



University of
Salford
MANCHESTER

Work at Height Procedure

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Author: Head of Operations

Estates & Facilities

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Others with responsibilities (please specify):	All subjects of the Procedure will be responsible for engaging with and adhering to this policy.		
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1.0 Scope and Objectives

The intention of this procedure is to ensure that persons required to work at height and those who manage them, are aware of the statutory obligations, and the Estates & Facilities requirements on the use of access equipment.

It identifies the standards required to ensure the correct equipment is selected and the level of competence required before using access equipment.

Provides details regarding the management procedure for the maintenance, storage and checking of University owned access equipment.

2.0 Definitions

The following terms shall apply unless otherwise specified:

- “work at height”
 - A place is ‘at height’ if a person could be injured falling from it, even if it is at or below ground level.
 - ‘Work’ includes moving around at a place of work (except by a staircase in a permanent workplace) but not travel to and from a place of work.
- “construction work” has the meaning assigned to it by regulation 2(1) of the Construction (Design and Management) Regulations 2015;
- “access” and “egress” include ascent and descent;
- “fragile surface” means a surface which would be liable to fail if any reasonably foreseeable loading were applied to it;
- “ladder” includes a fixed or moveable ladder having two feet resting on the horizontal and two feet against the vertical and a stepladder, which is a ladder having four feet resting on the horizontal.
- “line” includes rope, chain and webbing;
- “personal fall protection system”:
 - means fall prevention, work restraint, work positioning, fall arrest or rescue system, other than a system in which the only safeguards are collective safeguards; or
 - rope access and positioning techniques;
- “suitable” means suitable in any respect which it is reasonably foreseeable will affect the safety of any person;
- “work equipment” means any machinery, appliance, apparatus, tool or installation for use at work;
- “working platform”:
 - means any platform used as a place of work or as a means of access to or egress from a place of work;
 - includes any scaffold, suspended scaffold, cradle, mobile platform, trestle, gangway, gantry and stairway is so used.

3.0 Procedure Roles and Responsibilities

University of Salford Estates & facilities recognises that work at height poses a significant risk.

In order to safeguard the health and safety of its workers and others that may be affected by its workplace activities the University of Salford's Estates & Facilities has developed the following procedure, based on the requirements of the Work at Height Regulations 2005 (As amended), associated legislation and good practice.

The procedure will apply to all work at height where there is a risk of a fall liable to cause personal injury. The policy places duties on the University of Salford's Estates & Facilities Division, its employees and Contractors under its control.

The Work at Height Regulations 2005 (As amended) require that:

- all work at height is properly planned and organised;
- those involved in work at height are competent;
- the risks from work at height are assessed
- appropriate work equipment is selected and used;
- the risks from fragile surfaces are properly controlled; and
- equipment for work at height is properly inspected and maintained.

The Regulations include schedules giving requirements for existing places of work and means of access for work at height, collective fall prevention (e.g. guardrails and working platforms), collective fall arrest (e.g. nets, airbags etc), personal fall protection (e.g. work restraints, fall arrest and rope access) and ladders.

Where the Work at Height Regulations or other statutory instrument require the University of Salford Estates & Facilities to keep a report or copy of a report or plan it shall be kept in a form:

- a. that is capable of being reproduced as a printed copy when required;
- b. that is secure from loss or unauthorised interference.

3.1 Organising and Planning

The University of Salford Estates & Facilities will ensure that work at height is –

- a. properly planned, including planning for emergencies and rescue;
- b. covered by a suitable and sufficient risk assessment, which has been carried out as required by regulation 3 of the Management Regulations;
- c. appropriately supervised; and
- d. carried out in a manner that is, so far as is reasonably practicable, safe.

3.2 Danger Areas

Where there is a risk of a person:

- falling a distance that is likely to cause personal injury, or
- being struck by a falling object,

suitable and sufficient control measures must be installed to prevent such an incident.

