

NATIONAL CERTIFICATE in Lifts and Escalators (Level 4) with strands in Installation, and Servicing

Level 4

Credits 265

This qualification has been reviewed. The last date to meet the requirements is 31 December 2015.

Transition Arrangements

The review occurred as a result of the mandatory review of Mechanical Engineering qualifications, part of the Targeted Review of Qualifications (TRoQ).

The last date for entry to programmes leading to qualification is 31 July 2015. The last date for assessments to take place for this qualification is 31 December 2015, when the qualification will be discontinued.

This qualification contains expired and expiring unit standards for which replacement unit standards have now been registered. Candidates who gain credit for the replacement standard(s) are exempt from the requirement to gain credit for the expired or expiring standard(s).

Credit for	Exempt from
22913, 22914	2388
19873, 19874	2405
21907	2670
20613, 20614	2722
20597, 20598	2723
20599	2724
21911, 21912	2824
26551	6401
26552	6402
21913	12299

The qualification also contains an expired unit standard for which no replacement unit standard has been registered. Candidates will be unable to select unit standard 2389 from the pool of Core Elective standards.

For detailed information see [Review Summaries](#) on the NZQA website.

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	October 1999	December 2015
Review	2	July 2015	December 2015

Standard Setting Body responsible for the qualification:

Competenz
PO Box 9005
Newmarket
Auckland 1149

Telephone 0800 526 1800
Email qualifications@competenz.org.nz
Website www.competenz.org.nz

Reviewed

NATIONAL CERTIFICATE in Lifts and Escalators (Level 4) with strands in Installation, and Servicing

Level 4

Credits 265-283

	Core		Installation Strand		Servicing Strand		Balance if required
	C	E	C	E	C	E	
level 1 credits:	14	-	-	-	-	-	0-15
level 2 credits:	37	0-25	18	0-6	16	-	0-15
level 3 credits:	7	0-35	33	0-16	45	-	0-15
level 4 credits:	16	0-88	-	0-40	8	80	0-15
minimum totals:	74	100	51	25	69	25	0-15

<p>Key C = Compulsory. E = Elective.</p>

registration date: 19 October 1999

planned review date: 31 October 2003

field, sub-field and domains:

BUSINESS AND FINANCIAL SERVICES

Management
 quality management

COMPUTING AND INFORMATION TECHNOLOGY

Computing
 generic computing

CORE GENERIC

Core Generic
 work and study skills

ENGINEERING AND TECHNOLOGY

Electrical Engineering
 core electrical
 electrical machines
 Electronics Technology
 core electronics
 Mechanical Engineering
 engineering - measurement
 engineering core skills

engineering drawing and design
fluid power
lifts and escalators
maintenance and diagnostics in mechanical engineering
mechanical assembly
welding

HEALTH

Health Studies
core health
Occupational Health and Safety
occupational health and safety practice

HUMANITIES

Communication Skills
interpersonal communications
writing

SERVICE SECTOR

Lifting Equipment
powered industrial lift trucks
scaffolding
Service Sector Skills
service sector - core skills

1 purpose

This level 4 national qualification is designed to enable people employed in the Lifts and Escalators industry to gain recognition for the relevant skills and knowledge required by industry expressed in terms of competency.

People awarded with this qualification are able to safely install, test and service a range of traction and hydraulic lifts and escalators systems to comply with statutory standards and to meet customer requirements.

This qualification has been designed with specialist strands to accommodate the principle sectors of Installation and Servicing within the Lifts and Escalators discipline.

The elective components of this qualification allow people to develop a range of generic work skills, such as customer service skills and computer skills, which are desirable within the industry.

This qualification leads to the proposed National Certificate in Lifts and Escalators (Level 5) and/or a National Diploma in Engineering.

Before people can be awarded this qualification, they will need to be registered with the Electrical Workers Registration Board (EWRB) in terms of Schedule 2 of the Electricity Regulations 1997 as a “registered person”. As a minimum, a “registered person” will be registered as an Electrical Service Technician, Levels A and B. If this registration is not already held it can be obtained by attendance at a EWRB-approved course and meeting the examination, practical assessment, and relevant electrical work experience requirements of the EWRB.

