

Working at Height (WAH) Guidance for Managers

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Introduction

This document offers guidance on the application of the Working at Height Regulations 2005 and is applicable wherever and whenever Bradford Council employees work at height.

This document details the health and safety responsibilities and obligations placed on Directors, Governors, Managers, Head Teachers, Supervisors, Employees and others working on our behalf in relation to Working at Height.

The guidance provides the general requirements for all working at height tasks; however, some Council services carry out specific working at height activities for example, Arboriculture, Street lighting, and Highway maintenance, who should also refer to industry led best practice or national guidance.

Definitions Working at Height WAH A duty holder is defined as any person (including self -**Duty Holder** employed) or organisation (employers) that controls the work of others. Within the Council these may be Assistant Directors Managers of Services . **Building Custodians** • **Facilities Managers** Height Work in any place that is 'at height', including at or below a level where a person could fall a distance liable to cause personal injury, even if it is at or below ground level; including access to and egress from that place of work. Examples: Working on roofs, bridges and other elevated structures. • Working on/from work platforms, MEWPS, cherry pickers or similar, ladders and stepladders etc. Working at ground level next to excavations, openings or drops. Working on or near to fragile materials or surfaces, e.g. working in un-boarded loft spaces. It does **NOT** include permanent staircases, stairways, ramps or inclined routes, or slips, trips, falls at the same level. Work Work includes activities, tasks, moving around at a place of work (except by staircase in a permanent workplace) but is not travel to or from a place of work. Inspection Inspection is defined as such visual or more rigorous inspection by a competent person for safety purposes, including any testing that is appropriate for those purposes. **Reasonably Practicable** is defined as a means or comparing likelihood/consequence of the risk and what is involved to eliminate or reduce it in terms of costs, time and effort.

Responsibilities

Duty Holders Requirements

Duty holders must do all that is reasonably practical to prevent anyone falling from height, or from a level surface to a depth, which are liable to cause injury.

The key responsibilities of the Duty Holder are to ensure that all working at height:

- Is properly planned and organised.
- The place where work at height is done is safe.
- The equipment for work at height is appropriately inspected.
- Carried out in a safe manner using appropriate work equipment.
- Persons involved in working at height are suitably trained, competent and are supervised appropriately. Supervision should be carried out by a competent person.
- The risks arising from fragile surfaces are properly controlled.
- The risks arising from falling objects is properly controlled.

Note - Working at Height must not take place if the weather conditions would jeopardise the health and safety of the work.

Employees / Others (persons not in control of the working at height)

Employees working under someone else's control must:

- Co-operate with the Duty Holder to ensure that work can be carried out safely.
- Ensure they understand the hazards in the workplace and comply with safety procedures.
- Undertake training for the safe operation and use of equipment.
- Ensure the Duty Holder is notified of any medical condition that may affect working at height safety.
- Conduct themselves in a manner that does not endanger themselves or others (not act carelessly or recklessly).
- Report any defect or activity that could potentially lead to a dangerous occurrence or incident.

Organisation, Planning and Risk Assessment

Duty Holders and Managers must do all that is reasonably practicable to prevent anyone falling from height or a distance which is likely to cause injury. The Working at Height Regulations 2005 identifies a strict hierarchy of controls that must be followed when planning how to carry out working at height. This hierarchy below is in order of acceptability:

Avoid

• Where possible working at height should avoided, if it is safer and reasonably practicable to complete the work from the ground.

Prevent

- Prevent a fall from occurring by use of an existing work place or means of access.
- Use the most suitable method of working.

• Select the most suitable equipment to carry out the task, for example working platforms, cherry pickers, MEWPS, Scaffolds, towers with guardrails and toe boards (collective fall protection), ladders, step ladders.

Notes: All equipment used for working at height must be fit for purpose, marked, listed and inspected at least once a year. Details of all inspections must be recorded. User checks must always be carried out before equipment is used.

Minimise

 Minimise the distance and consequences of a possible fall from height or depth by the use of instruction, information and training, including refresher training at suitable intervals. The use of collective fall arrest measures, such as guard rails, barriers, nets, airbags, should be considered before considering the use of personal fall protective measures such as harnesses and rope access.

Notes: During the planning stage, consideration must be given to other tasks and activities taking place in the same working area or near to the proposed works, which may affect the safe completion of the works.

Planning working at height or depth must be recorded and reviewed as appropriate and any recommendations identified within the planning stage incorporated into the task specific risk assessments.

Procedures should be in place to enable the postponement of work if weather conditions endanger health and safety.