Unauthorised persons must, so far as is reasonably practicable, be prevented from entering the danger area by the provision of suitable guarding systems (barriers) which must be clearly indicated. The type, size and complexity of barriers must reflect the risk as identified in the risk assessment.

3.3 Control Measures

The University of Salford Estates & Facilities will ensure that, where it is reasonably practicable, work at height will be avoided. Where it is not reasonably practicable to avoid work at height the University of Salford Estates & Facilities will ensure suitable and sufficient control measures are implemented to prevent any person falling a distance liable to cause personal injury.

Control measures should reflect the probability and severity of risk as identified in the roof hazard sheet (risk assessment) and follow the hierarchy of risk management detailed here.

- e. fixed edge protection (roof work)
- f. fixed scaffolds
- g. mobile scaffolds
- h. mobile elevated working platforms e.g. scissor lifts, cherry pickers etc.
- i. slung nets / crash decks / air bags
- j. personal suspension e.g. fall arrest / static line devices
- k. ladders
- l. information instruction and training

3.4 Work at Heights

Before work at height takes place, the relevant Supervisor will carry out a risk assessment. The risk assessment will take particular account of the duration of the work, what equipment is best suited to minimise the risk of persons and/ or materials falling, and the prevailing weather conditions.

3.4.1 Working on roofs

- The roof hazard sheet will be interrogated.
- The correct equipment as identified by the risk assessment and the roof hazard sheet will always be made available and used when working on roofs.
- The correct roof ladders will be used at all times.
- Suitable protection will be provided when work is carried out on flat roofs, in a manner or location, that presents a risk of falling from the edge.
- Work will not take place at a height in windy conditions until the mean wind speed has been determined and the risk assessment has concluded that the conditions are safe for work at height.

3.4.2 Selection of work equipment

Work equipment will be selected following this hierarchy which:

- a. gives priority to collective protection measures i.e. those which prevent falls (e.g. fixed scaffold) over personal protection measures i.e. those which limit the severity of the fall (e.g. fall arrest systems); and
- b. takes account of:
 - the working conditions and the risks to the safety of persons at the place where the work equipment is to be used;
 - the distance to be negotiated; in the case of work equipment for access and egress,
 - the distance and consequences of a potential fall;
 - the duration and frequency of use;
 - the need for easy and timely evacuation and rescue in an emergency;
 - any additional risk posed by the use, installation or removal of that work equipment or by evacuation and rescue from it; and
 - the other provisions of the Work at Height Regulations 2005.

When selecting work equipment for work at height consideration must be given to:

- it being the most suitable equipment given that it is not reasonably practicable to carry out the work safely without operating at height.
- the characteristics including dimensions which –
 - are appropriate to the nature of the work to be performed and the foreseeable loadings i.e. inspection, light duty or working platforms; and
 - allow passage without risk i.e. minimum width of working platform.
 - The equipment has been inspected in compliance with the Management Procedure for the Maintenance and Checking of University Owned Access Equipment (Appendix 7.1).

The University of Salford Estates & Property Services will ensure that work at height is carried out only when the weather conditions do not jeopardise the health or safety of persons involved in the work.

3.4.3 Types of Equipment

(a) Mobile tower scaffolds

Mobile access towers should be erected and used by or under the control of a competent person.

The erection and use of the tower scaffold must refer and comply with the manufacturer or supplier instruction manual which should explain the erection sequence, including any bracing requirements.

Towers should be erected following a safe method of work approved by the Prefabricated Access Suppliers' and Manufacturers' Association (PASMA).

If the tower has been hired, the hirer has a duty to provide such information which must be passed on to the person erecting or using the tower.

