Managers are required to prevent or control the risks to employees when working at height. Ladders are used for all sorts of work without considering whether or not the risks involved require other equipment to be used instead. It is often much safer to work from a properly erected mobile scaffold tower than from a ladder.

The main causes of ladder accidents are:

* failing to secure the ladder
* failing to place the ladder on a suitable base
* climbing ladders while carrying loads
* overreaching and overbalancing.

Accidents involving tower scaffolds are mainly caused by poor standards of erection and misuse, ignoring simple basic safety rules and not following manufacturers’ instructions or training.

Whatever the intended purpose it is essential that the correct type of equipment is selected for the task.

**Scope**

This guidance is focused on KCC responsibilities under The Work at Height Regulations 2005 and is intended to cover the selection, use, storage and maintenance of all ladders and tower scaffolding used at work. This includes basic ladders, stepladders, extending ladders and trestles. It also provides basic advice on the erection, use and dismantling of prefabricated tower scaffolds.

The HSE state that, ‘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 you are working at height if you:

* are working on a ladder or a flat roof
* could fall through a fragile surface
* could fall into an opening in a floor or a hole in the ground.

Examples of work at height include:

* using ladders or stepladders
* using working platforms, such as tower scaffolds, cherry pickers, scissor lifts or podium steps
* work on a roof, plant or piece of equipment.

Various employees work at height including lone workers, cleaners, night staff, office staff, contractors and agency staff.

**The why, what and how**

KCC carries out a number of work at height activities, both in-house and in partnership with external organisations.

When planning work at height managers need to consider the risks associated with the tasks and how they can manage them safely. In the first instance the manager must decide if the work can be done by an alternative means other than at height, for example using a long handled duster or other long handled tool.

First you must assess the risks. Factors consider include the height of the task, the duration and frequency, and the condition of the surface being worked on.

Before carrying out any work at height the following hierarchy should be considered:

* avoid work at height where it's reasonably practicable to do so
* where work at height cannot be easily avoided, prevent falls using either an existing place of work that is already safe or the right type of equipment
* minimise the distance and consequences of a fall, by using the right type of equipment where the risk cannot be eliminated.

For each step, always consider measures that protect everyone at risk (collective protection) before measures that only protect the individual (personal protection).

Collective protection is equipment that does not require the person working at height to act for it to be effective. Examples are permanent or temporary guardrails, scissor lifts and tower scaffolds.

Personal protection is equipment that requires the individual to act for it to be effective. An example is putting on a safety harness correctly and connecting it, with an energy-absorbing lanyard, to a suitable anchor point.

Managers need to ensure that all work at height is properly risk assessed, planned and organised taking into account:

* weather conditions that could endanger health and safety
* training and competence of those involved in work at height
* the place where the work at height is to be done is safe
* equipment for work at height is appropriately inspected
* the risks from fragile surfaces are properly controlled
* the risks from falling objects are properly controlled.

all work is monitored – check work is being carried out as planned and the right equipment used.  Where work at height cannot be avoided, managers are required to ensure that any work at height equipment they control or provide for use, either in-house or externally, is:

• suitable for use and used for purpose

• maintained in a safe condition so that people’s health & safety is not at risk.

• inspected to ensure that it is, and continues to be, safe for use

• used only by people who have received adequate information instruction and training

• accompanied by suitable safety measures e.g. markings and warnings.

Any equipment used for work at height needs to be inspected and maintained at regular intervals with records kept.

Work at height equipment, for example scaffolding, needs to be assembled or installed according to the manufacturer’s instructions and in keeping with industry guidelines. Where the safety of the work equipment depends on how it has been installed or assembled, an employer should ensure it is not used until it has been inspected in that position by a competent person.

