

Title	Demonstrate knowledge of assembling and servicing moulds, and demoulding, for precast concrete product manufacture		
Level	3	Credits	8

Purpose	People credited with this unit standard are able to demonstrate knowledge of mould components and specifications; assembly of moulds; demoulding; and servicing of moulds, for precast concrete product manufacture.
----------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Classification	Concrete > Precast Concrete
-----------------------	-----------------------------

Available grade	Achieved
------------------------	----------

Guidance Information

1 Definitions

Specifications refer 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.

Workplace practice refers to the documented procedures specific to a work site which set out the standard and required practices of that workplace.

2 For the purpose of this unit standard, moulds can be one-sided.

3 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.

4 Legislation relevant to this unit standard includes:

Health and Safety in Employment Act 1992 and Health and Safety in Employment Regulations 1995;

Resource Management Act 1991;

NZS 3109:1997 *Concrete construction* and NZS 3114:1987 *Specification for concrete surface finishes*, available from Standards New Zealand

(<http://www.standards.co.nz>).

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of mould components and specifications for precast concrete product manufacture.

Performance criteria

- 1.1 Components are identified and their purpose described for moulds used in own workplace.
- 1.2 The importance of correct mould specifications is explained in terms of impact on the manufacturing process and quality of product.
- Range dimensional tolerances, finish requirements, sealing, release tapers, concrete pressures, grout losses, form removal.

Outcome 2

Demonstrate knowledge of assembly of moulds for precast concrete product manufacture.

Range four different types of mould used in own workplace.

Performance criteria

- 2.1 Tools and personal protective equipment for assembling mould are identified and described in terms of purpose and function.
- 2.2 Assembly sequence is described in terms of use of components and adjustments to meet job specifications and workplace practice.
- 2.3 Fittings, fixings, and hardware used in moulds are described in terms of impact on assembly sequence and final product.

Outcome 3

Demonstrate knowledge of demoulding for precast concrete product.

Range four different types of mould used in own workplace.

Performance criteria

- 3.1 Tools and personal protective equipment for demoulding are identified and described in terms of purpose and function.
- 3.2 Demoulding sequence is described in terms of removal of components to meet job specifications and workplace practice.
- 3.3 Fittings, fixings, and hardware used in moulds are described in terms of impact on demoulding sequence and final product.
- 3.4 Cleaning and preparation of moulds for reuse or storage is described in accordance with workplace practice.

Outcome 4

Demonstrate knowledge of servicing moulds for concrete product manufacture.

Range four different types of mould used in own workplace.

Performance criteria

- 4.1 Scheduled inspection and servicing of moulds is described in accordance with workplace practice.
- 4.2 Inspection of moulds is described in terms of process and factors to be checked for.
- 4.3 Servicing of moulds to meet manufacturer's specifications is described in terms of process and workplace practice.

Range cleaning, repair or replacement of parts, corrosion protection.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 November 2009	31 December 2023
Review	2	28 October 2021	31 December 2023

Consent and Moderation Requirements (CMR) reference

0048

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