When using a mobile tower scaffold, the following standards must be observed: -

- It should be erected and used only on ground suitable for the purpose, generally with a surface of concrete, tar macadam or similar.
- Where towers are built on soft, uneven or sloping ground, they should be set on boards or other rigid packing, which will provide a firm and level foundation.
- When used outside the height of the working platform should not be more than three times the minimum base width and when used inside, three and a half times (including the out-riggers, if fitted).
- The working platform must be fully boarded and the boards must be at least 38mm (1.5") thick.
- Guard rails and toe boards are necessary on all four sides with possibly a small break in one side at the stepping off point from the ladder access.
- Toe boards must be at least 150mm (6") above the platform level.
- Guard rails must be between 0.914m (3') and 1.143m (3'9") above the platform.
- Moving scaffold should only be effected by pulling or pushing at the base.
- When the scaffolding is being moved, the working platform shall be clear of people and materials and its path unobstructed. Also check above for overhead power lines/obstructions.
- The platform must have a safe means of access on the narrowest side of the tower.
- Do not climb the frame unless it has built-in ladder sections with rungs not more than 300mm apart and the stiles not more than 480mm apart.
- If the frame can be used, climb it from the inside. If not, use an internal ladder or stairway fixed firmly to the tower. **NEVER** climb up the outside; this may cause the scaffold to over-turn.
- The wheels should be turned outwards to provide maximum base dimensions and wheel brakes must be **ON** and locked when the scaffold is in use.
- All scaffolding must be inspected by a competent person before its put into use.
- Where scaffold is in use or left for more than 7 days, a description of the scaffold shall be entered into the prescribed register and the scaffold inspected at least weekly by the appropriate officer.

(b) Cherry picker

The "cherry picker" access cradle, and any similar equipment, will only be used by persons who have been trained in their safe operation.

- Harnesses will be worn at all times by persons carried by the equipment and harnesses will be firmly attached to the cherry picker and not onto adjacent structures.

- The use of a cherry picker must be authorised by the line manager following the results of a suitable and sufficient risk assessment.

(c) Ladders

The University of Salford Estate Division's workload involves operations, which may involve work at height. In the majority of cases this will be a mixture of planned, routine and emergency tasks. For low level work, E.g.- gaining access up to 1 Metre (reach height of 3.00 Metres), podium steps will generally be used.



The use of ladders will only be permitted for work at height where a risk assessment under regulation 3 of the Management Regulations has demonstrated that the use of more secure work equipment is not justified because of the low risk.

For the purpose of this document low risk will be defined as: -

- work of a short duration and;
- where those working on a ladder can maintain three points of contact at all times.

For all other practical purposes ladders will only be used for access/ egress purposes.

Only ladders that have been inspected within the preceding 6 months and comply with the relevant standards below are permitted to be used:

<i>Classification</i>	<i>Duty Rating</i>	<i>Maximum Load</i>	<i>Application</i>	<i>Symbol</i>
Class 1	130 Kg	175 Kg	Industrial use	
Class EN 131	115 Kg	150 Kg	Light Trade Use	
<u>Timber and Class 3 (Domestic) rated ladders are not considered adequate for use at work.</u>				

Before using any ladder

- Always visually inspect the ladder to be used.
- Check for damage to the stiles (the outside uprights), steps and top platform.
- Check that the stays, hinges, chains or cords (used to keep the stepladder from spreading or used to extend an extension ladder) are of sufficient and equal length and are in good condition.

- Check that rubber or plastic non-slip feet are not missing (replacements can usually be obtained from the supplier or manufacturer).
- Never use a ladder that is defective. Do not attempt to repair damage. Always report damaged equipment immediately to your supervisor.
- Make sure the steps are clean and dry. Beware of wet, greasy and icy steps.
- Wear flat firm soled shoes/boots with clean soles and a good grip.
- Check that there are no overhead hazards near where you are going to work, e.g. overhead electric lines.