2 regulations for the qualification

2.1 entry information for programmes of education and training assessed against the unit standards in the qualification

Open.

It is a legislative and an employment requirement that holders of the National Certificate in Lifts and Escalators must also have met the examination, practical assessment, and electrical work experience requirements of the Electrical Workers Registration Board (EWRB) in relation to the Electrical Service Technicians, Levels A and B Registration, known as EST “A” & “B”. People seeking the award of this qualification must first provide the NZEFMITO with proof of their registered status. The NZEFMITO is responsible for verifying registration and for forwarding all results to NZQA for the award of the qualification.

2.2 recognition of prior learning

Recognition of prior learning will be carried out by accredited providers or NZEFMITO registered workplace assessors in accordance with NZQA guidelines.

2.3 qualification requirements

summary of qualification requirements

This qualification will be awarded to people who meet the requirements of the core compulsory and elective sections, and one (or both) of the strands. They must also hold an Electrical Workers Registration Board (EWRB) registration as an Electrical Service Technician (EST), Levels A and B, known as EST “A” & “B”, as a minimum “registered person” status in terms of Schedule 2 of the Electricity Regulations 1997.

The above registration may be obtained following:

- attendance at EST-A and EST-B courses provided by an EWRB-approved training provider (includes study by distance learning).
- passing the EST-A and EST-B examinations and practical assessments conducted by an EWRB-approved training provider.
- providing evidence of safety training in work practices, testing, first aid, and CPR.
- providing evidence of relevant electrical work experience satisfactory to the EWRB.

Installation Strand

A minimum total of 265 credits of which 40 are at level 4 or above and include:

- all the unit standards listed in the Core and Strand Installation Compulsory Lists;
- a minimum of 100 credits from the Core Elective List;
- a minimum of 25 credits from the Installation Strand Elective; and if required
- a balance of credits from anywhere on the National Qualifications Framework.

Servicing Strand

A minimum total of 283 credits which include:

- all the unit standards listed in the Core and Servicing Strand Compulsory Lists;
- a minimum of 100 credits from the Core Elective List;
- a minimum of 25 credits from the Servicing Strand Elective List; and if required
- a balance of credits from anywhere on the National Qualifications Framework.

detailed qualification requirements

Core Compulsory

All the unit standards listed are required.

FIELD: CORE GENERIC
 Sub-field: Core Generic
 domain: work and study skills

Unit No.	Unit Standard Title	Level	Credit
4249	Demonstrate care and timeliness: as an employee	1	3

FIELD: ENGINEERING AND TECHNOLOGY

Sub-field: Electrical Engineering

domain: core electrical

Unit No.	Unit Standard Title	Level	Credit
15849	Perform manual soldering and de-soldering procedures for electrical work	2	2

Sub-field: Electronics Technology

domain: core electronics

Unit No.	Unit Standard Title	Level	Credit
5934	Prevent electrostatic damage to electronic components	2	1

Sub-field: Mechanical Engineering

domain: engineering - measurement

Unit No.	Unit Standard Title	Level	Credit
4432	Identify and convert basic units of measure used in engineering	1	1
4433	Measure with non-complex devices used in engineering	1	2

domain: engineering core skills

Unit No.	Unit Standard Title	Level	Credit
2395	Select, use, and care for engineering hand tools	1	4
2396	Select, use and maintain portable hand held engineering power tools	2	4
2824	Follow safe working practices on an engineering work site	2	3
12299	Shift loads in the performance of machinery and equipment installation and maintenance	2	3

domain: fluid power

Unit No.	Unit Standard Title	Level	Credit
2723	Make a fluid power system safe	2	8

domain: lifts and escalators

Unit No.	Unit Standard Title	Level	Credit
14571	Assist in the installation or replacement of lift roping systems under supervision	2	4
14578	Inspect, tests and adjust governors, ropes and lift safety equipment	4	8
14579	Coordinate inspection and testing of lift equipment for compliance with statutory requirements	4	8
14582	Release trapped passengers from lifts	3	4
14584	Clean and lubricate lift equipment	1	2

domain: mechanical assembly

Unit No.	Unit Standard Title	Level	Credit
2387	Assemble mechanical components under supervision	2	2

domain: welding

Unit No.	Unit Standard Title	Level	Credit
2670	Avoid welding hazards with safe work practices	2	1

