

Title	Erect, operate, and dismantle boatswain's chairs		
Level	4	Credits	5

Purpose	<p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – plan and prepare for the suspension of boatswain's chairs; – erect overhead structures and associated safety systems for the suspension of boatswain's chairs; – assemble and suspend boatswain's chair and associated safety systems from suspension point(s) on overhead scaffolding; – check the structure is compliant; – operate boatswain's chairs; and – dismantle boatswain's chairs.
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Classification	Lifting Equipment > Suspended Scaffolding
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Available grade	Achieved
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Prerequisites	Unit 26592, <i>Plan and prepare for the erection of proprietary suspended scaffolding</i> , and Unit 26594, <i>Erect, operate, and dismantle swinging stages</i> ; or demonstrate equivalent knowledge and skills.
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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 must take place under the 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 the equipment manufacturer requirements, applicable company procedures, and industry good practice found in the following sources:
 - a quality management systems;
 - b designer requirements and manufacturer operating instructions; and government and local government legislation, regulations, bylaws, Health and Safety at Work Act 2015, and Health and Safety in Employment Regulations 1995 or its replacement;
 - c the most up to date version of the Good Practice Guidelines (GPG) found at <http://www.business.govt.nz/worksafe/information-guidance/all-guidance-items/scaffolding-best-practice-guideline-for-scaffolding-in-new-zealand>, and all subsequent amendments and replacements.

3 Definitions

Boatswain's chair: a suspended scaffold of which the platform is a chair or similar device suitable for one person. It can be raised or lowered mechanically or by hand haulage.

Client: 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.

Limited fall situation: an environment in which a suspended scaffold is physically tested in a position raised slightly above its resting position.

Parapet hook: a clamp or bracket placed over a parapet from which a scaffold is suspended.

Proprietary needle: a pre-engineered cantilevered structural member that supports a scaffold.

Scaffold plan: A key design document prepared by the candidate and used as a basis for the erection of a particular scaffold.

Supporting structure: the building or structure from or on which a suspended scaffold is erected.

Suspended scaffolding: as defined in the GPG and in the Health and Safety in Employment Regulations 1995. Note that a suspended scaffold is capable of being raised or lowered. A working platform that cannot be raised or lowered is classified as a hanging scaffold, not a suspended scaffold.

4 Assessment

This unit standard must be assessed against using proprietary suspended scaffolding systems and components. Evidence is required for at least two boatswain's chairs, including one mechanical and one hand haul boatswain's chair. One chair must be suspended from a parapet hook, and one chair from a needle. One must be erected with a single suspension rope with an independent lifeline, and one chair must be erected with a double suspension rope system.

Outcomes and performance criteria

Outcome 1

Plan and prepare for the suspension of boatswain's chairs.

Performance criteria

1.1 Confirm erection requirements with the supervisor or client.

Range includes but is not limited to – confirmation of load calculation, establishing maximum load, determining the fulcrum point.

1.2 Check the supporting structure for its capacity to support the suspended scaffold and its associated components.

Range includes but is not limited to – confirmation of structural integrity, identification of viable parapet hook or proprietary needle attachment points, possible counterweight placement positions, positioning of tie back and/or bracing points.

1.3 Draw a scaffold plan.

- 1.4 Determine and source the necessary equipment in accordance with the scaffold plan.

Outcome 2

Erect overhead structures and associated safety systems for the suspension of boatswain's chairs.

Performance criteria

- 2.1 Lift components to the assembly point and assemble for construction of the suspension points, including support structures and safety systems.
- 2.2 Erect and construct overhead structures and proprietary needle(s) or parapet hook(s) accompanying safety systems.
- Range may include but is not limited to – tying parapet hook(s) or needle(s) together, construction of independent tying system around the supporting structure, wire and shackle restraints, counterweights, bolted supports, packing, bracing against lateral movement.
- 2.3 Attach fittings necessary for the operation of the boatswain's chairs to the parapet hook outriggers or proprietary needle(s).
- Range includes but is not limited to – use of safety harness for protection while connecting wires to the parapet hook(s) or needle(s).
- 2.4 Check inboard and outboard components for safety and operational stability against the scaffold plan.
- Range includes but is not limited to – minimum safety factor of 3 on combined loading, minimum safety factor of 3 against overturning and uplift, all brackets moused correctly.

Outcome 3

Assemble and suspend boatswain's chairs and associated safety systems from suspension point(s) on overhead scaffolding.

Performance criteria

- 3.1 Move the block and tackle system and/or wire ropes, including safety equipment, to the correct location, and rig in accordance with the scaffold plan.
- 3.2 Secure the block and tackle system and/or wire ropes, including safety equipment, to the suspension point(s), and rig in accordance with the scaffold plan.

3.3 Assemble, suspend, and check the boatswain's chairs and associated control and safety equipment.

Range for mechanical boatswain's chairs, control and safety equipment includes but is not limited to – a transformer or other Residual Current Device.

3.4 Test the safety systems.

Range includes but is not limited to – visual examination, physical test in a limited fall situation.

Outcome 4

Check the structure is compliant.

Performance criteria

- 4.1 Check the structure for compliance with the GPG inspection report and the scaffold plan.
- 4.2 Complete the GPG inspection report.
- 4.3 Make changes where structure is not compliant to ensure compliance and amend the GPG inspection report accordingly.

Outcome 5

Operate boatswain's chairs.

Performance criteria

- 5.1 Position the scaffolder to use boatswain's chair safely.
- 5.2 Operate the boatswain's chairs.
- 5.3 Carry out safety drills in response to possible emergency situations.
Range includes but is not limited to – rope jams, cut cable, emergency descent procedure.

Outcome 6

Dismantle boatswain's chairs.

Performance criteria

- 6.1 Bring outboard components inboard, and detach and disassemble outboard components from the overhead structure.
Range may include but is not limited to – chair, block and tackle, fittings, wire rope.

6.2 Dismantle the overhead structure beginning with the parapet hook(s) or proprietary needle(s).

Range may include but is not limited to – wire and shackle restraints, counterweights, bolted supports, packing, lateral bracing.

6.3 Lower and prepare components to the ground for transportation off-site.

Replacement information	This unit standard, unit standard 26591, unit standard 26592, and unit standard 26594 replaced unit standard 4204, unit standard 4205, and unit standard 4207.
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Planned review date	31 December 2021
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 July 2011	31 December 2016
Review	2	16 July 2015	31 December 2019
Review	3	29 March 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.