Setting up

- Always follow the manufacturer's instructions when setting up equipment.
- Do not use, or carry metal ladders beneath low power lines.
- Position the ladder on a firm and level base. If you are working on soft ground, place the ladder on a large flat non slip board to provide a suitable base.
- Always position at right angles to the work you are doing, i.e. when you climb up the ladder you are naturally facing the wall or item you are going to work on.
- If ladders are used in front of a doorway, the doors should be securely wedged open. (Please note: Fire doors must not be left open when the immediate work area is unattended.)
- Never have more than one person on the ladder at any one time.
- Do not use ladders outside in strong winds.
- If using stepladders, check that the ladder is locked into its correct position. Usually this will be with the legs positioned as far apart as the retaining cords/hinges allow.
- Never use stepladders in the closed position.

On the ladder

- Always face the ladder and use both hands when climbing up and down the steps.
- If you need to carry tools up the steps use a shoulder bag, tool belt, etc.
- Hold the ladder with one hand while you work. If this is not possible brace the knees between the styles to give additional support
- Always keep both feet on the steps whilst working. Never have one foot on the ladder and your other foot on something else (e.g. wall, bookcase, window ledge, etc.).
- Do not leave tools on steps where you could trip over them.
- Never work from the top step of a ladder, unless it has been specifically designed for this purpose and there is a secure handhold (always check the manufacturers guidance). As a general rule, keep your knees below the top step or the platform.
- Do not use the rear supports of steps for foot holds.

- Do not over-reach. Move the ladder! Keep you body within the uprights while working.
- Do not lend ladders to non-University employees.

Storage and records of inspection

- Ladders should be stored in a covered, well-ventilated place where they are protected from excessive damp, heat and the weather.
- Ladders should not be stored on a position where they are hung from their stiles or rungs.
- Ladders should be stored out of sight, under lock and key.
- As an alternative, if ladders are stored in corridors, public areas, etc. they should be secured to a wall, or suitable actions taken to ensure they do not fall over.
- Ladders found to be defective should be clearly labelled or marked "DO NOT USE" and withdrawn from service until repaired, or disposed of.
- Where ladders are destroyed a record must be kept on file of the date and method of destruction.

Lean to Ladders

- Any surface upon which a ladder rests shall be stable, firm, of sufficient strength and of suitable composition to support the ladder safely, so that its rungs or steps remain horizontal, and any loading intended to be placed on it.
- A ladder shall be so positioned as to ensure its stability during use.
- A suspended ladder shall be attached in a secure manner and so that, with the exception of a flexible ladder, it cannot be displaced and swinging is prevented.
- A portable ladder shall be prevented from slipping during use by: -
 - securing the stiles at or near their upper or lower ends;
 - an effective anti-slip or other effective stability device; or
 - any other arrangement of equivalent effectiveness.
- A ladder used for access shall be long enough to protrude sufficiently above the place of landing to which it provides access, unless other measures have been taken to ensure a firm handhold.
- No interlocking or extension ladder shall be used unless its sections are prevented from moving relative to each other while in use.
- A mobile ladder shall be prevented from moving before it is stepped on.

Stepladders

The use of stepladders will be permitted where;

- a suitable and sufficient risk assessment has been carried out and the risk assessment classifies the risk as low,

- the layout of the workplace prohibits the use of alternative forms of access equipment i.e. mobile towers / cherry pickers /scissor lifts,
- the duration of the work is considered as short term i.e. a matter of minutes not hours,
- the height to be gained (step height) does not exceed 1.25 Metres for normal step-ladders i.e. no platform or 1.5 Metres for platform steps, measured above the floor surface, not including any leading edges e.g. mezzanine floors. When working above the heights previously defined, the person carrying out the task **must** be capable of establishing three points of contact **at all** times.

When working from stepladders the person carrying out the task must;

- not over stretch up, down or to either side
- not lean backwards
- not exert excessive force whilst carrying out the designated task
- ensure that the stepladders are in good condition and free from defects
- ensure that the stepladders are contained in the permitted list of ladders above and have been inspected within the last six-months in compliance with this procedure.

3.4.4 Competence

The University of Salford Estates & Facilities will ensure that no person carries out work at height unless they are competent to do so, or are under the control of a competent person.