FIELD: HEALTH

Sub-field: Health Studies

domain: core health

Unit No.	Unit Standard Title	Level	Credit
6401	Provide basic first aid	2	1
6402	Provide basic life support	1	1

Sub-field: Occupational Health and Safety

domain: occupational health and safety practice

Unit No.	Unit Standard Title	Level	Credit
497	Protect health and safety in the workplace	1	1

FIELD: HUMANITIES
 Sub-field: Communication Skills
 domain: interpersonal communications

Unit No.	Unit Standard Title	Level	Credit
1277	Communicate information in a specified workplace	2	3
9681	Participate in groups and/or teams to make decisions	3	3

domain: writing

Unit No.	Unit Standard Title	Level	Credit
3492	Write a technical report	2	3

FIELD: SERVICE SECTOR
 Sub-field: Service Sector Skills
 domain: service sector - core skills

Unit No.	Unit Standard Title	Level	Credit
57	Provide customer service in given situations	2	2

Core Elective

A minimum of 100 credits is required.

FIELD: BUSINESS AND FINANCIAL SERVICES
 Sub-field: Management
 domain: quality management

Unit No.	Unit Standard Title	Level	Credit
8085	Explain the fundamental concepts and principals of quality and its management	3	4

FIELD: ENGINEERING AND TECHNOLOGY
 Sub-field: Mechanical Engineering
 domain: engineering - measurement

Unit No.	Unit Standard Title	Level	Credit
4435	Select, use and care for engineering dimensional measuring equipment	2	3

domain: engineering drawing and design

Unit No.	Unit Standard Title	Level	Credit
2430	Draw and interpret engineering sketches under supervision	2	4
2431	Draw and interpret engineering drawings under supervision	2	8

domain: lifts and escalators

Unit No.	Unit Standard Title	Level	Credit
14568	Plumb and set out multiple lift installations in a bank	4	10
14570	Install or replace lift roping systems	4	8
14575	Prepare and finish surfaces for lift and escalator installations	2	6
14577	Commission hydraulic lifts	4	15
14586	Replace and upgrade lift control systems	4	40
14587	Replace and upgrade mechanical lift equipment	3	10
14589	Commission escalators and moving walks	4	15

domain: mechanical assembly

Unit No.	Unit Standard Title	Level	Credit
2388	Assemble and fit precision tooling and mechanical components	3	10
2389	Assemble and fit precision tooling and mechanical components under supervision	2	4

FIELD: SERVICE SECTOR

Sub-field: Lifting Equipment

domain: powered industrial lift trucks

Unit No.	Unit Standard Title	Level	Credit
10851	Operate a powered industrial lift truck fitted with forks (forklift)	3	6
10852	Operate a powered industrial lift truck (PILT) fitted with attachments on a worksite	3	2

domain: scaffolding

Unit No.	Unit Standard Title	Level	Credit
9184	Erect non notifiable scaffolding	3	3

Installation Strand Compulsory

All the unit standards listed are required.

FIELD: ENGINEERING AND TECHNOLOGY

Sub-field: Mechanical Engineering

domain: lifts and escalators

Unit No.	Unit Standard Title	Level	Credit
14566	Prepare and restore sites for lift and escalator installation	3	8
14567	Plumb and set out a single lift installation	3	15
14569	Install and align shaft equipment, doors, cars, counterweight and pit equipment	3	10
14572	Install and align traction and hydraulic lift machine room equipment	2	8
14573	Install lift controls, car and landing buttons, indicators and wiring	2	10

Installation Strand Elective

- *a minimum of 25 credits from the following unit standards; and if required*
- *a balance of credits to achieve the strand requirement for a minimum total of 265 credits, of which a minimum of 40 are at level 4 or above, from anywhere on the National Qualifications Framework.*

FIELD: COMPUTING AND INFORMATION TECHNOLOGY

Sub-field: Computing

domain: generic computing

Unit No.	Unit Standard Title	Level	Credit
2780	Describe and operate a personal computer system	2	6

