustainability.

National unit Support Notes (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Guidance on approaches to delivery of this unit

Learners should be given the opportunity to develop the skill of taping and filling new plasterboard surfaces, applying coving, patching small plasterboard holes as well as preparing and coating both new and previously coated cementitious surfaces. Emphasis should be placed on the need for all tapes and beads to be firmly bedded and all edges being feathered as much as possible to reduce the amount of abrading being required. It is at the centre's discretion whether learners use hand method or machine application for taping and filling activities. Whichever method is used, the alternative should be studied or observed in a theory setting to provide an appreciation of the processes and skills involved.

Learners should be supplied with a new plasterboard surface which incorporates a flat, external and internal joint which should be taped and filled as specified earlier. They should also be supplied with cementitious surfaces to prepare by applying fungicidal wash as well as both hand and mechanical (pressure washer) methods. The suitably prepared surfaces should then be coated with a masonry sealer followed by two coats of masonry paint.

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

Guidance on approaches to assessment of this unit

Detailed assessment material for this unit will be found in the Painting and Decorating Training and Assessment Programme (TAP). Centres may use instruments of assessment which they consider to be most appropriate but are advised to use the Painting and Decorating 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 the chemical properties of cementitious surfaces, their common surface defects, as well as the surface preparation and materials named in the Evidence Requirements for this unit, will be assessed through a question paper.

Learners should be given as much practice as possible in preparing taping and filling new plasterboard, applying coving, patching small plasterboard holes, as well as the preparation by hand and power washer and coating of the prepared surfaces prior to assessment. Evidence will be gathered for Outcomes 2, 3, 4, 5 and 6 through observation that the learners have met the given standards and tolerances during the practical assessment. An assessor observation checklist can be used to record this evidence.

National unit Support Notes (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

Opportunities for e-assessment

E-assessment may be appropriate for some assessment 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.

Opportunities for developing Core and other essential skills

The Core Skill of *Problem Solving* 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.

Opportunities also arise for learners to develop the Core Skill of *Information and Communication Technology (ICT)* at SCQF level 3 by researching Health and Safety legislation affecting their area of work.

There could 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. As learners complete practical tasks, they should be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

There could be opportunities for learners to develop the Core Skill of *Working with Others* at SCQF level 4, particularly in Outcomes 2, 3, 4, 5 and 6 where the students should be encouraged to work in pairs.

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 5.

History of changes to unit

Version	Description of change	Date
02	Updated to include Machine Application as an option.	13/12/16

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General information for learners

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (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 will enable you to select suitable tools, equipment and prepare cementitious surfaces ready for you to then apply various coatings to them. It will also enable you to cut, fit and apply coving.

You will learn how to apply caulk, metal tapes, angle beads, fibre and paper tapes and prepare surfaces prior to applying coating.

You will develop knowledge and understanding of work methods and terminology used in painting and decorating. This unit may provide further progression in the Construction Craft industry.

You will also be provided with the knowledge to allow you to appreciate the reasons for carrying out the practical work in the manner directed and the reasons for using specific tools, materials, components and equipment.

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 tasks 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 Painting and Decorating which in turn will further develop your skills and knowledge.

During practical activities you must comply with all aspects of Health and Safety. This includes wearing appropriate personal protective equipment (PPE) and compiling risk assessment and method statements for each practical assessment. This will be assessed on an on-going basis for performance evidence.

Health and Safety is an extremely important part of this programme. Achievement of a unit will not be awarded where practical assessment are not carried out in a safe manner — even if the other standards have been met.

In order to successfully complete the programme, you must learn to think, work and behave in a safe manner, and be aware of the safety of others.

The Core Skill of *Problem Solving* could be developed as you undertake this unit. You 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.

General information for learners (cont)

Unit title: Painting and Decorating: Applying Coatings to Cementitious Surfaces (SCQF level 6)

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.

There could 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 for the knowledge part of the assessment. As you complete practical tasks, you will be expected to communicate with others using the correct terminology, tone and style suited to the workplace.

There could be opportunities to develop the Core Skill of *Working with Others* at SCQF level 4, particularly in Outcomes 2, 3, 4, 5 and 6 where you will be encouraged to work in pairs.

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 5.