Any person carrying out working at height will be provided with sufficient information, instruction and training as is necessary to carry out the work activity, including the use of any specified work equipment. Competency includes the planning, organising and supervision of the works.

3.4.5 New Staff

Whenever new staff are appointed into a position, where their work may require them to use access equipment, their level of competency will be measured during their induction by the line manager.

Where any deficiency is identified use of access equipment will be prohibited until adequate instruction has been provided.

3.4.6 Fragile surfaces

The University of Salford Estates & Facilities will ensure that persons working on its premises are not exposed to risk, as far as is reasonably practicable, whilst working on, working near or passing across fragile surfaces.

The definition of a fragile surface is “any surface liable to fail if any reasonably foreseeable load is applied to it” This will include surfaces such as sky lights and other horizontal or angled glazing in roofs, asbestos cement sheets, light weight ceilings constructed over internal offices, and other non-load bearing materials, etc.

Note designers must avoid the use of fragile materials in their design as far as is practicable.

Where it is not reasonably practicable to carry out work safely without passing across or near, or working on, from or near, a fragile surface, The University of Salford Estates & Facilities will ensure that -

- a. suitable and sufficient platforms, coverings, guard rails or similar means of support or protection are provided and used, so far as is reasonably practicable.
- b. where a risk of a person falling remains, despite taking suitable and sufficient measures to remove the risk, then further measures will be taken to minimise the distances and consequences of a fall.
- c. Prominent warning notices are affixed at the approach to the place where the fragile surface is situated, so far as is reasonably practicable; or
- d. Where that is not reasonably practicable, such persons are made aware of the location of the fragile surface by other means.

3.4.7 Falling objects

The University of Salford Estates & Facilities will take suitable and sufficient steps to prevent the fall from height of any material or object which may cause injury to any person, so far as is reasonably practicable.

Where materials are to be removed from height they must be removed in a manner not likely to cause injury.

4.0 Related Documentation

Work at Height Policy.

Lifting Operations and Lifting Equipment - Code of Practice.

Safe Use of Mobile Elevated Work Platforms - Guidance Sheet.

5.0 Monitoring and Performance of Procedure

The implementation of this procedure will be monitored by periodic reviews of risk assessments, sample audits and inspections and feedback from progress meetings.

Active monitoring will be carried out as a formal check that all aspects of safety performance are at an acceptable level.

6.0 Training and Support

Training will be provided for all staff required to work at height, as determined by this procedure.

7.0 Appendices

Appendix 7.1 - Management Procedure for the Maintenance and Checking of University Owned Access Equipment

Appendix 7.1 - Management Procedure for the Maintenance and Checking of University Owned Access Equipment

To ensure compliance with the Work at Height Regulations 2005 a formal and documented system of access equipment safety management and monitoring must be carried out. The types of University owned access equipment falls in to two types:

1. Ladders and other associated equipment which includes extension ladders, step ladders, platform steps, staging equipment, trestles, low level 'hop ups' and all other step type height access equipment.
2. Lightweight Tower Scaffolding or other types of low level scaffolding (excluding tube and clip and other certified types of scaffolding)

The Responsible Person for the Maintenance and Checking of University Owned Access Equipment

This management procedure and the carrying out of maintenance and checking will be the responsibility of the Head of Maintenance, supported by the Building Services Team Leader, acting in a deputy role in his absence.

As falls from height create significant risks these roles and the duties are considered crucial to the successful maintenance of safe access equipment. It is therefore essential that this duty is given the highest priority in the role holder's duties.

New Acquisitions

The Head of Maintenance and Building Services Team Leader are the only persons authorised to purchase new access equipment.

Where an order is placed for new equipment the Head of Maintenance must be notified when it is received.

The Building Services Team Leader will then be responsible for tagging and numbering the piece of equipment and notifying the Head of Administrative Services for Estates & Facilities so that the full details can be added to the inventory held of the CAFM system. The new piece of equipment will then be given a location and secured in line with these procedures.

