



COLÁISTE MHUIRE GAN SMÁL
OLLSCOIL LUIMNIGH
MARY IMMACULATE COLLEGE
UNIVERSITY OF LIMERICK

WORKING AT HEIGHT GUIDELINES

Version II

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WORKING AT HEIGHT GUIDELINES – EXECUTIVE SUMMARY

Working at height is where an individual is carrying out work in any place in the course of obtaining access to or egress from any place, at or below ground level, from which, if they were to fall from that location, injury could result. **Mary Immaculate College (MIC) will do all that is reasonably practicable to prevent people from falling from height during the course of their work.**

The College will ensure that:

- Working at height is properly planned and organised;
- Working at height is safe and takes account of adverse weather conditions and is carried out by people who are trained and competent.

Please refer to Section 2 of these guidelines.

All employees are responsible for their own safety and the safety of others while on the MIC campus. Employees are required to report any defective/unsuitable equipment or unsafe activities to their manager regarding working at height and use any equipment or safety device that has been provided for work at height in accordance with the training they have received. *Please refer to Section 3 of these guidelines.*

When considering work at height, a risk assessment must be undertaken in order to identify what the hazard is and the degree of risk present. Risk assessments will identify the hazards associated with working at height, who will be at risk, and the likelihood and severity of harm from those hazards. Hazard identification will consider the work activities, the height, the location, people falling, objects falling and work occurring above or below other people. *Please refer to Sections 4, 5 & 6 of these guidelines.*

Ladders can be used where the use of other forms of access equipment is not appropriate or practical. Ladders should only be used for low risk work at relatively low heights where the task is of short duration. Examples of this are tasks like cleaning a window, accessing a book shelf, or testing a smoke detector and other similar tasks. *Please refer to Section 7 of these guidelines.*

The Work at Height Regulations 2007 states that, if a falling object could injure someone, steps must be taken to ensure that this is prevented. The risks of falling material causing injury should be minimised by keeping workplaces at height clear of loose materials. *Please refer to Section 8 of these guidelines.*

The Work at Height Regulations 2007 states that an employer must, in selecting work equipment for use in work at height, give collective protection measures priority over personal protection measures. *Please refer to Section 9 of these guidelines.*

Where access to a roof is required, a risk assessment must be prepared to identify the hazards associated with each roof and the controls required for access and work activities to occur. The risk assessment for a roof must consider access and egress, the duration of the work, and the condition of the roof etc. *Please refer to Section 10 of these guidelines.*

An inspection of fall arrest equipment must be conducted by a competent person before first use and on a regular basis. Only suitable equipment such as a harness, safety line and other components shall be used in fall arrest systems. *Please refer to Section 11 of these guidelines.*

1. Introduction

Working at height means working in any place in the course of obtaining access to or egress from any place (except by a staircase in a permanent place of work), at or below ground level, from which, if measures required by the Work at Height Regulations 2007 were not taken, an employee could fall a distance liable to cause personal injury. These guidelines apply to all work at any height where there is a risk of a fall liable to cause personal injury. Please note that the previous 'over 2m height' definition of work at height has been removed from the Regulations.

In Mary Immaculate College, working at height includes simple tasks such as the retrieval of items from high-level shelving, putting posters up, putting decorations up, etc. as well as the higher risk activities involved in construction and maintenance work.

Examples of work activities that are classified as working at height in the Work at Height Regulations 2007 include:

- Working on a flat roof
- Erecting or working on scaffolding
- Using a ladder or step ladder for e.g. Shelf filling, window cleaning
- Working on a mobile elevated work platform (MEWP) (for example, to erect steel work)
- Working at ground level adjacent to an excavation;
- Working on formwork within an excavation
- Maintenance tasks (for example, changing lights or ceiling tiles in an office)
- Using trestles and ladders to paint or clean
- Work on staging, rigging or trestles, for example at a concert or for filming

2. Duties of Mary Immaculate College as an Employer

The College has a duty to do all that is reasonably practicable to prevent anyone falling from a height in the course of their work. The Work at Height Regulations 2007 require the risk of a fall to be prevented wherever a fall is liable to cause personal injury. This means that for any height where there is a risk of a fall causing personal injury the employer must introduce measures to prevent injury.

