

UON Key Risk Area: KRA 3.1

Working at Height

1. Purpose

To provide for the safe completion of work being carried out at height.

2. Scope

This document applies to all Faculties, Divisions, and organisational units of the University of Newcastle and its controlled entities.

3. Definitions

In the context of this document, the following definitions apply:

- **Work at Height:** An activity which takes place in the workplace where there is a risk of a fall by a person from one level to another that is reasonably likely to cause injury.
- **Competent Person:** A person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to correctly perform a specified task.
- **Fall Restraint System:** A system of work comprising a harness and lanyard assembly connected to an anchor point or system that prevents a person from being at risk of a fall from height.
- **Fall Arrest System:** A system of work comprising a harness and lanyard assembly connected to an anchor point or system that arrests a person's fall from height in a safe and controlled manner.
- **Leaders/Supervisors:** Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.

- **Workers:** As defined in the NSW Work Health & Safety Act 2011, workers include employees, conjoints, students on work experience, contractors, sub-contractors and their employees. Staff, conjoints, students on work experience, and contractors may be referred to collectively as workers, or separately as staff, conjoints, students, or contractors.

4. Responsibilities

4.1 Infrastructure and Facilities Services (IFS)

- Ensure work at heights is conducted in accordance with this procedure;
- Ensure that contractors who are required to undertake work at height have the appropriate procedures and equipment to undertake the work;
- Ensure that any work at height is conducted under a Permit to Work issued by IFS or a nominated representative;
- Ensure that the area where work at height is conducted is returned to service on completion of the work and the Permit to Work is signed off;
- Provide information to affected locations where work at height is to be conducted to ensure the necessary actions are taken to protect staff and students who work in the area.

4.2 Leaders/Supervisors

- Ensure that risk controls are followed when they are implemented to protect staff and students when work at height is to be conducted.

4.4 Health and Safety Team

- Provide professional input to regarding work at height activities when required.

5. Procedure

5.1 Identification and Assessment

Prior to any work at height commencing IFS or the nominated representative will ensure that a risk assessment is conducted, taking into consideration the likelihood and consequence of a fall when selecting control measures and taking into account:

- The nature of the work;
- Availability of equipment;
- Interaction with others;

- Availability of competent persons who understand the job/task methodology and who will be involved in carrying out the work;
- Assessment of how tools, equipment and materials will be brought to and from the work location.

5.2 Risk Controls

IFS or the nominated representative will ensure that contractors conducting work at height have Safe Work Method Statements (SWMSs) or Job Safety Analysis (JSA's) specific for the work which have appropriate risk controls and which have been signed off by all the contractor's employees who will be conducting the work.

Risk controls will consider the following:

- Installing edge protection, fixed walkways and stairways;
- Using correctly erected temporary work platforms (e.g. Scaffolding);
- Using elevating work platforms (EWPs);
- Ladders will only be used in accordance with AS/NZS 1657 and where this cannot be achieved additional fall prevention controls will be installed or used (see Ladder Safety section below);
- Where a fall risk cannot be eliminated or designed out, a fall restraint system of work will be planned in preference to the use of a fall arrest system;

All work at height will be conducted under a Permit to Work issued by IFS or a nominated representative. See the IFS Permit to Work Procedure.

5.3 Fall Protection

- Where work at height is regularly conducted e.g. roofs for cleaning gutters, fixed anchor points should be installed and tested at required intervals by a licensed and competent contractor, and marked accordingly. A register of fixed anchor points will be maintained including details of inspections conducted;
- Contractors should use fall restraint devices where workers can reach a point or location where free fall may occur (e.g. edge of building). They will be used in preference to fall arrest systems where possible;
- Fall arrest devices should be used where there is a risk of unrestrained or free fall;
- IFS or the nominated representative will ensure that the contractors using fall restraint/ arrest equipment hold certificates to verify they are trained and competent to use the devices.
- Where fall arrest equipment is used provisions will be made for immediate rescue should a fall occur.

