

COSVR257 – HL4M 04

Commission lightning conductor installation systems



Overview

This standard is about

- 1 interpreting information
- 2 adopting safe and healthy working practices
- 3 selecting materials, components and equipment
- 4 preparing and commissioning lightning conductor installations for use

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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

Performance Criteria 1

Interpretation of information

You need to know and understand:

- 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 **personal protective equipment (PPE)** should be used

Performance Criteria 3

Selection of resources

You need to know and understand:

- K9 the characteristics, quality, uses, 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

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

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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

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Additional Information

Scope/range related to performance criteria	Performance Criteria 1
	1 interpretation of drawings, method statements, risk assessments specifications, schedules 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 personal protective equipment (PPE)
	2.3 safe use of access equipment
	2.4 safe use and storage of materials, tools and equipment
	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 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 inspect, test, measure and record
	8 use and maintain hand tools, test instruments, powered tools and ancillary equipment
	9 commission lightning conductor installations to given working instructions for the following
	9.1 air terminations
	9.2 down conductors
	9.3 earthing
	9.4 bonding
	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, method of work, manufacturers' technical information, statutory regulations and official guidance
	Information
	4 drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, standards, regulations and official guidance associated with lightning conductor work
Legislation and official guidance	
5 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	
6 operative care of hand tools, test instruments, power tools and ancillary equipment	
Methods of work	
7 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to	
7.1 identify the lightning conductor installation system (including surge/transient protection)	
7.2 confirm the means of access to carry out the work	
7.3 survey and carry out visual inspection of the lightning conductor system	
7.4 use test instruments and ancillary equipment	
7.5 carry out tests for continuity, resistances, impedance	
7.6 visually inspect fall protection equipment	
7.7 use test instruments	
7.8 use hand tools, and ancillary equipment	
7.9 work at height	
7.10 use access equipment	
8 team work and communication	
9 needs of other occupations associated with commissioning lightning conductor installation systems	

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Personal protective equipment (PPE)

~~10 occupational use, types, purpose of each type and work situations~~

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 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 general workplace activities, other occupations and adverse weather conditions

Resources

- 15 materials, components and equipment relating to types, quantity, quality, sizes and sustainability of standard and/or specialist
 - 15.1 test instruments and equipment
 - 15.2 power tools
 - 15.3 hand and ancillary equipment
- 16 methods of calculating quantity and length associated with the method/procedure to commission lightning conductor installation systems

Security procedures

- 17 site, workplace, company and operative

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