

## Topic Skills Practice Cover Sheet

<b>Unit Name:</b>	NAT10809003 – Apply Australian standards and requirements to solve LV a.c. circuits/systems problems.
<b>Topic Title:</b>	MEN Earthing System

<b>Skill Practice Number:</b>	6.2
<b>Skill Practice Name:</b>	Draw and Connect a MEN Earthing System

<b>Student Name:</b>	
<b>Student ID:</b>	
<b>College/Campus:</b>	
<b>Group:</b>	

<b>Results</b>	
<b>Planning:</b>	
<b>Carryout:</b>	
<b>Completion:</b>	
<b>Overall Results:</b>	
<b>Comments:</b>	

## Topic Skills Practice 6.2

**NAT10809003 – Apply Australian standards and requirements to solve LV a.c. circuits/systems problems.**

**KE-10809003 - LV a.c. circuits/systems problems principles**

**Topic: 6. MEN Earthing System**

**Skills Practice 6.2: Draw and Connect a MEN Earthing System**

**Task:**

To draw, install and verify a MEN earthing system in accordance with AS/NZS 3000:2018.

**Objectives:**

At the completion of this skills practice, you should be able to:

- Draw the necessary connections for a MEN earthing system.
- Select earthing conductor sizes.
- Install earthing conductors for the connection of a MEN earthing system.
- Terminate MEN earthing system conductors
- Test earthing conductors for earth resistance.
- Verify compliance of earth resistance in accordance with AS/NZS 3000:2018 requirements.

# Topic Skills Practice 6.2

## 1. Planning the Skills Practice

### 1.1 Equipment

- Switchboard
- Earth electrode
- Water pipe
- TPI earth cable

### 1.2 Suggested Materials

- Socket outlets
- Lights
- Fixed appliance
- AS/NZS 3000:2018

### 1.3 Miscellaneous Items




- Wiring booth
- Hand tools
- PPE
- Multimeter

## 1.4 Risk Assessment

Risk assessment procedure:

- Identify any hazards that may exist with this skills practice below
- List the supervision level you will be working under - Direct (D), General (G) or Broad (B)
- List the risk classification – High Risk (H), Medium Risk (M) or Low Risk (L)
- List the control measures required for each identified hazard that you need to implement.

Hazard/s Identified	Supervision Level (D, G or B)	Risk Classification (H, M or L)	Control Measure/s

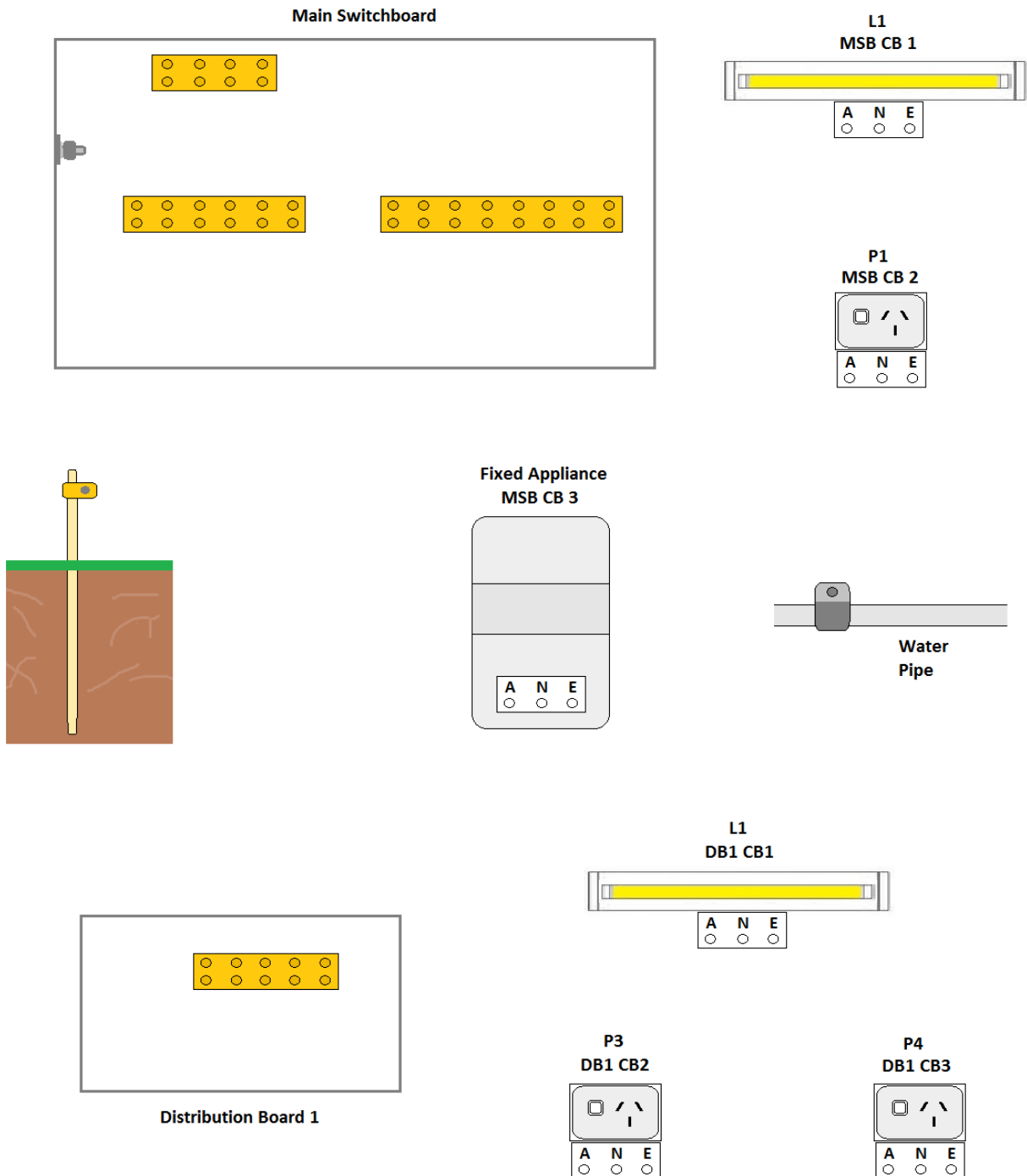
		<p>Have your teacher/trainer check your risk assessment</p>	<p>Teacher/Trainer Initials and Date</p>	
<i>Feedback</i>				

# Topic Skills Practice 6.2

## 2. Carrying Out the Skills Practice

### 2.1 Draw a MEN Earthing System




2.1.1 On the diagram below, draw in all the necessary earthing conductors to complete a MEN earthing system. Label each earthing conductor with its earthing conductor type.







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	 <i>Feedback</i>	Have your teacher/trainer check your electrical measurements	Assessor Initials and Date	

## 3. Completing the Skills Practice

### 3.1 Skills Practice Review Questions

3.1.1 Return all tools and equipment to their correct places and clean the work area. Then complete the following questions.

1. List the PPE you used whilst carrying out this skills practice.

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2. Did all earthing conductors comply with AS/NZS 3000:2018 requirements for earth resistance on your first attempt? If not, describe the alterations you had to make to correct the installation.

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## Topic Skills Practice 6.2

	 <p>Have your teacher/trainer check your answers</p> <p><i>Feedback</i></p>	<p>Teacher/Trainer Initials and Date</p>	
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