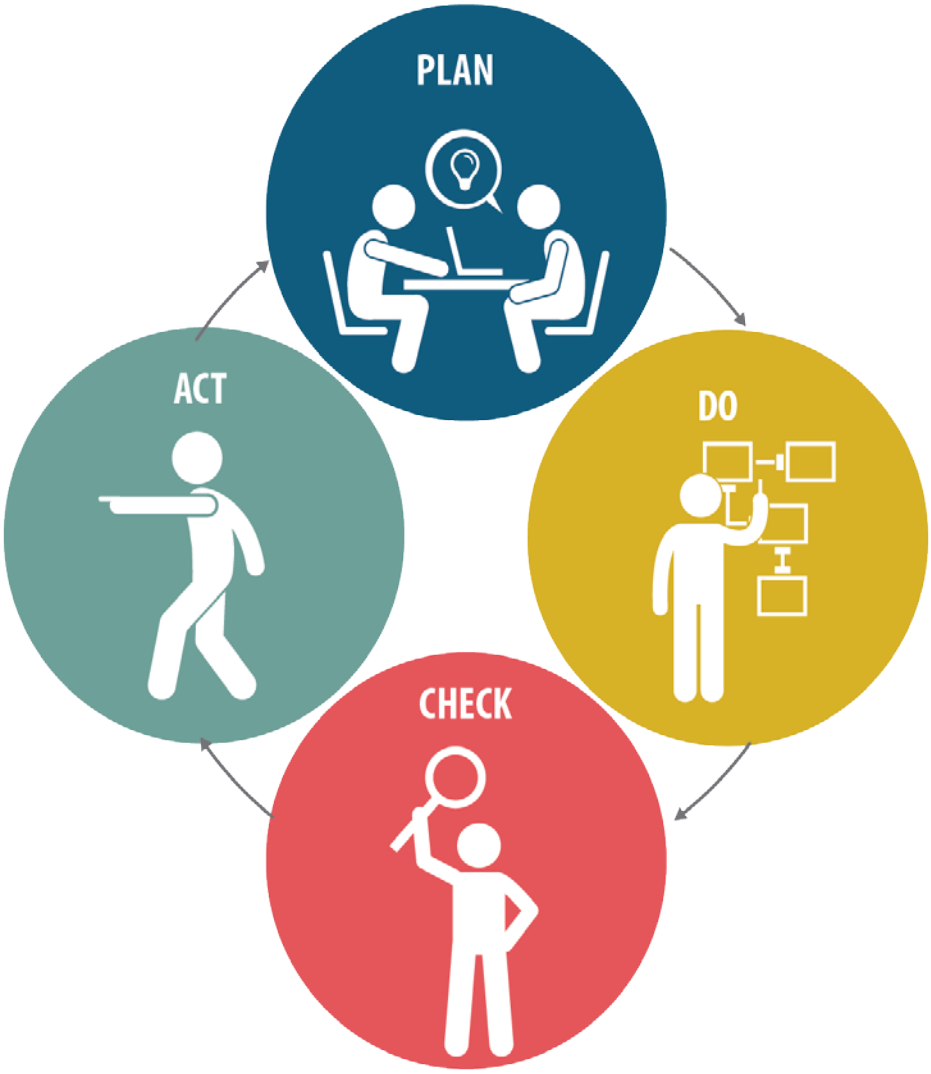

Working at Height Standard

Warwickshire County Council

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County Council

This standard has been produced in accordance with Warwickshire County Council's (WCC) Health and Safety Policy and outlines the minimum requirements that must be met.

Who is this Standard for?

The requirements of this document apply to any type of work at height activity undertaken within WCC and will assist managers and Head teachers in fulfilling their responsibilities and legal obligations in relation to working at height and specifically the current Work at Height Regulations (WAHR).

It's applicable to anyone where working at height is part of their work activities, or to anyone who manages them, to ensure that as far as is reasonably practicable, working at height is properly planned and carried out safely.

The extent of planning, arrangements and controls required will depend upon the type of work at height activity and the risks involved. For example; a teacher using a stepladder to display school work or a condition surveyor accessing a ceiling panel. In addition to this standard, some services will need to refer to industry specific guidance and practice e.g. arboricultural staff in Forestry Service, Outdoor Education etc.

