

## National Certificate in Precast Concrete (Level 3) with strands in Structural Precast, Prestressing, Precast Tank, and Traditional Tank

**Level** 3

**Credits** 213–252

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2023.

### Transition Arrangements

This qualification was republished in December 2021 to extend the last date for entry to programmes from 31 December 2021 to 30 June 2022. The last date for assessment has been extended from 31 December 2022 to 31 December 2023, when it will be discontinued.

This qualification has been replaced by the New Zealand Certificate in Concrete Construction Skills (Level 3) with strands in Formwork, Reinforcing, Placing and Finishing, Specified Concrete Finishes, Concrete Product Manufacture, Concrete Sawing and Drilling, and Precast Concrete Manufacture [Ref: 4189].

People currently working towards this qualification must either complete the requirements by 31 December 2023 or transfer to the replacement New Zealand qualification.

### Version 2

This qualification contains standards that replace earlier standards. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

Credit for	Exempt from
6400	26551, 26552
6401	26552
6402	26551
6401, 6402	26551, 26552

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

### NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	18 March 2011	31 December 2021
Review	2	28 November 2019	31 December 2021
Republication	2	26 March 2020	31 December 2021

Process	Version	Date	Last Date for Assessment
Republication	2	26 November 2020	31 December 2021
Republication	2	24 June 2021	31 December 2022
Republication	2	16 December 2021	31 December 2023

## Standard Setting Body

Waihanga Ara Rau Workforce Development Council  
PO Box 445  
Wellington 6140

Telephone 04 909 0174  
Email [Qualifications@waihanga.nz](mailto:Qualifications@waihanga.nz)  
Website [www.waihanga.nz](http://www.waihanga.nz)

Reviewed

## National Certificate in Precast Concrete (Level 3) with strands in Structural Precast, Prestressing, Precast Tank, and Traditional Tank

<b>Level</b>	<b>3</b>
<b>Credits</b>	<b>213–252</b>

### Purpose

The National Certificate in Precast Concrete (Level 3) with strands in Structural Precast, Prestressing, Precast Tank, and Traditional Tank [Ref: 1635] is designed for people who want to work in the concrete industry as precast concrete product manufacturers. It also provides a means of recognising current competence for those already working in the industry.

The qualification includes a Core Compulsory section which recognises the core skills and knowledge required by industry for precast concrete product manufacturers. These skills and knowledge relate to first aid; health and safety; interpreting specifications; industry standards and codes of practice; moulds and remoulds; environmental management; maintaining plant and equipment; quality checks; fabrication and placement of reinforcing; transportation, placement and finishing; curing and remedial work on concrete for precast product manufacture; and all other aspects of operations and logistics in a precast concrete product manufacturing workplace.

The Core Elective section includes standards which cover confined space entry; testing fresh or hardened concrete; preparation of orders for materials; yard duties; manufacturing and fabrication of moulds; cutting and drilling of concrete; and communicating during crane operations for precast concrete product manufacture.

Candidates must also meet the requirements of one strand. The Structural Precast Strand covers knowledge and skills related to the manufacture and lifting of precast concrete elements. The Prestressing Strand covers knowledge and skills related to the manufacture and lifting of prestressed concrete elements. The Precast Tank Strand covers knowledge and skills related to preparation for concrete industry operations, assembly and servicing of moulds and the demoulding of products; and the manufacture of precast concrete tanks. The Traditional Tank Strand covers knowledge and skills related to preparation for concrete industry operations, the assembly and servicing of moulds and the demoulding of products, and the manufacture of traditional concrete tanks.

The Core Elective section and strands provide flexibility within the qualification and recognition of specific skills and knowledge gained within the candidate's own work environment.

The qualification builds on the underpinning knowledge and skills provided by the National Certificate in Concrete Core Skills (Level 2) [Ref: 1452], and shares standards in common with other qualifications in the Concrete subfield at Level 3 and above, allowing transferable skills to be recognised between the different sectors of the concrete industry.

## Replacement Information

This qualification, the National Certificate in Concrete Construction (Placing and Finishing) (Level 3) [Ref: 1633], and the National Certificate in Concrete Construction (Level 4) [Ref: 1634] replaced the National Certificate in Concrete Construction with strands in Sitework, Pre-cast Concrete, and Placing and Finishing [Ref: 0732].

