

Work at Height Policy

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1. Introduction

'Work at height' means **work in any place where, if there were no precautions in place, a person could fall a distance liable to cause personal injury** (for example a fall through a fragile roof). Previously "work at height" was defined as 2m at more above the ground, however this was removed from the Work at Height Regulations 2005 and now any work "above ground" may be considered as work at height.

This policy reflects the commitment of the university to meeting the requirements of the Work at Height Regulations 2005 by ensuring that work at height is -

- Properly planned
- Appropriately supervised and
- carried out in a manner which is so far as is reasonably practicable, safe.

The university will consider the risks associated with working at height and ensure control measures are in place to manage these risks including the selection of work equipment based on the hierarchy of controls (Table 1).

Where possible work should be completed from the ground.

The selection of work equipment linked to the hierarchy of control

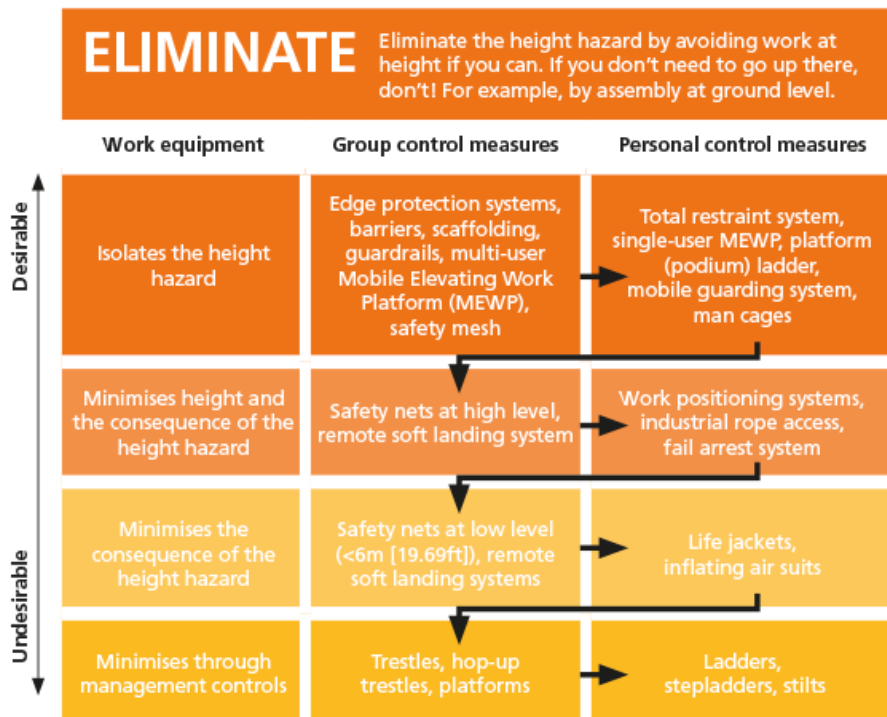


Table 1 Hierarchy of controls for work at height

2. Roles and Responsibilities

2.1 Managers

Managers should ensure that:

- a) All work is properly planned and organised.
- b) The risks from work at height are assessed and documented including a plan for emergencies and rescue.
- c) Appropriate work equipment is selected, regularly inspected, and maintained before being used (and records are kept).
- d) All work at height takes account of weather conditions that could compromise health and safety.
- e) Those involved in work at height are trained and competent.
- f) The place where work at height is undertaken is safe.
- g) The risks from accessing fragile roofs and surfaces are properly controlled.
- h) The risks from falling objects are properly controlled.

2.2 Staff

Staff are responsible for ensuring that they comply with this policy and are also responsible for:

- a) Familiarising with the risk assessment and ensure that identified controls are in place.
- b) Reporting any incidents, accidents or near misses to the Health and Safety Team: <https://staff.londonmet.ac.uk/employment-support/health-and-wellbeing/health-and-safety/reporting-incidents-and-accidents/>
- c) Inspecting equipment provided prior to use to ensure that it is in a safe condition.
- d) Using the equipment provided (including any safety devices) properly and in accordance with training and instruction.
- e) Reporting any defective equipment or failures in safe systems of work to their line manager.
- f) Staff acting as Project Managers have a duty to supervise contractors under their control.
- g) Ensuring that any Permit to Work is completed and followed (see the Control of Works Policy).

2.3 Students

Staff are responsible for supervising and supporting students ensuring that they comply with this policy and the risk assessment. This shall include –

- a) Reporting any incidents, accidents or near misses to the Health and Safety Team.
- b) Inspecting equipment provided prior to use to ensure that it is in a safe condition.

