Title	Demonstrate knowledge of shingle or slate roof systems		
Level	2	Credits	10

Purpose	This unit standard is intended for use in the training and assessment of people carrying out shingle or slate roof installation work and covers knowledge of roof shingle systems.  People credited with this unit standard are able to:  - identify support framing for roof shingles or slates;  - demonstrate knowledge of roof shingle or slate types;  - demonstrate knowledge of underlay used in roof shingle or slate installation;  - demonstrate knowledge of substrate and batten layout for roof shingles or slates;  - demonstrate knowledge of fastenings used in roof shingle or slate installation;  - demonstrate knowledge of flashings used in roof shingle or slate installation;  - identify specifications and regulations relevant to roof
	shingle or slate installation.

Classification	Plumbing, Gasfitting and Drainlaying > Roofing	
Available grade	Achieved	

## **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: <a href="http://www.business.govt.nz/lbp/the-board/getting-licensed/applying-for-licensing">http://www.business.govt.nz/lbp/the-board/getting-licensed/applying-for-licensing</a>;

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;

New Zealand Building Code Hand Book – available at: <a href="http://www.building.govt.nz/building-code-compliance/building-code-and-handbooks/building-code-handbook">http://www.building-code-and-handbooks/building-code-handbook</a>:

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**

Identify support framing for roof shingles or slates.

## Performance criteria

1.1 Identify structural components used for the roof support framework using industry terminology.

Range purlins, rafters, valley, fascia, portal frames, trusses, battens, substrate.

#### Outcome 2

Demonstrate knowledge of roof shingle or slate types.

#### Performance criteria

2.1 Describe shingle or slate types in terms of material, use, appearance, and durability.

Range asphalt, laminated, three-tab, four-tab, wooden species, shake, slate, composite.

2.2 Identify terms in accordance with industry use.

Range offset lap, head lap, butt end, course of shingles, cutout.

2.3 Identify the suitability of shingle or slate types for installation in terms of roof pitch.

#### Outcome 3

Demonstrate knowledge of underlay used in roof shingle or slate installation.

#### Performance criteria

- 3.1 Identify the types of underlay used most commonly in roof shingle or slate installation.
- 3.2 Identify the purpose and placement of underlays in terms of their function in the roofing system.

#### **Outcome 4**

Demonstrate knowledge of substrate and batten layout for roof shingles or slates.

#### Performance criteria

- 4.1 Describe substrate sheet layout and fixing in terms of industry use.
- 4.2 Describe batten layout and fixing.

#### **Outcome 5**

Demonstrate knowledge of fastenings used in roof shingle or slate installation.

### Performance criteria

- 5.1 Identify types of fastenings used in accordance with job specifications.
  - Range nail, staple, adhesive.
- 5.2 Describe options for fastening materials in terms of fastening type and use.
- 5.3 Describe nail types and sizes used to fix shingles and shakes or slates in terms of industry use.

#### Outcome 6

Demonstrate knowledge of flashings used in roof shingle or slate installation.

#### Performance criteria

6.1 Explain the purpose of flashings in accordance with New Zealand Building Code.

6.2 Identify flashing types suitable for use on shingle or slate roof in accordance with New Zealand Building Code Acceptable Solution E2/AS1.

Range metals, rubber membrane.

6.3 Provide two examples of areas where specialist flashings may be required in terms of job specifications.

#### **Outcome 7**

Identify specifications and regulations relevant to roof shingle or slate installation.

#### Performance criteria

- 7.1 Identify manufacturer information that specifies roof shingle installation.
- 7.2 Identify the regulations affecting the use of shingles or slates in accordance with the New Zealand Building Code.

Range Acceptable Solutions, Alternative Solutions, local council regulations.

Replacement information	This unit standard and unit standard 30025 were replaced by skill standard 40219.
	This unit standard replaced unit standard 25298.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment	
Registration	1	16 March 2017	31 December 2027	
Rollover	2	25 August 2022	31 December 2027	
Review	3	28 November 2024	31 December 2027	

1		
	Consent and Moderation Requirements (CMR) reference	0003

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