5.4 Elevated Work Platforms (EWPs)

EWPs will be used in preference to ladders for work at height wherever possible. The following requirements apply:

- IFS or the nominated representative will ensure that contractors who are using EWP's have appropriately trained and competent persons to operate the equipment;
- The EWP should be inspected prior to use and the inspection noted in the logbook which will be maintained for the equipment;
- Contractors' employees who are operating EWPs will wear fall arrest harnesses;
- Warning signs and barriers will be erected in an area where work at height is being conducted to protect passing vehicles and personnel.

5.8 Suspension Trauma and Rescue

Suspension trauma begins when a person is suspended vertically using a fall arrest system without the ability to move the lower parts of their body. Due to the lack of activity, the blood supply is reduced, which normally drops the person's blood pressure and unconsciousness can then occur. If not rescued promptly, death can follow within 20 minutes due to the deprivation of oxygenated blood to the major body organs. It is therefore vital that the contractor conducting work at height ensures the following risk controls are in place when using fall arrest equipment:

- Rescue plans, equipment and trained personnel are readily available wherever fall arrest systems are being used so that suspended persons can be rescued as quickly as possible;
- All personnel who are required to work at height and those responsible for rescue will be trained and aware of the risk of suspension trauma;
- The SWMS and/or JSA for the job and Permit to Work will include all the risk factors that can increase the risk of suspension trauma occurring and the appropriate risk controls.

5.5 Ladder Safety

Step ladders will only be used for access to reach an area to undertake a task and should not be used as a work platform from which to conduct work.

The following procedures will be followed when ladders are used, whether by a UON worker or a contractor;

- All ladders will be inspected prior to use to ensure they are fit for service;
- Ladders shall be appropriate for the work to be undertaken;

- Three points of contact will be maintained at all times by persons ascending and descending a ladder;
- Proper means of transporting tools and equipment to and from the elevated work location will be provided so that three points of contact can be maintained during ascent and descent;
- Non-conductive ladders will always be used for electrical work;
- Extension ladders should be inclined at a ratio of 1 (one) unit of length horizontally for each 4 (four) units of length vertically;
- The ladder will be secured against displacement at the top and provided with non-slip feet;
- Warning signs or barriers will be erected if vehicles or personnel can enter the area where the ladder is located;
- The stiles of the ladder will extend at least 1 metre above the stepping off point.

5.6 Scaffolding

If scaffolding is required for work at height, the erection, use, maintenance and dismantling will be conducted by qualified and certificated scaffolders according to the requirements of the NSW Work Health and Safety Regulations 2011 and AS/NZS1576.1 – 1995 Scaffolding – General Requirements

5.7 Work in Ceiling Spaces

If work is required in a ceiling space, consideration shall be given to:

- Distance of work from a designated access/egress point;
- Adequacy of lighting and presence of emergency lighting;
- Safe access to the work location where work is to be undertaken off designated access ways;
- Hot work;
- Potential exposure to electrical energy;
- Presence of asbestos.

SWMSs and/or JSAs for the work will include appropriate risk controls for the potential hazards in the space.

6. References

[NSW Work Health and Safety Regulations 2011.](#)

[NSW Code of Practice – Managing the Risk of Falls](#)

[UON Health and Safety Framework](#)

[UON HSP 4.1 H&S Risk Management](#)

[IFS Permit to Work Procedure](#)

AS/NZS1576.1 – 1995 Scaffolding – General Requirements

7. Attachments

Nil

Document Control Table

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Governing Legislation:	NSW Work Health and Safety Act and Regulations 2011 NSW Code of Practice – Managing the Risk of Falls				
Supporting documents & forms of this procedure/guideline:	UON H&S Management System Framework UON HSP 4.1 H&S Risk Management UON HSP 4.1 H&S Risk Management IFS Permit to Work Procedure AS/NZS1576.1 – 1995 Scaffolding – General Requirements				
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