The Work at Height Regulations require the employer to take a sensible, risk – based approach to preventing falls and to ensure that:

- All work at height is properly planned and organised
- The risks from work at height are assessed and appropriate work equipment is selected and used
- All work at height takes account of weather conditions that could compromise health and safety
- Those involved in work at height are trained and competent
- The place where work at height is done is safe
- Equipment for work at height is appropriately inspected and maintained
- The risks from fragile surfaces are properly controlled
- The risks from falling objects are properly controlled

Line Managers and Supervisors are responsible for ensuring that the measures outlined above are taken to ensure that staff work safely at height.

3. Duties of Employees

All employees are required to be responsible for their own safety and the safety of others that may be affected by their work activities when working at height.

Employees must:

- Report any activity or defect that is likely to endanger yourself or another person
- Ensure that you receive appropriate training for working at height
- Use equipment for working at height in accordance with your training
- Comply with any instructions or procedures for working at height.

Following appropriate training; employees are responsible for using height safety equipment for e.g. safety harnesses as instructed. To carry out roof work, painting etc., employees must use scaffolding or an MEWP or height for hire equipment and must be trained in the use of the equipment before use. If height for hire equipment is brought onto the Campus only employees that are trained in FAS CSCS can use it. Employees must restrict working at height during poor weather conditions when outdoors. Employees must ensure there are no safety issues before such work commences and allow sufficient time and manpower to complete the tasks involved in a safe manner.

4. Risk Assessments

The purpose of a risk assessment for working at height is to identify the hazards and the control measures required to minimise the distance and consequences of a fall should one occur; and the work equipment required (i.e. kick stools, ladders, steps, fall arrest equipment etc). An adequate risk assessment will identify the hazards associated with working at height, who will be at risk, the likelihood and severity of harm from those hazards, the magnitude of risk, the control measures to reduce that risk and who has responsibility in ensuring the management of the risks. They must be undertaken for work at height carried out by College employees. A risk assessment also ensures that employees or contractors working at height have the appropriate training in the equipment to be used. Supervision proportionate to the findings of the risk assessment, and the experience and capability of those involved in the work will be provided.

Risk assessments and associated documentation should be recorded and reviewed regularly. A competent person to complete a risk assessment is one who has attended risk assessment and working at height training and has the relevant technical knowledge, expertise and experience in the task/environment for working at height. Risk assessments are communicated to the employees undertaking the work at height and anyone else who may be affected is informed. Management ensure the control measures are implemented and monitor the effectiveness of the control measures. Specialist working at height training will be provided by a competent person as required.

5. Hazards

Before any risks with working at height can be controlled they must first be identified. Hazard Identification should include:

- Taking into account the work activities, the height, the location and area.
- People falling
- Objects falling
- Work occurring above or below other people

Typical hazards associated with working at height include:

5.1 Fall from height

Falling from height can cause serious personal injury. It can be a relatively small distance that results in serious injury. In the past, a '2 metre rule' applied which acted as a guide as to when employers needed to take precautionary measures; now risk assessments must be completed in all instances. Employees should avoid working at height if possible.

5.2 Work equipment

The equipment selected to work at height must be suitable. The following aspects of use must be considered when selecting working at height equipment.

- The environmental conditions in which it will be used.
- The nature of the work to be performed.
- Who will be using the equipment and training requirements.
- That the equipment meets the standard relevant to its intended use.
- All equipment must undergo a regular thorough examination by a competent person.

5.3 Falling objects

Suitable and sufficient steps to prevent, so far as reasonably practicable, the fall of any material or object and steps to prevent any person being struck by any falling material or object which is likely to cause injury. **Objects must not be thrown or tipped from height in circumstances where it will cause personal injury.** Where there is an area, owing to the nature of the work at height, presenting a risk of someone being struck by a falling object, devices and warning signs preventing unauthorised persons from entering such an area must be erected.