- c) Ensuring the equipment provided (including any safety devices) is used properly and in accordance with training and instruction.
- d) Reporting any defective equipment or failures in safe systems of work.

3. Hazards

Falls during working at height can occur from ladders, through gaps or holes in working platforms, through fragile materials and whilst accessing areas. In addition, serious injury can result from material falling or being thrown from height.

Before working at height, the identified hazards should be mitigated with suitable and sufficient measures to prevent injury. E.g. the provision of suitable footwear.

4. Risk Assessment

4.1 Necessity of Working at height

The most effective way to avoid a fall from height is to avoid work at height in the first instance. Therefore, any work at height must be justified and needs to be undertaken in a controlled manner from a safe place.

4.2 Health of Staff Working at Height

It is every individual's responsibility to ensure that they are medically fit to work at height.

Staff and Students **must** declare to their Line Manager if they are suffering from any medical condition which might adversely affect their ability to work at height safely (e.g. epilepsy or sedative medication). Management referral will then be made to Occupational Health (staff) or Student Health (student) who will assess the individual.

The University will seek to support individuals to ensure that fitness to work at height is achieved where the person works at height on behalf of the University either as an essential part of their employment, or where as part of an approved activity.

This support includes:

- Employment medical screening.
- Health assessment examinations upon commencement of employment.

4.3 Precautions for all Work at Height

Risk Assessment, Method Statements and Work at Height Permits

Prior to work at height commencing, a risk assessment must be undertaken by a competent person and recorded. While the responsibility to complete the risk assessment lays with the line manager of the individual completing that work, the line manager may and should involve others in the risk assessment process. Any person requested by the line manager to assist in the risk assessment process must be suitably competent. Refer to the H&S team for a competent advice.

The risk assessment must identify a safe system of work detailed in a safety method statement being specific and relevant to the work to be undertaken. The risk assessment and method statement must be signed by the competent person and communicated to all those involved in the working at height activity.

A risk assessment, safe working procedure/ method statement and permit to work (if deemed appropriate) covering all work to be carried out at height must be done in advance and the control measures identified, implemented before the work commences.

The risk assessment should include assessment of fitness to work at heights to consider health or medication which may compromise safety.

In addition to a risk assessment, work at height will require a requires a Permit to Work unless the work is of short duration (less than 30 minutes) and of a 'light' nature (i.e. inspection, access high levels).

Prevention of Falls

Generally:

- Do not work at height unless it is essential and unavoidable
- Ensure that there is adequate working space to undertake the task
- Ensure that the working platform or ladder is stable and secure, and you know how to use it safely
- Ensure that the working platform or ladder will support the weight of those persons using it and any materials and equipment that they require to undertake the work
- Ensure that the working platform is footed appropriately
- Ensure that all open edges are protected by use of guard rails, barriers, etc.

4.4. Ladder safety

Ladders are most appropriately used as a means of access to a workplace. Ladders should only be used as a workplace to complete short-term, light work of not more than 30 minutes duration. If ladders are to be used for any work, you must ensure that:

- The work only needs one hand to be used at any time.
- The work areas can be reached without the need for overstretching.
- The ladder can be fixed to prevent it slipping.

- The ladder is strong enough for the job and in good condition.
- A good handhold is available for the user.
- If the ladder cannot be fixed, a second person foots the ladder while it is being used (this includes whilst the ladder is being fixed). Any person tasked with footing the ladder should wear head protection.
- The user should be able to reach the work from 1m below the top of the ladder.
- The ladder will not be used where there is a risk of persons or objects coming into contact with the ladder/user/ Safe working areas must be provided with warning signage as appropriate.
- The work area is checked for electrical hazards as part of the overall risk assessment for the work. No work must be carried out within 6m of high voltage cables without a suitable and sufficient safe system of work being in operation. Aluminium ladders must not be used where any electrical hazards exist.

The ladder must be regularly checked for damage and prior to any use. There should be a management system in place to ensure that this is done, to include record keeping.

The person authorising the work must be certain that there is no other better means of access before using a ladder. The longer a ladder is the harder it is for the user to manually handle it; it is more difficult to foot, and it will flex more in use. Additionally, if the ladder is to be used in several locations requiring constant movement/repositioning, there is more scope for user carelessness.

Any tools required to complete work should be light and carried in a shoulder bag or holster attached to a belt to allow both hands to be free during climbing. Heavy or bulky loads should not be carried up or down ladders and a gin wheel or other suitable equipment must be used instead.

