



Level 1 Award in Health and Safety in a Construction Environment



Fatalities, injuries and ill-health in construction

Fatalities

In 2012/2013 there were 39 fatalities in the UK construction industry.

Main causes

Falls from height (59%)

Being struck by a moving vehicle (10%)

Electricity (5%)

Collapse or overturning of equipment (5%)

Being struck by moving/falling objects (3%)



Fatalities, injuries and ill-health in construction

Major injuries

These include amputations, crush injuries causing damage to the brain or internal organs, and loss of consciousness.

Most common causes

Slips and trips (28%)

Falls from height (28%)

Being struck by moving/falling objects (15%)

Manual handling (8%)



Fatalities, injuries and ill-health in construction

Health risks

About 30,000 new cases of work-related ill-health are reported each year in the UK construction industry.

Most common ill-health problems

Back problems

Hearing loss

Hand-arm vibration

Dermatitis

Asthma



Working at height

Falls from height are the main cause of deaths in the UK construction industry and, in 2012/2013, accounted for 59% of all fatal accidents.

There is a simple **hierarchy of controls** for managing the risks:

firstly **avoid** work at height wherever possible,
then **prevent falls** from height and, failing that,
reduce the consequences of a fall, should one occur.



Working at height

Edge protection and scaffolds

Suitable edge protection should be provided wherever there is a risk of falling. This should consist of a top guard rail, a mid rail and toe boards.

Scaffold platforms should be fully boarded with no sections missing.

Working platforms should be kept tidy. Slip or trip hazards should be removed promptly. Workers should store their tools safely and prevent them from falling by using a tool belt.



Working at height

Mobile tower scaffolds

These are a lot safer than a ladder, but they are not without risk.

Hazards include:

Collapse of the tower, due to incorrect assembly

Fall of people

Falling objects

Vehicles colliding with the tower

Overturning of a tower that is unstable



Working at height

Rules for the safe use of mobile tower scaffolds

DO

Follow the manufacturer's instructions for assembly and use

Lock wheels / castors in place when the tower is in use

Ensure guard rails and toe boards are fitted to the working platform

DON'T

Exceed the recommended height or safe working load

Climb up the outside of the tower (ladder access should be internal)

Move the tower while people or materials are still on it



Working at height

Mobile elevating work platforms (MEWPs)

More commonly known as 'cherry pickers' or 'scissor lifts'.

MEWPs can provide excellent safe access for high level work.

Hazards and risks are similar to tower scaffolds, except there is also the risk of a crush injury from the moving parts of the machine.



Working at height

Rules for the safe use of MEWPs

DO

Follow the manufacturer's operating instructions

Inspect the equipment before use to ensure it is safe to use

Ensure guard rails and toe boards are fitted to the working platform

DON'T

Stand on the guard rails of the MEWP

Climb out of the MEWP while it is elevated

Exceed the safe working load



Working at height

Ladders

Where work at height is necessary, you need to decide whether a ladder is the most suitable option.

Ladders should only be used if it is not reasonably practicable to use a MEWP or tower scaffold, and then only for short duration, light work.



Working at height

Rules for the safe use of ladders

DO

Inspect the ladder before use

Position the ladder at the correct angle (75° or 1 in 4 ratio)

Secure the ladder by tying it at the top and bottom

DON'T

Allow more than one person on the ladder at any one time

Exceed the safe working load

Overreach from a ladder



Working at height

Roof work

A risk assessment should be carried out to identify hazards and ensure proper controls are in place.

A safe system of work should be developed and written down in the form of a method statement which is then communicated to all workers involved.

Suitable edge protection and a safe means of getting up to the roof and moving across the roof must be provided.



Working at height

Fragile surfaces

All roof surfaces should be treated as fragile unless a competent person has confirmed they are not.

Work on or near fragile roof surfaces is high risk and requires careful planning and proper control measures.

Fragile roof lights are a particular hazard. Protection must be provided in these areas, either by using barriers or covers to prevent falls.