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## Overview

This standard is about interpreting information, adopting safe, healthy and environmentally responsible work practices, selecting and using materials, components and tools, preparing, setting up and completing pre-use checks and operating plant, machinery or equipment for laying high friction surfacing

This standard is for people working independently or as part of a team in the occupational area of pavement construction and maintenance and can be used by operatives, technicians, supervisors, managers

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## Performance criteria

- You must be able to:*
- P1 interpret the given operating information relating to the use of plant or machinery and confirm its relevance
  - P2 organise with others the sequence in which the work is to be carried out
  - P3 comply with the relevant, current legislation, special legal status documents, official guidance and organisational procedures to maintain safe and healthy work practices
  - P4 request resources to sustain plant or machinery operations to complete the programme of work
  - P5 select plant or machinery resources for the methods of work and operations to be carried out
  - P6 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
  - P7 comply with the given contract information to carry out the work efficiently to the required specification
  - P8 complete the work within the allocated time, in accordance with the programme of work

## 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**

#### **Organise with others**

- K4 **communication** of ideas between team members
- K5 organisation of **resources** in conjunction with the progress of work
- K6 the **skills** required to carry out the work

### **Performance Criteria 3**

#### **Safe work practices**

- K7 the level of understanding operatives must have of **information** for relevant, current **legislation, Approved Codes of Practice and official guidance** and how it is applied
- K8 the types of **fire extinguishers** and how and when they are used
- K9 how **emergencies** should be responded to and who should respond
- K10 the organisational **security procedures** for plant and/or machinery, tools, equipment and personal belongings
- K11 what the accident reporting procedures are and who is responsible for making the report
- K12 why, when and how **health and safety control equipment** should be used
- K13 how to comply with environmentally responsible work practices to meet the requirements of current **legislation and official guidance**

#### **Performance Criteria 4**

##### **Request resources**

K14 the organisational procedures for requisitioning consumables and other **resources**

#### **Performance Criteria 5**

##### **Selection of resources**

K15 the characteristics, quality, uses, sustainability, limitations and defects associated with plant **resources** and how defects should be rectified

K16 how the **resources** should be used and how any **problems** associated with the **resources** are reported

K17 the organisational procedures to select **resources**, why they have been developed and how they are used

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

#### **Performance Criteria 6**

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

K19 how to **protect work** from damage and the purpose of protection

K20 why **disposal of waste** should be carried out safely and how it is achieved

#### **Performance Criteria 7**

##### **Meet the contract specification**

K21 how **methods of work**, to meet the specification, are carried out and **problems** reported

K22 how **maintenance** of plant and/or machinery, tools and equipment is carried out

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## Performance Criteria 8

### Allocated time

K23 what the **programme** is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

**Scope/range****Performance Criteria 1**

1 interpretation of drawings, specifications, schedules, method statements, risk assessments and manufacturers' information related to the plant, machinery or equipment operations and the work to be carried out

**Performance Criteria 2**

2 organisation of own work

3 communication with team members and other associated occupations about the plant, machinery or equipment operations and the work to be carried out

**Performance Criteria 3**

4 avoidance of risk by complying with the given safety information relating to the following

4.1 methods of work

4.2 safe use of health and safety control equipment

4.3 safe use, storage and handling of plant, machinery, equipment and tools

4.4 safe use, storage and handling of materials

4.5 specific risks to health

**Performance Criteria 4**

5 follow organisational procedures for the requisition of consumables, materials and other resources

**Performance Criteria 5**

6 selection of resources associated with own work

6.1 tools and ancillary equipment and/or accessories

**Performance Criteria 6**

7 protection of the work and its surrounding area from damage

- 8 maintain a clear and tidy work space
- 9 disposal of waste in accordance with current legislation

### **Performance Criteria 7**

- 10 demonstration of work skills to check, set up, adjust, align, communicate, operate, control, secure, lay, spread, compact, mark, level and finish
- 11 use and maintain hand tools, ancillary equipment and/or accessories
- 12 prepare, operate, or control the operations of at least one of the following items of plant, machinery or equipment to given working instructions
  - 12.1 heating pot operator heating materials to specified temperature, avoiding overheating and delivering heated materials to shoe
  - 12.2 tanker operator maintaining speed and distribution
  - 12.3 spray bar operator maintaining level and distribution
  - 12.4 chipper machine operator maintaining speed and distribution
- 13 shut down and secure plant, machinery or equipment