## Special Notes

- 1 It is expected that candidates for this qualification will have an existing basic knowledge of concrete industry practices. Consequently, standards 24879, 24880, 24881, 24882 and 24883, or the demonstration of equivalent knowledge and skills, are a prerequisite for entry to this qualification.
- 2 Due to the health and safety requirements of the sites in which these trade skills are applied, people entering programmes of education and training leading to the award of this qualification must demonstrate the capacity to understand any and all requirements, instructions, and communications (oral, written and graphic), to the required industry level. This might be evidenced by standards or achievement standards from the *Communication Skills* and *English* subfields at Level 2 or above, or the demonstration of equivalent knowledge and skills.
- 3 Recognition of current competence acknowledges the skills and knowledge gained from work and experience, or from courses or study undertaken. Assessment of recognition of current competence may be conducted by an assessor appointed by the Building and Construction Industry Training Organisation, or an accredited provider.

Application for recognition of current competence may be initiated by contacting the Building and Construction Industry Training Organisation.

## Credit Range

	Core Compulsory	Core Elective
Level 2 credits	27	0-5
Level 3 or above credits	97	13-18
Minimum totals	124	18

Structural Precast Strand		
	Compulsory	Elective
Level 2 credits	-	0-10
Level 3 credits	100	-
Level 4 credits	-	0-16
Minimum totals	100	10

Prestressing Strand		
	Compulsory	Elective
Level 2 credits	-	0-10
Level 3 credits	100	-
Level 4 credits	-	0-16
Minimum totals	100	10

	Precast Tank Strand	Traditional Tank Strand
Level 2 credits	3	3
Level 3 credits	68	88
Minimum totals	71	91

## Requirements for Award of Qualification

### Award of NZQF National Qualifications

Credit gained for a standard may be used only once to meet the requirements of this qualification.

Unit standards and achievement standards that are equivalent in outcome are mutually exclusive for the purpose of award. The table of mutually exclusive standards is provided on the New Zealand Qualifications Authority (NZQA) website: <http://www.nzqa.govt.nz/qualifications-standards/standards/standards-exclusion-list/>.

Reviewed standards that continue to recognise the same overall outcome are registered as new versions and retain their identification number (ID). Any version of a standard with the same ID may be used to meet qualification requirements that list the ID and/or that specify the past or current classification of the standard.

## Summary of Requirements

- Core Compulsory standards
- Core Elective – A minimum of 18 credits as specified

One of the following strands is required

- Structural Precast Strand
- Prestressing Strand
- Precast Tank Strand
- Traditional Tank Strand

## Detailed Requirements

### Core Compulsory

The following standards are required

Health > Health Studies > First Aid

ID	Title	Level	Credit
26551	Provide first aid for life threatening conditions	2	1
26552	Demonstrate knowledge of common first aid conditions and how to respond to them	2	1

Health > Occupational Health and Safety > Occupational Health and Safety Practice

ID	Title	Level	Credit
18426	Demonstrate knowledge of hazards associated with confined space	3	4

## Planning and Construction &gt; Concrete &gt; Concrete Core Skills

ID	Title	Level	Credit
26050	Demonstrate knowledge of transporting fresh concrete, and transport fresh concrete in own workplace	2	3
26051	Demonstrate knowledge, and carry out curing, of concrete	2	8
26052	Demonstrate knowledge of defects and carry out remedial work on concrete	3	15
26055	Cast concrete cylinders for compression testing	3	2
26057	Read and interpret concrete industry drawings and specifications	2	3
26058	Demonstrate knowledge of environmental management within the concrete industry	3	5
26059	Demonstrate knowledge of concrete industry standards and codes of practice	2	2
26060	Demonstrate knowledge of, safely use, and maintain concrete industry plant and equipment	2	6
26062	Describe standard operating procedures in a concrete industry workplace	2	3

## Planning and Construction &gt; Concrete &gt; Concrete Product Manufacture

ID	Title	Level	Credit
26065	Demonstrate knowledge of receiving, storing, maintaining and moving materials for concrete product manufacture	3	5
26066	Perform quality checks for concrete product manufacture	3	6
26067	Fabricate and place reinforcing for concrete product manufacture	3	8
26068	Demonstrate knowledge of fabrication and placing of reinforcing for concrete product manufacture	3	6

## Planning and Construction &gt; Concrete &gt; Precast Concrete

ID	Title	Level	Credit
12017	Coordinate the handling, storage, dispatch and loading of precast concrete units	3	8
12024	Place and finish concrete for precasting	3	15
26071	Demonstrate knowledge of lifting systems for precast concrete elements	3	4
26072	Demonstrate knowledge of assembling and servicing moulds, and demoulding, for precast concrete product manufacture	3	8
26073	Use lifting systems for precast concrete elements	3	4

