

# ! Safe Maintenance

Saves Time >> Saves Money >> Saves Lives

## 5 Basic Rules

- Planning
- Making the work area safe
- Using the appropriate equipment
- Working as planned
- Final Check

## 2 Maintenance Tasks

- Corrective
- Preventive

## 3 Key Hazards

- Asbestos
- Work at Height
- Isolation

**Want to Know More?** Additional information is available from the HSENI website [www.hseni.gov.uk](http://www.hseni.gov.uk) or via the helpline number 0800 0320 121

It's not how high you climb... it's how far you

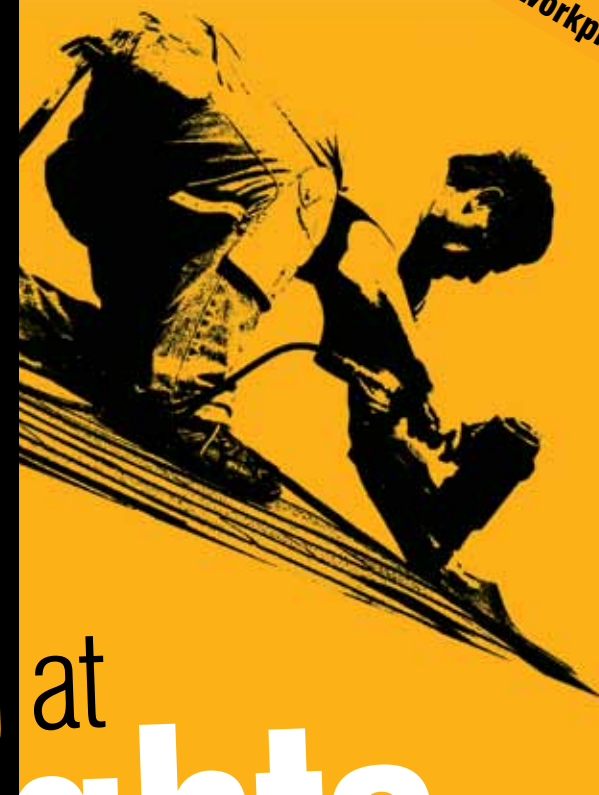
fall ↓

# Working at Heights

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**Dangers**  
lurk in every workplace





## What Is Work At Height?

Work at height means work in any place where, if precautions were not taken, a person could fall and injure themselves.

The fall could be from one level to another including from ground level into an opening in a floor or hole in the ground.

Many maintenance activities take place at height, such as replacement of high level lighting, cleaning of roofs and repair of roof-mounted equipment.



### Work at height includes:

**Using ladders or stepladders, working from platforms such as scaffolds, tower scaffolds, cherry pickers, scissor lifts and podium steps.**



## What Do You Need To Do?

### Plan Properly

- Is work at height a one off, or routine?
- Are fragile surfaces present?
- How are you planning to do the work safely?
- Will the weather conditions (e.g. wet, windy, icy) affect how or when you do the work?
- Will other people be affected (e.g. falling debris)?



**A man survived a fall through a fragile skylight on to a concrete floor below. The skylight had needed repair for a long time. Rather than waiting, the man chose to repair it on the windiest day of the year.**



**A long handled brush or roller for painting may be used to safely carry out a task from ground level.**

## Avoid 'Work at Height' Where Possible

- Is it possible to design out the need to work at height?
- Could new or replacement services, such as pipes or cables, be placed at ground level?
- Are fixtures and fittings, plant and services designed and installed to avoid work at height?
- Can alternative equipment or method of work be used?
- What new equipment is available to buy or hire?

## Select the Right Equipment, Inspect and Maintain It

If you can't avoid the need to work at height, you must try to make sure the risk of a fall is prevented by choosing the right equipment for the job. Make sure all equipment is regularly inspected and well maintained - damaged equipment must either be repaired or taken out of use. Don't make-do to save money or time.

- Use work equipment with a working platform and guard rails to prevent a fall.
- Minimise the distance of a fall and the consequences of a fall.
- The WAIT tool would help you to plan properly. Visit [www.hseni.gov.uk/wait](http://www.hseni.gov.uk/wait)



**For routine tasks, it is better to provide a permanent safe access method e.g. to maintain an air conditioning unit on a roof, provide permanent guard rails to the unit and around a safe permanent platform.**

Specialist solutions include airbags, safety nets, fall arrest equipment (including harnesses), rope access techniques. These methods minimise the risk of injury if someone falls, providing the equipment is set up correctly, users know how to look after it and they understand its limitations.

### Select the Right People. Train, Supervise and Monitor Them

Check Contractors are competent i.e. they are experienced in the type of work you need to have done and they are adequately trained - ask to see their training certificates.

Supervise the work:

- Is the work being done as you planned, and using the equipment you planned?
- Are the people working at height trained to use the work equipment properly, including erecting and dismantling it safely?
- Are unnecessary risks being taken?



**Ladders & Stepladders do not protect you against a fall.**

# 3

## Using Ladders

A third of all reported fall-from-height incidents involve ladders and stepladders – on average this accounts for 14 deaths and 1200 major injuries to workers each year (GB statistics). Many of these injuries are caused by inappropriate or incorrect use of the equipment.



**Ladders should only be used if the job is low risk AND it is short duration (i.e. a maximum of 30 minutes).**



## Checklist

Properly assess the job to determine what equipment should be used. Ladders are often used for tasks which could be done more safely and more quickly from equipment such as a cherry picker or a scaffold. Only use ladders for low risk, short duration tasks or where other working platforms cannot be accommodated on the site.	✓
Check the ladder for defects.	✓
Make sure the ladder is only used by people who know how to use it correctly.	✓
If a ladder is to be used make sure that it is secure and cannot slip. Tie it at the top, have someone hold it at the base, or use a suitable stability device to prevent it from slipping.	✓
If the ladder is more than 5m long, a person at the base is unlikely to be able to stop it from slipping.	✓
Place the ladder on a firm, stable surface which is of suitable strength to keep the rungs horizontal.	✓
Consider using attachments such as an adjustable ladder leveller, or a 'stand' spreader bar.	✓
Set the ladder at the correct angle. It should be angled out one measure for every four up (75 degrees).	✓
Use a ladder that is, or can be, extended to the correct length - don't work from the top three rungs of the ladder. Make sure the ladder protrudes sufficiently above the place of landing to which it provides access - three rungs or 1m should be enough.	✓



**A Maintenance fitter lost his footing on the second rung of a ladder. His feet slipped through the rungs and he was killed when his head hit the floor as he fell backwards.**

# 4

## Fragile Roofs

You need to be particularly aware of fragile materials when working at height as their presence in, or near the working area, increases the risk. A fragile surface is one which would be liable to break if a person walked on it or fell onto it. Common examples include fibre and asbestos cement roof sheets and many skylights, but could also include bridged materials in silos or corroded metal roofs.

### You should make sure you:

- Avoid the need to work on fragile roofs, e.g. repairing a skylight from underneath using a tower scaffold or from above using a cherry picker.
- Prevent a fall by using fixed walkways with guard rails to get across a fragile asbestos cement roof or use suitable working platforms with guard rails during work on or near a fragile surface.
- Minimise the consequences of a fall by using nets, airbags or fall arrest.



**Never walk along the line of the purlin bolts. It is like walking a tightrope and gives no protection at all. Can you inspect from below?**