What is Working at Height?

The WAHR defines work at height as 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.

Plan – consider activities, risks, competency/ refer to WCC/service/industry standards

What do I need to consider?

The first part of ensuring that work at height is properly planned is to identify all work activities where working at height is undertaken.

There are three simple steps that need to be considered before any work at height activity;

1. **avoid** it where it is reasonably practical to do so
2. where it can't be avoided, **prevent falls** using either an existing place of work that is already safe or the right type of equipment; i.e. barriers/rails
3. **Minimise the impact** of the fall; distance and consequence, using the right type of equipment, where the risk cannot be eliminated; i.e. harness/crash mat/netting

To do this, you will need to think about;

- What the work at height activity is
- Who and how many people are doing it
- How long the activity will last

- The time of day
- What environment they are doing it in, internal/external etc.
- What access is needed
- What the risks are for this activity
- What instruction, training, competency is needed for this activity

Planning will also need to include how any risks identified will be managed, before the work at height activity begins, any documents that need to be completed, risk assessments, safe system of work, equipment checks etc.

An integral part of the planning is also to consider when and how work at height activities will be monitored and reviewed to check that nothing significant has changed and that the arrangements and controls in place are still effective and working, including a review of any documentation.

How do I select the right equipment?

To select the right equipment you will need to consider the following:

- the height that will need to be reached (a pre-visit to site may be needed)
- the structure and layout, if applicable, e.g. outside wall, inside storage shelfing unit/other workplace features
- the environment e.g. ground levels/weather/obstructions/public/enclosed spaces/pedestrian routes
- requirement of access to a roof/roof space
- suitability for the intended use, i.e. strong and robust enough for the job
- conforms to the relevant British Standards; EN131 is for trade and light industrial use' BS2037/BS1129 Class 1 is for heavy duty and industrial use
  BS2037/BS1129 Class 3 is for domestic use only – this equipment can only be used if not for trade, heavy or industrial use and where the assessment of risk identifies that it's appropriate for the use

What about leaning ladders or stepladders?

Leaning ladders/step ladders can be used for work at height for a short period, when the risk of a fall is low or there are existing workplace features which cannot be altered e.g. changing a light bulb in a confined storage room. This must not be the only deciding factor, it must also depend on the risk.

Leaning ladders/step ladders should only be used if the activity is for no longer than 30 minutes, if it is any longer then alternative equipment must be considered, e.g. a mobile tower scaffold, mobile elevated working platform etc.

What about accessing and working on roofs?

All roof work is potentially dangerous so it is essential that a risk assessment is carried out before the work starts. Where access to a roof cannot be eliminated, the equipment for access and safe working on the roof needs to be carefully considered to prevent a fall risk. This may also include consideration of a permit to work/access control system.

Do - implement safe working practice/control measures produce documentation/records/arrange training/ inform staff

How do I know the equipment is safe to use?

Once the appropriate equipment has been selected, whether you purchase it, or, hire it, you must ensure that it's safe to use. The responsibility for ensuring this is the person who is going to use the equipment. This means that it must be regularly checked, maintained and inspected for any defects.

1. Pre-use inspection

All equipment must be visually inspected prior to use. This does not need to be formally recorded. A pre-use check should be carried out by:

- the user;
- at the beginning of the working day; and,
- after something has changed i.e. damage/incident

2. Formal inspection

A recorded inspection of equipment should be undertaken where it has been identified either by manufacturer's instructions or the risk assessment. The frequency will depend on how often and/or how heavily used/easily damaged. This should be recorded on the Ladder/Stepladder/Kickstool Inspection & Guide and Checklist.

3. Defects/Storage

If significant defects are identified (e.g. missing feet) that will make the equipment unsafe to use then it must be removed from use immediately and labelled accordingly. The equipment must be replaced or repaired sufficiently to ensure it is then safe to use. Where minor defects are identified, such as a small dent in the rung, where the equipment can still be used safely, must be checked regularly to ensure no further deterioration. (see "What Training is Needed" section below)

Equipment must be stored safely in accordance with the manufacturer's guidelines and to prevent damage.

How can I ensure the equipment is used safely?

To ensure that any equipment is used safely, the staff using it must have received the appropriate level of information, awareness and training. (see training section below).