## Planning and Construction &gt; Construction Trades &gt; Core Construction

ID	Title	Level	Credit
26039	Demonstrate knowledge of safe working and environmental practices in construction industry manufacturing workplaces	3	3
26040	Carry out safe working and environmental practices in construction industry manufacturing workplaces	4	4

**Core Elective**

A minimum of 18 credits

## Health &gt; Occupational Health and Safety &gt; Occupational Health and Safety Practice

ID	Title	Level	Credit
17599	Plan a confined space entry	4	5

## Planning and Construction &gt; Concrete &gt; Concrete Core Skills

ID	Title	Level	Credit
26053	Carry out routine tests on fresh concrete	3	5
26054	Perform a confined space entry in the concrete industry	3	5
26056	Demonstrate knowledge of the preparation of orders for materials and products in the concrete industry	3	3
26063	Carry out routine tests on hardened concrete	3	5

## Planning and Construction &gt; Concrete &gt; Concrete Product Manufacture

ID	Title	Level	Credit
26064	Demonstrate knowledge of and perform yard duties for a concrete product manufacturing workplace	2	5

## Planning and Construction &gt; Concrete &gt; Precast Concrete

ID	Title	Level	Credit
12029	Manufacture and fabricate moulds for precast concrete	4	30
26521	Cut and drill concrete for precast concrete manufacture	3	15

## Service Sector &gt; Cranes &gt; Crane Operation

ID	Title	Level	Credit
3789	Sling regular loads and safely direct a crane during crane operations	3	15
20864	Prepare for, and handle standard lift precast concrete elements during crane operations	4	16
30072	Demonstrate and apply knowledge of slinging regular loads safely	3	14

**Structural Precast Strand**

Meet the requirements of all of the following sets

- Structural Precast Strand Compulsory
- Structural Precast Strand Elective

**Structural Precast Strand Compulsory**

The following standards are required

Planning and Construction > Concrete > Precast Concrete

ID	Title	Level	Credit
26520	Manufacture precast concrete stairs	3	25
26523	Demonstrate knowledge of structural precast concrete element manufacture	3	25
26524	Manufacture precast concrete beams and columns	3	25
26525	Manufacture precast concrete panels	3	25

**Structural Precast Strand Elective**

A minimum of 1 standard

Service Sector > Cranes > Crane Operation

ID	Title	Level	Credit
3800	Operate a pendant controlled overhead crane and lift and place regular loads	2	10
20864	Prepare for, and handle standard lift precast concrete elements during crane operations	4	16

**Prestressing Strand**

Meet the requirements of all of the following sets

- Prestressing Strand Compulsory
- Prestressing Strand Elective

**Prestressing Strand Compulsory**

The following standards are required

Planning and Construction > Concrete > Precast Concrete

ID	Title	Level	Credit
26522	Demonstrate knowledge of structural prestressed concrete element manufacture	3	25
26526	Manufacture prestressed concrete beams and columns	3	25
26527	Manufacture prestressed concrete flooring units	3	25
26528	Manufacture prestressed concrete panels	3	25

**Prestressing Strand Elective**

A minimum of 1 standard



## Service Sector &gt; Cranes &gt; Crane Operation

ID	Title	Level	Credit
3800	Operate a pendant controlled overhead crane and lift and place regular loads	2	10
20864	Prepare for, and handle standard lift precast concrete elements during crane operations	4	16

**Precast Tank Strand**

The following standards are required

## Planning and Construction &gt; Concrete &gt; Concrete Core Skills

ID	Title	Level	Credit
26061	Prepare to perform concrete industry operations	2	3

## Planning and Construction &gt; Concrete &gt; Precast Concrete

ID	Title	Level	Credit
26070	Assemble and service moulds, and demould products for precast concrete product manufacture	3	8
27179	Demonstrate knowledge of precast concrete tank manufacture	3	30
27181	Manufacture precast concrete tanks	3	30

**Traditional Tank Strand**

The following standards are required

## Planning and Construction &gt; Concrete &gt; Concrete Core Skills

ID	Title	Level	Credit
26061	Prepare to perform concrete industry operations	2	3

## Planning and Construction &gt; Concrete &gt; Precast Concrete

ID	Title	Level	Credit
26070	Assemble and service moulds, and demould products for precast concrete product manufacture	3	8
27180	Demonstrate knowledge of traditional concrete tank manufacture	3	40
27182	Manufacture traditional concrete tanks	3	40

**Transition Arrangements**

This qualification, the National Certificate in Concrete Construction (Placing and Finishing) (Level 3) [Ref: 1633], and the National Certificate in Concrete Construction (Level 4) [Ref: 1634] replaced the National Certificate in Concrete Construction with strands in Sitework, Pre-cast Concrete, and Placing and Finishing [Ref: 0732].

