

Title	Demonstrate basic knowledge of concrete or clay roof tile systems		
Level	2	Credits	5

Purpose	<p>This unit standard is for people carrying out roof work and covers knowledge of concrete and clay roofing tile systems.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – identify roof parts and types; – demonstrate knowledge of concrete or clay roof tile types and laying terminology; – demonstrate knowledge of the purpose and types of flashings, accessories, and tile fasteners; – demonstrate knowledge of the key functions of underlay on a concrete or clay tile roof in accordance with NZS 4206; and – demonstrate knowledge of preliminary processes to be followed when working on roofs.
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Classification	Plumbing, Gasfitting and Drainlaying > Roofing
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job and off-job.
- 2 References
 - Construction Contracts Act 2002;
 - Historic Places Act 1993;
 - Local Government Act 2002;
 - Building Act 2004 and associated regulations;
 - Health and Safety at Work Act 2015;
 - Resource Management Act 1991;
 - Acceptable Solutions and Verification Methods for New Zealand Building Code Clause E2 External Moisture;
 - Licensed Building Practitioner Scheme – Understanding the Regulatory Environment Booklet – available at: <http://www.business.govt.nz/lbp/the-board/getting-licensed/applying-for-licensing>;
 - NZS 3604:2011 Timber-framed buildings;
 - NZS 3902:2004 Housing, alterations and small buildings contract;
 - NZS 4121:2001, Design for access and mobility: Buildings and associated facilities;
 - NZS 4206:1992, Concrete interlocking roofing tiles;

New Zealand Building Code Hand Book – available at:

<http://www.building.govt.nz/building-code-compliance/building-code-and-handbooks/building-code-handbook>;

and all subsequent amendments and replacements.

- 3 This unit standard applies to both new roof or re-roofing installations.
- 4 Range
- a Candidates must refer to current legislation and Standards during assessment.
 - b Demonstration of safe working practices are essential components of assessment of this unit standard.
 - c All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
 - i legislation;
 - ii policies and procedures;
 - iii ethical codes;
 - iv Standards – may include but are not limited to those cited in the New Zealand Building Code Hand Book;
 - v applicable site, enterprise, and industry practice; and,
 - vi manufacturers' instructions, specifications, and data sheets.

Outcomes and performance criteria

Outcome 1

Identify roof parts and types.

Performance criteria

- 1.1 Identify the parts that form the roof using industry terminology.
- Range includes but is not limited to – dormer, eaves, fascia board, flashing, flat roof, gable, hip, hip end, ridge, soffit, valley.
- 1.2 Identify common residential roof types using industry terminology.
- Range includes but is not limited to – gable, Dutch gable, four hip, mansard, skillion.
- 1.3 Identify roof frame structures in terms of their component parts, component purposes, and construction material.
- Range includes but is not limited to – tile batten, purlin, rafter, roof underlay.
- 1.4 Identify roof pitch factors in terms of slope, effect on concrete roof tile installation, water run-off variation, and recommended pitch for concrete tile roofs.

Outcome 2

Demonstrate knowledge of concrete or clay roof tile types and laying terminology.

Performance criteria

2.1 Identify concrete or clay roof tiles in terms of different profile variations available.

Range may include but is not limited to – type 1, type 2, type 3.

2.2 Explain tile laying terminology in terms of tile layout on the roof.

Range lap, straight bond, cross bond.

Outcome 3

Demonstrate knowledge of the purpose and types of flashings, accessories, and tile fasteners.

Performance criteria

3.1 Describe the purpose, type, and installation location of accessory tiles.

Range includes but is not limited to – ridge tile, barge tile, hip starter.

3.2 Explain the purpose and requirements of flashings on concrete or clay roofs.

3.3 Describe nails and clips used to fix concrete or clay roof tiles in terms of function and location when attaching roof tiles.

Outcome 4

Demonstrate knowledge of the key functions of underlay on a concrete or clay tile roof in accordance with NZS 4206.

Performance criteria

4.1 Describe key functions of self supporting underlay.

4.2 Explain situations where underlay is required.

Outcome 5

Demonstrate knowledge of preliminary processes to be followed when working on roofs.

Performance criteria

5.1 Describe processes to follow for securing and storing delivered tiles and battens.

- 5.2 Identify methods for moving tiles in terms of machinery used and safe lifting techniques.
- 5.3 Describe procedures to follow when walking on roof framing and on finished roof tiles.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 January 2009	31 December 2020
Review	2	16 March 2017	N/A
Rollover	3	25 August 2022	N/A

Consent and Moderation Requirements (CMR) reference	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the 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.