Any equipment exposed to conditions that may cause it to deteriorate, and result in a dangerous situation, should be inspected at suitable intervals appropriate to the environment and use. An inspection should be carried out every time something happens that may affect the safety or stability of the equipment, eg adverse weather, accidental damage. You are required to keep a record of any inspection for types of work equipment including: guard rails, toe-boards, barriers or similar collective means of protection; working platforms (any platform used as a place of work or as a means of getting to and from work, eg a gangway) that are fixed (eg a scaffold around a building) or mobile (eg a mobile elevated working platform (MEWP) or scaffold tower); or a ladder.

Those who have to use any work at height equipment should have received adequate training, instruction and information to enable them to use the particular equipment. Records should be kept of what training, information and instruction is provided, to whom and when.

Employees are required to use the equipment as they have been trained to. They are to co-operate with others and take reasonable care of themselves and anyone who may be affected by their actions.

**Working at height – frequently asked questions**

**What is work at height?**

You are working at height if you

* work above ground/floor level
* could fall from an edge, through an opening or fragile surface
* could fall into an opening in a floor or a hole in the ground.

It does not include a slip or a trip on the same level, as a fall from height must involve a fall from one level to a lower level.

It does not include walking up or down a permanent staircase in a building.

**What do I need to do to comply with the regulations?**

The purpose of the Work at Height Regulations 2005 is to prevent death and injury caused by a fall from height. They place duties on employers and those who control any work at height activity (such as facilities managers or building owners who may contract others to work at height).

You must ensure

* all work at height is properly planned, supervised and organised
* those involved in work at height are competent
* the risks from work at height are assessed and appropriate work equipment is selected and used
* the risks of working on or near fragile surfaces are properly managed
* the equipment used for work at height is properly inspected and maintained.

**Who is competent to work at height?**

Employers should make sure that only people with sufficient skills, knowledge and experience are permitted to perform the task, or if they are being trained, that they work under the supervision of somebody competent to do so.

KCC requires anyone who works at height to have received appropriate training for the work being undertaken. If the work involves low level access equipment such as stepladders below 4 steps, online ‘work at height’ training may be undertaken or receive a toolbox talk from a competent person. Anyone working above 4 steps will require face to face work at height training including practical elements.

Where a more technical level of competence is required, for example drawing up a plan for assembling a complex scaffold, existing training and certification schemes drawn up by trade associations and industry is one way to help demonstrate competence.

**Is work at height training required to use a mobile step stool (also known as kick step)?**

A step stool is not a ladder and does not have stability issues such as a free standing ladder. You therefore do not need to attend a work at height course in order to use one.

However, it would be sensible to examine your step stool or read any manufacturer's instructions that came with it to become familiar with its operation. The step stool is designed not to move when you apply weight to it.

As with any work equipment, you should be familiar with it before you use it.

Use of such equipment will also require that you wear shoes that will not slip on the stool’s surfaces and avoid clothes that you could catch your heel on when mounting the step.

Be prepared to move the step into a new position rather than risk overreaching for access to an item, and subsequently losing your balance. Don't carry items in both hands when stepping on.

 If you are using a kick stool it normally has rubber on the base to provide a uniform, stable surface for contact with the floor. This reduces the likelihood that the kick stool will slip on the flooring. If the rubber is damaged to the extent where it might compromise this facility then it should be replaced.

The kick stool should not be used if the rubber is damaged as this increases the risk that the equipment could move when in use.

**How do I select the right equipment to work at height?**

Work equipment must be suitable for the purpose for which it is to be used, and only used for the operation for which it is suitable. When selecting work equipment you must take account of

* the working conditions including the condition of the premises
* who will be using the equipment
* the nature, frequency and duration of the work
* the risks to the safety of everyone where the work equipment will be used.

The HSE have further guidance on working at height and selecting the correct access equipment for the task at: http://www.hse.gov.uk/work-at-height/types-of-equipment.htm

**Have ladders been banned from use?**

No, ladders are not banned from use. They can be a sensible and practical option for low risk, short duration tasks.

