

Key Risk Area (KRA)

KRA 3.1 Working at Height

1. Purpose

This document provides guidance on, so far as is reasonably practicable, the safe completion of work at height.

2. Scope

This Guideline applies to all health, safety and wellbeing activities of staff, students, visitors (including volunteers and contractors), Council members, and other persons interacting with the University of Newcastle (workers); the operations of staff of University aligned Research Centres and controlled entities; and all activities conducted by or on behalf of the University of Newcastle on and outside of the University's campuses.

3. Guidelines

3.1. Identification and Assessment

Prior to any work at height commencing, IFS or the nominated representative will ensure that a risk assessment is conducted, in accordance with Guideline [HSG 3.1 Health and Safety Risk Management](#), taking into consideration the likelihood and consequence of a fall or falling object when selecting risk elimination or 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, materials and other objects will be brought to and from the work location and either prevented from falling freely, so far as is reasonably practicable, or otherwise arrested if they fall, so far as is reasonably practicable.

3.2. Specific Risk Controls

IFS or the nominated representative will ensure that contractors conducting work at height have Safe Work Method Statements (SWMSs), Job Safety Analysis (JSAs) or Standard Operating Procedures (SOPs) specific for the work which have appropriate risk elimination or control measures, and which have been signed off by all workers who will be conducting the work. Refer to Guideline [HSG 6.1 Contractor Health and Safety Management](#) for details on further requirements.

Where it is not reasonably practicable to eliminate the health and safety risk arising from work at height (by way of ensuring that the work is carried out on the ground or a solid construction, providing a safe means of access to and exit from the workplace or any places in the workplace where a fall could occur, or preventing objects from falling freely), risk controls directed at minimising the risk of a fall or falling object so far as reasonably practicable and maintaining a safe system of work will be implemented. These controls include the following:

- providing a fall prevention device if it is reasonably practicable to do so (such as by installing edge protection, fixed walkways and stairways, or using correctly erected temporary work platforms (e.g. Scaffolding) or elevated work platforms (EWPs));
- if it is not reasonably practicable to provide a fall prevention device, providing a work positioning system; or
- if it is not reasonably practicable to do either of these things, providing a fall arrest system, so far as is reasonably practicable.

Systems to arrest the fall of falling objects should also be considered, so far as is reasonably practicable, if it is not reasonably practicable to prevent the object from free falling.

A combination of these controls may also be used to minimise risks, so far as is reasonably practicable, if a single control is not sufficient for the purpose.

Ladders will only be used in accordance with AS/NZS 1657:2018 Fixed platforms, walkways, stairs and ladders – Design, construction and installation and where this cannot be achieved additional fall control measures will be installed or used.

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](#).

3.3. Fall Prevention

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 person and marked accordingly. A register of fixed anchor points will be maintained including details of inspections conducted.

Workers should use fall prevention devices where they can reach a point or location where free fall may occur (e.g. edge of building), so far as is reasonably practicable. They will be used in preference to work positioning systems and fall arrest systems where possible.

Work positioning systems (such as a fall restraint) and fall arrest systems should be used where there remains a risk of unrestrained or free fall. IFS or the nominated representative will ensure that the workers using fall prevention devices, work positioning systems (including fall arrest measures) or fall arrest systems hold relevant certificates or other competencies to verify they are trained and competent to use the relevant devices or systems. Refer to Guideline [HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency](#) for competency requirements.

Where fall arrest systems are to be used, provisions and rescue plans will be made for immediate rescue should a fall occur and detail of the provisions included in the SOP.

3.4. Elevated Work Platforms (EWP)

Safer alternatives such as elevated work platforms (EWPs) will be used in preference to ladders for work at height wherever reasonably practicable. The following requirements apply to EWP use:

- IFS or the nominated representative will ensure that contractors who are using EWPs have been appropriately trained and are competent persons to use 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 systems;
- Warning signs and barriers will be erected in an area where work at height is being conducted to protect passing vehicles and persons.

3.5. Suspension Trauma and Rescue

Suspension trauma can occur 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 can reduce, which can then drop 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 party conducting work at height ensure the following risk controls are in place when using fall arrest systems:

- Emergency procedures are established and tested for effectiveness, and associated 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 Workers who are required to work at height using a fall arrest system and those Workers responsible for initiating or implementing emergency procedures including rescue will be provided information, training and instruction in relation to the emergency procedures, and aware of the risk of suspension trauma;
- The SWMS and/or SOP 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.

