
Overview

This standard is about positioning and installing electrical equipment and systems in engineering construction plant

You will need to be able to install and position electrical equipment and systems by following engineering drawings and specifications whilst adhering to health, safety and environmental legislation, regulations and safe working practices.

In the context of this standard, your responsibility is to interpret and work within given specifications, selecting approved methods and techniques to achieve the best possible result. In some cases, you may still be expected to refer to others for final authorisation, even though you remain responsible for identifying and implementing decisions.

Who this standard is for

This standard is for electrical maintenance technicians and those that maintain electrical plant and equipment.

Performance criteria

You must be able to:

1. work safely at all times, complying with health, safety, environmental and other relevant legislation, regulations, guidelines and local rules or procedures
2. ensure that the **work environment**, materials, tools and equipment are suitably prepared for the work activities to be undertaken
3. follow all relevant drawings and specifications for the installation being carried out
4. ensure appropriate temporary support systems are put in place for the task in hand
5. position, install and secure the electrical equipment and components in their correct positions in accordance with the relevant specification and instructions
6. undertake ingress protection procedures, as appropriate
7. ensure that all required connections to the installed equipment are complete
8. ensure that all relevant electrical equipment and components are free from damage, as appropriate
9. ensure that the installation is protected from the environment and potential damage
10. check the installation is complete and to the required specification, then follow the required handover procedures
11. **reinstate the work area**
12. deal promptly and effectively with problems within your control and report those that have been and those that cannot be solved

Knowledge and understanding

You need to know and understand:

1. relevant legislative, regulatory and local requirements or procedures and safe working practices including your responsibilities with regard to reporting lines and procedures
2. preparation and reinstatement requirements in respect of the work area, materials, tools and equipment, and the possible consequences of incorrect actions in these areas
3. relevant engineering drawings, related specifications, quality standards and, manufacturers' information
4. electrical installation techniques and procedures including how to ensure temporary support systems are put in place, when required
5. the importance of correct installation and the related consequences of incorrect installation
6. the tools used for positioning and installing electrical equipment, systems and components
7. how to check the condition of the installed equipment or system, that it is free from damage and what to do if damage is found
8. the techniques for ingress protection and protection against damage and the environment, and the importance of these
9. how to check that the final installation meets requirements and the related handover procedure(s)
10. tool and equipment control: the correct use of relevant tools and equipment and your individual responsibility for the use, care and security of those you use

Scope/range

Work environment

This could include:

- engineering construction sites
- controlled operations
- offshore installations
- maintenance sites
- nuclear sites
- repair sites

Work environments may be open or restricted spaces:

- at height
- confined spaces
- control rooms
- controlled operational and offshore installations
- designated work areas
- explosive atmospheres
- existing plants and structures
- fabrication workshops
- in plant rooms
- inside structures, system and plant
- on access structures (scaffold)
- on open structures
- onshore and offshore installations
- shafts
- shipyards

- tunnels

Reinstate the work area

This term could include:

- returning the work area to a safe condition
- removing barriers
- sweeping up
- correctly disposing of waste materials
- storing re-usable materials, consumables and equipment in accordance with appropriate procedures
- completing all necessary documentation

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