

## Apply coatings by the air spray method

---

### Overview

This standard is about assembling and setting up the high-volume low pressure (HVLP) air spray systems, applying water borne or solvent-borne coatings with air spray equipment, cleaning out and maintaining the air spray equipment. It also includes providing temporary surface protection to the work area

This standard will also involve interpreting information, adopting safe, healthy and environmentally responsible work practices, selecting and using materials, components, tools and equipment, in accordance with organisational requirements which are equal to or exceed current statutory and legislative requirements

This standard is for people working in the occupational area of Painting and Decorating and can be used by operatives, supervisors and managers

Apply coatings by the air spray method

---

## Performance criteria

*You must be able to:*

### Interpretation of information

P1 interpret the information relating to the work and resources to confirm its relevance for the following:

- drawings
- specifications
- schedules
- method statements
- risk assessments
- manufacturers' information
- technical data sheets
- safety data sheets
- current legislation and regulations governing buildings

### Safe work practices

P2 comply with the relevant legislation and official guidance to carry out the work and maintain safe and healthy work practices relating to the following:

- methods of work
- safe use of health and safety control equipment
- safe use of access equipment
- safe use, storage and handling of materials, tools and equipment
- specific risks to health, including mental health
- specific risks associated with asbestos containing materials
- specific risks associated with surface coatings containing lead

### Selection of resources

P3 calculate and select the required quantity and quality of resources for the methods of work for:

- materials
- tools and equipment

### Minimise the risk of damage

P4 comply with organisational procedures to minimise the risk of damage to the work

## Apply coatings by the air spray method

---

and surrounding area by:

- protecting the work, surrounding areas and adjacent finishes or surfaces from damage
- maintaining a clear and tidy work area
- disposing of waste in accordance with current legislation

### **Approach to the work**

P5 complete the work within the estimated, allocated time, in accordance with organisational procedures, the programme of work and to meet the needs of other occupations and client

### **Meet the contract specification**

P6 comply with the contract information to apply surface coatings by air spray method to the required specification by:

- demonstrating work skills to:
  - prepare
  - load
  - protect
  - measure
  - assemble
  - position
  - secure
  - clean
- using and maintaining hand and power tools, air spray equipment and associated equipment
- setting up and adjusting spray equipment (high volume low pressure [HVLP] systems) to achieve the finish stated in the working instructions, relating to the following:
  - preparation of coatings
  - loading the system
  - monitor and maintain supply
- applying water-borne or solvent-borne coatings by high volume low pressure [HVLP] spray systems to working instructions for the following
  - broad work

Apply coatings by the air spray method

---

- linear and structural components
- checking wet film thickness (as specified)
- implementing shut down procedures
  - temporary shut down
  - final shut down, clean out and maintain spray equipment

Apply coatings by the air spray method

---

## Knowledge and understanding

*You need to know and understand:*

### **P1 Interpretation of information**

K1 why organisational procedures have been developed and how they are implemented

K2 types of information, their source and how they are interpreted in relation to:

- drawings
- specifications
- schedules
- risk assessments
- method statements
- manufacturers' information
- technical data sheets
- safety data sheets
- current legislation and regulations governing buildings

K3 the importance of accurate information, and reporting and rectifying any concerns

K4 the range of relevant digital services, tools and systems, and how they are used

K5 the information for relevant, current legislation and official guidance and how it is applied

K6 the types of fire extinguishers and how and when they are used in relation to:

- water
- CO2
- foam
- powder

K7 how emergencies should be responded to in accordance with organisational authorisation and personal skills in relation to:

- fires, spillages, injuries
- emergencies relating to occupational activities
- identification of and reporting of asbestos containing materials
- identification and reporting of lead containing materials

## Apply coatings by the air spray method

---

K8 the organisational security procedures for tools, equipment and personal belongings in relation to:

- operative
- site
- workplace
- vehicles
- company
- customer
- the general public

K9 how to report risks and hazards identified by the following:

- methods of work
- risk assessment
- personal assessment
- manufacturers' technical information
- statutory regulations
- official guidance
- Control of Substances Hazardous to Health (COSHH)

K10 the accident reporting procedures and who is responsible for making the report

K11 why, when and how health and safety control equipment identified by the principles of prevention should be used in relation to:

- collective protective measures
- personal protective equipment (PPE)
- respiratory protective equipment (RPE)
- local exhaust ventilation (LEV)
- dust suppression

K12 how to comply with environmentally responsible work practices to meet current legislation and official guidance

K13 the organisational procedures when dealing with potential accidents, health hazards and the environmental impact whilst working in the workplace:

- below ground level
- in confined spaces
- at height

## Apply coatings by the air spray method

---

- with tools and equipment
- with materials and substances
- moving and storing materials by manual handling and mechanical lifting
- working in proximity to members of the public

### **P3 Selection of resources**

K14 why the characteristics, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified

K15 the organisational procedures to select resources, why they have been developed and how they are used

K16 how to confirm the resources and materials conform with the specification

K17 why, where and how the resources should be used and how any problems associated with the resources are reported in relation to:

- water-borne and solvent-borne coatings
- masking materials including but not limited to masking tape, masking paper, dust sheets, masking shield
- single pack, two-pack coatings (base, activator and solvent) and specialist coatings
- protective sheeting
- appropriate access equipment
- hand tools, wet film thickness gauges and air spray equipment (high volume low pressure [HVLP] systems) and associated equipment

K18 how to identify the hazards associated with the resources and methods of work and how they are overcome

K19 methods of calculating the quantity, length and wastage associated with the methods and procedures to apply surface coatings by brush and roller

### **P4 Minimise the risk of damage**

K20 how to protect work and its surrounding areas and adjacent finishes or surfaces from damage and the purpose of protection from general workplace activities, other occupations, members of the public and adverse weather conditions

K21 how to minimise the damage to existing building fabric

K22 why and how the disposal of waste must be carried out safely in accordance

## Apply coatings by the air spray method

---

with the following:

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

K23 why it is important to maintain a safe, clear and tidy work area

### **P5 Approach to the work**

K24 the programme of work to be carried out including the estimated and allocated time and why deadlines should be kept

K25 the types of progress charts, timetables and estimated times and the organisational procedures for reporting circumstances which will affect the work programme

### **P6 Meet the Contract Specification**

K26 the importance of teamwork and communication

K27 the importance of mental health awareness and wellbeing

K28 the importance of applying Fairness, Inclusion and Respect (FIR) when dealing with others

K29 the needs of other occupations associated with applying coatings by the air spray method

K30 how to recognise and determine when specialist skills and knowledge are required and report accordingly

K31 the relevance of an assessment of historical significance

K32 how to recognise specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance

K33 how to work with, around and in proximity to plant and machinery

K34 how to work at height using access equipment

## Apply coatings by the air spray method

---

- K35 how to use all hand and power tools and associated equipment
- K36 how and why operative care and maintenance of all hand and power tools and associated equipment is carried out
- K37 how to establish site access requirements
- K38 how to check suitability of previously decorated or prepared surfaces
- K39 how to provide protection by sheeting, masking and removing items
- K40 how to select and assemble component parts for paint spraying equipment (high volume low pressure [HVLP] systems)
- K41 how to prepare and apply coatings: single pack and two pack systems
- K42 how to load, operate, maintain (during use) and monitor the paint spray equipment
- K43 how to establish air-change requirements in confined areas
- K44 how to assemble, set up, operate, shut down, clean, maintain and store spray equipment
- K45 how to use correct spray gun technique on broad areas, angles, linear items and complex structural features
- K46 how atmospheric conditions affect coatings and their application process
- K47 how to implement safety procedures to protect operatives and the general public from spraying activities
- K48 how to identify and report spray equipment problems
- K49 how to identify and rectify application problems
- K50 how to measure wet film thickness with gauges
- K51 how to identify the working life of prepared materials

## Behaviours

Behaviours try to address the fact that NOS mainly concentrate on outcomes. In some industries, outcomes alone are not seen as sufficient. Employers also feel it is important to describe the general ways in which individuals go about achieving the outcomes.

The following behaviours have been identified for this NOS and should be noted but are not required to be assessed.

### **B1 Quality focused:**

Pay attention to detail to achieve high quality work to current industry standards. Awareness and consideration of other trades. Provide protection to adjacent finishes to avoid possible damage.

### **B2 Positive and mature attitude:**

Conscientious and professional including appearance. Take responsibility for personal judgements and actions. Be aware of the limits of personal competence. Upholding ethical standards, including honesty, integrity, fairness, inclusion, respect, and transparency in all aspects of role.

### **B3 Teamwork:**

Work as part of a larger construction team. Collaborate effectively with other tradespeople and communicate well to achieve project goals. Demonstrate good customer service. Be polite, approachable, and responsive to client needs.

### **B4 Attention to Sustainability**

Have an awareness of sustainability and environmental considerations when using resources and carrying out processes.

### **B5 Continuous Learning:**

Identify personal development needs and take action to meet those needs through learning and development opportunities. Keep up to date with best practice, new technology, techniques, and materials.

Apply coatings by the air spray method

---

**Developed by** CITB

---

**Version Number** 4

---

**Date Approved** 30 Sept 2025

---

**Indicative Review Date** 30 Sept 2030

---

**Validity** Current

---

**Status** Original

---

**Originating Organisation** CITB

---

**Original URN** COSVR340

---

**Relevant Occupations** Construction Operatives, Painters and Decorators

---

**Suite** Painting and Decorating

---

**Keywords** Air Spray Painting; Surface Coatings; Water-borne; Solvent-borne; Wet Film thickness; Dry Film thickness High pressure low volume; HVLP

---