5.4. Weather conditions

Work at height shall only occur when the weather conditions do not jeopardise the health and safety of employees and others affected by that work.

5.5 Working environment

Where there is an area, owing to the nature of the work at height, that there is a risk of someone falling, devices and warning signs preventing unauthorised persons from entering such an area must be erected.

5.6 Roof work and access

Before access is granted to any roof to contractors, the Buildings Maintenance Manager must permit access and a safe system of work, method statement or risk assessment will be made available to the Health and Safety Officer.

6. Control Measures

Risks associated with falling from a height are required to be controlled through the use of the following control measures:

- Avoiding work at height where possible
- Using equipment or other measures to prevent falls where work at height cannot be avoided
- Using equipment or other measures to minimise the distance and consequences of a fall should one occur
- Other control measures that Line Managers and Supervisors might include in their risk assessment
- Preventing unauthorised access to roofs
- Ensure all staff are suitably trained in the safe use of access and safety equipment
- Restrict the use of ladders to only light work of short duration, where there is no safe alternative. (Staff must not over-reach on ladders and platforms)
- Ensure ladders are inclined at 75 degrees (ratio of 1:4) and that they are secured top and bottom
- All broken or damaged equipment must be removed from service,
- Makeshift ladders or access equipment is not to be used under any circumstances
- All equipment in use will be maintained and inspected
- Ensure loading limits for access equipment is not exceeded
- Work involving working at height will be undertaken using written working method statements and risk assessments.

7. Working from Ladders (including stepladders)

Working from ladders greatly increases the chances of falling compared to other methods of working at heights, such as a work platform for e.g. a MEWP. **It is important to realise that there are limits to the safe use of a ladder.** Most accidents involving ladders occur because these limits are exceeded. As such working on ladders should be minimised and where appropriate alternate methods introduced.

The Work at Height Regulations 2007 states that employers and users of ladders must make sure that:

- A secure handhold and secure support are available at all times
- The work can be reached without stretching,
- The ladder can be secured to prevent slipping
- The surface on which the ladder rests is stable and firm

The regulations also stipulate that anyone using a ladder or stepladder should ensure that it is marked in accordance with Irish, European or other appropriate standards.

Ladders are available in a variety of types, including portable and fixed, and the following should be considered when setting up ladders:

7.1 Support

It is important to ensure that the ladder is adequately supported at the base, the base should be of solid construction and the surface of the ground to support the ladder suitable.

7.2 Slope

The slope of a ladder is important to ensuring the ladder will not fall backwards. The correct slope must be used when setting up a ladder, which is 1 metre out at the base for every 4 metres of height.

7.3 Contact

When working on a ladder the person is required to maintain three points of contact at all times. This means having two hands and one foot or one hand and two feet on the ladder this includes when ascending, descending.

7.4 Services and Location

It is important to consider where the ladder is located, and to ensure that it is not positioned near electrical supplies or other forms of services. When selecting a position to place a ladder it must not be placed over a doorway. If there is no other alternative, appropriate warning and prevention mechanisms must be introduced to prevent someone coming through the door while the ladder is in position.

Ladders should only be used for low risk work at relatively low heights where the task is short duration. Examples of this are tasks like cleaning a window (inside), accessing a book shelf, changing a light bulb, testing a smoke detector and other similar tasks. Where the task is higher (such as a second floor window on the outside of a building) then there is a clearly a need to consider a different means of access.

Any ladders to be used must be:

- In good condition (not damaged or with 'wobbly' connections)
- Set on a secure base (level and even without the need for 'packing' materials)
- Long enough to do the job without having to use the top steps where there is not a suitable hand hold.
- Ladders being used against a building or structure (e.g. a tree) need to be secured so that they cannot slide out or slip sideways.

There are numerous devices available to enable a single person to use such ladders safely without having them 'footed' by another person..