The law says that ladders can be used for work at height, when a risk assessment has shown that using equipment offering a higher level of fall protection is not justified, because of the low risk and short duration of use; or there are existing workplace features that cannot be altered.

Up until 2018 there were 3 different classes of aluminium ladders and steps.

**Class 1 -**  is suitable for industrial jobs, with a maximum static vertical load of 175kg, making them the most heavy duty products under BS2037 standard. You will most likely see these in use on building sites.

**EN131 Trade/Industrial** **-** is suitable for trade use and has a maximum static vertical load of 150kg.

**Class 3** - is a domestic standard, suitable for home DIY use and with a maximum static vertical load of 125kg. **This class is not for use in the work place.**

New ladder standards have been introduced and will replace the previous standards. The new standards will only apply to new ladders and it is perfectly acceptable to continue to use ladders already purchased under the old standards, unless they are no longer fit for use.

The new ladder and stepladder standards are:

 **EN131 Professional** – for use in the workplace

 **EN131 Non-professional** – for domestic use only

The Professional standard ladders are the only type that should be purchased for use in the workplace.

**Do I need to inspect ladders?**

Yes ladders need to be inspected before use. You should always carry out a ‘pre-use’ check to spot any obvious visual defects to make sure the ladder is safe to use.

A ‘pre-use’ check should be carried out

* by the user
* at the beginning of each day the ladder is to be used
* after something has changed, e.g. a ladder has been dropped.

What you should check

**The stiles** – make sure they are not bent or damaged, as the ladder could buckle or collapse.

**The feet** – if they are missing, worn or damaged the ladder could slip. Also check the ladder feet when moving from soft or dirty ground to a smooth or solid surface to make sure the foot material and not the dirt is making contact with the ground.

**The rungs** – if they are bent, worn, missing or loose the ladder could fail.

**Any locking mechanisms** – if they are bent or the fixings are worn or damaged the ladder could collapse. Ensure any locking bars are engaged.

**The stepladder platform** – if it is split or buckled the ladder could become unstable or collapse.

**The steps or treads on stepladders** – if they are contaminated they could be slippery; if the fixings are loose on the steps they could collapse.

If you spot any of the above defects, do not use the ladder and notify the manager.

**3 monthly inspections -** Managers need to ensure a competent person carries out inspections on a three monthly basis. Records should be kept and a three monthly inspection checklist should be used.

**Can I use a mobile access tower (tower scaffold)?**

Yes, you may erect and use tower scaffolds, as long as you are competent to do so by undertaking Prefabricated Access Suppliers & Manufacturers Association (PASMA) training. You need to be competent to build, inspect and dismantle a tower scaffold.

Mobile access towers are widely used and can provide an effective and safe means of gaining access to work at height. However, inappropriate erection and misuse of towers are the cause of numerous accidents each year. Aluminium and thin-wall steel towers are light and can easily overturn if used incorrectly. Towers rely on all parts being in place to ensure adequate strength. They can collapse if sections are left out.

Before selecting or specifying a tower, you must be satisfied that it is the most suitable item of equipment for the job.

**How do I carry out a work at height assessment – what do I need to do?**

When planning work at height, managers must do everything reasonably practicable to

* prevent anyone falling
* reduce the risks from fragile surfaces and
* prevent falling objects.

The hierarchy for managing and selecting equipment for working at height is taken from the Work at Height Regulations 2005.

**Planning**

From time to time it will be necessary for staff to access areas above ground level (e.g. to clean tops of doors, to take down/refit curtains, to put up Christmas decorations or to reach high shelving). As with all work tasks, adequate risk assessments must be undertaken to prevent injury resulting from falls.

