

Domain
Title:
Level: 3

ELECTRICAL INSTALLATION
Install electrical fixtures and accessories

Unit ID: 1225

Credits: 4

Purpose

This unit standard specifies the competencies required to install electrical fixtures equipment. It includes planning and preparing for work, mounting fixtures and accessories, completing working. This unit standard is intended for those who work as electricians.

Special Notes

1. Entry information:

Prerequisite

- Unit 1219 - *Apply safety rules and regulations in an electrical work environment or demonstrated equivalent knowledge and skills.*

2. This unit standard is to be delivered and assessed in the context of electrical operations and should be assessed in conjunction with other relevant technical units selected from this domain.

3. To demonstrate competence, at a minimum, evidence is required of installing screens, guards and railings. Perform these tasks ensuring correct identification of requirements, selection and use of appropriate processes, tools and equipment and completing all work to specification.

4. Assessment evidence may be collected from a real workplace or an appropriate simulated realistic environment in which electrical operations are carried out.

5. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' and company guidelines, instructions, and reasonable flat rate time.

6. Glossary of terms:

- '*isolation and lockout procedures*' refer to isolating an electrical circuit from the source of supply
- '*specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, workplace specific requirements, national and international standards and legislations
- '*ISO*' refers to International Organization for Standards
- '*SANS*' refers to South African National Standards
- '*TT system*' refers to *terra* and *terra* where *terra* is a direct connection point to earth
- '*TN-S system*' refers to *terra* and *neutral separate*
- '*TN-C-S system*' refers to *terra* and *neutral combined* from the supply and then *separated* in an installation
- '*TN-C system*' refers to *terra* and *neutral combined*.

7. Regulations and legislation relevant to this unit standard include the following:
- Labour Act No. 11 of 2007
 - Petroleum Products and Energy Amendment Act No. 2 of 2005
 - National Energy Fund Act of 2000
 - Gas Act (Draft 2b)
 - Occupational Health and Safety Regulations No. 18, 1997 and all subsequent amendments
 - ISO 14001 (Environmental Management Standard)
 - Electricity Act No.4 of 2007
 - SANS 10142-1 and SANS 10142-2 electrical wiring code
- and all subsequent amendments to any of the above.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on www.namqa.org and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Plan and prepare for work

Performance Criteria

- 1.1 Work instructions, including permit to work, job card, plans, specifications and operational details are obtained, confirmed and applied.
- 1.2 Safety requirements are followed in line with safety plans and policies.
- 1.3 Tools and equipment selected to carry out tasks is consistent with the requirements of the job, checked for serviceability and any faults rectified or reported prior to commencement.
- 1.4 Material requirements are identified and obtained in line with job card and/or specifications.
- 1.5 Materials are safely handled and located ready for use in line with workplace procedures.
- 1.6 Technical requirements for tools and equipment are sourced and implemented in line with workplace procedures.
- 1.7 Environmental protection requirements are identified and applied in line with environmental plans and legislative requirements.

Element 2: Mount fixtures and accessories

Performance Criteria

- 2.1 Mounting positions are identified and mounting procedures confirmed according to organisational procedures.
- 2.2 Fixtures are mounted according to workplace procedures.
- 2.3 Accessories are mounted according to workplace procedures.
- 2.4 Fixtures and accessories are checked for not interfering with operation of equipment or machinery.

Element 3: Complete work

Range

Work completion details may include but is not limited to accident report forms and permit to work form.

Performance Criteria

- 3.1 Work is completed and appropriate personnel notified in line with work place procedures.
- 3.2 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures and waste management principles.
- 3.3 Reusable material is collected and stored in line with workplace procedures.
- 3.4 Tools and equipment are cleaned, checked and maintained in line with workplace procedures.
- 3.5 Work completion details are finalised in line with workplace procedures.

Registration Data

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