

Using access equipment safely in building maintenance

What is this leaflet about?

This leaflet is mainly aimed at employers, so they can make sure their workers have the right skills and experience to use access equipment safely and to identify gaps in knowledge and decide what level of supervision is required, or where a worker may need some training. There are sections covering specific pieces of access equipment, from ladders to cherry pickers.

It can also be used by workers and self-employed people to make sure they know how to work at height safely. If you think you need to know more about the access equipment you use, there is a list of organisations that may help you under 'Further information'.

*There are areas this leaflet does not cover, for example **rope access**, these are specialist areas where you need formal training.*

Why is it important?

Falls from height are the main cause of death in the workplace. Forty-five people died in 2006/07 as a result of a fall at work. There were 3750 major injuries, 350 every month. Reducing the number of tragic deaths and terrible injuries from falling from height remains a priority for HSE. For those who regularly use access equipment, falls from height is one of the main risks you face every day. You can use this leaflet to help you make sure you, and the people you work with, know how to use your access equipment safely.

Planning the work

Before you start work at height it is vital to take a moment to plan the work properly. The Work at Height Regulations 2005 (as amended) set out a hierarchy that you must follow when you are planning work at height. The first thing to look at is how the work could be done avoiding work at height. Long-handled tools could help do this. If this cannot be achieved, what measures can you take to prevent a person from falling? This could be by using a guard rail or work positioning system. If this cannot be achieved, look at what you can do to minimise the distance and consequences of a fall. A net or airbag system could do this. Where there is still the risk of a worker falling and injuring themselves, you must look at what other measures can be taken to reduce this risk. Extra training would be one way to do this.



Ladders and stepladders

It is vital that everyone involved in working from ladders can do their work safely. These lists show the knowledge people in your workplace need to have, if they use a ladder in their day-to-day work. Before you start, you need to know about the risks you might face.

Common causes of ladder falls

- Over-reaching.
- Ladder in poor condition.
- Ladder not suitable for the work.

Now think about the ladder and how you will use it.

Is a ladder right for the job?

- Is the job low risk?
- Is the work short duration?
- Is a stability device or stand off required?

Is your ladder up to the job?

- Is it long enough to reach the work easily?
- Can it be placed securely on the surface?
- Can you maintain three points of contact (leaning ladder)?
- Can the ladder be set up at the right angle?
- Is the surface it is leaning on secure (leaning ladder)?
- Is it of the right classification (trade – industrial)?

Is your ladder in good condition?

- Check styles, rungs or steps.
- Check the feet – are they missing, loose, damaged, worn?
- Are rivets in place and secure?
- Check locking bars are not bent or buckled (stepladders).

Do you know how to set up your ladder?

- Do you know the correct angle?
- Do you know how to use any stability devices?
- Can you secure or tie the ladder at the top or bottom?

Using the ladder safely

- Make sure there are three points of contact available.
- Do not over-reach.
- If you need to carry tools and equipment, make sure you do this safely.
- Make sure you know the maximum safe loads on the ladder.
- Always position the ladder face on to the work.
- Make sure any locking bars are in the proper position.
- Wear the right footwear and make sure the soles are clean.
- Footing the ladder – do you know how best to do it and that it is the last option?
- Working near people and near doors – do you know what needs to be done to keep safe?

Looking after your ladder

- You need to be able to identify each ladder you have for checking and inspection purposes. If you have one this is easy, if you have 20, it might be more difficult.
- You need to store your ladder safely.
- You need to transport the ladder safely.
- Keep the rungs clean, so that they don't become slippery.

If you want to learn more, you could take a training course. The Ladder Association has a training course that may help you – it is for those who use ladders or manage workers involved in ladder work. If you feel this course is relevant, see www.ladderassociation.org.uk for a list of training providers you could use.

Podiums and tower scaffolds

It is vital that everyone involved in working from a podium or tower scaffold can do their work safely. These lists show the knowledge people in your workplace need to have if they use a podium or tower scaffold in their day-to-day work.

Before you start, you need to know about the risks you might face.

Common causes of falls from podiums and tower scaffolds

- The barrier or gate is not closed or locked and the worker slips or trips and falls through the gap.
- The worker misses a step or slips on accessing or getting down from the podium.
- The podium or tower overturns because it is not set up on a firm surface or levelled properly.
- The podium or tower overturns because of over-reaching or pulling/lifting a heavy object.

Now think about the podium or tower and how you will use it.

Is a podium or tower right for the job?

