

Title	Demonstrate knowledge of thinning plantation trees and equipment used		
Level	3	Credits	5

Purpose	<p>This unit standard is intended for people employed in a thinning role in a commercial forestry operation.</p> <p>People credited with this unit standard are able to demonstrate knowledge of thinning plantation trees, and the equipment used for thinning plantation trees.</p>
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Classification	Forestry > Forest Silvicultural Operations
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Available grade	Achieved
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Guidance Information

- 1 Definition
Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
- 2 References
Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from <https://worksafe.govt.nz/>.
New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <https://www.nzfoa.org.nz>.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of thinning plantation trees.

Performance criteria

- 1.1 Basic thinning terminology is described in accordance with accepted industry practice.

Range	cull trees, crop trees, final crop tree, canopy gap trees, posting, stem diameter, stocking, brushing, hang ups, stems per hectare (SPH), scar damage, stump heights, scarf, back cut.
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- 1.2 The purpose of thinning is explained in terms of the effect on the final crop in accordance with accepted industry practice.

- 1.3 Factors which may influence whether a stand is waste, or production thinned are explained in accordance with accepted industry practice.
- Range terrain, market for products, cost, tree species.
- 1.4 Selection criteria for thinning are described in accordance with accepted industry practice.
- Range form, dominant trees, spacing, stocking, tree health.
- 1.5 Factors affecting the timing of thinning are explained in accordance with accepted industry practice.
- Range may include but is not limited to – branch size, stem growth and height, stem stability, wind blow, wood quality, job ease, hindrance level, cost, damage, disease; evidence of six is required.
- 1.6 The importance of directional felling in thinning operations is described in accordance with accepted industry practice.
- Range may include but is not limited to – stem damage, hang-ups, extraction, roadways, waterways, drop tree damage, working of the block; evidence of five is required.
- 1.7 The interrelationships between thinning and other operations are explained in accordance with accepted industry practice.
- Range impact of thinning on pruning, impact of pruning on thinning operations.
- 1.8 The consequences of poor selection and quality in a thinning operation are described in terms of the quality and value of the final crop.

Outcome 2

Demonstrate knowledge of equipment used for thinning plantation trees.

Performance criteria

- 2.1 Equipment used for thinning is identified and its function explained in accordance with accepted industry practice.
- 2.2 Stand factors affecting the choice of equipment for thinning are explained in accordance with accepted industry practice.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	8 November 1996	31 December 2012
Revision	2	19 June 1998	31 December 2012
Review	3	5 December 2000	31 December 2012
Review	4	22 May 2008	31 December 2016
Review	5	19 March 2015	N/A
Review	6	23 April 2020	N/A

Consent and Moderation Requirements (CMR) reference

0173

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

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.