

SAFE WORKING GUIDELINES SCAFFOLDING

1. Introduction

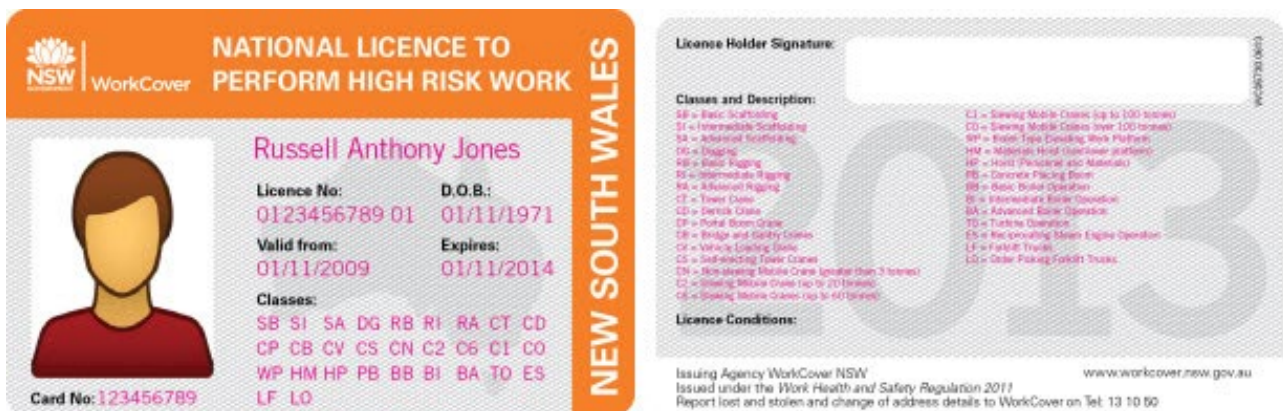
The objective of this procedure is to prevent the occurrence of injury and reduce the severity of injuries resulting from erecting or dismantling of scaffold less than 4m in height, performed by employees and subcontractors of Proline Building Commercial Pty Ltd.

2. Purpose

The purpose of this document is to provide suitable information for the identification, assessment and control of hazards associated with scaffold and where there is a risk of falling.

3. Definitions

Height	of a building means the height measured from ground level to its highest part.
Competent Person	A person who has the necessary practical and theoretical skills, acquired through training, qualification, experience or a combination of these, to correctly and safely undertake the tasks.
Licensed Person	holds a current National Licence to Perform High Risk Work – from Workcover NSW – Valid for SB / SI / SA as required – for any scaffold to be erected where a person can fall more than 4meters.



Scaffolding work is the erection, alteration or dismantling of a temporary structure erected to support a platform from which a person or object could fall **more than four metres from the platform or the structure.**

There are three type of scaffolding:

Basic scaffolding (SB)

Consists of scaffolding work involving:

- modular or prefabricated scaffolds
- cantilevered materials hoists with a maximum working load of 500 kg
- ropes and gin wheels
- safety nets and static lines, and
- bracket scaffolds (tank and formwork)

Intermediate scaffolding (SI)

All basic scaffolding work plus scaffolding connected with the use and operation of:

- cantilevered crane loading platforms
- cantilevered and spurred scaffolds
- barrow ramps and sloping platforms
- perimeter safety screens and shutters
- mast climbers
- tube and coupler scaffolds (including tube and coupler covered ways and gantries)

Advanced scaffolding (SA)

All intermediate scaffolding work plus scaffolding connected with the use and operation of:

- cantilevered hoists
- hung scaffolds, including scaffolds hanging from tubes, wire ropes or chains
- suspended scaffolds

Note: advanced certificates cover the requirements for the intermediate certificates; intermediate certificates cover the requirements for the basic certificates.

4. Roles & Responsibilities

Project Managers/ Supervisors and Site Supervisor are responsible for the following:

- Identification, assessment, control and evaluation of working at heights hazards;
- Ensure that competently trained person/s carry out works at heights only;
- Ensure any plant or equipment used for working at heights, has been checked and tested appropriately prior to use;
- Ensure that records are kept and maintained on the status of electrical testing and tagging of equipment and to provide a monthly report to the Systems Manager.

Other Employees / subcontractors are responsible for the following:

- Ensure they do not carry out works in where uncontrolled height hazards exist;
- Notify the Site Supervisor of any hazards / faults or maintenance requirements of equipment to be used when working at heights;
- Co-operate with Project Managers/Supervisors and Site Supervisor in implementing the working at heights hazards management controls;

5. Procedure

General Information obtained from Managing the Risk of Falls Code of Practice.

