

Title	Install earthing systems for multiple earthed neutral installations		
Level	3	Credits	3

Purpose	<p>This unit standard is for people wishing to qualify in the electrical industry and covers the installation of multiple earthed neutral (MEN) earthing systems.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – plan earthing systems for MEN installations; – install earthing systems for MEN installations; and – test MEN earthing systems and document installation results.
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Classification	Electrical Engineering > Electrical Installation and Maintenance
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job.
- 2 This unit standard and unit standards 1204, 29473, and 29477 together meet the assessment requirements of ERAC CEPC 16.
 This unit standard and unit standards 1204 and 29477 together meet the assessment requirements of ERAC CEPC 17.
 This unit standard and unit standards 29419, 29441, and 29469 together meet the assessment requirements of ERAC CEPC 21.
 This unit standard and unit standards 5931, 29419, 29430, and 29440 together meet the assessment requirements of ERAC CEPC 38.
- 3 Definitions
CEPC – Critical Essential Performance Capabilities.
ERAC – Electrical Regulatory Authorities Council.
EWRB – Electrical Workers Registration Board.
Industry practice – those practices that competent practitioners within the industry recognise as current industry best practice.
Safe and sound practice – as it relates to the installation of electrical equipment is defined in AS/NZS 3000:2007, *Electrical Installations (known as the Australian/New Zealand Wiring Rules)*.
- 4 Range
 - a Candidates may refer to current legislation and Standards during assessment.
 - b Demonstration of safe working practices and installation in accordance with *safe and sound practice* are essential components of assessment of this unit standard.

- c All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
- i legislation;
 - ii policies and procedures;
 - iii ethical codes;
 - iv Standards – may include but are not limited to those listed in Schedule 2 of the Electricity (Safety) Regulations 2010;
 - v applicable site, enterprise, and industry practice; and,
 - vi where appropriate, manufacturers' instructions, specifications, and data sheets.

Outcomes and performance criteria

Outcome 1

Plan earthing systems for MEN installations.

Performance criteria

- 1.1 Plan earth electrode system.
Range size, type, position.
- 1.2 Plan earthing cable and route.
- 1.3 Identify all metal work requiring bonding.

Outcome 2

Install earthing systems for MEN installations.

Performance criteria

- 2.1 Install earth electrode, main earth conductor, and other components.
- 2.2 Bond metalwork.
Range bonding may include but is not limited to connections between – water pipes, gas pipes, waste pipes, showers, sinks, switchboard enclosures.
evidence of two is required.
- 2.3 Connect earthing and bonding.
Range connections – clean, secure, protected against corrosion, protected against mechanical damage, readily accessible, labelled as required.

Outcome 3

Test MEN earthing systems and document installation results.

Performance criteria

- 3.1 Test earthing systems for compliance with current regulations and standards and ensure that they are safe to connect.
- 3.2 Document test results and complete a certificate of compliance in accordance with company requirements.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 April 1994	31 December 2013
Review	2	23 April 1996	31 December 2013
Review	3	28 June 1999	31 December 2013
Revision	4	3 April 2001	31 December 2013
Review	5	26 May 2005	31 December 2021
Rollover and Revision	6	15 March 2012	31 December 2021
Revision	7	15 January 2014	31 December 2021
Review	8	21 July 2016	31 December 2025
Revision	9	16 March 2017	31 December 2027
Review	10	24 March 2022	31 December 2027
Rollover and Revision	11	25 May 2023	31 December 2027

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.