

Title	Set out and lay structural block masonry		
Level	4	Credits	45

Purpose	<p>This unit standard is intended for people working in the brick and block laying industry.</p> <p>People credited with this unit standard are able to set out and lay structural block masonry to the level required of a commercially competent brick and block laying trade professional.</p>
----------------	---

Classification	Masonry > Brick and Block Laying
-----------------------	----------------------------------

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

Guidance Information

1 Assessment

This unit standard is one of a family of standards intended to align with the *New Zealand Certificate in Trowel Trades – Specifications*, and the New Zealand Certificate in Trowel Trades (Level 4) with strands in Brick and Block Laying, Floor and Wall Tiling, Proprietary Plaster Cladding Systems, Ferro-cement Tank Manufacture, Refractory Installation, and Solid Plastering (with optional strands in Fixing Cavities and Substrates, and Decorative Mouldings) [Ref: 3137].

Evidence for this unit standard must reflect commercial competence.

Commercial competence requires a candidate to be capable of consistently performing the requirements of the skill specification:

- to current regulatory, industry and commercial standards
- within a commercially viable timeframe
- in commercial environments
- without supervision
- in different and unfamiliar contexts.

Commercial competence must be confirmed by a person who has current expertise in the brick and block laying trade.

2 Definitions

Job documentation refers to approved plans for the specific work to be carried out. *Job specifications* provide detailed guidance on how the work is to be carried out, including manufacturers' specifications.

Workplace procedures refer to the documented procedures specific to a workplace which sets out the standard and the required practices of that workplace.

- 3 Legislation, standards and guidance information relevant to this standard includes the following, and any subsequent amendments and replacements:

New Zealand Certificate in Trowel Trades – Specifications, August 2021, available from www.WaihangaAraRau.nz.

Legislation accessed at www.legislation.govt.nz

- Building Act 2004,
- Health and Safety at Work Act 2015,
- The New Zealand Building Code.

Standards accessed at www.standards.govt.nz

- NZS 4210:2001 *Masonry construction: Materials and workmanship*
- NZS 4229:2020 *Concrete masonry buildings not requiring specific engineering design*
- NZS 4230:2004 *Design of reinforced concrete masonry structures*.

Best practice and good practice guidelines

- CCANZ CP 10:2014 *Code of Practice for Weathertight Concrete and Concrete Masonry Construction*, available from <https://concretenz.org.nz>
- *New Zealand Concrete Masonry Manual*, and other ConcreteNZ publications available from <https://concretenz.org.nz>
- *The Absolutely Essential Health and Safety Toolkit for Small Construction Sites*, and other Worksafe NZ publications available from www.worksafe.govt.nz.

Skill specification and performance level guidance

Skill specification

Set out and lay structural block masonry.

Knowledge

The requirements and method for set up in readiness to lay structural blocks for straight walls, and to form corners and intersecting walls.

Range set up includes use of – profiles, string lines, chalk lines.

The set out requirements of the first block structural block course to form straight walls, and to form corners and intersecting walls.

Range includes – bond pattern, laying plumb corners and positions for wash outs, reinforcing, control joints.

The purpose and methods to complete block cuts.

The purpose and method to place mortar to create an even joint between blocks.

Range spreading beds, buttering blocks.

The requirements and method to lay subsequent structural block courses to form a straight wall, corners and intersecting walls.

Range form corners and control joints, reinforcing, flashings, air vents, tool joints.

The requirements and methods to form and complete doors, windows and penetrations for services.

The requirements and methods to form block columns, bond beams and lintels.

The requirements and method to prepare a wall for grout fill.

Range high lifts, low lifts, bracing.

The requirements and methods to form curved walls.

The requirements and methods to laying structural block courses for corners other than 90 degrees.

The requirements and methods to form double storey structural block walls.

Range includes – requirements for laying blocks when working at heights.

The requirements and methods to perform vibrating and rodding of block fill.

The purpose of tooling block joints.

The requirements to finish block surfaces.

Range includes – laying sills, capping blocks, form plaster cappings, clean all surfaces; may include – coatings capability.

Skills

Set up to lay structural blocks and set out the first course.

Range set up may include use of – profiles, string lines, chalk lines, laser level.

Lay first and subsequent structural block courses of a range of blocks and incorporate block laying requirements.

Range first course includes – confirm level, bond pattern, laying plumb corners and positions for wash outs, reinforcing, control joints; subsequent courses include – confirm level, forming corners and control joints, reinforcing, flashings, air vents, tooling joints.

Form and complete openings.

Range doors, windows, penetrations for services.

Form structural members.

Prepare for and complete grout fill for a block wall.

Perform vibrating or rodding of block fill.

Finish block surfaces.

Performance level guidance

Performance must reflect laying blocks to form single storey rectangular walls, raking or gable walls, intersecting walls, foundation walls, retaining walls, freestanding walls and curved walls, including 90 degree corners.

Performance must reflect workplace procedures, legislative requirements, New Zealand Standards, best practice guides, job documentation, and job specifications relevant to structural block masonry work.

Planned review date	31 December 2027
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 September 2018	31 December 2025
Review	2	25 August 2022	N/A

Consent and Moderation Requirements (CMR) reference	0048
--	------

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

Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@WaihangaAraRau.nz if you wish to suggest changes to the content of this unit standard.