Ladders must be secured in position and are only safe when they rest on a firm and level surface. Once in position, they must be secured by rope or other suitable stabilisation devices to ensure that the ladder does not move sideways or slide away from the wall. The ladder must also:

- Be angled to minimise the risk of slipping outwards ('one out for every four up' is the rule of thumb).
- Rest at the top against a solid surface.
- Have both feet on a firm footing so that it cannot slip.
- If the ladder is more than 3m long or used as access to a workplace it must be secured from falling. This may be achieved by fixing it at the top or base.
- Extend a sufficient length (approximately 1m) above any landing place from where people get on and off it unless some other suitable handhold is provided.
- Where ladders are used for vertical distances of more than 9m suitable landings or platforms must be provided (as often as possible).

- Extension ladders must overlap at the top by at least three rungs and be locked out before use.
- Only be used by one person at a time.

The user of the ladder must wear suitable non-slip footwear, face the ladder when ascending and descending and be physically fit for this type of work.

Ladders must be of the correct safe working load relative to the work to be undertaken. Domestic standard ladders (British Standard Class 3) are not appropriate for use in the workplace.

4.4.1 Step Ladders

Step ladders are designed to provide a free-standing means of access and are not designed to account for any side loading and therefore are relatively easy to overturn. Users of step ladders must avoid over-reaching and the top step must not be worked from unless it has been specifically designed for this purpose.

4.5 Falling Objects

Housekeeping is of paramount importance and can prevent materials accumulating with the potential to fall and cause injury. Nothing should ever be thrown from a height and waste material should either be lowered to the ground in a controlled manner or dropped down an enclosed rubbish chute.

Access to areas underneath or adjacent to work at height should be prevented. Where this cannot be reasonably maintained, debris netting, covered walkways, or similar safeguards to stop falling material causing injury should be used.

Care is required where there is public access close to work occurring at height. If possible, try to arrange for work to be carried out when numbers of passers-by will be minimal.

5. Training

Persons undertaking work at height must have the appropriate knowledge, information, instruction, skills training, and experience to work safely, or be under the supervision of a designated competent person. Competence must be assured in the following areas:

- Ability to recognise the risks and necessary controls to work safely.
- Conversant with agreed safe system of work including, where necessary, choice and safe operation of ladder or other relevant access equipment.

6. Conditions

6.1 Weather

Adverse weather conditions need to be anticipated and suitable precautions planned for all external work at height. Work platforms should always be inspected prior to work at height commencing to determine whether conditions have changed and to enable safe working. When deciding whether to continue or suspend work, consideration should be given to:

- Wind speed, temperature, lighting
- Existing controls in place to prevent falls from height.
- The position/ height of the working platform in respect of any material being handled.

The work being undertaken.

6.2 Physical environment

When working at height you must identify and adequately control the risks to ensure those in the vicinity can continue safely by

- Avoiding 'work at height' where possible
- Planning properly and not underestimating the risks, e.g. maintaining a safe means of access and egress
- Selecting the right equipment
- Training those doing the work, making sure they know how to use the equipment safely
- Making sure all equipment is regularly inspected and maintained
- Checking work is being carried out as planned

7. Prevent unauthorised access

Make sure that unauthorised access to all access equipment and working platforms is prevented. This may be achieved by implementing a permit to work system or by blocking off/ securing access to the area(s) concerned.

8. Working on or near to fragile materials

At no time may anyone work on, from or pass over fragile material, unless platforms, covering or other similar safe means are provided that adequately support and protect the individual. Support platforms must be at least 600mm wide and or greater width if the work requires it. Platforms must be long enough to provide adequate support to do the work safely. Precautions are required to prevent people and materials falling from the platform and edge protection comprising of a top rail, intermediate rail and toe-board is required.

Protection must be provided when anyone passes or works less than 2m from a fragile material. In such situations fragile materials must be securely covered, or full edge protection provided to the perimeter or along the full length of the fragile material to prevent access to it. Appropriate precautions are to be taken when installing such protection. Where it is not reasonably practicable to provide such

protection, for example, in cases where proximity to the fragile material is irregular or for a short time span, use of safety harnesses may be appropriate.

Designated boundaries can be established that are useful in identifying safe work areas and/or routes to and from them. If these are used:

- The boundary should be at least 2m from the fragile material.
- The boundary does not need to comply with full edge protection standards but there should be a physical barrier (a painted line or bunting is not acceptable).
- All persons should receive appropriate information, instruction, and training.

9. Roof installation, works and maintenance

RAMS must be provided in advance to the Project Manager for any proposed works are to take place. These must detail the type of access equipment to be used (and its service record available if requested) and copies of any driver/ operator competencies.

