Title	**Use mathematics for fibrous plaster manufacture**		
Level	**4**	**Credits**	**3**

Purpose	This unit standard aligns with the *New Zealand Certificate in Fibrous Plaster Manufacture – Specifications*, developed on behalf of the fibrous plaster manufacture industry to specify the skills and knowledge required to achieve the New Zealand Certificate in Fibrous Plaster Manufacture (Level 4) with an optional strand in Specialist Models and Mould Making [Ref: 3062]. This unit standard is intended for those working in the fibrous plaster manufacturing industry. People credited with this unit standard are able to use mathematics for fibrous plaster manufacture to the level required of a commercially competent fibrous plaster manufacturer.

Classification	Construction Trades > Fibrous Plaster

Available grade	Achieved

Guidance Information

This unit standard is one of a family of standards that align with the *New Zealand Certificate in Fibrous Plaster Manufacture – Specifications* and should be read, interpreted and assessed in the context of those *Specifications* and the New Zealand Certificate in Fibrous Plaster Manufacture (Level 4) with an optional strand in Specialist Models and Mould Making [Ref: 3062].

The overarching level of performance for the family of unit standards is commercial competence.

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

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

The sufficiency of evidence required to demonstrate commercial competence against this unit standard is determined within the context of the family of unit standards aligned to the *Specifications.*

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The assessor must be confident that the candidate is capable of applying the skills and knowledge included in this skill specification to the level, scope and complexity required to support the achievement of related skills included in the *Specifications*.

Commercial competence can only be demonstrated, and must be assessed, in the workplace.

The assessment of commercial competence must be corroborated and confirmed by a person who has current expertise in the fibrous plaster manufacture trade and has had the opportunity to regularly observe the candidate in the workplace.

Reference
New Zealand Certificate in Fibrous Plaster Manufacture – Specifications, Waihanga Ara Rau, October 2018, available from https://www.waihangaararau.nz.

Skill specification and performance level guidance

Skill specification

Use mathematics for fibrous plaster manufacture.

Know The different units of measurement and how they are applied to the manufacture of fibrous plaster products.

Conventions associated with the uses of centres and spacing.

How to calculate perimeter length, area and volume.

Pythagoras' theorem and its practical application.

How to use and apply percentages, fractions and ratios to calculations.

Do Undertake measurements and calculations in one, two and three dimensions.

Use the mathematical principles associated with right-angled triangles.

Calculate physical quantities of materials.

Performance level guidance

Units of measurement include – those used for length, weight, volume, time, temperature.

Calculations for perimeter length, area and volume include a variety of different shapes including – rectangular, triangular, circular.

Measurements and calculations include using accepted conventions and making applicable allowances.

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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	30 August 2018	N/A
Rollover	2	27 April 2023	N/A
Rollover and Revision	3	28 August 2025	N/A

Consent and Moderation Requirements (CMR) reference	0120

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.

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