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## Overview

This standard is about

- 1 interpreting information
- 2 adopting safe and healthy working practices
- 3 selecting and preparing materials and associated equipment
- 4 providing protection to the work area
- 5 assembling and setting up the high volume low pressure (HVLP) air spray systems
- 6 applying coatings with air spray equipment
- 7 cleaning out and maintaining the air spray equipment

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## Apply coatings by the air spray method

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### Performance criteria

- You must be able to:*
- P1 interpret the given information relating to the work and resources to confirm its relevance
  - P2 comply with the given, relevant legislation and official guidance to carry out your work and maintain safe and healthy work practices
  - P3 select the required quantity and quality of resources for the methods of work
  - P4 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
  - P5 comply with the given contract information to carry out the work efficiently to the required specification
  - P6 complete the work within the allocated time, in accordance with the programme of work

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### Knowledge and understanding

*You need to know and understand:*

#### Performance Criteria 1

##### Interpretation of information

- K1 the organisational procedures developed to report and rectify inappropriate **information** and unsuitable **resources**, and how they are implemented
- K2 the types of **information**, their source and how they are interpreted
- K3 the organisational procedures to solve **problems** with the **information** and why it is important they are followed

#### Performance Criteria 2

##### Safe work practices

*You need to know and understand:*

- K4 the level of understanding operatives must have of **information** for relevant, current **legislation and official guidance** and how it is applied
- K5 how **emergencies** should be responded to and who should respond
- K6 the organisational **security procedures** for tools, equipment and personal belongings
- K7 what the accident reporting procedures are and who is responsible for making the report
- K8 why, when and how **health and safety control equipment** should be used

#### Performance Criteria 3

##### Selection of resources

*You need to know and understand:*

- K9 the characteristics, quality, uses, sustainability, limitations and defects associated with the **resources** and how defects should be rectified
- K10 how the **resources** should be used and how any **problems** associated with the **resources** are reported
- K11 the organisational procedures to select **resources**, why they have been developed and how they are used
- K12 the **hazards** associated with the **resources** and **methods of work** and how they are overcome

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### Performance Criteria 4

#### Minimise the risk of damage

*You need to know and understand:*

- K13 how to **protect work** from damage and the purpose of protection
- K14 why **disposal of waste** should be carried out safely and how it is achieved

### Performance Criteria 5

#### Meet the contract specification

*You need to know and understand:*

- K15 how **methods of work**, to meet the specification, are carried out and **problems** reported
- K16 how **maintenance** of tools and equipment is carried out

### Performance Criteria 6

#### Allocated time

*You need to know and understand:*

- K17 what the **programme** is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

## Additional Information

### Scope/range related to performance criteria

#### Performance Criteria 1

- 1 interpretation of specifications, current regulations, risk assessments, method statements and manufacturers' information related to the work to be carried out

#### Performance Criteria 2

- 2 avoidance of risk by complying with the given information relating to the following
  - 2.1 methods of work
  - 2.2 safe use of health and safety control equipment
  - 2.3 safe use of access equipment
  - 2.4 safe use and storage of materials, tools and equipment
  - 2.5 specific risks to health

#### Performance Criteria 3

- 3 selection of resources associated with own work
  - 3.1 materials
  - 3.2 tools and equipment

#### Performance Criteria 4

- 4 protection of the work and its surrounding area from damage
- 5 minimise damage and maintain a clean work space
- 6 disposal of waste in accordance with legislation

#### Performance Criteria 5

- 7 demonstration of work skills to prepare, load, protect, communicate, measure, assemble, position, secure and clean
- 8 use and maintain hand tools, air spray equipment and ancillary equipment
- 9 set up spray equipment (high volume low pressure [HVLP] systems) to achieve the finish stated in the given working instructions, relating to
  - 9.1 preparation of coatings
  - 9.2 loading the system
  - 9.3 monitor and maintain supply
10. apply water-borne and/or solvent-borne coatings by high volume low pressure [HVLP] air spray systems to given working instructions for the following
  - 10.1 broad work
  - 10.2 linear and structural components

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### **Performance Criteria 5 continued**

