

Applicant Evidence Guide and Checklist

Recognition of Current Competency

New Zealand Certificate in Electrical Engineering (Trade) (Level 4)

Applicant name	
National student number (NSN) (if known)	
Organisation name	

Introduction

This guide outlines the assessment process, provides you with guidance on what evidence to collect, and a checklist to ensure you have completed and included all required components for Recognition of Current Competence (RCC) in Electrical Engineering.

Please read it carefully and follow the instructions in each section to ensure a smooth, and successful outcome. You will be required to submit this document to Skills as part of your application.

The RCC process will result in unit standards and credits towards the New Zealand Certificate in Electrical Engineering (Trade), Level 4, or may result in the awarding of the full qualification.

If you have any questions about the assessment process, need help or have any special requirements for assessment please email us at recognition@skills.org.nz.

What you will be assessed against:

To achieve the New Zealand Certificate in Electrical Engineering (Trade), Level 4, you must be able to:

- Install, commission, and maintain electrical systems and equipment, including electrical protection.
- Carry out fault diagnosis and testing of electrical systems and equipment.
- Monitor and maintain safe working; procedures, practices, and environment, and identify and control hazards in the workplace.
- Apply electrical and relevant non-electrical legislation governing the work of electricians.
- Install and maintain electrical machines and control systems.
- Install and maintain electrical equipment in special electrical situations.
- Work ethically and professionally within the electrical industry, as a commercially competent registered electrician, including maintaining current competency and communicating with stakeholders on electrical and related matters.

The programme is made up of both on-job (practical) and off-job (theory) unit standards. To meet the full qualification requirements, you must also achieve the unit standards of either the Domestic/Commercial speciality or the Industrial speciality. Some units are achieved by completing an exam, see page 8 for details on this.

A full list of the unit standards can be found in Appendix 1.

Confirm eligibility and build your evidence.

Please tick the boxes to confirm you meet the eligibility criteria

Eligibility criteria	
I am based in New Zealand	
I can provide evidence of my qualification	
List the electrical related qualification/s that you hold	
I can provide evidence of my work experience (required for on-job units)	
State how many years of work experience you have	
I can provide evidence of the registration or licence I gained my work experience under (required for on-job units)	
List your licence/s details here	
I can supply 2 work referees	

You need to put together a portfolio of evidence. Below is a list of example evidence you can use for your application. Please tick the boxes and complete the notes column as you gather the related evidence for submission. You can add to the bottom of this list if you have other evidence you believe is relevant.

Evidence required	✓	Notes	Use this column to note what evidence you are supplying with your application
A transcript or academic record from Tertiary institution		This is a full print out of your academic record. It should include a full list of subjects studied.	
Certificates from any short courses or manufacturer specific courses attended		This could include PLC, CompTIA, Cisco, PDL etc.	
Military competency log (where applicable)		This details Unit standards and is a list of jobs completed	
Detailed work history showing roles, work undertaken and dates of employment for each role		Detailed CV or other list. This must include a list of employers, roles held and details of the type of work undertaken. If RCC is to be based mainly on Academic Record, then a basic CV is acceptable.	
First Aid Certificate		Must be current and include unit standards 6401 and 6402	
Evidence of any continuing professional development (CPD) from the last 24 months		For example – course or conference registrations, certificates of attendance	
Tailgates (Risk Analysis) and job sheets		Where using work experience for evidence, these can show details of work completed.	
Photographs		Can be used to show evidence of completing specific jobs. Ideally you should be in the	

		photograph, but if not then include a job sheet.	
Copy of EWRB registration card or website screenshot, or of international registration/licence		This could be for various classes of registration including E,I, EAS, EASQ, EST, Installer, Trainee cards, Limited registration etc.	
Other:			

Work referee form

Please complete the forms below. The referee must be a person for whom you have worked within the last 5 years (for example a supervisor or a manager).

Referee 1

Name	
Organisation	
Position	
Phone or Mobile	
Email	

Referee 2

Name	
Organisation	
Position	
Phone or Mobile	
Email	

After the assessment

Awarding the unit standards

The assessor will review all the evidence you have submitted and determine what unit standards can be awarded. These will then be reported to NZQA and will show on your Record of Achievement.