Planning Working at Height

There are mainly three stages to the planning of a working at height activity, which are described below. These principles should be referred to whenever a decision is made during the planning stages.

• Stage 1 - Safe place of work

At the planning stage the duty holder/ manager must first establish whether the requirement to work from height can be eliminated. If not they must ensure the place where work is to be carried out at height, including the means of access/egress, is safe. If it is not reasonably practicable to avoid work at height, then equipment to prevent falls must be selected as outlined in Stage 2.

• Stage 2 – Selecting equipment

When selecting equipment for working at height, the duty holders must give priority to collective protection equipment over personal protection equipment. For example

- Use of Cherry Pickers or Mobile Elevated Work Platforms (MEWPS).
- Use of prefabricated aluminium Scaffolding, Towers.
- Installation of Scaffolding/ Toe-boards/Guard rails/Barriers.

If the duty holder is still unable to confirm that the place of work is safe from falls from height, even with the use of protective equipment, then the distance and the effect of a fall must be minimised as outlined in Stage 3.

• Stage 3 – Minimising the distance and consequence of a fall

If the duty holder is still unable to confirm that the place of work is safe from falls from height, even with the use of protective equipment, they must do all that is reasonably practicable to minimise the distance and effect of a fall by selecting and using personal protective equipment, for example:

- Use of Airbags.
- Use of Nets.
- Fall restraints/Fall arrest body harnesses.

WAH Risk Assessments

The duty holder must ensure that all significant risks associated with working at height are identified, assessed, eliminated or controlled and recorded.

Work at Height Risk Assessments must consider

- The work activity All stages of the work, installation, use of, dismantling, potential rescue or evacuation requirements.
- The work equipment to be used.
- Duration and frequency of the work.
- Location of the work, including the access to and egress from.
- Presence of specific hazards e.g. overhead services, structures, power lines, open excavations, underground services voids, 3rd party activity, etc.
- Ground conditions and stability of existing flooring, steps, slopes.
- Environment weather, lighting etc.
- The physical capability of staff, their health, fitness (the physical stamina or agility of workers who need to gain safe access to their work positions) that would endanger them or others, is checked prior to the commencement of working at height.
- Competency of staff including supervisors, what are the training, information and instruction requirements?
- Other risk assessments applicable to the task or operation are taken into account.

Notes: Work involving office kick stools when used correctly present a low risk and would not normally require a specific risk assessment. However, a risk assessment must be completed for putting up displays in schools for example, which clearly identifies the correct access equipment for this task and the safe system of working for staff to follow.

The outcomes of the risk assessment process must be communicated and understood by all concerned. Risk assessment documentation should be retained for future use, for example to assist person's carrying out repeat work, such as window or gutter cleaning.

Selection of Equipment

Where working at height cannot be avoided, duty holders must ensure the most suitable equipment for this work is selected, taking into account the working conditions and risks to the safety of all those at the place where the work equipment is to be used.

The selection of the appropriate equipment must consider the ground conditions, space constraints, obstructions, access by public, proposed loadings of personnel, equipment and materials as examples.

Within this decision process, priority for collective protective measures should be given over personal protection measures.

Types of equipment for working at height in order of preference:

- Guardrails
- Working platforms (Scaffolds/Mobile Elevated Working Platforms (MEWPS), Scissor platforms, climbing towers etc.)
- Safety nets and Airbags
- Personal fall protection
- Ladders/Stepladders

Notes: The use of ladders and stepladders should only be used for access to a height, and must only be considered if the other methods detailed above cannot be employed, or unless a risk assessment shows the work is low risk and for a short duration only, or existing features in the work area means that using a ladder is the only practical way in which the task can be carried out. Short duration work should not be the only deciding factor when considering the use of ladders.

Training and Competency

Duty holders must ensure that everyone involved in the organising, planning, supervision and carrying out Working at Height are competent and have completed the appropriate level of training.

A competent person can be summarised as someone who should be capable of:

- Carrying out the specified activity safely at their level of responsibility, within their level of knowledge, skills and expertise.
- Understanding the potential risks related to the activity.
- Being able to detect and report any defects in equipment, or concerns with working arrangements and procedures.
- Recognising any implications for the health and safety of themselves and others.
- Specifying appropriate remedial actions that may be required.
- Knowing when to stop a particular activity if the potential risk to safety is too great.

Inspections

Detailed Physical Inspections

All equipment for work at height requires regular inspection to ensure it is safe to use. It may be appropriate to mark the equipment to ensure that it is obvious when the next inspection is due.

