# PERFORM FIXING AND MAINTENANCE OF LIGHT FITTINGS, POWER OUTLETS AND BASIC APPLIANCES

UNIT CODE: ENG/OS/EI/CR/01/3/A

#### **UNIT DESCRIPTION**

This unit covers the competencies on fitting, mounting and installing wiring devices, installing lighting fixtures/switches, notifying completion of work, mounted outlets, auxiliary outlets and maintenance.

## ELEMENTS AND PERFORMANCE CRITERIA

	PERFORMANCE CRITERIA
ELEMENT	These are assessable statements which specify the
These describe the key	required level of performance for each of the
outcomes which make up workplace function.	elements.
	(Bold and italicised terms are elaborated in the
	Range)
	1.1 Drawings are read and interpreted to determine
1. Select wiring devices	job requirements
and basic appliances	1.2 Correct type and quantity of wiring devices and
	consumable items are identified in line with job
	requirements.
	1.3 Tools and equipment are selected in line with job
	requirements
	1.4 Correct PPE are identified and selected in line
	with safety requirements.
2 Install which a devices	2.1 Safety procedures are followed based on safety
2. Install wiring devices	regulations
and basic appliances	2.2 Installation of wiring devices and basic
	appliances are performed in line with job
	requirements
	2.3 Wiring devices and basic appliances are
	grounded in accordance with IEEE regulations
	2.4 Schedule of work is followed based on agreed
	time, quality standard and minimum wastage
	2.5 Further instructions are sought in case of
	unplanned events or conditions.
	2.6 Changes are recorded according to work place
	procedures.
	2.7 Identification and labeling of circuits is carried
	out.
	2.8 On-going checking of quality of work is done in
	accordance with instructions and requirements
	2.9 Reports are prepared in accordance with work

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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.  (Bold and italicised terms are elaborated in the Range)  place procedures
3. Install lighting fixtures	<ul> <li>3.1 Safety procedures are followed.</li> <li>3.2 Installation of light fixtures are performed in line with job requirements.</li> <li>3.3 Schedule of work is followed to ensure work is completed in an agreed time, to a quality standard and with a minimum waste.</li> <li>3.4 Further instructions are sought from a supervisor if unplanned events or conditions occur.</li> <li>3.5 Changes are recorded according to work place procedures.</li> <li>3.6 On-going checks of quality of work are undertaken in accordance with instructions and requirements.</li> <li>3.7 Reports are prepared in accordance with work place procedures.</li> </ul>
4. Complete installation of wiring devices, basic appliances and lighting fixtures	<ul> <li>4.1 Final checks are made to ensure that work conforms with instructions and to requirements</li> <li>4.2 Supervisor is notified upon completion of work</li> <li>4.3 Tools, equipment and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures</li> <li>4.4 Work area is cleaned and made safe</li> </ul>
5. Perform basic repair and maintenance of installation and appliances	<ul> <li>5.1 Tools and equipment are selected in line with job requirements.</li> <li>5.2 Correct PPE are identified and selected in line with safety requirements.</li> <li>5.3 Identify the fault and perform the repair in line with the IEE regulations.</li> <li>5.4 Perform repair on the appliance in line with the manufacture's manual.</li> <li>5.5 Maintain the installation and appliances in line with the set standards</li> </ul>

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## **RANGE**

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

Variable	Range
Wiring devices include but	Socket outlets
not limited to:	• Cooker units
	• Double pole switches
	Circuit breakers
Light fixtures include but	Light fittings
not limited to:	• Light switches
Consumables include but not	Insulating tapes
limited to:	• Strip connectors
	• Sleeves
Basic appliances include but	• Cookers
not limited to:	• Instant water heaters
	Water pumps
	Hand dryers
	• Fans
	Air conditioners
Tools and equipment include	• Pliers
but not limited to:	Screwdrivers
	• Electrician knives
	<ul> <li>Clipping tools</li> </ul>
	• Spirit levels
	• Spanners
	• Drills
	• Wrenches
	• Tape measures
Personal protective	<ul> <li>Working gloves</li> </ul>
equipment (PPE) include but	• Safety shoes
not limited to:	• Helmet
	<ul> <li>Overalls and aprons Safety harness Googles</li> </ul>
	• Nose masks
Safety procedures include	IEEE regulations
but not limited to:	Building Code
	Safety standards

# REQUIRED KNOWLEDGE AND UNDERSTANDING

The individual needs to demonstrate knowledge and understanding of:

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• Interpretation of drawings	Installation procedures of various wiring
Materials specification	devices, lighting fixtures and basic
Types and uses of electrical	appliances
wiring devices, tools and	Ratings of lighting fixtures
equipment	Maintenance of tools
• Proper PPEs	Storage of tools
• Types of lighting fixtures and	Report writing and record keeping
installation techniques	Good housekeeping

#### FOUNDATION SKILLS

The individual needs to demonstrate the following foundation skills:

• Interpreting plans and drawing	• Installing wiring devices, lighting fixtures
Handling and storage of	and basic appliances
materials, tools and equipmen	• Communication
Observing safety standards	Report writing and record keeping

## **EVIDENCE GUIDE**

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

Assessme		Assessment requires evidence that the candidate:
1.	Critical Aspects	1.1 Observed safety standards
	of Competency	1.2 Correctly interpreted drawings and work instructions
		1.3 Selected appropriate tools, equipment and materials for
		installing wiring devices, lighting fixtures and basic
		appliances
		1.4 Selected and used correct PPE
		1.5 Demonstrated correct procedures for installation of
		wiring devices and lighting fixtures and basic appliances
		1.6 Cleaned worksite, tools and equipment
		1.7 Stored surplus materials
		1.8 Prepared reports and kept records
2.	Resource	Resources the same as that of workplace are advised to be
	Implications	applied including:
	imp ii cuii oii o	Workplace location
		<ul> <li>Tools and equipment appropriate for installation of</li> </ul>
		wiring devices, lighting fixtures and basic appliances
		<ul> <li>Materials relevant to the proposed activity</li> </ul>
		<ul> <li>Drawings and specifications relevant to the task</li> </ul>
3.	Methods of	Competency may be assessed through:
.	Assessment	3.1 Observation
		3.2 Oral questioning
		3.3 Written test
		3.4 Portfolio of Evidence

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		3.5 Interview
		3.6 Third party report
4. Context of Assessment	Context of	Competency may be assessed individually
		4.1 In the actual workplace
	Assessment	4.2 Simulated environment of the work place
5.	Guidance information for	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.
	assessment	

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