Maintenance and Planned Preventative Checking Procedures

The following arrangements will be put in place to ensure that all access equipment is Inspected at least 6 monthly and is maintained fit for purpose:

1. Planned Preventative Maintenance (PPM) will be preserved on the CAFM software system by the Building Services Team Leader. A close link should be maintained with the Head of Administrative Services for Estates & Facilities to ensure the system is kept up to date.
2. The Recording system will include a current and up to date inventory of all access equipment used in Estates & Facilities. The Head of Maintenance will make arrangements with the Estates Stores to ensure all deliveries of new equipment are brought to their attention to ensure the records are maintained accurately. All

condemned equipment will be retained on the inventory, but marked as destroyed, so evidence of its history is retained.

3. A six monthly CAFM job ticket will be issued, with instructions on the inspection requirements and an associated specification check sheet (Standard Operating Procedure SOP) attached, so the competent persons carrying out the inspections are fully aware of the checking standard required. The job ticket should only be signed off by the Building Services Team Leader when he is fully satisfied that the system is fully safe and legally compliant.
4. All live equipment is fully compliant with the requirements of the Estates and Facilities Work at Height Policy and Procedures.
5. All equipment will be suitably tagged to ensure that PPM compliance checking is displayed and that equipment can be identified by users as being safe to use.
6. A designated location will be identified and provided for Estates and Facilities access equipment and the Head of Maintenance is responsible for ensuring the ladder equipment is located in a safe and secure place with lockable security devices fitted, whenever possible to do so. The locking off requirement will prevent use by unauthorised persons.
7. Equipment will be checked on a 6-monthly basis and the results logged and filed in the CAFM ticket filing system so that it is available for retrieval as required.
8. Any equipment found to be faulty at any time or at the 6 monthly inspections will be either suitably repaired or destroyed. Equipment awaiting repair must be quarantined and labelled to prevent inadvertent use until adequate repairs are completed. Records are kept of all actions taken, using the proforma documents issued as part of the PPM job ticket system.
9. No timber access equipment should be used at any time.

Non University of Salford Working at Height Access Equipment Found on Campus

Any working at height access equipment found on campus that is not marked and tagged as Estates and Facilities must be immediately reported to the Estates Help Desk for immediate collection to be arranged.

The Help Desk Team will raise a CAFM job ticket to have the access equipment collected, inspected and recorded.

The access equipment should not be used and a temporary sign fitted 'DO NOT USE' on the equipment to prevent unauthorised use. This requirement must be communicated to the Help Desk Staff and to all staff who may find ladders. The Head of Maintenance will attempt to locate the original owner and or take appropriate steps to ensure that the ladder is not used in breach of our Work at Height Policy.

If useable the equipment can be returned to its owner with instructions regarding security, use and the need for regular future inspections in line with the Work at Height Policy.

Training

Suitable training will be provided on the management and checking of ladders and the Head of Maintenance, Building Services Team Leader, other line managers and supervisors, that have

already been trained, will be expected to cascade such training to other staff to meet the needs of the access safety system.

Work at height equipment selection and use training will be included as part of the Induction of all staff new to the Division.

Additional training including tLA Inspector course (the Ladder Association), PASMA (Prefabricated Access Suppliers' & Manufacturers' Association Ltd) and IPAF (International Powered Access Federation) training will be provided as required.

Resources

The Head of Maintenance will be provided with all reasonable and practicable resources to comply with the needs of these procedures. If additional resources or equipment are required then they should be requested immediately in writing from the Head of Operations with a copy to the Estates Health & Safety Coordinator.

Monitoring of the Access Equipment Maintenance and Checking System

Monitoring checks will be carried out by the Head of Maintenance from time to time to ensure the system is operating satisfactorily.

Any serious compliance issues will be immediately brought to the attention of the Head of Operations.

Review of the Safety Access Maintenance and Checking System

The system should be reviewed as part of the Estates and Facilities Annual Audit, to ensure the system is fully operational and that the system is working in practice.