

HEALTH AND SAFETY Working at Height Procedure

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1. PURPOSE

- 1.1 This document sets out the responsibilities and steps to be followed to effectively manage activities involving work at height, to prevent those involved or affected by it being harmed and to comply with legal requirements.
- 1.2 It provides information on the potential hazards of working at height, assessing the risks, appropriate selection of equipment and explains the hierarchy of control measures that must be applied when selecting measures to control risks.

2. SCOPE AND COMMENCEMENT

2.1 This procedure applies to all areas of operation within the University, with effect from 25 May 2021. It applies to both University personnel (including students under supervision) and Contractors.

3. BACKGROUND

- 3.1 Falls from height are, by far, the number one cause of death in the workplace and account for a significant number of serious injuries.
- 3.2 There is often a perception that work at height only relates to construction tasks such as roof work or scaffolding. However, it is of note that most fall-related injuries occur following a fall from height of less than two metres.
- 3.3 When there is working at height there is always a chance that someone can be injured by falling tools, equipment, loads and even people.
- 3.4 There are a wide range of activities taking place within Ulster University which involve, or have the potential for, working at height. Where this cannot be avoided, sensible precautions must be put in place.

4. **DEFINITIONS**

| Height | A place is 'at height' if a person could be injured falling from it, even if it is at or below ground level. |
|-----------|--|
| | No specific height is identified. |
| | This can be above or below ground level. |
| Work | Includes moving around at a place of work (except by |
| | a staircase in a permanent workplace). |
| Work | Any machinery, appliance, apparatus, tool, or |
| Equipment | installation for use at work (whether exclusively or |
| | not). |
| Work | Any platform used as a place of work or as a means of |
| Platform | getting to or from a place of work. |

| | This includes any scaffold, suspended scaffold, cradle, mobile platform, trestle, gangway, gantry, and stairway which is so used. |
|-----------|---|
| Fragile | A surface which would be liable to fail if any reasonably |
| Surface | foreseeable loading were to be applied to it e.g. persons |
| | or otherwise. |
| Access | Any equipment that is specifically designed to allow the |
| Equipment | user to work safely at height (e.g. ladders, tower |
| | scaffolds). |

5. KEY LEGAL REQUIREMENT

- 5.1 The Work at Height Regulations (NI) 2005 apply to all work at height where there is a risk of a fall liable to cause personal injury.
- 5.2 They place duties on employers, contractors, and any person who controls the work of others (e.g., facilities managers or staff supervising student activities) to the extent they control the work/activity.
- 5.3 Those in control of any work at height are required to make sure work is properly planned, risk assessed, supervised, and carried out by competent people.
- 5.4 The Regulations also require employees to report any safety hazard to their employer and use the equipment supplied (including safety devices) properly, following any training and instructions.

6. **RESPONSIBILITIES**

Vice- Chancellor

On behalf of the Council the Vice-Chancellor has executive responsibility to ensure, that the requirements of the health and safety legislation and the University health, safety and wellbeing policy are complied with. The Vice-Chancellor will ensure that responsibility for health and safety is properly assigned and accepted at all levels within the University.

Deputy Vice Chancellor (DVC), Pro Vice Chancellors (PVC), Chief People Officer (CPO), Chief Finance and Strategy Officer (CFSO) Deans, Directors, Heads of Schools and Departments and Research Institute Directors

6.2 Are responsible for ensuring that all work at height is managed in accordance with this procedure.

Managers (including those in charge of buildings and management of UU estates)

- 6.3 Are responsible for ensuring that all work at height is managed in accordance with this procedure including: -
 - All work at height is subject to a suitable and sufficient Risk Assessment and that adequate safety controls (in keeping with the hierarchy identified at section 9 and Appendix 2) are implemented, monitored and reviewed.
 - The risks associated with working near fragile surfaces and falling objects is properly assessed and that agreed control measures are implemented, monitored and reviewed.
 - Staff engaged in any activity (including organising, planning and supervising) in relation to work at height, or work equipment for use in such work, are competent to do so.
 - All workplaces and equipment related to work at heights are appropriate, regularly inspected and maintained.
 - Access to "Danger Areas" is restricted to authorised persons.
 - Sufficient assurance is received that contractors are competent, are authorised in accordance with permit to work procedures, have provided a suitable risk assessment and method statement and are appropriately supervised when on site.
 - Where responsibility is delegated to a member of staff such as a Supervisor, the Manager remains accountable and delegate to those who are competent in the task/activity.