SCAFFOLDING

Scaffolding can be very effective protection in preventing falls; however, there are specific requirements that apply to some types of scaffold under the WHS Regulations.

A person with management or control of a scaffold must not allow the use of a scaffold from which a person or object could fall more than four metres unless a competent person provides written confirmation that the scaffold has been completed. The person must also ensure that:

- the scaffold and its supporting structure is inspected by a competent person before use, after any incident that could affect its stability (such as a severe storm), after any repairs, and at least every 30 days
- unauthorised access is prevented on scaffolding that is incomplete and left unattended (for example, by attaching danger tags and warning signs at appropriate locations).

Scaffolding work platforms are generally rated as light, medium or heavy duty. Safety considerations include:

- scaffolding conforms to *AS/NZS 4576 Guidelines for scaffolding* and the *AS/NZS 1576 Scaffolding series*
- all scaffolding is erected, altered and dismantled by competent persons. Any scaffold from which a person or object could fall more than four metres must be erected, altered and dismantled by or under the direct supervision of a licensed scaffolder.
- prefabricated scaffolds are of the same type and not mixed components, unless the mixing of components has been approved by the manufacturer
- safe access to and egress from the scaffold is provided
- edge protection (hand rails, mid-rails and toe boards) is provided at every open edge of a work platform (see Figure 5).

Information, instruction and training for workers using scaffolds

Where work is performed from a scaffold, you must ensure that the relevant workers understand:

- what loads the scaffold can safely take
- not to make any unauthorised alterations to the scaffold (such as removing guard rails, planks, ties, toe boards and braces)
- that working platforms need to be kept clear of debris and obstructions along their length, and
- that incomplete or defective scaffolds must never be accessed.

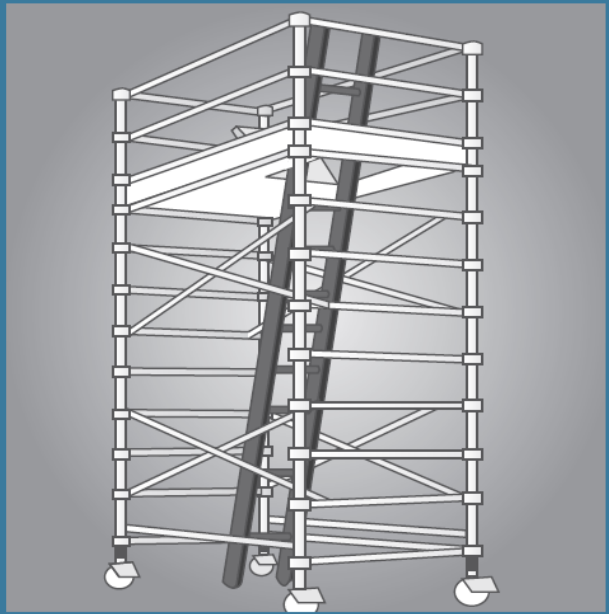
Where work is performed using mobile scaffolds, workers should be trained to ensure the scaffold:

- remains level and plumb at all times
- is kept well clear of powerlines, open floor edges and penetrations
- is not accessed until the castors are locked to prevent movement
- is never moved while anyone is on it
- is only accessed using internal ladders (see Figure 7).

FIGURE 6 Perimeter scaffold with a fully decked working platform, guardrails and toeboards.



FIGURE 7 Mobile scaffold with an access ladder and trapdoor to provide the largest possible hazard-free working platform.



Employees and subcontractors are responsible for developing an understanding of becoming competent in the implementation of risk management principles and practices on site/s.

This is a four phase process:-

1. Risk Identification
2. Risk Assessment
3. Risk Control
4. Risk Evaluation

5.1 Risk Identification

Identification of risks associated with working at heights on scaffold should be undertaken by the following means:

- Consultation with employees / subcontractors
- Observation of work practices
- Inspections of the task and associated work areas
- Examine workplace injury records to assess what injuries have occurred to what tasks being carried out.

Consideration should also be given to the work area

The identification of particular hazards might include items such as:-

- people falling;
- objects falling;
- work occurring above or below other people;
- the structural adequacy and integrity of supports where work is occurring from or on.

5.2 Risk Assessment

Identified hazards should then be prioritized according to the severity of injury, frequency of task and probability whilst performing the task. When assessing the risk, consideration will be given to:

- The likelihood of the incident occurring and;
- The consequence relating to that type of incident.