When planning a job consider the following

* does the task need to be carried out?
* is there an alternative to working at height to complete the task? (i.e. using long handled equipment to reach high areas)
* if there is no alternative to work at height the manager needs to ensure the most suitable equipment is provided?
* staff should never work from a chair, table, box or anything else not intended for safe access
* it is recommended that ladders and stepladders should only be used in one position for a maximum of 30 minutes
* work at height will often involve cleaning, taking down or putting up something – it is one thing being safe standing on a ladder, it is quite another remaining safe whilst carrying out a task. Careful consideration must be given to the task in hand, avoid carrying buckets of water up ladders, these can cause individuals to unbalance and spillage can cause slipping hazards. Some tasks may require two people
* distance to be climbed – portable ladders are less suitable for higher climbs than temporary stairs or tower scaffolds.

**The environment**

Whatever the equipment, it must be used on a firm and level base. If necessary spread the load using a board, do not build up ground under ladders with loose earth.

Consider whether the type of surface may be slippery or wet i.e. tiled floor. Consider the stability of the surface; a fragile surface could include skylights or fibre and asbestos cement roof sheets.

For a leaning ladder, you should secure it (eg by tying the ladder to prevent it from slipping either outwards or sideways) and have a strong upper resting point, ie do not rest a ladder against weak upper surfaces (eg glazing or plastic gutters). If this is not possible use ladder stays, spreader bars or stand offs.

Consider falling objects including tools and materials. Ensure tools belts are worn and steps are taken to prevent falling materials i.e. fencing off areas. Ensure nothing is thrown or tipped from height if it is likely to injure anyone, or stored in such a way that its movement is likely to injure anyone.

For further information, see Safe use of ladders and stepladders: a brief guide - HSE

**Personal considerations**

Ensure individuals dress correctly i.e. clothing that will not get caught in the ladder, suitable non slip closed toe footwear, long hair is tied back and loose jewellery removed or tucked in.

Does the individual have any medical conditions which could affect their ability to work at height? Are they confident that they are able to work at height?

**Information, Instruction and Training**

Managers need to ensure they have given any employees who use work equipment adequate health and safety information. Where appropriate they should have written instructions about using work equipment.

Managers must make sure employees and others affected are aware of the risks they face in the workplace and the control measures that have been put in place to manage the risks.

Managers need to make sure they communicate in a way that ensures all employees understand what is required of them. Consideration should be given to staff in minority groups who may require alternative formats or more specific training to suit their individual needs.

In addition to constantly providing them with the most up-to-date information, managers need to ensure they give any employee who supervises or manages the use of equipment adequate training to enable them to work safely. This should include training in the methods to be adopted when using the work equipment, any risks associated with that use and the precautions that should be taken. When allocating work to staff you must make sure that the demands of the task do not exceed their individual levels of knowledge or their capabilities.

Managers should keep records of what information and training has been provided, who has received the training and on what date(s).

Managers should also provide refresher training when necessary. Skills decline if they are not used regularly. Pay particular attention to people who deputise for others occasionally as they may need more frequent refresher training than those who do the work regularly.

Specific training courses are available through Learning and Development.

**Am I responsible for contractors working at height on my premises?**

Managers need to ensure that any contractors used are competent to work at height. Where possible, contractors should be selected from KCCs Approved Contractor list.

**If I have questions about work at height where can I get some advice?**

If you have any questions relating to health and safety, including working at height, please contact Kent County Council’s Health and Safety Team

Advice line 10am – 4pm 03000 418456

Email: - healthandsafety@kent.gov.uk

You can access further information by visiting

http://www.kelsi.org.uk/policies-and-guidance/health-and-safety-guidance/working-at-height

https://kentcountycouncil.sharepoint.com/sites/KNet/documentshands/Forms/Working%20at%20height.aspx

**Related documents:**

KCC - Hierarchy for working at height

KCC – Ladder checklist – 3 month inspection

KCC – Ladder safety – user checklist

KCC – Work at height – frequently asked questions

KCC – Roof work checklist

KCC - Safe Use of Ladder and Tower Scaffold

HSE – Safe use of ladders and stepladders – a brief guide

HSE – Working at Height Regulations – a brief guide