8 Falling Objects

The Work at Height Regulations 2007 states that, if a falling object could injure someone, steps must be taken to ensure that this is prevented. The effectiveness of any measures will depend on the material and tools which are being used, and the effect which winds or other factors may have in creating a more widespread hazards. The risks of falling material causing injury should be minimised by keeping workplaces at height clear of loose materials. Ways

of preventing objects rolling or being kicked off the edge might include toe boards or solid barriers.

Consideration must be given to the following:

- Plant, equipment or other objects required for use at heights.
- Measures to arrest the fall of objects
- Provision of appropriate personal protective equipment
- Use of a barrier to close off the work area underneath or other means to prevent persons working or passing by underneath.
- Suitable and sufficient steps to prevent, so far as reasonably practicable, the fall of any material or object and steps to prevent any person being struck by any falling material or object which is likely to cause injury.
- Objects must not be thrown or tipped from height in circumstances where it will cause personal injury.
- Where there is an area, owing to the nature of the work at height, presenting a risk of someone being struck by a falling object, devices preventing unauthorised persons from entering such an area must be erected with warning signs.

9. Selecting Work Equipment

The Work at Height Regulations 2007 states that an employer must, in selecting work equipment for use in work at height give collective protection measures priority over personal protection measures and take account of the working conditions and the risks to the safety and health of employees at the place where the work equipment is to be used.

- There are many forms of edge protection, scaffolding, elevated platforms, mobile towers etc. available. Likewise with all types of protective equipment (such as harnesses etc.) therefore it is critical to consider the use and the suitability for each to protect from falls. It is important that the most suitable solution is used.

Wherever there is a choice between two (or more) alternate means of protection the one that offers the most protection to the most people is the one that should be selected. Steps are also taken to ensure that any equipment selected is not only suitable but also that the people who are to use it are correctly trained.

- Protective equipment such as scaffolding is inspected and maintained sufficiently frequently to ensure that they continue to be safe. Scaffolds need to be inspected at least weekly, scaffold towers should be inspected every time they are moved or at least weekly, whichever is the more frequent.
- There is a requirement to inspect a range of equipment from footstools to equipment such as Mobile Elevated Work Platforms.

10. Roof Safety

Authorised persons are required to access the roofs of College buildings for a variety of purposes on a regular basis. A risk assessment for the roof shall identify the hazards associated with each roof and the controls required for access and work activities to occur. The necessary controls for access and safe work on a roof shall be signposted at the access point to each roof.

Where access is required to a roof, a risk assessment must be prepared, taking account of:

- Access and egress (routes on and off for personnel and equipment)
- The duration of the work
- The pitch and condition of the roof
- Any fragile surfaces such as roof lights, unprotected openings, or fragile roofing material
- Provision of suitable edge protection or alternative methods of protection
- Exposure to hazardous materials e.g. emissions from local exhaust ventilation
- Prevention of falling materials
- Tripping hazards presented by service pipework etc.
- Weather conditions (high winds, frost, lightning)
- Proximity to other hazards e.g. electromagnetic radiation from radio masts
- Emergency procedures

In some instances access to a roof may require a permit – this will be stated on the risk assessment. The roof risk assessment shall be reviewed by the Buildings Maintenance Manager and Health and Safety Officer on a regular basis.

11. Fall Arrest Equipment

Where a fall arrest device is being used this equipment is required to have all anchorage points for the device inspected before first use and on a regular basis so they are capable of supporting the loads. This inspection may only be conducted by a competent person. Where the load-bearing capacity of anchor points is impaired, the anchor point is required to be taken out of service to prevent its use.

Only suitable equipment such as harness, safety line and other components shall be used in fall arrest systems. Where any part of the system shows signs of weakness and inability to perform the function as designed, it is not to be used. Any person using fall arrest equipment is required to have training and be competent in its use and care. Where a fall arrest system is in use, an appropriate rescue plan is required in the event of a person falling.

12. Reference

Safety, Health and Welfare at Work Law In Ireland, Second Edition, Raymond Byrne

Mary Immaculate College Safety Statement, 2010, Revision 6