Where the assessor has found that you meet the full qualification requirements, Skills will verify the qualification completion with NZQA. On successful verification you will be awarded the qualification. The qualification and the individual unit standards achieved within this programme will show on your NZQA Record of Achievement, and you will be issued with a certificate.

Finishing the full qualification

If you have not achieved the full qualification you can sign up as a trainee with Skills to complete the gaps you need. To do this you need to be working in an electrical workplace and undertaking electrical work.

We will send you a training agreement to complete and one of our Regional Account Managers will contact you to discuss arranging the further training and assessment required.

Exams and capstone assessment

There are some unit standards in the qualification that are achieved by exams. These are:

Regulations – 1702, Demonstrate knowledge of, and apply electrical legislation, New Zealand codes of Practice and Standards. Level 4, Credits 8.

Theory – 21766, Demonstrate knowledge of theory for registration of electricians, Level 4, Credits 3

Capstone – 29484, Demonstrate knowledge of theory and practice for electrical workers, Level 3, Credits 1

If unit standards 1702 and 21766 are already achieved then US 29484 will be assessed as part of this RCC process.

Where these unit are not already held they will be covered, following the RCC process, when you enrol with Skills to complete the full qualification.

Completing your application

Once you have compiled your portfolio of evidence and completed all the requirements outlined in this guide you are ready to submit your application.

Follow the instructions on the website to make your payment, and complete and submit your application. Please note that when you submit your application you will be agreeing to the following declaration.

Declaration

By submitting this form, I confirm that:

- I understand that payment is non-refundable.
- I have understood the eligibility criteria and evidence requirements and I am able to supply all the required information.
- I believe I have the skills, knowledge, and experience at (or near) the level required by the qualification.
- The information contained in my application is true and correct and all evidence is my own.
- I am aware that the evidence in my portfolio of evidence and a record of the competency discussion will be subject to quality assurance processes by The Skills Organisation (e.g. moderation, verification, validation).

Appendix 1: UNIT STANDARD LIST

New Zealand Certificate in Electrical Engineering Theory and Practice (Trade), (Level 4)

Key:

Core
On-job
Off-job
Specialties:
Domestic/Commercial
Industrial

Unit Standard Number	Name	Level	Credit Value
Compulsory			
3490	Complete an incident report	1	2
4249	Describe care and timeliness as an employee	1	3
30657	Isolate low-voltage electrical subcircuits and perform basic checks and tests to confirm isolation	2	1
30658	Demonstrate knowledge of fundamental electrical safety in the workplace	2	2
30692	Perform basic calculations used in given trade situations	2	2
29465	Apply knowledge of electrical safety and safe working practices for electrical workers	3	6
29466	Demonstrate knowledge of legislation and Standards governing electrical workers	3	2
29467	Demonstrate knowledge of the electrical industry ethical work practices	3	2
29468	Demonstrate and apply knowledge of safe plant isolation, re-commissioning, and associated electrical testing procedures	3	5
25070	Explain the properties of conductors, insulators, and semiconductors and their effect on electrical circuits	2	7
25071	Demonstrate knowledge of electromotive force (e.m.f.) production	2	3
25072	Apply electromagnetic theory to a range of problems	3	6
750	Demonstrate knowledge of electrical test instruments and take measurements	2	2
15852	Isolate and test low-voltage electrical subcircuits	2	2
15866	Demonstrate and apply knowledge of procedures for examining and testing electrical installations	4	3
29469	Select and install flexible cords and cables	2	4
29470	Demonstrate knowledge of electric motor and generator construction and operation	3	2
29471	Demonstrate knowledge of electric switchboards and lighting and power circuits	3	2
29472	Demonstrate knowledge of electric lighting systems	3	6
29473	Demonstrate knowledge of single-phase and three-phase transformers	3	3