- Formal inspections of equipment are not a substitute for any pre-use checks or routine maintenance requirements. Inspections should be carried out at suitable intervals and formal records made of that activity.
- The purpose of the inspection is to identify whether the equipment is fit for purpose and can be used safely and that any deterioration is detected and remedied before it is being used.
- The period between inspections will vary depending on the equipment, the environments it is being used in and its likelihood to deteriorate.
- Suitable records must be kept safe from loss and unauthorised interference, so that copies can be made as required. Inspection records must be kept until the next inspection is carried out. In some council settings there maybe a 'Ladder Register' as this will be the only type of access equipment in use.
- Duty holders must ensure that places of work, e.g. surface conditions where working at height is taking place, are safety checked.
- Operators using equipment for working at height should carry out a pre-use check before use.
- Any equipment for working at height which is found to be defective, or fails an inspection, must not be used, removed from service and the duty holder informed of the issue.

Movement of equipment between businesses

The Duty holders must ensure that equipment, which has come from another source e.g. hire firm, has been tested in accordance with the regulations. Equally when returning equipment, or passing it onto another user, it should have a visible indication of its last inspection.

Inspection of Working Platforms in Construction

Duty holders must ensure that platforms used for construction work, which a person could fall more than 2 metres is inspected before use and not more than seven days prior to use.

For mobile platforms, inspection at the site is sufficient without re-inspection every time it is moved.

Inspection Records

Duty Holders must ensure that the person inspecting a working platform:

• Prepares a report before going off duty containing the information listed below.

- Gives the report (or a copy) within 24 hours of completing the inspection to the person for whom the inspection was done (e.g. site/contract manager or representative).
- Retains all records of the inspection work for a further 3 months after the work is complete. This requirement applies to all work platforms.

Inspection records should contain the following information:

- The name and address of the person for whom the inspection was carried out.
- The location of the work equipment inspected.
- A description of the work equipment inspected.
- The date and time of the inspection.
- Details of any matter identified that could give rise to a risk to the health or safety of any person.
- Details of any action taken as a result of any matter identified above.
- Details of any further action considered necessary.
- The name and position of the person making the report.

Use of Ladders and Step Ladders

The use of ladders and stepladders must only be considered if other safe working methods cannot be employed, or unless a risk assessment shows that work is for a short duration only or existing features in the work area mean that ladder use is the only practical way in which the task can be carried out in reasonable safety. Short duration work should not be the only deciding factor when considering the use of ladders.

Ladder Selection

Selecting the right ladder for the right job is one of the most important aspects of planning the task. The guidance below provides a list of ladder standards and classifications, which should be referred to during the purchasing and selection process.

Types of Ladders

There are three basic types of ladder (of galvanised steel, timber, aluminium or fibreglass) namely:

Single section- e.g. pole ladder

Double extension push-up 2 piece or double extension maybe rope operated

Triple extension push-up 3 piece or triple extension maybe rope operated.

Ladder Standards and Classifications

All ladders and stepladders must be manufactured and tested to an appropriate standard.

Ladders have different classifications depending upon usage namely:

Class 1: Industrial Use (colour coded - Blue) - Used for regular heavy use e.g. construction sites - Duty rating of 130 kg (20 stone) - Max vertical static load 175 kg (27.5 stone).

Class EN131: Commercial (light) – (colour coded – Green or Yellow) Used as a Tradesman's ladder for light work i.e. painting and window cleaning - Duty rating 115kg (18 stone) - Max Vertical static load 150 kg (23.5 stone).

Class III: Domestic (colour coded – Grey) – Used for Domestic work - Duty rating 95 kg (15 stone) - Max vertical static load 125 kg.

Note: This class of ladder is not to be used by employees or contractors.

Step Stools

These are manufactured to BS 7377 and must not be used for any work at height activity, as they have no top handrails. They should only be used for simple tasks such as putting items on high shelves or putting up displays as examples.

Landing or Rest Areas

A ladder or run of ladders, which rise to a vertical distance of 9 metres or more, should be provided at suitable intervals with sufficient safe landing areas or rest platforms.

Use of Extension Ladders

All extension ladders should overlap, and at the point of overlap connection by the following minimums:

Closed height up to 5 metres	by 1.5 rungs minimum
Closed height between 5 and 6 metres	by 2.5 rungs minimum
Closed height over 6 metres	by 3 rungs minimum

Guidance can be found in HSE Publication "Safe use of Ladders and Stepladders INDG 455" Safe use of ladders and stepladders: A brief guide

Fragile Surfaces including - fibre cement sheets, linear panels, metal sheets, roof lights, glass, chipboard.

