

Coordinate delivery of and erect precast concrete units on site

Level 3

Credits 8

Purpose People credited with this unit standard are able to: conduct pre-erection planning for precast concrete units; coordinate the off-loading of precast concrete units on site; coordinate the stacking of pre-cast concrete units; erect pre-cast concrete units in place on site; and complete work operations on site.

Subfield Concrete

Domain Concrete Construction

Status Registered

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Entry information Open.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Building and Construction Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0048

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

Special notes

- 1 Definitions
Specifications refers to documented instructions (oral, written, graphic) and may include any of the following: manufacturer's specifications, recommendations or technical data sheets; material specifications; specifications from a specialist source such as an architect, designer, engineer or a supervisor; site or work specific requirements.
Work site practice refers to the documented procedures specific to a work site which set out the standard and required practices of that work site.
- 2 Credit for this unit standard indicates compliance with industry practice. *Industry practice* refers to the ability to demonstrate knowledge that reflects the productivity, uniformity, finish quality and material economies currently accepted within industry.

- 3 Assessment against this unit standard must be undertaken on site. *On site* refers to a wide range of building and construction environments within which trade skills are required, and includes concrete production and concrete construction sites.
- 4 Legislation and publications relevant to this unit standard include: Health and Safety in Employment Act 1992 and Health and Safety in Employment Regulations 1995; Building Act 2004; Approved Code of Practice for the safe Handling, Transportation and Erection of Precast Concrete, available from Occupational Safety and Health (<http://www.osh.govt.nz/order/catalogue/pdf/concrete-ac.pdf>); NZS 3104:2003 *Specification for concrete production* and NZS 3109:1997 *Concrete construction*, available from Standards New Zealand (<http://www.standards.co.nz>)

Elements and performance criteria

Element 1

Conduct pre-erection planning for precast concrete units.

Performance criteria

- 1.1 Planning includes logistics of crane operations.

Range	rotation of elements, ground conditions, overhead conditions, safety, crane ratings, access requirements.
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- 1.2 The falsework/propping design is interpreted to determine job requirements.

Element 2

Coordinate the off-loading of precast concrete units on site.

Performance criteria

- 2.1 Precast concrete units are verified on delivery as complying with specified requirements.
- 2.2 Precast concrete units are lifted in accordance with work site practice.

Range	lifting equipment – inserts, bolt holes, lifting clutches, lifting beams, chain angles, hooks, strops, crane, use of dunnage points.
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Element 3

Coordinate the stacking of precast concrete units.

Performance criteria

3.1 Precast concrete units are stacked in accordance with work site practice, ensuring protection from damage, deterioration and contamination.

Range factors to consider – accumulation of trapped water, efflorescence, stain or damage by airborne pollutants, rust deposits, chafing and disfiguring, mishandling, dunnage points, access, free movement, use of supports, packaging, temporary protection.

Element 4

Erect precast concrete units in place on site.

Performance criteria

4.1 Precast concrete units are lifted in accordance with work site practice.

Range lifting equipment – inserts, bolt holes, lifting eyes, lifting beams, chain angles, hooks, strops, crane.

4.2 Precast concrete units are placed in position in accordance with specifications and falsework/propping design.

Range one of – precast beam, precast flooring, precast panel, precast stairs.

4.3 Post erection check is performed to verify erection against specifications, and any required actions are taken in accordance with work site practice.

Range alignment, location, propping / falsework.

Element 5

Complete work operations on site.

Performance criteria

5.1 All operations are safely completed; workplace, tools, plant and equipment are cleaned; and tools, plant and equipment are stored in accordance with work site practice.

5.2 Documentation is completed and processed in accordance with work site practice.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

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

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

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