FIELD: ENGINEERING AND TECHNOLOGY

Sub-field: Mechanical Engineering

domain: lifts and escalators

Unit No.	Unit Standard Title	Level	Credit
14574	Install, maintain, and dismantle false lift cars	4	5
14581	Diagnose and repair faults and service lift cars and equipment	3	10
14583	Inspect, test and maintain lift performance parameters	4	15
14588	Install, set up, and align escalators and moving walks	4	20

domain: welding

Unit No.	Unit Standard Title	Level	Credit
2682	Weld steel up to 10mm thick with the manual metal arc welding process in the downhand positions	3	6

Servicing Strand Compulsory*All the unit standards listed are required.*

FIELD: COMPUTING AND INFORMATION TECHNOLOGY

Sub-field: Computing

domain: generic computing

Unit No.	Unit Standard Title	Level	Credit
2780	Describe and operate a personal computer system	2	6

FIELD: ENGINEERING AND TECHNOLOGY

Sub-field: Electrical Engineering

domain: electrical machines

Unit No.	Unit Standard Title	Level	Credit
1184	Test, and locate and diagnose faults in electrical machine windings	3	2
16413	Fault-find, repair, and test electric motors	4	8
16416	Service bearings and seals in electrical rotating machines	2	1

Sub-field: Electronics Technology
domain: core electronics

Unit No.	Unit Standard Title	Level	Credit
8218	Carry out surface mounted device (SMD) soldering and de-soldering as used in electronics servicing	3	3

Sub-field: Mechanical Engineering
domain: fluid power

Unit No.	Unit Standard Title	Level	Credit
2722	Maintain a fluid power system	2	5
2724	Clean a fluid power system for service	2	4
2727	Maintain hydraulic fluid power equipment and components under supervision	3	20

domain: lifts and escalators

Unit No.	Unit Standard Title	Level	Credit
14580	Diagnose and repair faults and service lift controls	3	10
14581	Diagnose and repair faults and service lift cars and equipment	3	10

Servicing Strand Elective

- a minimum of 25 credits from the following unit standards; and if required
- a balance of credits to achieve the strand requirement for a minimum total of 283 credits from anywhere on the National Qualifications Framework.

FIELD: ENGINEERING AND TECHNOLOGY

Sub-field: Electrical Engineering
domain: electrical machines

Unit No.	Unit Standard Title	Level	Credit
2014	Overhaul a. c. rotating machines and control equipment	4	5
5928	Overhaul d. c. rotating machines and control equipment	4	5

Sub-field: Mechanical Engineering
 domain: fluid power

Unit No.	Unit Standard Title	Level	Credit
2731	Maintain hydraulic fluid power equipment and components	4	20
2733	Diagnose hydraulic fluid power system faults	4	20

domain: lifts and escalators

Unit No.	Unit Standard Title	Level	Credit
14585	Service, clean and lubricate escalators and moving walks	4	10

domain: maintenance and diagnostics in mechanical engineering

Unit No.	Unit Standard Title	Level	Credit
2405	Identify and replace bearings in machines and equipment	4	20

3 accreditation option

Evaluation of documentation	Evaluation of documentation and visit
Core Skills National Standards Body – Communication Skills Advisory Group	NZQA

Further accreditation requirements depend on the electives undertaken, and can be found on the unit standards concerned.

4 certification

The logos of the New Zealand Engineering, Food and Manufacturing Industry Training Organisation and NZQA will appear on the certificate.

5 transition arrangements

5.1 non National Qualifications Framework transition

There are no existing or previous qualifications in this domain and consequently no transition arrangements are required.

5.2 National Qualifications Framework transition

Any version of a unit standard contained within this qualification which retains its original unit standard identification number will continue to meet the requirements of this qualification.

Comments to:

NZ Engineering, Food and Manufacturing Industry Training Organisation
Qualification Revision
PO Box 160
WELLINGTON

by 31 October 2003.

Please Note:

Providers must be accredited by the Qualifications Authority before they can offer programmes of education and training assessed against unit standards.

Accredited providers assessing against unit standards must engage with the moderation system that applies to those unit standards.

Reviewed

Prerequisite Diagram