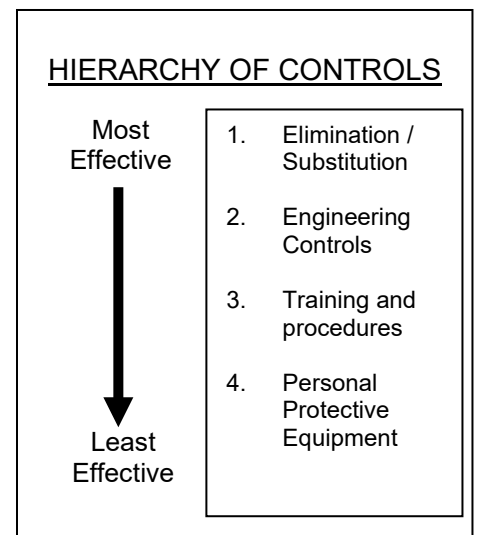
5.3 Risk Control

It is the responsibility of all employees and subcontractors involved in the working at heights management process to ensure that they co-operate with control measures that are put in place by Proline. Risk Control is the means for minimizing or eliminates the identified risk and is carried out using the following hierarchy of control:

- *Eliminate the risk by ceasing the hazardous component or activity*
- *Substitute a less harmful alternative hazard substance or process*
- *Isolate the hazard at source using engineering means*
- *Introduce administrative controls to minimize exposure*
- *Use of Personal Protective Equipment*

Control options should include the following:

- a work platform which is stable and securely fenced;
- where the above is not possible, a temporary solution/s such as a perimeter screen, fencing, handrails or other types of physical barrier to prevent a person or object falling;
- or in the case the above two can not be utilised, then forms of physical restraints are required, such as a safety harnesses attached to the scaffold during erection & dismantling, if there is a risk of a person/s falling more than two metres.



5.4 Risk Evaluation

It is important to evaluate the effectiveness of the control measures implemented, to ensure that they are effective and that they do not lead into the introduction of additional hazards within the work environment. An evaluation of control measures must be carried out by the Site Supervisor during the tasks Safe Work Method Statement Reviews.

6. Generic Scaffold Work Sequence

Task	Activity
Base out scaffold and erect base lift and first lift	<ul style="list-style-type: none"> - Prevent authorized access to scaffold area - One Scaffolder holds standards, while another places transoms and ledgers. - Adjust screw jacks to level the scaffold - Erect transoms and ledgers for the first lift - Erect planks from below
Complete first lift	<ul style="list-style-type: none"> - Install access stairway or ladder to platform above - Access each lift by ladder or stairway - If access is by stairway, ensure the stair access bay is erected with the run of the scaffold - Install guardrail, mid rail and toeboard to first lift
Erect next lift from a platform	<ul style="list-style-type: none"> - Working from a fully planked platform, install standards (where the standard joint is 1 to 1.5m above the platform level), transoms, ledgers and hop-ups for the next lift above. - Place an erection platform on the scaffold - Working from the erection platform, erect standards (where the standard joint is 1 to 1.5m above the erection platform level) and guardrails for the lift above. - Erect mid-rails for the lift above from the erection platform. - Scaffold should be erected as close as practicable to the working face. Where the scaffold is greater than 225mm from the working face, install guardrails and mid rails to the inner face standards. - Standing on the working platform, place planks within the transoms to form the above working platform. - Install mid-rails (if not already erected) and toe boards (or other systems to prevent falling objects).
Erect third and higher lifts from platform	<ul style="list-style-type: none"> - Unless a specific engineering design is provided, fix the first row of ties no more than four metres above the ground. - Do not allow a scaffold to free stand more than four meters above the ground or a row of ties - Do not leave unsecured objects on the scaffold - Repeat erection sequence as per previous task
Install ties	<ul style="list-style-type: none"> - Install ties from a fully planked platform - Check with Site Management that the supporting structure is sufficient to withstand the forces imposed by the scaffold when the tie is connected i.e. minimum 615kg push in or pull out per tie
Fix anchors (where required)	<ul style="list-style-type: none"> - Install anchors in accordance with manufacturers specifications - Check the structure and material to which the drilled in anchors are applied, to confirm its suitability for the