- Is there a firm, level surface or if not level, can the equipment be levelled effectively?
- Is the height of work right for the podium or tower?

Can you get a podium or tower to the work area?

- Are there height, width and weight restrictions?

Is your podium or tower right for the job?

- Can you get to the work area easily?
- Is the podium or tower stable?

Is your podium or tower in good condition?

- Check the wheels are secure.
- Check the welding on the staging and guard rails.

- Check the platform and trap door on the tower.
- Check any rivets are in place and are not damaged.
- Can the gate on the podium be closed securely?
- Check the braces are in good condition and not bent or corroded.
- Check the brace claws work properly.

If you use a tower of over 2 metres on a construction site, it must be inspected when it is in position or every seven days.

Do you know how to set up your tower scaffold?

- Are you using a recognised method to build the tower – 3T (Through The Trap) or advanced guard rail system?
- Are the wheels or feet all in contact with a firm surface?
- Are all of the brace claws and knuckle joints in position and locked securely?
- Are the wheels locked and turned 90° to the work face?
- Are outriggers required?
- Do you know the safe working height of the tower – refer to the manufacturer's manual?
- Do you know how to adjust the platform height?
- Can the work be accessed without over-reaching?

Do you know how to set up your podium?

- Are the wheels or feet all in contact with a firm surface?
- Is the podium positioned to face the work area?
- Are all of the claw braces and knuckle joints in position and locked securely?
- Are the wheels locked and turned 90° to the side of the podium?
- Do you know how to adjust the platform height?
- Can the work be accessed without over-reaching?

Using the tower or podium safely

- Can you get in and out of the platform safely?
- Put tools and materials onto the podium from ground level where possible.
- Always close and lock the gate or trap before starting work.
- Do not climb or lean on the guard rails.
- Do not move the tower or podium with a worker on it.
- Wear the right footwear and make sure the soles are clean.
- Before moving the tower, reduce it to a maximum height of 4 metres.
- Before moving, check for overhead hazards.

Looking after your tower or podium

- Store it safely.
- Transport it safely.
- Keep locks and wheels in good condition.
- Keep steps or rungs clean so they don't become slippery.
- Keep braces in good condition.

If you want to learn more, you could take a training course. The Prefabricated Access Suppliers' and Manufacturers' Association (PASMA) have a range of training courses that may help you. They are for those who use a tower or podium or manage workers involved in this work. See www.pasma.co.uk for a list of training providers you could use.

Scaffolding

Where you have to work on scaffolding (not erecting or dismantling it – only trained and competent scaffolders should undertake this work), you need to know the following:

Common causes of falls from scaffolds

- Incomplete guard rails leaving a gap in the edge protection from where the worker can fall.
- Missing or broken boards mean that a worker could fall through the boarding.
- Unsecured ladder or stairwell access onto the scaffolding can cause falls.
- A loading bay gate is not fitted and a worker falls from the unprotected edge.
- Modifications to the scaffold being made by those who are not competent.
- Lack of hand hold at the transition point onto the scaffold if a short ladder is used

Now think about the scaffolding and how you will use it.

Using scaffolding safely

- You should never adjust scaffolding.
- You should be aware that a scaffold must be inspected before use to make sure it is safe and then weekly or after alterations or damage; you should not use it if inspections have not been carried out.

There should be safe access to the scaffold – this is a minimum of a tied ladder with three rungs projecting over the platform to provide a hand hold.

Vertical (scissor) lifts

It is vital that everyone involved in working from a vertical lift can do their work safely. These lists show the knowledge and skills people in your workplace need to have if they use a vertical lift in their day-to-day work.

Common causes of falls from scissor lifts

- Guard rails are used to climb on and the worker falls over the top guard rail.
- The worker misses a step or slips on accessing or getting down from the scissor lift.
- The lift overturns because it is not set up on a firm or level surface.
- The lift overturns because of over-reaching or pulling/lifting a heavy object.

Now think about the scissor lift and how you will use it.

Other safety issues

- Workers getting trapped between the guard rail and ceiling or other structure above.
- People getting trapped in the mechanism as the lift is descending.

Is a vertical lift right for the job?

- Is the surface firm and level?
- Is the height of work right for the vertical lift?
- Can you get your vertical lift to the work area easily?
- Can the outriggers be properly deployed and give the stability required?
- Will your vertical lift damage the flooring?
- Is your vertical lift light enough for floor loadings?

Is your vertical lift in good condition?