Using a stepladder

When using a stepladder you will need to assess the risks of the particular activity and where significant risks are identified, these must be recorded using the normal risk assessment process and form. In addition, a specific safe working procedure/safe system of work may also need to be produced, where necessary.

When using a stepladder, the following needs to be taken into account:

- check all four feet are in contact with the ground and the steps are level (if this can't be achieved, the stepladder can be footed, if this then ensures stability)
- maintain three points of contact when climbing (this means a hand and two feet)
- maintain 3 points of contact at working position; 2 feet and 1 hand,
- if both hands are needed (for a brief period) keep two feet on the same step and the body (knees or chest) supported by the stepladder to maintain three points of contact. **(Fig. 1)**
- don't overreach
- don't stand and work on the top three steps (including the step at the very top)
- ensure there's a suitable handhold
- ensure any locking devices are engaged
- position the stepladder to face the work activity, not side on (unless an assessment of risk identifies that it's safer to work side on, e.g. a stock room with space constraints/narrow aisle)
- avoid work that imposes side loading e.g. side-on drilling, use alternative equipment or steps should be securely tied to a structure
- place the ladder where it won't be struck by vehicles or pedestrians (if necessary, use suitable barriers and signs to protect and warn others)
- where a handhold cannot be maintained, the task, duration, height to be reached and specific risks must be considered for this to be justified (e.g. putting a box on a shelf)
- carry equipment and tools in a suitable tool belt/sling bag
- ensure equipment and tools are secure on the platform

Using a leaning ladder

When using a leaning ladder you will need to assess the risks of the particular activity and record the risks and control measures using the normal risk assessment process and form. In addition, a specific safe working procedure/safe system of work may also need to be produced, where necessary.

When using a leaning ladder, the following needs to be taken into account:

- secure the ladder by tying it to suitable points to prevent it from slipping either outwards or sideways, making sure both stiles are tied **(Fig. 2);** ensure there is a strong upper resting point (i.e. not weak glazing or plastic gutters) if possible, also wedge the stile/s against a wall **or**;
- use an effective stability device e.g. a fixed roof restraint or a portable stand-off device e.g. a microlite **(Fig. 3)**
- make sure the ladder is at an angle of 75° ;1 unit out for every 4 units up **(Fig.4)**
- maintain 3 points of contact when climbing,1 hand and 2 feet and wherever possible at the work position **(Fig. 2 and 3)**
- where you cannot maintain a handhold, other than for a brief period (eg to hold a nail while starting to knock it in, starting a screw etc), you will need to take other measures to prevent a fall or reduce the consequences if one happened
- only carry light materials/tools and use a suitable tool belt/sling bag
- don't over reach **(Fig. 5)**grip the ladder and face the rungs while climbing/descending (don't slide down the stiles)

- don’t move or extend ladders while standing on the rungs
- don’t work off the top three rungs; ensure the ladder extends at least 1m (three rungs) above where you’re working **(Fig. 6)**
- don’t work within 6 m horizontally of any overhead power line, unless made dead or protected with insulation. Use a non-conductive ladder (fibreglass or timber) for any electrical work
- place the ladder where it won’t be struck by vehicles or pedestrians (if necessary, use suitable barriers and signs to protect and warn others)
- weather conditions that may increase the risk of stability and use, e.g. strong winds
- the ladder must only be used on firm, level ground that is clean and solid (not slippery or contaminated)
- if the above cannot be achieved, a proprietary levelling device, e.g. ladder stabiliser, should be used **(Fig. 7) or;**
- if a device is not available, another person **must** safely foot the ladder; footing a ladder is an additional control measure not an alternative measure
- there are a range of feet stabilising products available from various suppliers, the following link shows one example: https://www.ladderm8.co.uk/

Using a mobile tower scaffold

When using any type of tower scaffold you will need to assess the risks of the particular activity and record the risks and control measures using the normal risk assessment process and form. In addition, a specific safe working procedure/safe system of work may also need to be produced, where necessary.

The type of tower selected must be suitable for the work and erected and dismantled by people who have been trained and are competent to do so. There is specific training required for erecting, dismantling and using a tower scaffold. There are a number of organisations that provide training e.g. https://www.pasma.co.uk/

Tower scaffold provision and use must be properly managed and include rigorous scaffold inspection arrangements. The tower must be inspected following assembly and then at suitable regular intervals by a competent person.