Duty Holders can only permit persons under their control to go onto, or near, a fragile surface once they have satisfied themselves that this is the only reasonably practicable method for the worker to carry out the work safely. This must be documented in the method statement giving regard to the demands of the task, equipment and/or working environment.

The key requirements for Fragile Surface working are:

- Work is only permitted on fragile surfaces if suitable platforms or coverings are provided and used.
- Suitable guard rails or coverings, etc are provided to protect against falls for work near a fragile surface.
- Prominent warning notices are fixed at the approach of where fragile surfaces are present in the work area.
- Even if the above measures have been provided, if there is still a risk of falling a means of arresting a fall must be provided.

Falling Materials or Objects

Where it is necessary to prevent injury, the duty holder must do all that is reasonably practicable to prevent anything falling from height. If it is not reasonably practicable, the duty holder must ensure that no one is injured by anything falling. If the workplace contains an area in which there is risk of someone being struck by a falling object or person, they must ensure that the area is clearly indicated and that unauthorised people are unable to reach it.

The duty holder must ensure nothing is:

- Thrown or tipped from height if it is likely to cause injury or damage property.
- Stored in such a way that its movement is likely to cause injury or property damage.

The following appendices outline the main requirements where different equipment and the arrangements for working at height are being used. These requirements are outlined in the Working at Height Regulations 2005 Schedules 1- 6.

Appendix A

Working Platforms, Structures (inc Scaffolds), Means of Access and Egress

- Must be of sufficient strength and rigidity for purpose.
- Surfaces they rest on must be sufficiently strong and stable to support the structure and loads.
- Must be large enough to allow safe access/passage and the safe use of plant/materials etc.
- Must have a suitable means of fall prevention.
- The working surface must have no gaps through which persons or objects could fall.
- Must be constructed and maintained to prevent risks of slipping and tripping.
- Must be constructed to prevent a person being caught between them and adjacent structures.

- Accidental movement must be prevented where there are moving parts e.g. wheels.
- The structure must be securely fixed to prevent movement e.g. scaffolding secured to building.
- Loads must be such that they do not create a risk of collapse or deformation of the structure.
- They must be erected and altered in such a way that ensures they remain stable and be capable of being dismantled in a safe manner.

Suitability of Means of Protection e.g. Guard Rails, Toe Boards, Barriers etc.

- Must be of sufficient size, strength and rigidity for purpose. Be placed and secured so that they don't become accidentally detached, including preventing persons and objects from falling.
- The top rail must be at least 950mm (910mm if in place prior to April 2005) above the edge from which a person can fall.
- There must be no gaps between the intermediate guard rails of more than 470 mm.
- Toe-boards must be suitable to prevent any person, material, or object from falling from place of work.
- Must be no lateral openings except where there is a means of access e.g. ladder, stairway.
- Are alternative safe arrangements in place where having to work with the protection removed.

Scaffolding

- Strength and stability calculations must be available, or it must have been assembled to a recognised standard configuration.
- Depending on the complexity of the scaffolding required, there must be an assembly, use and dismantling plan drawn up by a competent person. These plans must be retained until after it has been dismantled.
- The layout of the scaffold decks must be suitable for the work being carried out, passage and loads.
- Must be suitably marked when not available for use e.g. assembly, dismantling or alteration.
 Access to the scaffold must be physically prevented when not in use e.g. assembly, dismantling or out of hours.
- Scaffolding may only be erected, altered or dismantled under the supervision of competent contractor/persons who understand the plan, means of protection, effects of weather, loadings and any other risks which this work may entail.
- Where large scaffolds are in use for a prolonged period of time, then the access and egress staircases should be used instead of tethered ladders. Also mechanical lifts should be used to eliminate the need to carry materials and equipment up and down ladders or staircases.

Appendix B

Personal Fall Protection Systems

- Must only be used if other safe work equipment has been considered for use in the first instance.
- All users, including any potential rescuers, must be competent and sufficiently trained for the task.
- Fall protection systems and equipment must be suitable and strong enough for the purpose it is being used.
- It must be correctly fitted, easily adjusted to fit the user properly and designed to prevent the user from falling, slipping or an uncontrolled movement.
- Any anchor points must be strong and stable enough to prevent the user from slipping or falling.

Work Positioning Systems

- If using a Work Positioning System, a suitable fall arrest back-up system must be included, (if a safety line is being used it must be connected to the user).
- If it is not practicable to provide back-up system, all practical measures must be taken to ensure that the Work Positioning System will not fail.

