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## Health & Safety and Employment Law



# Ladders and Stepladders

Health and safety training for  
employees





## Working at Height

- ④ 4 Fatal Accidents on average, every year (from ladders)
- ④ 1,200 Major Accidents on average, every year (from ladders)
- ④ The single biggest cause of workplace deaths
- ④ One of the biggest causes of major accidents
- ④ 2/3 of all major injuries caused by 'low level falls' (from ladders)
- ④ You do not need to fall from a great height to be badly injured. More people get injuries such as broken arms or legs falling from a ladder
- ④ A person was killed when they lost their footing on the second rung of a ladder and fell backwards, hitting their head on the floor.



## The Work at Height Regulations

The Work at Height Regulations apply to **all** activities where there is a risk of a fall which is likely to cause personal injury. The Regulations place duties on employers, employees, the self-employed and any person who **controls** the work of others.





## The Work at Height Regulations

If you are an employee or working under someone else's control, Regulation 14 states you must:

- ② Report any safety hazard to your supervisor
- ② Use the equipment supplied (including safety devices) properly following any training and instructions that you have been given. If you think it is unsafe to use a ladder, seek further instructions from your supervisor before you begin / continue.





## The Work at Height Regulations

Do the Work at Height Regulations ban the use of Ladders?

The short answer is **No!**

However the Regulations state, that ladders should only be considered where a risk assessment has shown that:-

- ② The use of other more suitable work equipment is not justified because of the low risk
- ② The work will be short in duration. (The Health and Safety Executive have indicated that "short duration of use" is anything up to 30 minutes)
- ② There are existing features on site which cannot be altered.





## Ladders and Stepladders

- ② Ladders provide a simple and easy access solution for a number of work activities that occur at height
- ② Always plan work that requires the use of ladders as an access tool or a working platform
- ② Ladders are often used when it would be safer to use other equipment, e.g. mobile tower scaffolds
- ② Ladders may be used for short duration work but this can still be hazardous as many ladder accidents occur during work lasting 30 minutes or less.







## Ladders and Stepladders

Ladders and stepladders should only be used: -

- ② For access only
- ② For light short duration work only (30 minutes)
- ② By trained staff
- ② For work when alternative methods are not suitable.





## Ladders and Stepladders

The choice of ladders will be determined by: -

- ② The task
- ② The site conditions and location
- ② The frequency of access required
- ② The risks associated with the task(s)
- ② The number of people required to use the access equipment.





## Ladders and Stepladders

It is recommended that you only use one of the following:

- ② Class 1 (Industrial) Maximum static load:175kg (27.5 stone)
- ② BS EN/131 (or EN/131) Maximum static load:150kg (23.5 stone)
- ② Remember to consider the persons weight and the weight of equipment being carried



Ladders should be marked with the class number, safe working load weight and instructions on how to use the ladder safely. These instructions should be followed at all times.



