

<b>Title</b>	<b>Use mathematics for stonemasonry work</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	<p>This unit standard is intended for those working in the stonemasonry industry.</p> <p>People credited with this unit standard are able to use mathematics for stonemasonry work to the level of performance required of a commercially competent stonemason.</p>
----------------	---

<b>Classification</b>	Masonry > Stonemasonry
-----------------------	------------------------

<b>Available grade</b>	Achieved
------------------------	----------

### Guidance Information

#### 1 Assessment

This unit standard is one of a family of standards intended to align with the *New Zealand Certificate in Stonemasonry – Specifications*, and the *New Zealand Certificate in Stonemasonry (Level 4) with strands in Monumental Masonry, Construction Stonemasonry, and Natural Stone Fixtures and Fittings (with optional strands in Banker Masonry, and Conservation and Preservation)* [Ref: 2737].

Evidence for this unit standard must reflect commercial competence.

Commercial competence requires the candidate to demonstrate knowledge and skills in the context of the currently accepted requirements of a business operating in a commercial environment.

Commercial competence must be confirmed by a person who has current expertise in the stonemasonry trade.

#### 2 Definition

*Workplace procedures* refer to the documented procedures specific to a workplace which sets out the standard and the required practices of that workplace, which may include workplace codes of conduct, workplace safety policies and management plans, job specifications, and building requirements.

#### 3 Guidance information relevant to this unit standard includes the following, and any subsequent amendments and replacements:

- Health and Safety at Work Act 2015.
- *New Zealand Certificate in Stonemasonry – Specifications*, Waihanga Ara Rau, February 2023, available from [www.waihangaararau.nz](http://www.waihangaararau.nz).

## Skill specification and performance level guidance

### Skill specification

Use mathematics for stonemasonry work.

### Knowledge

The different units of measurement and how they are used in a stonemasonry context.

Range includes – length, weight, volume, time, temperature.

Conventions around the use of centres and spacings in stonemasonry work.

How to calculate area and volume for a variety of shapes relevant to stonemasonry work.

Range shapes include – rectangular, triangular and circular.

Pythagoras theorem and its practical application to construction and stonemasonry work.

Trigonometric calculations to determine lengths and angles for stonemasonry work.

How to use and apply percentages and ratios to stonemasonry calculations.

### Skills

Undertake measurements and calculations in one, two and three dimensions for stonemasonry work.

Use the mathematical principles associated with right angled triangles for stonemasonry work.

Calculate physical quantities of materials and make applicable allowances for stonemasonry work.

### Performance level guidance

Performance must reflect workplace procedures relevant to stonemasonry work.

<b>Planned review date</b>	31 December 2028
----------------------------	------------------

### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2017	31 December 2026
Review	2	28 September 2023	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	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](mailto:qualifications@waihangaararau.nz) if you wish to suggest changes to the content of this unit standard.