

Title	Connect security control panels to existing domestic subcircuits		
Level	3	Credits	10

Purpose	<p>This unit standard covers the cabling and connection of electronic security control panels to the electricity supply by connection to existing subcircuits in domestic premises.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – prepare to connect a security control panel to an existing domestic subcircuit; – install and terminate cabling to connect a security control panel to an existing domestic subcircuit; – inspect and test connection of security control panel to domestic subcircuit; and – complete connection of security control panel to domestic subcircuit.
----------------	--

Classification	Electronic Engineering > Electronic Security
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 The unit standard has been developed for learning and assessment on-job.
- 2 This unit standard was developed as a component of the National Certificate in Electronic Security (Level 3) [Ref: 0414], which includes training and assessments relating to the cabling and connection of security control panels to existing 230 volt subcircuits. Candidates who have obtained the National Certificate may apply to the Electrical Workers Registration Board (EWRB) for registration and licensing as *Electrician limited to Electronic Security Installer*.
- 3 References
 - AS/NZS 3000:2007, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*;
 - AS/NZS 3008.1.2:1998, *Electrical Installations – Selection of Cables, Cables of alternating voltages up to and including 0.6/1kV, Typical New Zealand installation conditions*;
 - AS/NZS 3760:2003, *Inservice safety inspection and testing of electrical equipment*;
 - AS/NZS 3820:1998, *Electrical installations – Essential safety requirements for low voltage electrical equipment*;
 - Electrical Workers Registration Board, *Manual for Safety Training in the Electrical Industry*, March 2000, Wellington;
 - Electricity Act 1992;
 - Electricity Regulations 1997;

NZS 3019 (Int):2007, *Electrical installations – In-service testing*; and all subsequent amendments and replacements.

- 4 Competency under this unit standard does not entitle the candidate to legally connect security control panels to subcircuits without appropriate supervision, until he/she has been registered.
- 5 Assessors of this unit standard must be *Supervisors of Electrical Work* as defined in the Electricity Act 1992.
- 6 Range
 - a Performance of all outcomes must comply with the legislation and standards listed in guidance information note 3.
 - b Evidence of at least four installations is required.

Outcomes and performance criteria

Outcome 1

Prepare to connect a security control panel to an existing domestic subcircuit.

Performance criteria

- 1.1 The proposed location for the security control panel is identified taking relevant factors into account.

Range relevant factors include – customer agreement, future servicing, ventilation, accessibility for cabling, cable routes, penetrations, accessibility for isolation, switchboard location, access to intended subcircuit.
- 1.2 Existing subcircuit, and cable type and size are identified.
- 1.3 All required materials are identified.

Range typical materials – cable, cable ties, cable clips, junction box, conduit, tees, bends, inspection bends, labels, fastenings, tools, test equipment.

Outcome 2

Install and terminate cabling to connect a security control panel to an existing domestic subcircuit.

Performance criteria

- 2.1 The intended subcircuit is isolated, tagged and proven safe using prove-test-prove methodology.
- 2.2 Cabling between security control panel and existing subcircuit is installed in accordance with current legislation and standards.

2.3 Terminations are made in accordance with current legislation and standards.

Outcome 3

Inspect and test connection of security control panel to domestic subcircuit.

Performance criteria

3.1 Visual inspection and tests are conducted in accordance with current legislation and standards.

3.2 Results are recorded in accordance with current legislation and standards.

Outcome 4

Complete connection of security control panel to domestic subcircuit.

Performance criteria

4.1 Subcircuit fuses are replaced, circuit proven as fully functional, and safety tags removed.

4.2 Subcircuit fuses are clearly identified to prevent inadvertent switching off of security control panel.

4.3 The site is cleaned and cleared of all surplus material.

4.4 A Certificate of Compliance is prepared.

Range does not include signing of certificate, as this can only be done by a registered person.

4.5 The client is shown the means of circuit isolation.

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	23 March 2004	31 December 2021
Rollover	2	21 November 2008	31 December 2021
Review	3	24 January 2019	31 December 2021

Consent and Moderation Requirements (CMR) reference	0003
--	------

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