



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

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

**Unit code:** H0HK 12

**Superclass:** TG

**Publication date:** February 2012

**Source:** Scottish Qualifications Authority

**Version:** 01

## **Summary**

This Unit is suitable for candidates working towards a Modern Apprenticeship in Painting and Decorating and will develop the candidate's craft skills in the preparation and coating of timber surfaces. This Unit is designed to provide candidates with competence in the use of tools and equipment to recognise and remedy surface and manufacturing defects, removing existing surface coatings, prepare surfaces and select appropriate protective and decorative coating systems and the ability to apply these skills in the workplace. This Unit will enable candidates to develop their understanding and use of painting and decorating terminology, equipment, techniques and practices to apply surface coatings.

## **Outcomes**

- 1 Demonstrate knowledge and understanding of terminology, equipment, techniques and practices used in applying surface coatings.
- 2 Identify and rectify defects in new timber coated surfaces.
- 3 Select and prepare surface coating systems materials for use.
- 4 Prepare surfaces and apply materials.

## **Recommended entry**

While entry is at the discretion of the centre, candidates undertaking the Professional Development Award in Painting and Decorating at SCQF level 6 must meet the requirements of the Modern Apprentices which includes being employed in the relevant craft industry.

## General information (cont)

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

### Credit points and level

2 National Unit credits at SCQF level 6: (12 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

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill                      None

Core Skill component                      Critical Thinking @ SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit Specification.

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

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

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, equipment, techniques and practices used in applying surface coatings.

#### **Performance Criteria**

- (a) Identify and select terminology and equipment used to applying coatings.
- (b) Identify and select preparation and application techniques correctly.
- (c) Identify and select construction practices correctly.

### **Outcome 2**

Identify and rectify defects in new timber coated surfaces.

#### **Performance Criteria**

- (a) Select tools and materials appropriate to the given task.
- (b) Identify and rectify timber and joinery manufacturing defects.
- (c) Identify and remove defective coatings.
- (d) Clean and prepare bare joinery for priming.
- (e) Comply with current health and safety legislation during all work methods and activities.

### **Outcome 3**

Select and prepare surface coating system materials for use.

#### **Performance Criteria**

- (a) Select surface coating systems appropriate for the given task.
- (b) Prepare surface coatings in accordance with the manufacturers' instructions.
- (c) Comply with current health and safety legislation during all work methods and activities.

### **Outcome 4**

Prepare surfaces and apply materials.

#### **Performance Criteria**

- (a) Select appropriate process of preparation.
- (b) Select tools and equipment appropriate to the given task.
- (c) Apply surface coating systems in accordance with manufacturers' specifications.
- (d) Comply with current health and safety legislation during all work methods and activities.

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

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

### Evidence Requirements for this Unit

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 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 terminology, advantages and disadvantages of methods for removing surface coatings. Identification of appropriate surface coatings, as well as identify suitable types of personal protective equipment.

Product and Performance Evidence is required to demonstrate that the candidate has achieved the practical requirements of the Unit to the standard specified in the Outcomes and Performance Criteria each candidate should be observed to show that they can achieve the following throughout the delivery of the Unit:

- ◆ Prepare a previously painted timber door.
- ◆ Remove paint coatings from timber panel (including mouldings) by electric hot air (EHA) method.
- ◆ Apply solvent-borne, water and spirit stains.
- ◆ Prepare new timber door and apply a moisture vapour permeable (MVP) paint system (oil based) to one half of door and solvent-borne varnish to the other.
- ◆ Prepare new timber door to receive solvent-borne, water-borne and spirit-borne stains to new timber. Carry out a risk assessment and prepare a method statement that covers all the activities.
- ◆ Prepare and apply a solvent based paint system to a timber door. Carry out a risk assessment and prepare a method statement that covers all the activities.

Practical assessment can be carried out working in pairs.

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

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

<b>Summary of standards (working towards industrial tolerances)</b>	
<b>Item</b>	<b>Measurement of standard</b>
<b>Abrade previously painted door (wet and dry), make good defects and leave an acceptable standard of finish to receive new coating</b>	
Select correct type and grade of abrasive	Correct grade of abrasive selected
Abrade surface	Surface abraded to suitable standard to receive new coating
Wash and rinse surface clean after abrading	Surface cleaned correctly with no trace of any residue on surface
Select correct tools and materials for making good any defects	Correct tools and filling/stopping materials selected
Apply fillers and stoppers to surface defects	Appropriate surface filler/stopper selected for surface type
<b>Burn off mouldings, panels, cross rails and stiles using electric heat gun</b>	
Select correct tools and equipment to remove paint coating from door surface	Tools and equipment correctly selected
Remove paint coating from stated area of door	Electric heat gun checked for defects Setting up procedures correct Correct work sequence adopted EHG handled and used in safe manner Adjacent surface/s protected from heat before and during 'burning off' operations Timber surface free from damage on completion of 'burning off' Area safety checked on completion of 'burning off' All debris removed and disposed of in a safe manner