29474	Demonstrate and apply knowledge of electrical fittings and components and their installation	3	6
29475	Demonstrate and apply knowledge of electronics	3	8
29476	Demonstrate and apply knowledge of capacitance, inductance, power factor, and power factor correction	3	7
1204	Demonstrate knowledge of earthing	3	2
5932	Demonstrate knowledge of protection of circuits from static electricity and magnetic interference	2	2
15848	Demonstrate and apply knowledge of safeguards for use with portable electrical appliances	2	3
29477	Demonstrate knowledge of the New Zealand national electricity grid and associated electrical protection	3	2
29478	Demonstrate knowledge of electrical installations in special situations	4	6
29479	Draw and explain electrical diagrams	3	4
29480	Demonstrate knowledge of electric circuit design, control, and protection	3	6
29481	Apply knowledge of lighting installation, testing, repair, and disposal	3	5
15855	Demonstrate knowledge of circuit protection	3	3
29482	Demonstrate and apply knowledge of special power supplies	3	3
29483	Demonstrate and apply knowledge of single-phase and three-phase rotating machines	3	4
29557	Apply fundamental techniques for identifying and locating faults in electrical fittings or systems	3	4
5926	Demonstrate knowledge of programmable logic controllers (PLCs)	4	3
15862	Demonstrate knowledge of industrial process control	4	2
29440	Demonstrate knowledge of electric switchboards	4	3
29441	Demonstrate and apply knowledge of cable coding, colours, characters, applications, and capacity	4	2
29442	Demonstrate and apply knowledge of renewable energy electricity generation systems	4	4
29443	Demonstrate and apply knowledge of a.c. motors	4	4
29444	Demonstrate and apply knowledge of a.c. electric motor control and installation	4	5
27352	Demonstrate knowledge of supervision of trainees undertaking prescribed electrical work	4	2
29445	Demonstrate and apply knowledge of single-phase and three-phase transformers	4	4
376	Employ customer service techniques to accommodate customer behavioural styles in a workplace	3	2
2016	Install earthing systems for multiple earthed neutral installations	3	3
2020	Plan and install cable support systems	3	3
11095	Write business correspondence to convey complex ideas and information	3	3
15844	Select and install flexible cords	3	2
15869	Install electrical equipment in damp situations	4	3
15870	Inspect and test an electrical installation for compliance with AS/NZS 3000	4	5

16407	Use and maintain hand and power tools for electrical work	3	3
16415	Install and commission extra-low voltage equipment	4	3
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4
29419	Prepare for, install, test, and commission new electrical installations	4	10
29420	Fault-find, test, and commission electric motors	4	4
29421	Inspect, test, fault-find, and repair fixed-wired electrical appliances, portable electrical appliances, and tools	3	3
29422	Install, wire, test and fault-find, and repair power outlets and electric lighting systems in existing installations	4	7
29424	Install, commission, and maintain emergency lighting systems	4	2
29425	Write electrical industry service reports	3	2
29427	Install, test, and commission electrical appliances	4	2
29429	Demonstrate and apply knowledge of safe practices in an electrical workplace	4	2
Domestic/Commercial Speciality			
2021	Plan, install, and commission a power supply on a construction or demolition site	4	2
5931	Select and install domestic or commercial electric switchboards	4	3
29434	Install computer networking infrastructure systems	4	4
29436	Wire and connect control devices used in the electrical environment	4	4
29437	Analyse building and plant energy efficiency	4	3
29438	Install, commission, and maintain a power quality protection system	4	4
29439	Schedule and manage preventative maintenance for domestic or commercial electrical equipment	4	5
29446	Demonstrate knowledge of computer networking infrastructure principles	4	2
Industrial Speciality			
2030	Schedule and manage preventative maintenance for industrial electrical equipment	5	6
10787	Install and test transducers	4	2
29423	Carry out planned maintenance of electrical equipment	4	3
29426	Follow a control drawing and install, wire, and commission a control panel	4	2
29428	Install, test, and commission a.c. rotating machines	4	3
29430	Select and install industrial electric switchboards	4	3
29431	Select and install electric motor starters	4	2
29432	Select, install, and commission a variable frequency drive	4	2
29433	Install, wire to, and connect a machine safety device	4	2
29434	Install and programme a PLC	4	2