

Title	Demonstrate knowledge of ropes, and tie knots and hitches during rigging work		
Level	2	Credits	2

Purpose	People credited with this unit standard are able to: <ul style="list-style-type: none"> - identify common types of ropes, knots, and hitches, used in rigging work; - describe their attributes, uses, and limitations; - tie knots and hitches using ropes during rigging work; - and store ropes for rigging work.
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Classification	Lifting Equipment > Core Rigging
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Available grade	Achieved
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Guidance Information

- 1 Ropes referred to in this unit standard does not include wire ropes.
- 2 All tasks must be carried out in accordance with the industry good practice based on:
 - a quality management systems (of the employer);
 - b designer's requirements and manufacturers' operating instructions; and government and local government legislation, regulations, bylaws, Health and Safety at Work Act 2015 and New Zealand Standards;
 - c the most up to date version of the *Approved Code of Practice for Load-lifting Rigging* is available online from: <https://worksafe.govt.nz/topic-and-industry/load-lifting-and-rigging/>; and all subsequent amendments and replacements.
- 3 Definition
Rigging – as defined in the *Approved Code of Practice for Load-lifting Rigging*.
- 4 Assessment
Those undertaking assessment against this unit standard should note that rigging work may take place at heights well above ground level and, therefore, requires physical fitness and ability to work at heights.

Outcomes and performance criteria

Outcome 1

Identify common types of ropes used in rigging work and describe their attributes, uses, and limitations.

Performance criteria

1.1 Identify common types of ropes.

Range at least three types of rope.

1.2 Describe the attributes, uses, and limitations of common types of ropes.

Range attributes may include but are not limited to – susceptibility to rot, abrasion resistance, stretch, flexibility, cost; evidence of at least one attribute, one use, and one limitation for each of three types of rope is required.

Outcome 2

Identify common knots and hitches used in rigging work and describe their attributes, uses, and limitations.

Performance criteria

2.1 Identify common knots and hitches.

Range includes but is not limited to – sheet bend, bowline, reef knot, figure eight knot, timber hitch, clove hitch, round turn and two half hitches, rolling hitch, sheepshank; evidence of at least three knots and three hitches are required.

2.2 Describe the attributes, uses, and limitations of common knots and hitches.

Range attributes may include but are not limited to – ease of tying and undoing, resistance to slipping, common applications; evidence of at least one attribute, one use, and one limitation for each of three knots and three hitches are required.

Outcome 3

Tie knots and hitches when using ropes and rope applications during rigging work.

Performance criteria

3.1 Use rope to tie knots and hitches during rigging work.

Range applications may include but are not limited to – securing tag lines, positioning wire rope for re-roping cranes, securing loads, joining ropes of equal and unequal diameter, tying off slack lines and lines under tension; knots and hitches may include but are not limited to – sheet bend, bowline, reef knot, figure eight knot, timber hitch, clove hitch, round turn and two half hitches, rolling hitch, sheepshank; evidence of at least three applications is required.

Outcome 4

Inspect, care for and store ropes for rigging work.

Performance criteria

4.1 Inspect ropes for damage.

Range may include but is not limited to – rot and mildew, cuts and abrasions, melts and chemical attack, broken fibres, ultra-violet damage, bird caging.

4.2 Identify and dispose of unsuitable ropes.

Range may include but is not limited to – worn, damaged, not fit for purpose.

4.3 Prepare and stow ropes for storage.

Range may include but is not limited to – removal of contaminants, coiling up and securing.

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	22 October 2010	31 December 2016
Review	2	16 July 2015	31 December 2020
Review	3	13 December 2018	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 Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.