

COSVR235 (SQA Unit Code - H1PB 04)

Contribute to the piling operation



Overview

This standard is about

- 1 interpreting information
- 2 adopting safe and healthy working practices
- 3 selecting materials, components and equipment to provide ground support
- 4 preparing and installing, or contributing to the installation of, bored and/or driven piles and/or specialist works

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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 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 the types of **fire extinguishers** and how and when they are used
- K6 how **emergencies** should be responded to and who should respond
- K7 the organisational **security procedures** for tools, equipment and personal belongings
- K8 what the accident reporting procedures are and who is responsible for making the report
- K9 why, when and how **health and safety control equipment** should be used

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

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

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You need to know and understand:

Performance Criteria 5

Meet the contract specification

- 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

You need to know and understand:

Performance Criteria 6

Allocated time

- K18 what the **programme** is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

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Additional Information

Scope/range related to performance criteria

Performance Criteria 1

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

Performance Criteria 2

- 2 avoidance of risk by following 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 and storage of materials, tools and equipment
- 3 safe use of fire extinguishers, as appropriate to the fire

Performance Criteria 3

- 4 selection of resources associated with own work
 - 4.1 materials, components and fixings
 - 4.2 tools and equipment

Performance Criteria 4

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

Performance Criteria 5

- 8 demonstration of work skills to measure, communicate, prepare, position, fit, secure, remove, clean and maintain
- 9 use and maintain hand tools, machinery and ancillary equipment
- 10 install, or contribute to the installation of, bored and/or driven piles and/or specialist works to given working instructions, using one or more of the following methods
 - 10.1 sheet piling
 - 10.2 driven piling
 - 10.3 rotary bored kelly bar piling
 - 10.4 driven cast-in-situ piling
 - 10.5 sectional auger piling (mini piling)
 - 10.6 continuous flight auger piling
 - 10.7 displacement flight auger
 - 10.8 slurry walling
 - 10.9 tripod piling
 - 10.10 vibro piling
 - 10.11 diaphragm walling

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 piling and other occupational activities

Fire extinguishers

- 3 water, CO₂, foam, powder and their uses

Hazards

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

Health and safety control equipment

- 5 identified by the principles of protection for occupational use, types and purpose of each type, work situations and general work environment
 - 5.1 collective protective measures
 - 5.2 personal protective equipment (PPE)
 - 5.3 respiratory protective equipment (RPE)
 - 5.4 local exhaust ventilation (LEV)

Information

- 6 drawings, instructions, specifications, schedules, method statements, risk assessments, manufacturers' information, tool-box talks, daily briefings, certificates and permits

Legislation and official guidance

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

Maintenance

- 8 operative care of hand tools, machinery and ancillary equipment

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Methods of work

- 9 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
 - 9.1 install, or contribute to the installation of, piles using one of the following methods: sheet piling; driven piling; rotary bored kelly bar piling; driven cast-in-situ piling; sectional auger piling (mini piling); continuous flight auger piling; displacement flight auger piling; slurry walling; tripod piling; vibro piling; diaphragm walling
 - 9.2 use hand tools, machinery and ancillary equipment
- 10 team work and communication
- 11 needs of other occupations associated with piling operations

Problems

- 12 those arising from information, resources and methods of work
 - 12.1 own authority to rectify
 - 12.2 organisational reporting procedures

Programme

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

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 sustainability of standard and/or specialist
 - 16.1 plant
 - 16.2 hand and/or powered tools, machinery and ancillary equipment

Security procedures

- 17 site, workplace, company and operative

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