- 11 check wet film thickness (as specified)
- 12 shut down and clean out spray equipment

### **Performance Criteria 6**

- 13 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

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### Scope/range related to knowledge and understanding

#### **Disposal of waste**

- 1 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

#### **Emergencies**

- 2 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
  - 2.1 fires, spillages, injuries
  - 2.2 emergencies relating to occupational activities (to include air injection)

#### **Hazards**

- 3 those identified by risk assessment, method of work, manufacturers' technical information, statutory regulations and official guidance

#### **Health and safety control equipment**

- 4 identified by the principles of protection for occupational use, types and purpose of each type, work situations and general work environment
  - 4.1 collective protective measures
  - 4.2 personal protective equipment (PPE)
  - 4.3 respiratory protective equipment (RPE)
  - 4.4 local exhaust ventilation (LEV)

#### **Information**

- 5 specifications, current legislation, risk assessments, method statements, manufacturers' information and paint sprayer's instructions

#### **Legislation and official guidance**

- 6 this relates to the operative's responsibilities regarding first aid procedures, potential accidents and health hazards whilst working in the workplace, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling

#### **Maintenance**

- 7 operative care of spray equipment, associated hand tools and ancillary equipment

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### **Methods of work**

- 8 application of knowledge for safe and healthy work practices, procedures and skills relating to the method/area of work and materials used to:
  - 8.1 establish access requirements
  - 8.2 check suitability of previously prepared surfaces
  - 8.3 provide protection by sheeting, masking and removing items
  - 8.4 assemble component parts to form spraying equipment (high volume low pressure [HVLP] systems)
  - 8.5 prepare coatings: single-pack and two-pack systems
  - 8.6 load, operate, maintain (during use) and monitor the paint spray equipment
  - 8.7 establish air-change requirements in confined areas
  - 8.8 assemble, set up, operate and shut down spray equipment
  - 8.9 use correct spray gun technique on broad areas, angles, linear items and complex structural features
  - 8.10 plan the safeguard of operatives and the general public from spraying activities
  - 8.11 troubleshoot spray equipment problems
  - 8.12 troubleshoot coating problems
  - 8.13 measure wet and dry film thickness with gauges
  - 8.14 handle coatings that contain activator
  - 8.15 shut down, clean and store equipment
  - 8.16 identify how atmospheric conditions affect coatings and their application process
  - 8.17 identify the working life of prepared materials
  - 8.18 use access equipment
  - 8.19 use hand tools and ancillary equipment
- 9 team work and communication
- 10 needs of other occupations associated with applying coatings by the air spray method

### **Problems**

- 11 those arising from information, resources and methods of work
  - 11.1 own authority to rectify
  - 11.2 organisational reporting procedures



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### **Programme**

- 12 types of progress charts, timetables and estimated times
- 13 organisational procedures for reporting circumstances which will affect the work programme

### **Protect work**

- 14 protect work against damage from spraying operations, general workplace activities, other occupations and adverse weather conditions

### **Resources**

- 15 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and/or specialist
  - 15.1 water-borne and solvent-borne coatings
  - 15.2 masking materials: masking tape, masking paper, dust sheets, masking shield
  - 15.3 two-pack coatings (base, activator and solvents)
  - 15.4 protective sheeting
  - 15.5 access equipment
  - 15.6 hand tools, film thickness gauges and air spray equipment (high volume low pressure [HVLP] systems) and ancillary equipment
- 16 methods of calculating the quantity of materials required associated with the method/procedure to apply coatings by the air spray method

### **Security procedures**

- 17 site, workplace, company and operative

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<b>Developed by</b>	ConstructionSkills
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<b>Version number</b>	2
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<b>Date approved</b>	January 2012
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<b>Originating organisation</b>	ConstructionSkills
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<b>Original URN</b>	VR340
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<b>Relevant occupations</b>	Painters and Decorators
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<b>Suite</b>	Decorative Finishing and Industrial Painting Occupations (Construction)
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<b>Key words</b>	Spray-gun; Spraying-techniques; Water-borne; Solvent-borne; Paint; Wet and dry; Film-thickness; Broad-work; High pressure low volume; HVLP
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