

Title	Demonstrate knowledge of placing concrete		
Level	3	Credits	3

Purpose	People credited with standard can demonstrate knowledge of: <ul style="list-style-type: none"> • concrete, and placing concrete; and • health and safety for placing concrete.
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Classification	Construction Trades > Carpentry
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Available grade	Achieved
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Guidance Information

1 Range

Evidence generated for assessment against this standard must reflect workplace and industry requirements specified in:

- documented worksite specifications, procedures, and practices;
- manufacturer recommendations, specifications, and technical data sheets;
- applicable specifications from other sources such as an architect, designer, engineer, or supervisor;
- applicable material safety data sheets;
- NZS 3109:1997 *Concrete construction*;
- NZS 3604:2011 *Timber Framed Buildings*;
- the New Zealand Building Code.

Evidence generated for assessment against this standard must reflect the requirements of:

- Building Act 2004
- Health and Safety at Work Act 2015
- Resource Management Act 1991
- Building Regulations 1992
- Building (Forms) Regulations 2004
- Health and Safety in Employment Regulations 1995.

2 References

NZS 3109:1997 *Concrete construction* (SNZ).

NZS 3604:2011 *Timber Framed Buildings* (SNZ).

Available from Standards New Zealand (<http://www.standards.co.nz>).

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of concrete.

Performance criteria

1.1 Identify and describe concrete ingredients. Identify the required proportions of concrete ingredients for workability and strength.

Range water, cement, aggregates, admixtures.

1.2 Describe the classifications of admixtures.

Range water reducers, accelerators, expanders, retarders, colouring agents.

Outcome 2

Demonstrate knowledge of placing concrete.

Performance criteria

2.1 Calculate required quantities of set concrete for a construction job.

2.2 Calculate required quantities of ingredients for site-mixed concrete.

2.3 Describe how distance, time, and method of transport affect concrete transport requirements.

2.4 Describe how to place and finish wet concrete.

Range compaction, screed and float, surface finish.

2.5 Describe how to cure concrete.

Range ponding, covering, time, treatment.

Outcome 3

Demonstrate knowledge of health and safety for placing concrete.

Range labour, identification of hazards and controls, plant; plant includes – any machinery, vehicle, vessel, aircraft, equipment (including personal protective equipment), appliance, container, implement, or tool; any component of any of those things; anything fitted or connected to any of those things; personal protective equipment includes – anything used or worn by a person (including clothing) to minimise risks to the person's health and safety; air supplied respiratory equipment.

Performance criteria

3.1 Identify and describe health and safety requirements for placing concrete.

Replacement information	This unit standard and unit standard 13047 replaced unit standard 611.
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Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 May 1999	31 December 2023
Review	2	26 February 2002	31 December 2023
Review	3	25 January 2008	31 December 2023
Review	4	30 September 2021	N/A

Consent and Moderation Requirements (CMR) reference	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Building and Construction Industry Training Organisation at national.office@bcito.org.nz if you wish to suggest changes to the content of this unit standard.