In addition, if the tower is used for construction work and a person could fall 2 metres or more from the working platform, then it must be inspected following assembly and then every 7 days. Work must stop if the inspection shows it is not safe and can only continue once the defects have been rectified. The result of an inspection should be recorded and kept until the next inspection.

Erect the tower scaffold where it won’t be struck by vehicles or pedestrians (if necessary, use suitable barriers and signs to protect and warn others).
Key issues and potential risks with tower scaffolds are:

- erection and dismantling
- stability
- precautions and inspection
- using and moving

The incidents that occur are mainly caused by:

- dangerous methods of erection or dismantling – where a safe system is not being followed;
- defects in the erected scaffold – where the tower structure is incorrectly assembled or where a platform guardrail is missing'
- misuse of the scaffold – where a ladder is used causing it to overturn or when a person falls while it's being moved

For further detailed information on the use of tower scaffolds refer to:
http://www.hse.gov.uk/construction/safetytopics/scaffold.htm

Accessing/working on a roof

When accessing and working on a roof, you will need to assess the risks of the particular activity and record the risks and control measures using the normal risk assessment process and form. In addition, a specific safe working procedure/safe system of work/permit to work/access may also need to be produced, where necessary.

Any fall from a roof inevitably involves at least a serious injury if not a fatality. The risks are significant, however long or short the work and can occur even when only on the roof for a few minutes 'to have a quick look' or to carry out a small repair. Serious injuries can also occur from material falling or being thrown.

Falls can occur;

- from the edges
- through gaps or holes
- through fragile roof materials and roof lights

Avoiding accessing and working on a roof **must** be the first consideration, for inspections/surveys etc. For example, you could use a mobile elevating work platform (MEWP); telescopic pole with camera attachment or binoculars instead.

Getting on and off

Getting on and off the roof is a potential signifcant risk. Access to a roof must be by safe and secure means. If possible and available, always use internal roof access or a specific external fixed, protected, roof access ladder **(Fig. 8).**

If a leaning ladder needs to be used, refer to the safe practice in the leaning ladder section above. In addition to securing the ladder it must extend at least 1 metre (3 rungs) above the access point so that a safe hand hold is provided, even if you are using a fixed roof restraint or portable stand- off device e.g. microlite.

If using a contractors scaffolding to access a roof, ensure that you are aware of the safe access points and safe system of work for that particular scaffolding.

Working on a roof

If a roof is being accessed purely for inspecting/surveying but not working on it, this must be at a distance of at least 2 metres away from an unprotected roof edge.

If working on a roof, there must either be an existing (950 mm minimum height) parapet wall, fixed edge protection or appropriate portable edge protection must be erected. Where the risk of a fall cannot be fully eliminated, minimising the risk of the distance and consequences of the fall must be implemented e.g. using nets, air bags, fall arrest systems etc. The person identifying the type of measures and equipment required and to be used must have the competency to do so or obtain this externally.

Fragile roof

A fragile material is one that does not safely support the weight of a person and any load they are carrying. Even roofs that were deemed to be 'non-fragile' when they were installed will eventually deteriorate and become fragile over time. An entire roof surface could be fragile, such as fibre cement roofs, or just part of the roof, e.g. fragile roof lights.

The fragility of a roof should be confirmed by a competent person before work starts. If there is any doubt, it should be treated as fragile until confirmed that it is not. Work on fragile materials must always be avoided where possible, e.g. by use of a MEWP, if not, it must be carefully planned to ensure that falls through the roof are prevented.

If access onto the fragile roof cannot be avoided, a safe system of work must be produced using appropriate edge protection and other equipment e.g. spreaders and harnesses etc.

For further detailed information refer to the specific HSE fragile roofs safe working practices guidance: http://www.hse.gov.uk/pubns/geis5.pdf

Sloping/Pitched roof

On traditional pitched roofs most people fall from eaves, by slipping down the roof and then over the eaves, through the roof internally, e.g. during roof truss erection, or from gable ends. Full edge protection at eaves level will be required. The edge protection needs to be strong enough to withstand a person falling against it.