Refer to [#Appendix1](#)

Lone working is not permitted for this type of work and access can only be arranged via Estates.

10. Inspections

In addition to pre-use inspection by the user, work at height equipment should be subject to periodic inspection by a competent person with the findings documented.

Schools and Departments should ensure a ladder inventory form is completed at suitable intervals.

Refer to [#Appendix3](#)

All equipment brought on-site by contractors must be certified in writing as fit for use and London Met may request copies of inspections for review.

11. References and further reading

- HSE: <http://www.hse.gov.uk/work-at-height/index.htm>
- INDG284 – Working on Roofs
- INDG455 – Safe use of ladders and stepladders
<http://www.hse.gov.uk/pubns/indg455.pdf>
- INDG401 – Working at Height: a brief guide:
<http://www.hse.gov.uk/pubns/indg401.pdf>
- The Ladder Association: <https://ladderassociation.org.uk/>

Appendix 1 – Types of Access Equipment

The nature of the task to be carried out and duration of the work will influence the type of working platform most appropriate for the work. There is a range of equipment available for work at height, including scaffolding, tower scaffolds, mobile elevating working platforms (MEWPs) and platforms.

General access scaffolds

All scaffold must:

- Be designed, erected, altered, and dismantled by competent trained personnel and such work must be directed by a competent supervisor (PASMA or equivalent).
- Never be erected over people or busy areas. This risk must be controlled by scheduling in the work during quiet times such as early mornings or alternatively, closing pavements/ areas with permission from local authorities.
- Be placed on a firm and level foundation that can support the weight of the scaffold and any other potential loading.
- Be braced and tied into a permanent structure or otherwise suitably stabilised as per any manufacturer's instructions.
- Have platforms that are fully boarded and of adequate width for the intended work and access.
- Consist of scaffold boards that are adequately supported and do not overhang excessively.
- Be designed to prevent falling materials.
- Provide ladders or other safe access on to the work platform.
- Be checked for suitability for the task prior to use or whenever it is altered or adversely affected (i.e. in high winds).
- Be inspected by a competent person before first use, after substantial alteration, after any event likely to have affected stability and at regular intervals not exceeding 7 days.
- When scaffolding is left unattended it should be secured in such a manner to stop unauthorised access, for example by removing ladders at ground level.

- Waste materials should be removed via mechanical hoists or more often rubbish chutes.
- Scaffolding erected on public highways or on any roads, pavements, paths, or routes used by the public must be authorised by the relevant Local Authority.

Tower Scaffolds

Tower scaffolds are quick to erect and can provide safe access, but many are involved in accidents due to incorrect operation and use. A wide range of prefabricated towers are available, and the manufacturer or supplier should provide an adequate instruction manual detailing advice on the erection sequence and

bracing requirements. If the equipment is hired, the hirer should provide this information.

If a tower scaffold is to be used:

- All **manufacturer's** instructions for erection, use and dismantling must be adhered to.
- The person erecting the tower should be trained and competent (PASMA or equivalent).
- An instruction manual should be kept with the tower scaffold for reference.
- The tower must be vertical with the legs supported on firm level ground and wheel brakes on.
- Wheels and outriggers must be locked when the tower scaffold is in position.
- A safe means of access to and from the work platform must be provided e.g. internal ladders with secure handholds at all landing places.
- Edge protection in the form of guard rails and toe-boards to all platforms (including intermediate ones) must be provided.
- Tie the tower rigidly to the structure it is serving or provide additional support if the tower is sheeted, may be exposed to strong winds, is used for grit blasting/ water jetting or where heavy items are lifted the outside or where the tower base is too small to ensure stability for the height of the platform.
- In exposed conditions or outside, the height of the working platform should be no more than 3 times the minimum base dimension.
- Internally, on firm ground, the height of the working platform should be no more than 3.5 times the minimum base dimension.
- Always check the safe base to height ratio in the instruction manual.

Do Not:

- Use a ladder footed on the working platform.
- Apply horizontal loads.
- Overload the working platform.
- Fix ties to the centre of thin walled aluminium tubes.
- Move the tower by applying force at the platform level.
- Climb up the outside of the tower unless it has been specifically designed for this.

When moving a mobile tower scaffold the route must be checked in advance for power lines and overhead obstructions and holes/ dips in the ground. The tower must be cleared of all materials and people prior to it being pushed/ pulled at its base. Anyone moving a tower scaffold must have received manual handling training and be in possession of a manual handling risk assessment covering the task.

Tower scaffolds must be inspected by a competent person. The requirement for inspection is different for small towers under 2m and for towers of 2m and above.