Staff

- 6.4 All staff must: -
 - Co-operate with the manager/supervisor to ensure that work can be carried out safely.
 - Ensure they understand the hazards and comply with the risk assessment and safety procedures.
 - Undertake training for the safe operation and use of equipment.
 - Ensure the manager is notified of any medical condition that may impact on working at height safely.
 - Report any unsafe equipment or conditions that could potentially lead to a dangerous occurrence or incident.
 - Use suitable equipment and personal protective equipment in accordance with training & instructions.
 - Have the necessary competency to carrying out the work e.g. have the necessary skills, training, and knowledge.

7. PLANNING AND PREPARING

- 7.1 Before work starts, it must be properly planned and coordinated to ensure it is carried out with a reasonable degree of safely. (See **Appendix 1**.) This includes selecting the correct equipment for the task.
- 7.2 If selecting contractors for activities involving work at height, evidence must be sought of their competency, safe equipment, and safe operating procedures, proportionate to the degree of risk and duration of the activity. Relevant permits to work must be completed.
- 7.3 Low-risk, relatively straightforward tasks will require less effort when it comes to planning.
- 7.4 Any work or activity on roofs which have restricted access for maintenance or other reasons must be approved by Estates Services. Access to roof areas will only be granted to staff or contractors who possess appropriate qualifications and/or experience in relation to the type of roof and the nature of the work/activity being carried out.
- 7.5 The Manager must ensure that regular monitoring of the work takes place to ensure that all the necessary precautions are in place and being maintained throughout the duration of the work at height activity/task.

8. COMPETENCE

- 8.1 Staff engaged in any activity (including organising, planning and supervising) in relation to work at height, or work equipment for use in such work, must have the training & knowledge to so.
- 8.2 Managers must ensure that staff have been provided the necessary information, instruction, and training, proportionate to the risk involved.
- 8.3 Straightforward low risk tasks may require basic instruction and training which can often take place on the job.
- 8.4 More technical level of competence is required for higher risk activities such as roof work, erection/inspection/dismantling of scaffolds and towers or for longer duration work at height.
- 8.5 Technical training must be completed using an accredited training provider.

9. RISK ASSESSMENT

- 9.1 Before work starts, the manager responsible must assess the risk and think about sensible and proportionate precautions to put in place for working at height, following the steps below in sequence.
 - **Avoid** work at height where it is reasonably practicable to do so (is it necessary? do as much as possible from ground level).
 - Where it cannot be easily avoided, use either an existing place of work that is already safe or a suitable type of equipment to **prevent** falls (e.g., Work platform, Guard rails, scissor lift).

- **Mitigate** the risk if falling cannot be prevented, minimise the distance and consequences of a fall, by using the appropriate type of equipment (e.g., netting, harnesses/lanyards).
- 9.2 For each step (Refer to **Appendix 2**), managers must implement measures that protect everyone at risk (collective protection) before measures that only protect the individual (personal protection).
- 9.3 Factors to weigh up as part of the risk assessment include: -
 - Weather/ground conditions that could compromise safety.
 - Overhead hazards such as power lines or roof when used indoors.
 - Check that the place (e.g., a roof) where the work is to be undertaken is safe and can be accessed safely.
 - Distance and consequence of a fall.
 - Duration and frequency of the activity.
 - Restricted access Barriers/signage.
 - Stop materials or objects from falling or, if that is not reasonably
 practicable then take suitable and sufficient measures to make sure
 no one can be injured, e.g., use exclusion zones to keep people
 away, toe boards on scaffold to stop materials falling off, or a means
 to catch falling items such as netting.
 - Planning for foreseeable emergencies and rescues including consideration of lone working.
 - Selection of suitable PPE e.g. hard hat.
- 9.4 The risk assessment and resulting safe working procedures must be shared with all those involved so they know what to do to keep themselves and others involved safe.
- 9.5 **Fragile surfaces** such as skylights and cement roofs, pose a significant risk of fall through. No one at work should pass across or near, or work on, from or near, a fragile surface. Roofs and similar surfaces should be treated as fragile unless known to be otherwise.

