**Unit ID: 1225** 

Domain ELECTRICAL INSTALLATION

Title: Install electrical fixtures and accessories

Level: 2 Credits: 3

## <u>Purpose</u>

This unit standard is intended for those who install electrical fixtures and accessories. People credited with this unit standard are able to plan and prepare for work; mount fixtures and accessories; and clean-up work area.

This unit standard is intended for those who work as electrical workplace environment.

#### **Special Notes**

1. Entry information

#### Prerequisite

- Unit 1157 Demonstrate basic knowledge of workplace health and safety
- 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 a simulated workplace 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)
  - Regulations relating to the health & safety of employees at work under Schedule 1 (2) of the Labour Act No.11 of 2007
  - 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 <a href="https://www.namqa.org">www.namqa.org</a> and the Namibia Training Authority on <a href="https://www.namqa.org">www.namqa.org</a> and the Namibia Training Authority on <a href="https://www.namqa.org">www.namqa.org</a> and the Namibia Training Authority on <a href="https://www.namqa.org">www.nta.com.na</a>.

# **Elements and Performance Criteria**

#### **Element 1: Plan and prepare for work**

# Performance Criteria

- 1.1 Work instructions, including plans, specifications, quality requirements; job card and operational details are obtained, confirmed and interpreted.
- 1.2 Signage and barricade requirements are identified and implemented, where necessary.
- 1.3 Safety requirements are followed in line with safety plans and policies.
- 1.4 Tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement.
- 1.5 Material quantity requirements are calculated in line with plans, specifications and quality requirements.
- 1.5 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 are confirmed according to workplace 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.
- 2.5 Work is completed and appropriate personnel notified in line with workplace procedures.

## Element 3: Clean-up work area

#### Range

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

## **Performance Criteria**

- 3.1 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures and waste management principles.
- 3.2 Reusable material is collected and stored in line with workplace procedures.
- 3.3 Tools and equipment are cleaned, checked and stored in line with manufacturer specifications and workplace procedures.
- 3.4 Materials and wastes are disposed of, reused, or recycled in accordance with legislation, regulations, codes of practice and job specifications.

# **Registration Data**

Subfield:	Electrical Engineering
Date first registered:	24 July 2014
Date this version registered:	23 November 2023
Anticipated review:	23 November 2028
Body responsible for review:	Namibia Training Authority