### **Performance Criteria 8**

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

**Scope/range related  
to knowledge and  
understanding**

**Communication**

1 discussions, sketches electronic information and briefings

**Disposal of waste**

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

**Emergencies**

3 operative's response to situations in accordance with organisational  
authorisation and personal skills when involved with

3.1 fires, spillages, injuries

3.2 emergencies relating to occupational activities

**Fire extinguishers**

4 water, CO<sub>2</sub>, foam, powder and their uses

**Hazards**

5 those identified by methods of work, risk and Control of Substances  
Hazardous to Health (COSHH) assessments, manufacturers' technical  
information, statutory regulations and official guidance

**Health and safety control equipment**

6 identified by the principles of prevention for occupational use, types  
and purpose of each type, work situations and general work  
environment

6.1 collective protective measures

6.2 personal protective equipment (PPE)

6.3 respiratory protective equipment (RPE)

**Information**



7 drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, verbal, written and graphical instructions, current regulations and official guidance governing the operation of plant, machinery and accessories for high friction surfacing

### **Legislation, Approved Codes of Practice and official guidance**

8 this relates to the operative's responsibilities regarding potential accidents, health hazards and the environment whilst working in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and storage of materials and by manual handling and mechanical lifting

### **Maintenance**

9 operative care of plant or machinery, hand tools, ancillary equipment and/or accessories

### **Methods of work**

10 application of knowledge for safe and healthy work practices, procedures and skills relating to the method and area of work and materials used to

10.1 identify installation requirements

10.2 conform to agreed specifications

10.3 confirm the area and location of work, the operations, safety and security requirements including temporary traffic management and immediate area protection

10.4 identify the constituents of high friction surfacing materials

10.5 prepare and mask features

10.6 prepare, set up and carry out pre-start and running checks of the plant, machinery and equipment

10.7 check and monitor ambient conditions and adjust work in relation to prevailing weather conditions

10.8 recognise the test criteria for high friction surfacing materials

10.9 carry out and control operations according to your role and the required performance of plant, machinery or equipment

10.10 recognise the duties of the operatives; tanker operator, spray bar operator and chipper machine operator to ensure cohesive operations

10.11 recognise, monitor and control processes e.g. treatment and

- preparation of joints, line, level, spread, thickness and finishes
- 10.12 work around street furniture and ironwork
- 10.13 return infrastructure to operational status
- 10.14 recognise and determine when specialist skills and knowledge are required and report accordingly
- 10.15 record and report, machine operation factors, work progress and completions
- 10.16 shut down and secure plant, machinery and equipment
- 10.17 use hand tools, ancillary equipment and accessories
- 11 team work and communication
- 12 needs of other occupations associated with operating plant, machinery and equipment for laying high friction surfacing

### **Problems**

- 13 those arising from information, resources and methods of work
- 13.1 own authority to rectify
- 13.2 organisational reporting procedures

### **Programme**

- 14 types of productivity targets and time scales
- 15 how times are estimated
- 16 organisational procedures for reporting circumstances which will affect the work programme

### **Protect work**

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

### **Resources**

- 18 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and/or specialist
- 18.1 consumables, lubricants and fuels
- 18.2 attachments
- 18.3 high friction surfacing materials
- 18.4 hand tools, ancillary equipment and accessories

19 identify weight, pressure, quantity, length and area associated with the method and procedure to operate plant, machinery and equipment for laying high friction surfacing

20 how to confirm resources and materials conform with agreed specification

### **Security procedures**

21 site, workplace, company and operative

### **Skills**

22 own occupation and occupations related to the work

COSVR776

Operate and control operations of road plant, machinery or equipment for laying high friction surfacing



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**Developed by** Construction Skills

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**Relevant Occupations** Road Construction Operatives

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