10. SELECTING SUITABLE EQUIPMENT

- 10.1 Equipment for working at height must provide the correct protection for the task. It should be chosen in accordance with the hierarchy of control set out in the risk assessment section 9 above. **Appendix 2** gives some practical examples of what access equipment may be most suitable.
- 10.2 Consider the distance and consequence of a fall; duration and frequency of use; ease of access e.g. Space to manoeuvre MEWP; ease of access to the workplace; impact on others in vicinity, safe working load e.g. Persons and materials.
- 10.3 Prioritise equipment which protects everyone at risk (collective protection e.g. guard rails) before measures that only protect the individual (personal protection e.g. restraint harness).

- 10.4 Only equipment which has been maintained/inspected to the appropriate standard should be used.
- 10.5 When hiring equipment which holds/lifts people or requires assembly or installation such as tower scaffolds or scissor lifts, assurance of maintenance/statutory inspections must be provided.
- 10.6 Staff must report defective equipment immediately and managers must ensure it is removed.

11. INSPECTION AND EXAMINATION

11.1 Places of work at height

 Managers must ensure that the surfaces and every parapet, permanent rail, or other such fall protection measure of every place of work at height are checked on each occasion before the place is used.

11.2 **Equipment**

- The Work at height regulations set out the type and frequency of inspection for specific types of access equipment and safety devices.
- There is also a legal requirement to have equipment such as Mobile Elevating Work Platforms (MEWPs), harnesses or other types of equipment that lift people to be thoroughly examined at least every 6 months by an independent competent person or as part of an examination scheme.
- Managers responsible for work at height must ensure documented inspections of equipment take place of the type and frequency specified for that equipment.
- All equipment used for working at height must undergo daily pre-use visual checks by the user.
- Users must report any defects immediately to their Manager/Supervisor so that remedial work can be arranged/undertaken and/or the equipment removed.
- In addition to the daily visual check, a recorded inspection must be made every 6 months for equipment such as access towers, ladders, step ladders..
- In the case of fixed or mobile scaffolding an examination must be completed by a competent person and certificate issued prior to use and inspected at regular intervals by a competent person.
- The frequency of additional inspections will be determined by the competent person based on the duration, environment and type of work being undertaken.

More information is included in Appendix 3.

12. SPECIFIC EQUIPMENT

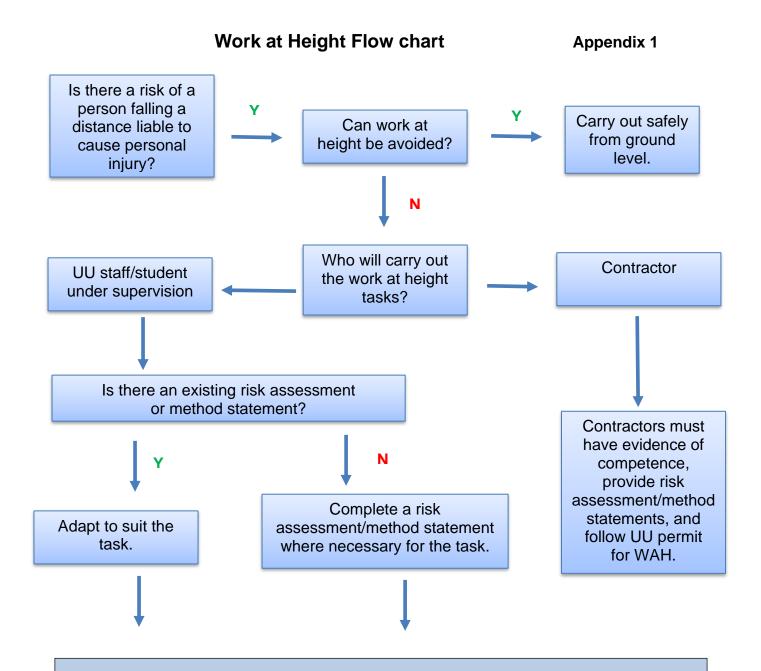
- 12.1 When working at height there are a range of different types of access equipment that can be used. Each one is designed for a different type of situation so having the correct equipment is key.
- 12.2 The most common types of equipment when working at height include:
 - Fixed scaffolding
 - Tower scaffolds
 - Mobile Elevated Working Platforms (MEWPs) Scissor lifts/telehandlers
 - Ladders and stepladders
 - Trestles and staging

Guidance for safe use of specific equipment can be found in the resources section at Appendix 5.

