

Work at Height / Falling Objects

Introduction

This information sheet will give employers practical advice on identifying and managing work at height and preventing falling objects.



Fig 1. Reaching high shelves

What is work at height?

Work at height is working in a place where a person could be injured by falling from it, even if it is at or below ground level.

Examples of work at height include:

- > Using a ladder, kick stool or stepladder in a stock room or store cupboard or to reach high shelves (see Figure 1)
- > Using trestles or ladders to paint or clean
- > Changing light bulbs in an office
- > Working on the back of a lorry to cover a load
- > Working close to an open excavation or cellar trap door
- > Rigging lighting for a concert or stage production
- > Working on a roof
- > Dressing retail displays on a mezzanine edge (see Figure 2)
- > Window cleaning
- > Working from a scaffold, cherry picker or mobile elevated work platform (see Figure 3)

What do I have to do as an employer?

- > Risk assess activities involving work at height and put control measures in place so that work at height is firstly avoided whenever possible. For example, can windows be cleaned using an extendable pole while staying on the ground instead of climbing a ladder?
- > Make sure work at height is properly planned, supervised and carried out
- > Minimise the risk of falling where work at height is unavoidable. For example, make sure there is a parapet or double handrail around a work area at height or use suitable work equipment
- > Use suitable work equipment to minimise the distance someone could fall and the consequences of the fall e.g. safety nets, bean bags



Fig 2. Retail displays on a mezzanine ledge

- > Make sure the place where work at height is done is safe and employees can get to it safely. Take account of weather conditions if the place is outdoors.
- > Instruct and train employees involved in work at height, for example in the safe use, storage and maintenance of personal protective equipment such as safety harnesses
- > Inspect equipment for work at height and keep records
- > Control the risks from fragile surfaces and falling objects



Fig 3. Scaffolding

What do employees have to do?

Employees also have responsibilities including:

- > Co-operating with their employer in relation to carrying out work at height safely
- > Not being under the influence of any intoxicant such as alcohol or drugs
- > Not behaving in a way that could endanger themselves or others
- > Reporting any defects in the place of work, system of work, equipment etc.
- > Using all machinery and equipment properly, including personal protective equipment



Fig 4 Equipment for reaching work areas at height

How do I carry out a risk assessment for work at height?

- > A risk assessment is a careful examination of what could cause harm to people. It allows you to put in place control measures for eliminating or minimising the risk of harm from working at height
- > Document your risk assessment and any safe systems of work you have for organising and carrying out work at height
- > Have procedures in place for selecting suitable work equipment for work at height

The extent of the control measures is determined by how serious the harm would be if no action was taken.

The employees involved in the work activity at height, and those who may be affected by the work, must be told about the hazards and the control measures to be used.

For some work at height activities it may be necessary to have emergency plans and procedures in place before work starts such as a rescue plan. For example if a fall arrest system is used a rescue plan must be in place in case an employee falls and becomes suspended.

How do I decide what work equipment is suitable for work at height?

The choice of equipment will depend on the risk assessment. There is a wide range of work equipment suitable for different environments and different activities. Whatever equipment is selected it must be fit for purpose, in good condition and suitable for the activity and the environment.

Where possible you must choose equipment that protects all the people working at height in preference to equipment that protects them one by one, for example handrails around the edge of the work area at height instead of safety harnesses with lanyards.

The choice of equipment has to be practical for the work environment including the ground conditions, and the type and duration of the task. Equipment chosen to access the work area at height will depend on the use (e.g. frequent use, bulky or heavy materials to be carried). Employees must not have to climb over guardrails or step over gaps to get to the work area.



Fig 5. Boom hoist

Work equipment used for lifting people must have a thorough examination, (e.g. see Figure 5) which should be carried out by a competent person at least every six months. Accessories for attaching to lifting equipment such as slings or chains must also be examined every six months. All lifting equipment must be inspected weekly by the owner or user and records of these and all examinations must be kept. Proper maintenance is also essential in ensuring that equipment is safe to use.

Ladders

Ladders are commonly used in most workplaces, but falls from ladders, and ladders collapsing or falling, account for many serious work related injuries each year. Ladders should only be used where the risk assessment shows other work equipment is not suitable and where the activity is light work, low risk and of short duration.

Do's

- ✓ Do a daily pre-use check
- ✓ Do secure the ladder
- ✓ Do set up on firm ground, never on a moveable surface e.g. pallets, blocks
- ✓ Do have a strong upper resting point
- ✓ Do have the ladder at a safe angle (1 out for every 4 units up)
- ✓ Do use for short duration work only
- ✓ Do use for light work only
- ✓ Do grip the stiles while climbing



Fig 6. Ladder use

Do not's

- ✘ Do not overreach: keep your belt buckle between the stiles and both feet on same rung
- ✘ Do not carry out work which causes sideways loadings
- ✘ Do not work on the top three rungs, or the top two steps for stepladders
- ✘ Do not straddle an A frame ladder
- ✘ Do not move a ladder while standing on the rungs
- ✘ Do not slide down the stiles
- ✘ Do not extend a ladder while standing on the rungs

Other equipment

Think about using work platforms with handrails on the steps and guardrails on the platform instead of ladders. Figure 7 gives an example of a work platform.

Guardrails may be needed to make a work platform or other place of work safe. They must be strong enough to prevent them breaking and secured to prevent them moving if someone falls against them. The rails should be spaced so that no one can fall over, under or between them.

Equipment designed to catch a falling person such as safety nets or bean bags, must be erected by a competent person in accordance with the manufacturer's instructions. A rescue plan will be needed if this type of equipment is used.

Personal fall protection equipment such as lanyards, safety harnesses or work positioning equipment should only be used if the risk assessment showed that the use of other, safer equipment is not practical. They must be strong enough, correctly adjusted and fitted, and suitably anchored. A rescue plan will be needed if this type of equipment is used. This equipment must be visually checked before each use and must be inspected by a competent person at least every six months.



Fig 7. Ladder use

Fragile surfaces

Employers must identify any potential fragile surfaces in or on their premises.

A fragile surface is a surface where there is a risk of a person or object falling through it e.g. fragile roofs, ceilings, skylights. Employers must prevent employees passing across or near, or working on or near a fragile surface where it is practical to do so e.g. working from a suitable work platform underneath the fragile surface.

If passing near or on, or working near or on a fragile surface is impossible to avoid then measures must be put in place to prevent falls from height or minimise the distance of a fall using the risk assessment as before. If regular or occasional access is required to or near a fragile surface then permanent guardrails should be put in place.



Fig 8. Ladder use

Falling objects

Employers must take steps to prevent the fall of any material or object to prevent injury to employees or others.

- > Keep workplaces at height clear of loose materials and store materials well back from edges
- > Materials stored at height should be secured to prevent them being dislodged by the wind or knocked over
- > Store only small amounts of materials at height
- > Prevent objects rolling or being kicked off an edge by using toeboards (boards put lengthways at the edge of the storage area) or solid barriers
- > When using racking for storage, it must be erected as per the manufacturer's instructions, including correctly anchoring it and protecting the uprights (legs) from impact. Heavier items should be stored at lower levels. Racking and shelves must be checked regularly for damage. If damaged, they must not be used until replaced or repaired. Racks and shelves must not be overloaded and the maximum safe load must be prominently marked on all racking