Work should not be undertaken directly on slates or tiles, as they do not provide a safe footing, particularly when they are wet. Appropriate roof ladders and proprietary staging must also be used and fixed securely to enable safe passage across a roof.

Equipment and edge protection used will be dependent on the work you are planning, e.g. consideration of MEWPs, or proprietary access systems, which are easy to transport from site to site.

For further detailed information refer to the specific "Working on sloping roofs" section of the HSE guidance: http://www.hse.gov.uk/pubns/indg284.pdf

What training is needed?

Anyone engaged in working at height activities must receive the appropriate level of information, awareness and training.

The level of training required for employees will vary depending on the task they are required to do and will therefore be identified through the job role and risk assessment process. The use of some equipment for work at height will require specific accredited training (e.g. mobile tower scaffold).

Formal training will be required where working at height is an inherent part of the job role, e.g. caretaker/site manager.

The WCC standard for this training is that it **must** include the following as a minimum:-

- information on identifying suitable equipment for the task
- information on checking the safety of the equipment **and**
- a practical session, using ladders/step ladders with staff undertaking a physical exercise and understanding how to check for defects and record the information
- information on safe use of the equipment
- where leaning ladders are used by staff on the training this **must include** information on safe tie off/roof restraint/stand-off device as well as footing

Employees using a scaffold tower are required to have attended and passed the Basic Prefabricated Access Suppliers and Manufacturers Association (PASMA) tower scaffold training course, or equivalent standard.

What about contractors?

Where you have commissioned a contractor to undertake work that includes them working at height, you will need to ensure the following, as far as is reasonably practicable:

- the contractor has provided any relevant risk assessments/method statements.
- they are suitable and sufficient (e.g. a window cleaning contract will state how they have eliminated, reduced or will control the risks of working at height).
- the contractor should be using their own equipment, (they will know if it is suitable and sufficient for the task)

Where your service has some specific equipment that is used to access a confined/restricted area, you can consider allowing the contractor to use this equipment. This must be with their signed agreement that they will check the equipment before use and that it is suitable for the task that they are undertaking.

For further information, refer to the Managing Contractor Work document.

Check – **monitor how effective arrangements & measures are/any incidents/issue**

Act **– take action/have a plan of action for any gaps /revisit arrangements/measures/ documentation**

What else do I need to do?

As part of your planning you will have considered when and how working at height activities would be monitored and reviewed to ensure that arrangements and control measures are still effective.

As part of your review, you should consider the following:

- review working at height activities
- review risk assessments (RA) and safe systems of work (SSOW) annually or if anything significant changes, accidents etc.
- check equipment is still suitable for the task
- check that staff have the relevant training
- review RA/SSOW if there have been any accidents/incidents
- review contractors working at height documents
- check that defects to equipment are being logged and rectified.
- check that equipment maintenance records are kept up-to-date.

If your review identifies any gaps, you will need a documented plan to show how action is going to be taken with suitable timescales and responsibilities.

Further Information

- WCC Ladder Inspection Guide & Checklist
- HSE's brief guide to the Working at Height Regulations
- HSE's Safe use of ladders and stepladders
- HSE's Health & Safety in roof work
- HSE's Selection, management and use of mobile elevating work platforms (MEWPS)
- PASMA's Safe use of a Scaffold Tower, or Mobile Tower

For further advice and guidance please contact
healthsafetyandwellbeing@warwickshire.gov.uk

Fig.1

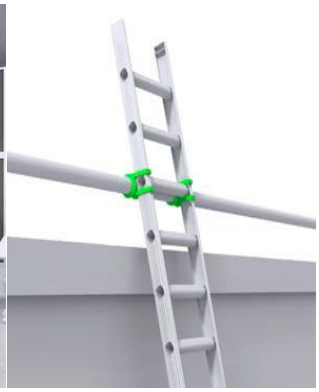

Fig.2

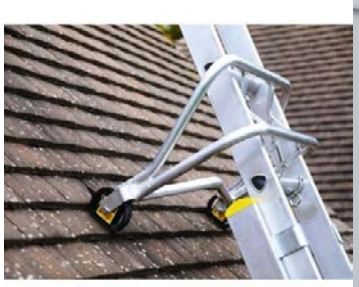

Fig.3

Fig.4

Fig.5

Fig.6

Fig.7

Fig.8