- 12.3 Specific access equipment must be selected in accordance with the hierarchy of control set out at Appendix 2.
- 12.4 Hard hats must be worn when working at heights or in the vicinity of access equipment where there is a risk of falling items.

Inspection

The Manager should ensure that all equipment used for working at height is visually checked either daily or before being used and that recorded inspections are carried out as specified in **Appendix 3**. Note: if the inspection shows that any equipment is not safe then the work must be STOPPED and either faults repaired by a competent person or the equipment removed. Checklists for ladder/Stepladder checks are available at **Appendix 4**.



Take suitable and sufficient steps to PREVENT the risk of a fall at work or, if it can't be prevented, to mitigate consequences of such a fall – **See Appendix 2a & b**.

Figure 1 Step-by-step diagram

Can you AVOID working at height in the first place? If NO, go to PREVENT Can you PREVENT a fall from occurring? If NO, go to MINIMISE

Do as much work as possible from the ground.

Some practical examples include:

- using extendable tools from ground level to remove the need to climb a ladder
- installing cables at ground level
- lowering a lighting mast to ground level
- ground level assembly of edge protection

You can do this by:

- using an existing place of work that is already safe, eg a nonfragile roof with a permanent perimeter guard rail or, if not
- using work equipment to prevent people from falling

Some practical examples of collective protection when using an existing place of work:

 a concrete flat roof with existing edge protection, or guarded mezzanine floor, or plant or machinery with fixed guard rails around it

Some practical examples of collective protection using work equipment to prevent a fall:

- mobile elevating work platforms (MEWPs) such as scissor lifts
- tower scaffolds
- scaffolds

An example of personal protection using work equipment to prevent a fall:

 using a work restraint (travel restriction) system that prevents a worker getting into a fall position Can you MINIMISE the distance and/or consequences of a fall?

If the risk of a person falling remains, you must take sufficient measures to minimise the distance and/or consequences of a fall.

Practical examples of collective protection using work equipment to minimise the distance and consequences of a fall:

 safety nets and soft landing systems, eg air bags, installed close to the level of the work

An example of personal protection used to minimise the distance and consequences of a fall:

- industrial rope access, eg working on a building façade
- fall-arrest system using a high anchor point

Using ladders and stepladders

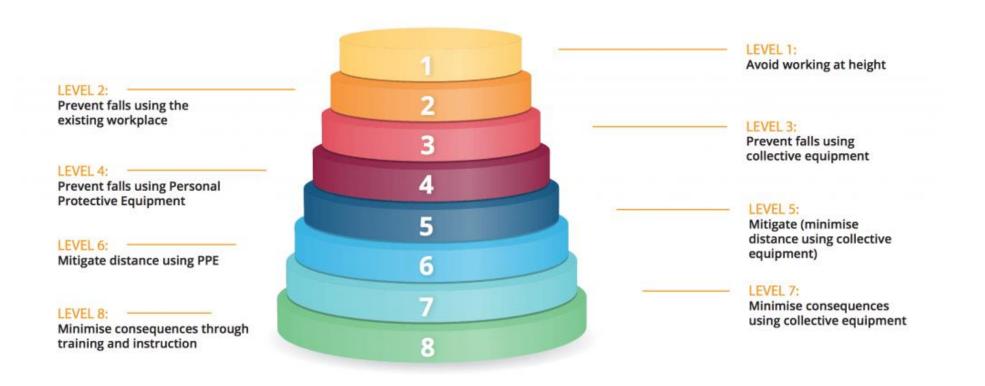
For tasks of low risk and short duration, ladders and stepladders can be a sensible and practical option.

If your risk assessment determines it is correct to use a ladder, you should further **MINIMISE** the risk by making sure workers:

- use the right type of ladder for the job
- are competent (you can provide adequate training and/or supervision to help)
- use the equipment provided safely and follow a safe system of work
- are fully aware of the risks and measures to help control them

Follow HSE guidance on safe use of ladders and stepladders at www.hse.gov.uk/work-at-height/ index.htm

For each step, consider what is reasonably practicable and use 'collective protection' before 'personal protection'



