

COSVR366 – SQA Unit Code HL5M 04

Install street ironwork (metal, plastic, concrete and composite materials)



Overview

This standard is about interpreting information, adopting safe, healthy and environmentally responsible work practices, selecting and using materials, components, tools and equipment, preparing for and installing or adjusting street ironwork to new and reinstated pavements

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

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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

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
- K9 how to comply with environmentally responsible work practices to meet current **legislation and official guidance**

Performance Criteria 3

Selection of resources

You need to know and understand:

- K10 the characteristics, quality, uses, sustainability, limitations and defects associated with the **resources** and how defects should be rectified
- K11 how the **resources** should be used and how any **problems** associated with the **resources** are reported
- K12 the organisational procedures to select **resources**, why they have been developed and how they are used
- K13 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:

K14 how to **protect work** from damage and the purpose of protection

K15 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:

K16 how **methods of work**, to meet the specification, are carried out and **problems** reported

K17 how **maintenance** of tools and equipment is carried out

Performance Criteria 6

Allocated time

You need to know and understand:

K18 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 drawings, specifications, schedules, 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, storage and handling of materials, tools and equipment
 - 2.4 specific risks to health
 - 2.5 those affected by the work

Performance Criteria 3

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

Performance Criteria 4

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

Performance Criteria 5

- 7 demonstration of work skills to measure, mark out, position, fit, level, align and secure
- 8 use and maintain hand tools, power tools and ancillary equipment
- 9 install street ironwork (metal, plastic, concrete and composite materials) to new and/or reinstated pavements to given working instructions relating to the following
 - 9.1 access covers and frames
 - 9.2 gully grates and frames

Performance Criteria 6

- 10 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

Hazards

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

Health and safety control equipment

- 4 identified by the principles of prevention 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)

Information

- 5 drawings, specifications, schedules, risk assessments, method statements, manufacturers' information, verbal, written and graphical instructions and current regulations for installing street ironwork fixtures

Legislation and official guidance

- 6 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, with tools and equipment, with materials and substances, with movement and storage of materials by manual handling and mechanical lifting

Maintenance

- 7 operative care of hand tools, power tools and ancillary equipment

Methods of work

- 8 application of knowledge for safe and healthy work practices, procedures and skills relating to the method and area of work and materials used to:
 - 8.1 confirm the area and location of work, the operations, safety and security requirements including temporary traffic management and immediate area protection
 - 8.2 locate the area and position where the street ironwork is to be installed
 - 8.3 conform to agreed specifications
 - 8.4 remove, take up and set aside street ironworks
 - 8.5 confirm the street ironwork, fixing and bedding requirements
 - 8.6 work around street furniture
 - 8.7 adjust height of existing street ironwork
 - 8.8 position, fit, align, level and secure the street ironwork
 - 8.9 protect ironwork during curing
 - 8.10 return infrastructure to operational status
 - 8.11 recognise and determine when specialist skills and knowledge are required and report accordingly
 - 8.12 use hand tools, power tools and equipment
 - 8.13 use ancillary equipment
- 9 team work and communication
- 10 needs of other occupations associated with the installation of street ironwork

Problems

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

Programme

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

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Protect work

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

Resources

16 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and specialist:

16.1 sand, cement, mortar, resin-based materials

16.2 bricks, shims and proprietary products for adjusting

16.3 access covers and frames, gully grates and frames

16.4 hand tools, power tools and equipment

17 identify by calculation, quantity and size associated with the method and procedure to install street ironwork (metal, plastic, concrete and composite materials)

Security procedures

18 site, workplace, company and operative

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