

<b>Title</b>	<b>Design, erect, and dismantle advanced falsework</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	<p>This unit standard is for people who have intermediate scaffolding skills and who want to develop their scaffolding skills to an advanced level.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>– design advanced falsework;</li> <li>– erect advanced falsework;</li> <li>– check the structure is compliant; and</li> <li>– dismantle advanced falsework.</li> </ul>
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<b>Classification</b>	Lifting Equipment > Advanced Scaffolding
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<b>Available grade</b>	Achieved
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<b>Entry information</b>	
<b>Critical health and safety prerequisites</b>	New Zealand Certificate in Scaffolding (Level 4) [Ref: 2362], or demonstrate equivalent knowledge and skills.

**Explanatory notes**

- 1 This unit standard has been developed for learning and assessment on-job or off-job in a simulated environment.
- 2 All tasks must be carried out in accordance with the Best Practice Guide (BPG) based on:
  - a quality management systems;
  - b designer’s requirements and manufacturers’ operating instructions; and government and local government legislation, regulations, bylaws, Health and Safety in Employment Act 1992, and Health and Safety in Employment Regulations 1995;
  - c the most up to date version of the: <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  
*Advanced falsework*: includes non-standard and specialist uses and the construction of unusual and irregular falsework structures. This incorporates propping on sloping ground, propping non-level loads, the addition to falsework of other scaffolding structures such as cantilever platforms and falsework to support concrete, both pre-

cast and in situ. Advanced falsework is normally designed, erected, and dismantled to specifications prepared or checked by a chartered engineer;

*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;

*Falsework*: defined in the BPG as scaffolding used to prop or support a load at height;

*Falsework plan*: a key design document prepared by the candidate and used as a basis for the erection of particular falsework;

Scaffolding as defined in the BPG and in the Health and Safety in in Employment Regulations 1995.

#### 4 Assessment

This unit standard covers the erection and dismantling of falsework and falsework structures must take place under the supervision of a certified scaffolder who holds a current Certificate of Competence for the scaffolding concerned.

#### 5 Range

Evidence is required of four instances of advanced falsework. For primary beam support only: shoreload frames, an individual proprietary falsework system, and tube and fitting falsework are all required. For primary and secondary beam support one of the following is required: shoreload frames, an individual proprietary falsework system, or tube and fitting falsework.

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## Outcomes and evidence requirements

### Outcome 1

Design advanced falsework.

#### Evidence requirements

1.1 Confirm falsework requirements with the client, or chartered engineer.

Range includes – loading requirements;  
may include but is not limited to – nature of material(s) to be supported, equipment needs, timeframes.

1.2 Determine design parameters including, where necessary, meeting chartered engineer's requirements.

Range includes but is not limited to – calculation of loads, duration of supporting requirements, consideration of environmental factors, regulatory requirements, safety margins.

- 1.3 Prepare design documents including, where necessary, incorporating advice from a chartered engineer.

Range includes falsework plan, gear list, and, where necessary, engineer's requirements; may include but is not limited to – CAD printouts, work schedules, staffing allocation, WorkSafe New Zealand and local authority approvals, workplace-specific documentation.

- 1.4 Submit where necessary, the falsework plan and associated design documents to a chartered engineer for checking and make adjustments as required.

## Outcome 2

Erect advanced falsework.

### Evidence requirements

- 2.1 Confirm design parameters are confirmed work begins in accordance with the falsework plan.

Range includes but is not limited to – ground conditions, bracing points and their structure, load weights, bracing methods, direction and magnitude of forces, movement of personnel and materials.

- 2.2 Source the necessary equipment in accordance with the falsework plan.

- 2.3 Erect falsework and associated bracing progressively in accordance with the falsework plan.

- 2.4 Attach additional scaffolding structures to falsework in accordance with the falsework plan.

Range may include but is not limited to – cantilever platforms, provision of support for formwork construction.

## Outcome 3

Check the structure is compliant.

### Evidence requirements

- 3.1 Check the structure for compliance in accordance with the falsework plan.

- 3.2 Complete a BPG inspection report.

- 3.3 Make changes to the structure ensure compliance and amend the BPG inspection report accordingly.

**Outcome 4**

Dismantle advanced falsework.

**Evidence requirements**

- 4.1 Confirm the structure supported by the falsework as self-supporting.
- 4.2 Remove scaffolding components, and their bracing and ties, progressively back to the supporting members.
- 4.3 Remove supporting members and their bracing progressively from the top down.

<b>Planned review date</b>	31 December 2019
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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	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0183
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Please note**

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

**Comments on this unit standard**

Please contact The Skills Organisation at [reviewcomments@skills.org.nz](mailto:reviewcomments@skills.org.nz) if you wish to suggest changes to the content of this unit standard.