Title	**Erect and dismantle vessel scaffolding**		
Level	**4**	**Credits**	**10**

Purpose	This unit standard is for people who have elementary scaffolding skills and who want to develop their scaffolding skills to an intermediate level. People credited with this unit standard are able to: – plan and prepare for the erection of vessel scaffolding; – erect vessel scaffolding; – install link bay/lap, butt planks, and rectangular vessel scaffolding; – check the structure is compliant and complete the GPG inspection report; and – dismantle vessel scaffolding.

Classification	Lifting Equipment > Intermediate Scaffolding

Available grade	Achieved

Guidance Information

1 This unit standard has been developed for learning and assessment on-job or off-job in a simulated environment. Design, erection, and dismantlement of scaffolds and scaffolding structures in this unit standard must take place under the direct supervision of a certified scaffolder who holds a current Certificate of Competence for the scaffolding concerned.

2 All tasks are to be carried out in accordance with:
- a quality management systems;
- b designer requirements and manufacturer operating instructions; and legislation, regulations, bylaws, Health and Safety at Work Act 2015, and Health and Safety in Employment Regulations 1995;
- c the most up to date version of the *Good Practice Guidelines - Scaffolding in New Zealand (GPG),* 2016 available from https://www.worksafe.govt.nz/topic-and-industry/working-at-height/scaffolding-in-new-zealand/; and all subsequent amendments and replacements.

3 Definitions
Bay/lap scaffolding refer to the construction of independent scaffold bays linked by lapping planks or boards (called ‘lap bays’) to encompass the entire internal or external face of the vessel. Bay/lap scaffolding may thus be constructed inside or outside the vessel.

Client is an individual or representative of a company who commissions a particular scaffold or scaffolding structure to be erected, or is an end user of the scaffold or scaffolding structure.
Dismantle the deck refers to the process of removing, in safe order, scaffolding components from a lift above to a lift below or the ground.
Rectangular vessel scaffolding refers to the construction of a square or rectangular scaffold to surround the exterior of a vessel, which is then planked across at the corners to facilitate access to the vessel. Rectangular vessel scaffolding may only be used when the diameter of the vessel is less than the greatest possible scaffold bay length able to be used and can only be constructed on the outside of the vessel.
Scaffold plan is a key design document prepared by the candidate and used as a basis for the erection of a particular scaffold.
Scaffolding is as defined in the GPG and in the Health and Safety in Employment Regulations 1995.
Splay scaffolding refers to the construction of abutting trapezoid shaped scaffold to encompass the entire internal or external face of the vessel. Splay scaffolding may be constructed inside or outside the vessel. By its nature splay scaffolding must be constructed with tube and fitting scaffolding.
Vessel is a three dimensional structure containing curves and often irregular in shape.
Vessel scaffolding refers to scaffolding that encompasses the entire face of a vessel. A tank is a specific type of vessel and for the purposes of this unit standard is included in the term vessel. Vessel scaffolding includes bay/lap scaffolding, rectangular vessel scaffolding and splay scaffolding.

4 Training and assessment
Evidence is required using multi-bay structures for at least one each of bay/lap scaffolding; rectangular scaffolding; and splay scaffolding. For the construction of bay/lap and splay scaffolding, assessment may be for scaffolding constructed either inside or outside a vessel.

Assessment should not include scaffolding requiring a Chartered Professional Engineer to certify the adequacy of the design prior to the erection of the scaffold.

5 Recommended skills and knowledge
New Zealand Certificate in Scaffolding (General) (Level 3) [Ref: 3708] or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Plan and prepare for the erection of vessel scaffolding.

Performance criteria

1.1 Confirm vessel scaffolding requirements with the work supervisor or client.

Range includes but is not limited to – vessel diameter, offset distance, type of vessel scaffolding to be employed.

1.2 Draw a scaffold plan.

Range includes – vessel diameter, offset distance, ground conditions, type of vessel scaffolding to be employed;
may include but is not limited to – number of bays, spacing between bays, bracing, guardrails and planking.

1.3 Identify and source the necessary equipment in accordance with the scaffold plan.

Outcome 2

Erect vessel scaffolding.

Performance criteria

2.1 Base out the scaffolding in accordance with the scaffold plan.

2.2 Erect lifts in accordance with the scaffold plan.

2.3 Brace and plank the scaffolding in accordance with the scaffold plan.

Range for bay/lap and rectangular vessel scaffolding individual bays are planked and braced; for splay scaffolding the entire structure is braced and planked.

Outcome 3

Install link bay/lap, butt planks, and rectangular vessel scaffolding.

Performance criteria

3.1 Install and lash lap planks in accordance with the scaffold plan.

3.2 Install and lash butt planks in accordance with the scaffold plan.

3.3 Erect guardrails in accordance with the scaffold plan.

Outcome 4

Check the structure is compliant and complete the GPG inspection report.

Performance criteria

4.1 Check the structure for compliance in accordance with the scaffold plan.

4.2 Complete a GPG inspection report.

4.3 Make changes to the structure to ensure compliance and amend the GPG inspection report accordingly.

Outcome 5

Dismantle vessel scaffolding.

Performance criteria

5.1 Remove lap planks.

5.2 Dismantle the deck in sequence.

Range all components removed progressively beginning with kickboards and mid rails from the top working lift.

5.3 Descend the stripped deck to the lift.

Planned review date	31 December 2026

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 November 2008	31 December 2016
Review	2	16 July 2015	31 December 2019
Rollover and Revision	3	23 November 2017	31 December 2025
Review	4	24 February 2022	N/A
Revision	5	24 August 2023	N/A

Consent and Moderation Requirements (CMR) reference	0003

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.