- Check the wheels and/or outriggers are in good condition and working properly.
- Check the working platform.
- Check the guard rails and the gate or barrier.
- Check the struts for corrosion and bends.
- Check the controls – make sure they work as expected.
- Check the fluid and/or battery charge levels.
- Check that the descent alarm and horn is working.
- Check the emergency or ground controls are working properly.

Using the vertical lift safely

- Only get in and out of the platform when it is lowered fully.
- Put tools and materials onto the platform from ground level or use a tool belt.
- Wear the right footwear and make sure the soles are clean.
- Make sure that the barrier or gate is closed and secured before raising the lift.
- Do not climb or lean on the guard rails.
- Make sure that no-one can be trapped by the struts when the lift is in operation.
- Make sure that traffic cannot come into contact with the lift.

Looking after your vertical lift

- Store it safely.
- Transport it safely.
- Keep outriggers in good condition.
- Keep metal struts and guard rails in good condition.
- Keep batteries charged.

If you want to learn more, you could take a training course. The International Powered Access Federation (IPAF) have a training course that may help you – it is for those who use scissor lifts or manage workers involved in work with scissor lifts. See www.ipaf.org for a list of training providers you could use.

Boom-type lifts (cherry pickers)

It is vital that everyone involved in working from a cherry picker can do their work safely. These lists show the knowledge people in your workplace need to have if they use a cherry picker in their day-to-day work.

Common causes of falls from cherry pickers

- Guard rails are used to climb on and the worker falls over the top guard rail.
- The worker misses a step or slips on accessing or getting down from the cherry picker.
- The cherry picker overturns because it is not set up on a firm or level surface.
- The cherry picker overturns because of over-reaching or pulling/lifting a heavy object.
- Locking pins or joints fail and the platform falls.
- Another vehicle hits the cherry picker and it overturns.

Now think about the cherry picker and how you will use it.

Other safety issues

- Trapping workers between the guard rail and ceiling when working indoors.
- Trapping people in the mechanism as the cherry picker is descending.

Is a cherry picker right for the job?

- Is the surface firm and level?
- Is the height of work right for the cherry picker?
- Can you get your cherry picker to the work area easily?
- Will your cherry picker damage the flooring?
- Is your cherry picker light enough for floor/surface loadings?

Is your cherry picker in good condition?

- Check the wheels are in good condition and the brakes are working properly.
- Check the working platform – is it in good condition?
- Check the guard rails and the gate or barrier.
- Check the locking pins and joints for corrosion or damage.
- Check the struts for corrosion and bends.
- Check the controls – make sure they work as expected.
- Check the fluid and/or battery charge levels.
- Check the outriggers and feet.
- Check that the descent alarm and horn is working.
- Check the emergency or ground controls are working properly.

Using the cherry picker safely

- Only get in and out of the platform when it is lowered fully.
- When do you need to use outriggers?
- Put tools and materials onto the platform from ground level or use a tool belt.
- Wear the right footwear and make sure the soles are clean.
- Make sure that the barrier or gate is closed and secured before raising the lift.
- Do not climb or lean on the guard rails.
- A harness with a short work restraint lanyard provides the most suitable form of personal fall protection.
- Make sure no tools or materials fall from the platform.
- Make sure that traffic cannot come into contact with the cherry picker.
- Only manoeuvre the cherry picker on rough terrain or gradients when the platform is lowered.

Looking after your cherry picker

- Store it safely.
- Transport it safely.
- Keep locks and wheels in good condition.
- Keep metal struts and guard rails in good condition.
- Keep the batteries charged.

If you do not have the skills that you need, the International Powered Access Federation (IPAF) have a training course that may help you – it is for those who use a cherry picker or manage workers involved in this work. See www.ipaf.org for a list of training providers you could use.

Further information

Further information can be obtained from the HSE website (see back cover) or from the trade associations listed below.

You may find these publications useful

- *Safe use of ladders and stepladders: An employers' guide* INDG402 HSE Books 2005 (single copy free or priced packs of 5 ISBN 978 0 7176 6105 3)
www.hse.gov.uk/pubns/indg402.pdf
- *Tower scaffolds* Construction Information Sheet CIS10(rev4) HSE BOOKS 2005 www.hse.gov.uk/pubns/conindex.htm
- *Preventing falls from boom-type mobile elevating work platforms* Information Sheet MISC614 HSE Books 2003
www.hse.gov.uk/pubns/misc614.pdf

Ladders

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Podium steps and tower scaffolds

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Powered access (scissor lifts and cherry pickers)

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