Rope Access and Positioning Techniques

- Two separately anchored lines must be used i.e. a working line (access, egress and support) and a safety line.
- Users must be provided with a suitable harness that is connected to both lines.
- The working line must have a self locking system fitted which prevents the user from falling.
- The safety line must incorporate a mobile fall protection system which travels with the user.
- Consideration should be given to the duration and ergonomic constraints of the proposed work where the provision of a seat would be appropriate.
- Where a risk assessment indicates the use of a single rope system, then appropriate measures must be taken to ensure its safety.

Fall Arrest Systems

- The fall arrest system must have suitable means of absorbing energy so as to limit the forces applied to the user's body.
- It must be used so that there is no risk of the line being cut.
- There must be sufficient room around the system to enable it to operate correctly.

Work Restraint Systems

• The system must prevent the user from getting into a position from which they could fall and must be used correctly.

Appendix C

Use of Fall Arrest Safeguards – eg Nets, Airbags

- Alternative work equipment must have been considered before use of the above examples.
- Staff must be trained in their safe use, including any rescue procedures.
- Must be strong enough to safely arrest the fall of the user involved.
- Any anchor points used must be strong and stable enough to support loading in case of a fall/rescue and there must be sufficient clearance to allow the safeguard to deform during a fall.
- Steps must be taken to ensure users are not injured by the safeguards themselves.

Appendix D

Ladders, Stepladders and their use

A risk assessment must identify a ladder is being used because the task is of low risk, short duration and/or there are fixed site features preventing other equipment being used. Using a step ladder and not maintaining a handhold must be justified by a risk assessment showing that it's a low risk and short duration task.

- The surface on which the ladders will stand must be stable and firm enough to keep rungs horizontal and support loads.
- Securing stiles, anti slip devices etc, must be used to prevent the ladder from slipping or falling.
- The ladder must protrude sufficiently above place of landing, unless alternative safe handholds have been provided. A secure handhold and secure support must always be available to the user of ladder.
- Interlocking/extension ladder sections must be prevented from moving relative to each other during use.
- Mobile ladders must be prevented from moving before being stepped on, eg wheel brakes or locks.
- Suitable safe landing areas/platforms must be provided if ladders extend more than 9 metres.
- The user must be able to maintain a safe handhold when carrying a load.
- Where both hands are required to carry out the work from a ladder or stepladder, users can use their torso, thighs and or knees to support themselves against the equipment and to maintain balance.

Appendix E Ladder Inspection Checklist – Example

Ladders should be visually checked prior to use, formally inspected at regular intervals, annually (low use), 6 monthly (weekly) or 3 monthly (high use -daily)

Service Ladder ID No. :	Date of Inspection:		Inspected	by:		
Type of ladder	Classification type		Ladder construction material			
Inspection type (tick one)	3 monthly	6 m	6 monthly		12 monthly	

Where is the ladder normally stored:

Work through each element of the list below checking for defects.

Item to be checked	Condition Pass / Fail	Comments or Actions Required			
GENERAL					
Signs of makeshift repairs or modifications inc painted					
Suitable for their intended use					
Stable when sighted - not bowed or twisted					
Signs of loose steps, rungs or treads (consider loose if they can be moved by hand).					
Impact damage, warped, bent, bowed or twisted stiles.					
Missing, cracked, split or broken stiles, braces, steps or rungs.					
Slivers/splinters on stiles, rungs or steps.					
Corrosion, rot, mould or fungus on ladder or fixings					
Damaged, missing or worn non-slip feet					
Ladder painted (may hide defects) or chemical damage.					
FEET AND END CAPS		Comments or Actions Required			
Secure with no loose or missing fixings					
Any over wear, splits, cracks or other damage					
LADDER FITTINGS		Comments or Actions Required			
Loose, bent or broken hinges, spreaders and stops					
Tie rods and Struts, damaged or loose					
Rivets and welding cracked, corroded or loose					
Loose, broken or missing extension locks, locking bars					
Defective locks, hooks or catches that do not seat properly when ladder is extended					
Defective or worn rope pulleys					
Deterioration of rope or anti-splay cords					
Hand rails intact, secure and free from damage					
Access gates intact, secure and free from damage					
Ladder cage intact secure and free from damage					
(* delete as appropriate) The ladder has * passed / failed the inspection and * is / not fit for use.					

In the case of a "Fail" the equipment must be removed to a safe place; warning sign attached and not used until suitable repairs are made. Ladders that are discarded must be destroyed to prevent use.

References

The Work at Height Regulations 2005 The Health and Safety at Work Act 1974 The Management of Health and Safety at Work Regulations 1999 The Construction (Design and Management) Regulations 2015 The Workplace (Health, Safety and Welfare) Regulations 1992 Safe use of Ladders and Stepladders INDG 455