

<b>Title</b>	<b>Demonstrate knowledge of construction of alternative roof structures</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>4</b>

<b>Purpose</b>	People credited with this unit standard are able to: explain requirements of roof construction for roofs other than standard gable and hip; explain the method used to determine the dimensions and material required for unequal pitch and splayed end roofs; and describe the construction of roofs other than standard gable and hip.
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<b>Classification</b>	Construction Trades > Carpentry Theory
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<b>Available grade</b>	Achieved
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## Guidance Information

- Definition  
*Industry standards* means standards that are documented and recognised by industry, and are relevant to the building material used. Standards that may be applicable are listed in guidance note 3.
- Credit for this unit standard indicates compliance with industry practice. *Industry practice* refers to the ability to demonstrate knowledge that reflects the uniformity, finish quality and material economies currently accepted within industry.
- Legislation and publications relevant to this unit standard include:  
 Health and Safety in Employment Act 1992 and Health and Safety in Employment Regulations 1995;  
 Building Act 2004;  
 Resource Management Act 1991;  
 New Zealand Building Code;  
 NZS 3604:1999 *Timber Framed Buildings*, available from Standards NZ (<http://www.standards.co.nz>);  
*National Association of Steel Framed Housing (NASH) 3405 Design and Construction Guide (Non-specific)*, available from NASH NZ, PO Box 76 134, Manukau City.

## Outcomes and performance criteria

### Outcome 1

Explain requirements of roof construction for roofs other than standard gable and hip.

Range flat roofs, mono pitch roofs, skillion roofs, mansard roofs, curved roofs, roof dormers, unequal pitch, splayed ends.

**Performance criteria**

- 1.1 Roofs are described in terms of their characteristics and differences.
- 1.2 Roof and ceiling framing members are described in terms of their location and purpose.
- 1.3 Roof and ceiling bracing and support systems are described in terms of their location and purpose.
- 1.4 Penetration framing is described in terms of its location and purpose.

**Outcome 2**

Explain the method used to determine the dimensions and material required for unequal pitch and splayed end roofs.

**Performance criteria**

- 2.1 Principles of roof geometry are described in terms of obtaining roof member lengths and bevels.
- 2.2 Methods of calculating lengths and bevels of roof framing are described, and accurate sample calculations performed in accordance with industry practice.

**Outcome 3**

Describe the construction of roofs other than standard gable and hip.

Range flat roofs, mono pitch roofs, skillion roofs, mansard roofs, curved roofs, roof dormers, unequal pitch, splayed ends.

**Performance criteria**

- 3.1 Methods for the set out and cutting of roof framing members to correct lengths and bevels are explained.
- 3.2 The erection and fixing in position of roof framing members is explained.
- 3.3 The construction of penetration framing is explained.
- 3.4 Procedures for maintaining health and safety requirements when erecting roof framing are described.

<b>Replacement information</b>	<p>This unit standard replaced unit standard 13014.</p> <p>This unit standard was replaced by unit standard 32491.</p>
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**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	25 January 2008	31 December 2023
Review	2	30 September 2021	31 December 2023

<b>Consent and Moderation Requirements (CMR) reference</b>	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.