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	application
Erect and move up hop-up brackets and tie bars	<ul style="list-style-type: none"> - Erect or move up hop-up brackets, tie bars and planks from behind a standard on the fully planked platform below
Install access	<ul style="list-style-type: none"> - Erect stairway and ladders progressively from the base of the scaffold - Ensure that the top ladder extends not less than 900mm above the highest platform served by the ladder, otherwise provide a suitable handhold to this height - Ensure that suitable edge protection is fitted at the opening in each platform served by the ladder within the scaffold bay - Secure ladders to prevent movement
Fix chain wire mesh & shade cloth (where required)	<ul style="list-style-type: none"> - Fix chain wire mesh when working from a fully planked platform with edge protection (guardrails and mid rails) - Securely fix chain wire mesh to the scaffold at 1200mm centres (max) vertically and horizontally - Fill in gaps between the panels of chain wire mesh with similar material - Ensure chain wire mesh extends at least one metre above the top most platform. Scaffold must not extend more than two meters above top tie if clad with chain wire mesh and/or shade cloth - Do not allow any sheeted scaffold to free stand more than two metres above the highest tie remaining in place.
Dismantle scaffold	<ul style="list-style-type: none"> - General Precautions - Access the scaffold platform from a ladder or stair access, do not climb the standards, ledgers and transoms - Maintain a tidy work area - Do not overload the scaffold bays, progressively move scaffolding equipment from platforms, and stack it neatly on the ground. - Do not leave loose materials on platforms - Do not throw down any materials or scaffolding equipment - Remove chain wire mesh and shade cloth while working from a fully planked platform - Work from a fully planked platform below when dismantling hop-up brackets, tie bars and planks - Do not allow an unsheeted scaffold to free stand more than four meters or a sheeted scaffold more than two meters above the highest tie remaining in place. - Before lifting toe boards, ensure the adjacent plank is held in place - Dismantling Sequence - Access the top platform by stairway or ladder - Start dismantle from an end bay - Remove chain wire mesh and shade cloth, from the level to be dismantled, or from the whole scaffold if not required during dismantling - Move down to the platform below - Dismantle top platform planks - Working from an erection platform on the fully planked platform, dismantle guardrails, mid rails, ladders, transoms and standards from the level above. - Step off the erection platform above, if in place - Remove not more than three planks (ensure at least two planks remain) to enable the dismantled materials to be

	<p>passed down to the next level (where they are to be temporarily stacked)</p> <ul style="list-style-type: none">- Remove tie progressively as the scaffold is dismantled- Progressively repeat this procedure until dismantling can be completed from the ground.
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7. Falling Objects

Objects falling from heights can place those working near or below at risk. Where working on a scaffold that requires objects such as equipment and materials, the following is required:

- a safe means of lifting and lowering the items;
- a secure physical barrier to prevent objects falling freely from the platforms, buildings ie toeboards
- measures to arrest the fall of objects ie catch scaffold / safety nets
- use of personal protective equipment ie safety harnesses during erection & dismantling of scaffolds / hard hats
- a barrier to close off the work area underneath or other means to prevent person/s working or passing by underneath.

8. Licence & Certification

Any scaffold erected over 4m, will be required to do so by a licensed scaffolder only.

9. Training

The Systems Manager will train employees during WHS EMS QA Seminars to ensure that employees can identify risky activities and receive appropriate training.

Project Manager/Supervisors should ensure Site Supervisor train employees / subcontractors in identifying, assessing and controlling risks during Safe Work Method Statement training for any erection or dismantling of scaffold. Site Supervisor should ensure the person/s being trained understand the reason for performing the task with the least amount of risk, can recognise the risks and decide the most appropriate method to complete the task and can perform the task in the correct way.

10. Review & Evaluation

In order to ensure this procedure remains effective, it will be reviewed by Senior Management on an annual basis or in the event of an injury or near miss resulting from any working at heights activity, changes in legislation or if raised by an employees concern.

11. References / Legislation

- o Work Health & Safety Act 2011
- o Work Health & Safety Regulation 2017
- o Workcover Safe Working at Heights Guide 2006
- o Workcover Hazard Identification Aluminum Scaffolds 2001
- o Workcover Erecting, Alerting and Dismantling Scaffold August 2008
- o Managing the Risks of Falls –Code of Practice
- o AS/NZS4576 – Guidelines for Scaffolding
- o AS1576 – Scaffolding Series

12. Version Control

Date	Version	Owner	Comments
11.05.09	1	Michelle Noy	For Issue
11.11.11	2	Michelle Murphy	Following External 3 rd Party Audit
18.04.12	3	Michelle Murphy	Changes in legislation / code of practices
10.06.15	4	Michelle Murphy	Following Management Review
01.09.17	5	Michelle Murphy	General Review
01.6.18	6	Michelle Murphy	Changes in legislation
01.12.23	7	Michelle Murphy	General Review