There are substantial differences between the replaced qualification and its replacement qualifications.

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

People currently working towards versions 4 or 5 of the replaced qualification may choose to complete those versions or transfer to this qualification or another of the replacement qualifications. However, candidates working towards versions 4 or 5 of the replaced qualification with the Pre-cast Concrete Strand are advised to complete that version or transfer to this qualification.

The final date for entry into programmes or courses leading to the award of version 5 of the replaced qualification is 30 April 2011.

The final date for assessments to take place for version 4 of the replaced qualification is December 2011. The final date for assessments to take place for version 5 of the replaced qualification is 31 December 2013.

All versions of the replaced qualification will be recognised by the Building and Construction Industry Training Organisation.

This qualification contains standards that replace earlier standards. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

Credit for	Exempt from
6400	26551, 26552
6401	26552
6402	26551
8492	26627

It is not intended that anyone is disadvantaged by this review, and the above arrangements have been designed for a smooth transition. However, anyone who feels they have been disadvantaged may appeal to the Building and Construction Industry Training Organisation at the address below.

### Planned Review

Any person or organisation may contribute to the review of this qualification by sending feedback to the standard setting body at the above address.

Next Review	2015
-------------	------

## Other standard setting bodies whose standards are included in the qualification

The Skills Organisation  
 NZQA

### Certification

This certificate will display the logos of NZQA, the Building and Construction Industry Training Organisation, and the organisation that has been granted consent to assess against standards that meet the requirements of the qualification (accredited).

### Classification

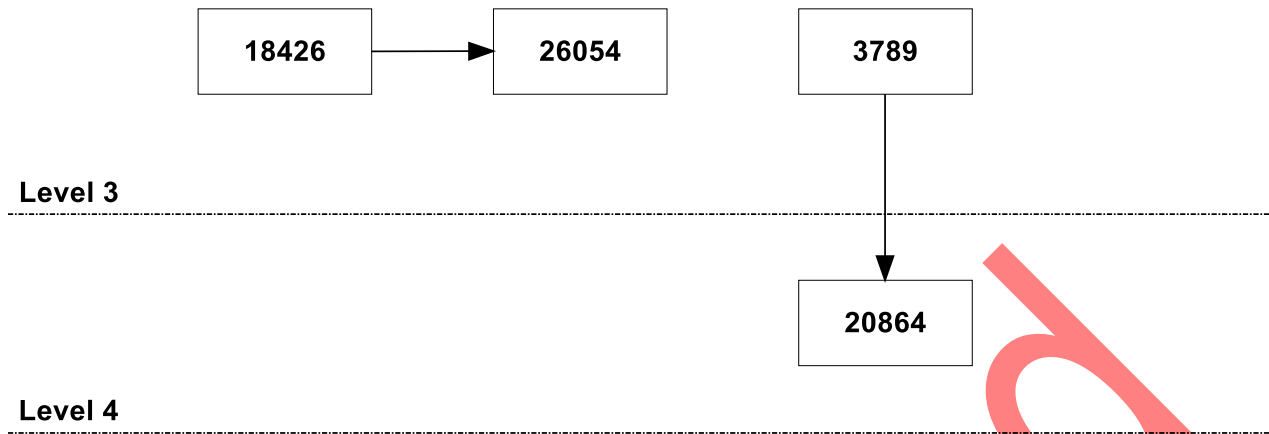
This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		NZSCED	
Code	Description	Code	Description
2105	Planning and Construction > Concrete > Precast Concrete	040399	Architecture and Building > Building > Building not elsewhere classified

#### Quality Management Systems

Providers and Industry Training Organisations must be granted consent to assess by a recognised Quality Assurance Body before they can register credits from assessment against standards. Accredited providers and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Accreditation requirements and the moderation system are outlined in the associated Consent and Moderation Requirements (CMR) for each standard.

### Prerequisite Diagram



### Recommended Diagram