Appendix 3 Time and frequency of checks, inspections, and examinations

| Place of work/equipment | Visual check before starting recommend ed | Inspect after installation or assembly in any position (see notes 1 and 2) | Inspect at suitable intervals | Inspect after exceptional circumstances which are liable to jeopardise the safety of work equipment | Inspect at intervals not exceeding 7 days (see note 2) | Check on each occasion before use (REPORT NOT REQUIRED) | LOLER Thorough Examination (if work equipment subject to LOLER) (see note 3) |
|--|--|---|-------------------------------------|---|--|---|--|
| The surface and every parapet or permanent rail of every existing place of work at height | $\sqrt{}$ | | | | | $\sqrt{}$ | |
| Guard rails, toe boards, barriers, and similar collective means of fall protection | $\sqrt{}$ | √ | $\sqrt{}$ | V | | | |
| Scaffolds and other working platforms (including tower scaffolds and MEWPs) used for construction work and from which a person could fall more than 2m | $\sqrt{}$ | V | | $\sqrt{}$ | $\sqrt{}$ | | V |
| All other working platforms | | V | $\sqrt{}$ | $\sqrt{}$ | | | ~ |
| Collective safeguards for arresting falls (e.g. nets, airbags, soft landing systems) | V | V | V | V | | | |
| Personal fall protection systems (including work positioning, rope access, work restraint and fall arrest systems) | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | | | | √ |
| Ladders and stepladders | | | $\sqrt{}$ | | | | |

Notes

- 1 'You are not required to inspect and provide a report every time a ladder, tower scaffold or mobile elevated work platform (MEWP) is moved on site or a personal fall protection system is clipped to a new location.
- 2 An inspection and a report are required for a tower scaffold or MEWP (used for construction work and from which a person could fall 2 metres) after installation or assembly and every seven days thereafter, providing the equipment is being used on the same site.

A record of this inspection must be made and retained for three months.

If a tower scaffold is reassembled rather than simply moved, then an additional, pre-use inspection and report is required. It is acceptable for this inspection to be carried out by the person responsible for erecting the tower scaffold, providing they are trained and competent.

A visible tag system, which supplements inspection records as it is updated following each pre-use inspection, is a way of recording and keeping the results until the next inspection.

- 3 All work equipment subject to Lifting Operations and Lifting Equipment Regulations (Northern Ireland) 1999 (LOLER) regulation
- 9, thorough examination and inspection requirements, will continue to be subject to LOLER regulation 9 requirements.

Ladders that are part of a scaffold system still must be inspected every seven days as part of the scaffold inspection requirements. Ladders must be suitable for the intended use, i.e. are strong and robust enough for the job.

HSE recommends British Standard (BS) Class 1 'Industrial' or BS EN 131 ladders for use at work.

Checklist for 'pre-use' checks and annual recorded inspection of Step/Ladders

| CHECK HSE Advice | Step ladder No. | Step ladder No. | Step ladder No. |
|---|-----------------|-----------------|-----------------|
| LOCKING BARS Should not be bent or the fixings worn or damaged as the ladder could collapse | | | |
| FEET Should not be missing, worn or damaged as the ladder could slip. | | | |
| PLATFORM Should not be split or buckled | | | |
| STEPS/TREADS Should not be contaminated as they could be slippery. | | | |
| STRENGTH AND STABILITY Fixings should not be loose as ladder could collapse. | | | |
| STILES Should not be bent or damaged as the ladder could buckle or collapse. | | | |
| OTHER | | | |

Further information

- Using leaning ladders safely
- Using stepladders safely

Resources

- CIS60 Roof Repair Work Source HSE(GB)(external link opens in a new window / tab)
- Falls from heights leaflet
- Fragile Roofs Safe Working Practices Source HSE(GB) (external link opens in a new window / tab)
- HSG 033 Roof Work Source HSE (GB(external link opens in a new window / tab))
- INDG 402 Safe Use of Ladders and Stepladders Source HSE (GB)(external link opens in a new window / tab)
- Inspecting fall arrest equipment made from webbing and rope(external link opens in a new window / tab)
 HSE
- Working at height a brief guide(external link opens in a new window / tab) HSE
- Working on roofs(external link opens in a new window / tab) HSE
- Use of mobile elevating work platforms (MEWPS)(external link opens in a new window / tab) - HSE
- HSE Tower Scaffolds
- Work at height FAQs(external link opens in a new window / tab) HSE
- https://www.hse.gov.uk/pubns/indg422.pdf HSE Thorough examination of lifting equipment A simple guide for employers
- Selection and management of mobile elevating work platform in construction GEIS6 (hse.gov.uk)