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

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

Item	Measurement of standard
<b>Apply solvent-borne, water and spirit stains</b>	
Select correct tools materials and equipment to apply solvent-borne, water-borne and spirit-borne stains	Tools and equipment correctly selected
Abrade and make good surfaces prior to the application of each stain	Timber surface prepared to suitable standard
Apply each of the listed stains	Stains applied evenly with no evidence of 'setting edges' Timber surface filled using correct filler No evidence of staining of timber from applied fillers
<b>Select and prepare tools required to apply MVP paint coating and solvent-borne varnish</b>	
Select and prepare tools and materials prior to application	Correct brush(es) selected Correct material selected for application Material prepared following manufacturers instructions Material strained and thinned if required
Abrade and make good surface area	Correct grade of abrasive selected Correct equipment selected to aid abrading No trace of any bits/nibs after completion of 'rubbing down' Any trace of dust/debris removed from surface area
Apply fillers and stoppers to recognised defects on door surface	Correct filler/stopper type selected Surface defects filled correctly No evidence of over/under filling Abrade filler smooth Remove all dust/debris from abrading, prior to repainting
Apply solvent-borne varnish and MVP paint coating	Correct coatings selected for application Materials applied evenly to surface Good laying off technique adopted No trace of brush marks over completed surface Appropriate sequence of work followed Allow over the whole surface a maximum of two runs, tears or curtains not more than 5 mm in depth and 25 mm in width Fat edge/wet edge build up not to exceed 100 mm Bits and nibs not excessive Surrounding areas free from damage

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

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

Item	Measurement of standard
<b>Select and prepare tools required to apply solvent-borne, water and spirit stains</b>	
Select and prepare tools and materials prior to application	Correct brush/es select Correct material selected for application Material prepared following manufacturers instructions Material strained and thinned if required
Abrade and make good surfaces prior to the application of each stain	Correct grade of abrasive selected Correct equipment selected to aid abrading No trace of any bits/nibs after completion of 'rubbing down'
Apply fillers and stoppers to recognised defects on door surface	Correct filler/stopper type selected Surface defects filled correctly No evidence of over/ under filling Abrade filler smooth Remove all dust/debris from abrading, prior to repainting
Apply each of the listed stains	Stains applied evenly with no evidence of 'setting edges' Timber surface filled using correct filler No evidence of staining of timber from applied fillers
<b>Abrade previously painted door (wet and dry), make good any defects and leave an acceptable standard of finish to receive new coating.</b>	
Apply Solvent — borne 3ct Paint System	Correct coatings selected for application Materials applied evenly to surface Good laying off technique adopted No trace of brush marks over completed surface Appropriate sequence of work followed Allow over the whole surface a maximum of two runs, tears or curtains not more than 5 mm in depth and 25 mm in width Fat edge/wet edge build up not to exceed 100 mm Bits and nibs not excessive Surrounding areas free from damage

## **National Unit specification: support notes**

### **Unit title:**     Painting and Decorating: Applying Coatings to Timber Surfaces

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 Painting and Decorating at SCQF level 6.

The successful completion of this Unit will provide candidates with the underpinning knowledge and skills relating to the preparation and coating of timber surfaces and specific knowledge and skills in the removal of surface coatings and the re-application of suitable coating systems.

Candidates should be able to identify various, types of fillers and stoppers, coating systems and use these fillers, stoppers and coating systems on both new and previously painted suitably prepared timber surfaces.

Candidates should be able to remove coatings from previously painted timber surfaces by solvent paint remover and electric hot air gun method. On completion of satisfactory removal of the coatings the candidate should then select and apply a suitable coating system.

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. Sustainability should include reference to the criteria affecting sustainability, the impact of not implementing sustainability on the environment and the legislation promoting sustainability.

### **Guidance on learning and teaching approaches for this Unit**

Candidates should be given the opportunity to develop the skill of removing surface coatings by the methods named previously. Emphasis should be placed on the need for all surface coatings to be completely removed with minimal damage to the timber surface.

Candidates should be supplied with a previously painted door measuring 1200 mm x 500 mm containing at least two panels and mouldings to carry out the removal of surface coatings by electric hot air. As well as this candidates will also require three timber panels measuring at least 500 mm x 500 mm to be brought forward to finish with oil, water and spirit stains. Two untreated doors measuring 1200 mm x 500 mm should also be supplied to allow the candidate to apply a water-borne paint system to door one and an MVP paint system to one side and an oil based varnish system to the reverse side of door two.



## National Unit specification: support notes (cont)

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

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 for this Unit

Detailed assessment material for this Unit will be found in Section 4 of 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 candidate's knowledge and understanding of paint coating systems, methods of removal, setting up of equipment as well as PPE requirements will be assessed through a question paper.

Candidates should be given as much practice as possible in the removal of surface coatings and application of timber coating systems prior to being set the assessment. Evidence will be gathered through observation that the candidates have met the given standards and tolerances during the practical assessment. An assessor observation checklist can 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* 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.

## National Unit specification: support notes (cont)

**Unit title:** Painting and Decorating: Applying Coatings to Timber Surfaces

Opportunities also arise for candidates 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 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. As candidates 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 candidates to develop the Core Skill of *Working with Others* at SCQF level 4, particularly in Outcomes 3 and 4, as the assessment may be carried out in pairs.

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 5.

### **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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