3.6. Ladder Safety

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:

- 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 persons 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.

3.7. 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 Work Health and Safety Regulations 2017 (NSW) and AS/NZS 1576.1 – 2010 Scaffolding – General Requirements.

3.8. Work in Ceiling Spaces

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

- Any relevant requirements of Part 4.3 – Confined Spaces of the Work Health and Safety Regulation 2017 (NSW), if applicable;

- 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 SOP's for the work will include appropriate risk elimination or control measures for the potential hazards in the space, so far as is reasonably practicable.

4. Definitions

In the context of the Health and Safety Management System Framework:

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| Competent Person | A person who has, through training, qualification or experience, acquired the knowledge and skills to carry out a specified task. |
| Employer | Means the University of Newcastle (the University). |
| Executive Committee | Consisting of the Vice-Chancellor, the Deputy Vice-Chancellors, the Pro Vice-Chancellors, the Chief Operating Officer, Chief People and Culture Officer and the Chief Financial Officer, the University Secretary and the President of Academic Senate. |
| Fall Arrest System | Plant or material designed to arrest a fall, such as a harness and lanyard assembly connected to an anchor point. |
| Fall Prevention Device | Plant or material used to prevent a fall which (after its initial installation) does not requiring any ongoing adjustment, alteration or operation to ensure its integrity, including (without limitation) a secure fence, edge protection, working platforms and covers. |
| Leader / Supervisor | Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects. |
| Work at Height | An activity which takes place in the workplace where there is a risk to health and safety associated with a fall by a person from one level to another, or an object falling on a person, either of which is reasonably likely to cause injury to a person. |
| Work Positioning System | Any plant or structure, other than a temporary work platform, that enables a person to be positioned and safely supported at a location for the duration of the relevant work being carried out (which may include the use of fall restraint techniques). |
| Worker | Includes an employee, conjoint, student on work experience, contractor, sub-contractor, and volunteer. A person is a worker if the person carries out |

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| | <p>work in any capacity for the University or another person conducting a business or undertaking, including work as:</p> <ul style="list-style-type: none"> (a) an employee, or (b) a contractor or subcontractor, or (c) an employee of a contractor or subcontractor, or (d) an employee of a labour hire company who has been assigned to work in the person's business or undertaking, or (e) an outworker, or (f) an apprentice or trainee, or (g) a student gaining work experience, or (h) a volunteer, or (i) a person of a prescribed class. |
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5. Responsibilities

A comprehensive list of health, safety and wellbeing responsibilities is provided in [HSG 1.2 Roles and Responsibilities Guideline](#).

Specific responsibilities under this Guideline include:

Infrastructure and Facility Services (IFS)

- Ensure work at height is conducted in accordance with this procedure and the requirements of the Work Health and Safety Regulation 2017 (NSW);
- 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; and
- Provide information to affected locations where work at height is to be conducted to ensure the necessary actions are taken to protect Workers, students and any other persons in the area, so far as is reasonably practicable.

Leaders and Supervisors

- Ensure that risk elimination and control measures are followed when they are implemented to protect workers, contractors and any other persons when work at height is to be conducted, so far as is reasonably practicable.

Health, Safety and Wellbeing Team

- Provide professional input regarding work at height activities when required; and
- Support IFS in risk assessment and review of work at height activities.

6. References & Related Documents

The following documentation is referenced in, or applicable to this Guideline:

[HSG 1.2 Roles and Responsibilities](#)

[HSG 3.1 Health and Safety Risk Management](#)

[HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency](#)

[HSG 6.1 Contractor Health and Safety Management](#)

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

[IFS Permit to Work Procedure](#)

AS/NZS 1576.1:2010 Scaffolding – General Requirements

AS/NZS 1657:2018 Fixed platforms, walkways, stairs and ladders – Design, construction and installation

7. Amendment History

| Version | Date of Issue | Approval | Section(s) Modified | Details of Amendment |
|---------|----------------|---|---------------------|--|
| 1 | September 2015 | Director, People and Workforce Strategy | - | Original version. |
| 2 | October 2023 | CPCO | All | 1. All sections reviewed for legal compliance 2. Updated content in all sections 3. Added new/renamed Related Documents 4. Added Amendment History 5. Amended document control header and footer |

8. Appendices

Nil