If the working platform is less than 2m in height, the tower must be inspected:

- After assembly in any position.
- After any event liable to have affected its stability; and
- At suitable intervals depending on frequency and conditions of use

If the working platform is 2m or more in height, it must be inspected:

- After assembly in any position.
- After any event liable to have affected its stability; and
- At intervals not exceeding seven days.

A new inspection and report are not required every time a mobile access tower is moved to a new location on the same site. However, if any part of the tower to be removed as part of the moving process, then a pre-use check should be undertaken by a trained and competent person to make sure that the tower has been reinstated correctly.

Platforms (MEWPs)

Mobile elevated work platforms (MEWPs) can provide excellent safe access to high levels. Anyone using a MEWP must ensure that:

- The operator is trained and competent (IPAF or equivalent).
- The work platform is fitted with guard rails, toe-boards, and other suitable barriers.
- It is only used on firm and level ground.
- The tyres are fully inflated.
- Outriggers are properly extended and chocked before the platform is raised into position.
- Emergency procedures are in place should the platform fail in the elevated position.
- The MEWP is not operated close to overhead obstructions or cables.
- Not allow any part of the MEWP to extend over a traffic route.
- The MEWP is not moved with the platform in the elevated position unless it is designed to do so.

Those responsible for the use of MEWPs must assess the risks of people falling from or being thrown from the carrier, or the MEWP overturning and take precautions to eliminate or control these risks. If the risks cannot be eliminated, then measures should be put into place to minimise the risk of falling from or with the carrier. If there is still a residual risk of impact or persons falling then the use of fall protection equipment should be considered, for example: when working adjacent to or in a live highway.

Fall protection will normally consist of either a work restraint system (normally a combination of full body harness and lanyard) or fall arrest system. Wearing of a harness with a fall restraining lanyard attached to the platform can provide additional protection against falls whilst the platform is in motion.

The supplier of such equipment must provide information and instruction at the point of delivery.

Fixed Height Access Platforms

Fixed height access platforms provide a safe, secure, and stable work platform when working at low levels for prolonged periods of time:

- Maximum safe working height is normally 3m.
- Normally for light work only.
- Locking guardrail allows easy access to the platform. It can be secured after the user is in work position to provide security/ safety.
- Secure lockable castors required to prevent inadvertent movement of the platform.

Appendix 2 – Collective and Personal Protective Measures

Providing platforms and edge protection may not always be possible or reasonably practicable.

Safety Harnesses

In situations where it is not practicable to provide the requirements for edge protection and where people may still approach an open edge from which they could fall a distance likely to cause injury, other forms of protection will be required. In some situations, a suitably attached harness and temporary horizontal lifeline could allow safe working.

The following must be considered when using harnesses and temporary horizontal lifelines:

- Harnesses and lanyards are prone to degradation and daily pre-use checks must be undertaken. **They must also be subject to thorough examination at least every six months.**
- An energy-absorbing lanyard can reduce the risk of injury to the user should a fall occur. This should be attached above the wearer where possible.
- To minimise the free-fall distance the anchor needs to be kept as high as possible.
- All rescue plans must consider the following
 - The safety of the person carrying out or assisting with the rescue
 - The anchor points to be used for the rescue equipment
 - The suitability of equipment
 - The method that will be used to attach the casualty to the rescue system
 - The direction that the casualty needs to be moved to get them to the point of safety
 - The first aid needs the casualty may have due to suspension, and who will carry this out
 - The possible needs of the casualty following the rescue
- Operator attachment must take place from a safe position. They must be securely attached to sufficiently strong anchor points and must always be worn.
- Ensure that there is adequate fall height to allow the system to operate effectively.
- If the user needs to move about during operations a twin lanyard should be used.
- Installation of fixing points for harnesses must be supervised by a suitable qualified person.

Any person required to wear a harness must know how to check, wear, and adjust it before use and the procedure for connecting themselves to the structure or safety line.

Edge Protection

Where there is a risk that a person could fall from height, edge protection must be provided. This will normally consist of:

- A main guard rail at least 950mm above the edge.
- A toe board at least 150mm high.
- An intermediate guard rail or other barrier so that there is no gap greater than 470mm.

Edge protection must be strong and rigid enough to prevent people from falling and be able to withstand other loads likely to fall on them (i.e. stored materials). They must be fixed to a structure for adequate support.

Appendix 3 – Ladder Inspection Register

<u>Ladder inspection register and inventory -</u>						
Ladder type	Where is it kept?	Nanotag reference	Inspection date	Inspected by:	Notes on inspection	Next inspection date