

Title	Demonstrate knowledge of roof installation preparation, planning, and organisation		
Level	4	Credits	6

Purpose	<p>This unit standard is intended for use in the training and assessment of people carrying out roof installation and covers knowledge of roof installation preparation planning and organisation.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – demonstrate knowledge of different roofing components and accessories; – demonstrate knowledge of the planning and checks required before installing roofing materials; – demonstrate knowledge of material calculations and checks to establish the quantity and condition of delivered materials; – demonstrate knowledge of roofing material handling, lifting, and stacking process; – demonstrate knowledge of the approved procedures used for installing roofing material al; – describe the process required for joints, laps, and penetration flashing; and – demonstrate knowledge of roofing technical information.
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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.
- 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
 - NZS 4121:2001, Design for access and mobility: Buildings and associated facilities;

Booklet – available at: <http://www.business.govt.nz/lbp/the-board/getting-licensed/applying-for-licensing>;

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 and 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

Demonstrate knowledge of different roofing components and accessories.

Performance criteria

1.1 Describe different roofing materials used across different roofing systems in terms of their common name and technical term, their function, and application.

Range evidence of 10 different roofing materials for three different roofing systems is required.

1.2 Describe roof framing components and their functions.

Range includes but is not limited to – uniformly distributed load, point load, peripheral load, snow and hail load, load of the structure, design load;
evidence of five roof framing components is required.

1.3 Describe roof accessory components and their functions and applications.

Range evidence of five accessory components is required.

Outcome 2

Demonstrate knowledge of the planning and checks required before installing roofing materials.

Performance criteria

- 2.1 Describe the purpose of the work sheet, plan, or job schedule in terms of defining the work to be done.
- 2.2 Describe site check activities.

Range may include but are not limited to – preparing the site, health and safety checks and signs, site hazards.
- 2.3 Describe roof framing or substrate checks that are used to verify the builder's work before commencing roof installation work.
- 2.4 Describe notifiable work activities and procedures relevant to roofing work.
- 2.5 Identify work area cordons, safety notices, and notification of work signs.
- 2.6 Describe the purpose of an initial site meeting in terms of job organisation.
- 2.7 Describe types and the purpose of underlays in terms of suitability for the roof type.
- 2.8 Describe the legislative requirements associated with ensuring re-roofing work is brought into line with the current New Zealand Building Code.

Outcome 3

Demonstrate knowledge of material calculations and checks to establish the quantity and condition of delivered materials.

Performance criteria

- 3.1 Explain methods for determining material quantities.
- 3.2 Describe delivered material checks against specifications.
- 3.3 Describe material checks for establishing the quantity and condition of delivered materials.

Outcome 4

Demonstrate knowledge of roofing material handling, lifting, and stacking process.

Range evidence for three different types of roofing material is required.

Performance criteria

- 4.1 Describe process of lifting roofing material onto the roof.
- 4.2 Describe process of stacking roofing material on the roof.
- 4.3 Explain precautions to be observed when moving and stacking roofing material on a roof.
- 4.4 Identify procedures for handling and protecting materials before, during, and after they are installed.

Outcome 5

Demonstrate knowledge of the approved procedures used for installing roofing material.

Performance criteria

- 5.1 Describe the purpose of communication and toolbox meetings in terms of information sharing and job organisation.
- 5.2 Describe procedures for using ladders, scaffolding, edge protection, safety nets and walking on roofs in accordance with site procedures.

Outcome 6

Describe the process required for joints, laps, and penetration flashing.

Performance criteria

- 6.1 Describe external corner flashing details.
- 6.2 Describe pipe penetration flashing.
Range new pipes, existing pipes, pipe wrap/dektites.
- 6.3 Describe roofing material junctions.
Range evidence for three different types roofing material junctions is required.

Outcome 7

Demonstrate knowledge of roofing technical information.

Performance criteria

- 7.1 Describe the purpose of key documentation associated with roof installation.
Range product technical statements, New Zealand Building Code, codes of practice, Acceptable Solutions, Alternative Solutions, manufacturers' specifications.

- 7.2 Explain how to access documentation associated with roof installation.
- 7.3 Describe as-built drawings and explain methods of keeping them up-to-date during the project.

Replacement information	This unit standard and unit standard 30011 replaced unit standards 25275, 25278 and 25290. This unit standard also replaced unit standard 25284.
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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	16 March 2017	N/A
Rollover	2	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.