

INSTALL TRUNKING SYSTEM

UNIT CODE: 0713 251 02A

TVET CDACC UNIT CODE: ENG/OS/EI/CR/02/3/MA

UNIT DESCRIPTION

This unit covers competences required in installing trunking system. The competences include identifying trunking accessories, preparing trunking work pieces, mounting trunking work pieces, installing electrical cables and accessories and perform test and inspection.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function.	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements. <i>(Bold and italicised terms are elaborated in the Range)</i>
1. Identify trunking accessories	1.1. Trunking types are identified as per IEC standards. 1.2. Trunking sizes are identified as per IEC standards. 1.3. Trunking accessories are identified as per IEC standards
2. Prepare trunking work pieces	2.1 Safety measures are applied as per OSHA and EHS standards 2.2 Electrical tools and equipment are selected as per work requirement 2.3 Measurements are taken as per work requirement. 2.4 Trunking work pieces are cut as per the measurements. 2.5 Housekeeping activities are performed as per the work requirement.
3. Mount trunking work pieces	3.1 Safety measures are applied as per OSHA and EHS standards. 3.2 Mounting points are marked out as per IEC standards 3.3 Trunking work pieces are mounted as per the IEC standards. 3.4 Housekeeping activities are performed as per the work requirement.
4. Install electrical cables and accessories	4.1 Safety measures are applied as per OSHA and EHS standards. 4.2 Electrical cable colour code is identified as per IEC standards. 4.3 Electrical cable sizes are identified as per IEC standards. 4.4 Cables are laid as per the IEC standards. 4.5 Accessories are fixed as per IEC standards. 4.6 Housekeeping activities are performed as per the work requirement.

5. Perform Tests and Inspection	5.1 Visual inspection is performed as per work requirements 5.2 Continuity test is performed as per IEC standards 5.3 polarity test is performed as per IEC standards
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RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range
1. Trunking types may include but not limited to:	• PVC • Metallic • Galvanized iron
2. Trunking sizes may include but not limited to:	• 16mm x 16mm • 25mm x 16mm • 25mm x 25mm • 40mm x 25mm
3. Electrical tools and equipment may include but is not limited to:	• Cutting tools • Fastening tools • Measuring tools • Marking tools • Measuring instruments
4. Cable sizes may include but not limited to:	• 1.0mm² • 1.5 mm² • 2.5 mm² • 4.0 mm² • 6.0 mm²
5. Housekeeping activities may include but not limited to:	• General cleanliness • Tools and equipment storage

REQUIRED KNOWLEDGE

The individual needs to demonstrate knowledge of:

- Units of measurement and abbreviations
- Work sequence
- Electrical materials
- Tools and equipment

REQUIRED SKILLS

- Communication skills
- Negotiation skills
- Digital literacy
- Waste disposal

- Occupational safety and health practices

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and understanding and range.

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Identified trunking types as per IEC standards. 1.2 Applied safety measures as per OSHA and EHS standards 1.3 Cut trunking work pieces as per the measurements. 1.4 Mounted trunking work pieces as per the IEC standards. 1.5 Laid cables as per the IEC standards. 1.6 Fixed accessories as per IEC standards. 1.7 Performed Continuity test as per IEC standards 1.8 Code of conduct is observed as per the workplace requirement.
2. Resource Implications	The following resources should be provided: 2.1 Appropriately simulated environment where assessment can take place. 2.2 Access to relevant work environments. 2.3 Resources relevant to the proposed activities or task.
3. Methods of Assessment	Competency may be assessed through: 3.1 Practical 3.2 Projects 3.3 Written tests 3.4 Oral questions 3.5 Portfolio of evidence 3.6 Third party evidence
4. Context of Assessment	Competency may be assessed in a work place or a simulated work place.
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.