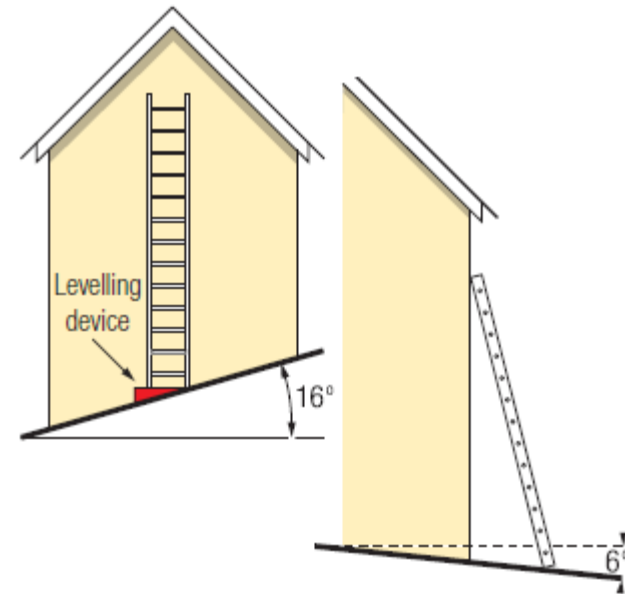
## Incorrect Work at Height





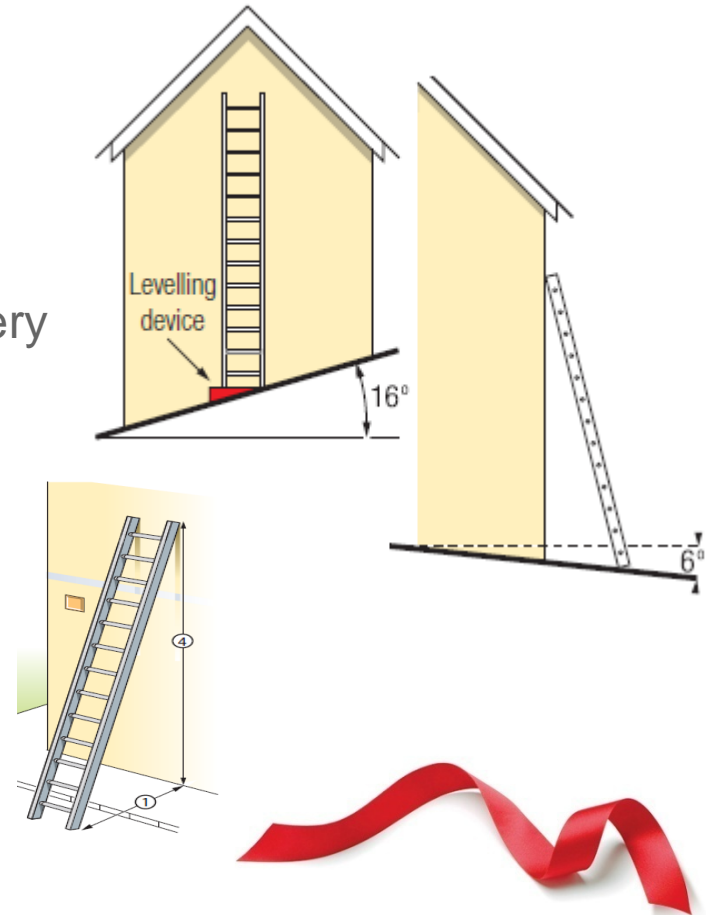
## Setting up a Leaning Ladder

- ② Undertake a daily pre-use check on the ladder (including the ladder feet)
- ② Secure the ladder e.g. tie it to a suitable point or use a suitable device
- ② Ensure the ground is firm and level with a:-
  - Maximum safe ground side slope of  $16^{\circ}$  (if not, level the rungs with a purpose made device.)
  - Maximum safe ground back slope is  $6^{\circ}$



## Setting up a Leaning Ladder

- ② The rungs should always look horizontal
- ② Ensure the ladder is resting on a strong point at the top (not plastic guttering)
- ② Ensure the floor surface is clean and not slippery
- ② Where ladders can be put up at the correct angle of  $75^{\circ}$  (1 unit out for every 4 units up)



## Setting up a Leaning Ladder

- ② Undertake a daily pre-use check, including the feet
- ② Ensure that there is enough space to open the steps fully
- ② Use and fit locking devices
- ② Ensure that the ground is firm and level
- ② Ensure that floors are clean and not slippery





## Safe use of Ladders or Stepladder

Do not:

- Ⓢ Overload them - the person using them and anything they are taking up the ladder/s should not exceed the safe working load stated on the ladder/s
- Ⓢ Over reach - always maintain three points of contact when using ladders or stepladders (this can mean two feet and one hand, two feet and the body supported by the ladder, or two feet and the body supported by the stepladder)
- Ⓢ Work sideways; stepladders should always be used with the steps facing the work to reduce the risk of it tipping over.

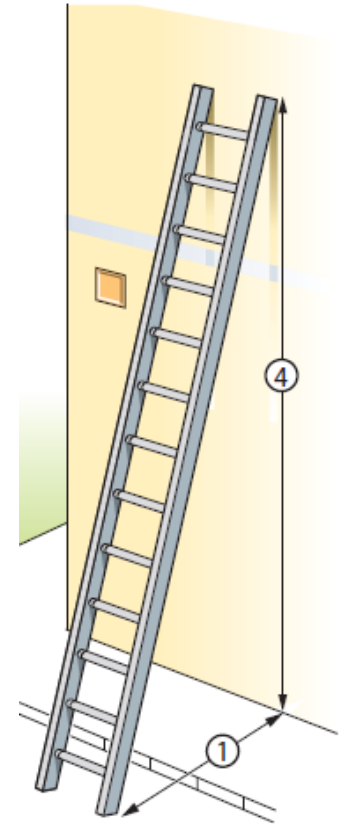






## Only use Ladders or Stepladders

- ② Where they will not be struck by vehicles
- ② Where they will not be pushed by doors or windows being opened
- ② Where pedestrians are prevented from walking under or near them.





## Safe use of Ladder or Stepladder

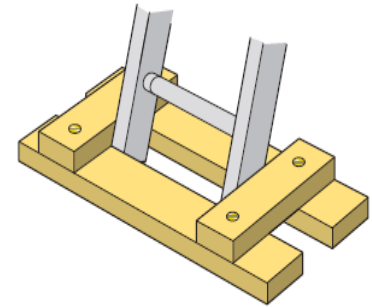
- ② Do not work near any overhead power line
- ② Do not use them in strong or gusting winds
- ② Ensure that the rungs are level and are non slip
- ② Wear robust sensible footwear
- ② Prevent other workers or the public from using them
- ② Do not use them if you are taking medication or suffering any illness that may affect your safety whilst working at height.








## Safe use of Ladders and Stepladders

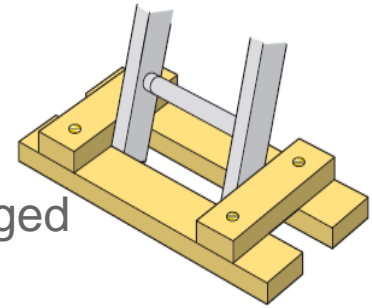
- ❗ **Do not** move them while standing on the rungs/steps
- ❗ **Do not** support them by the rungs or steps at the base, always support them using the stiles
- ❗ **Do not** slide down the stiles
- ❗ **Do not** stand them on moveable objects, such as pallets, bricks, lift trucks etc.





## Safe use of Ladders and Stepladders

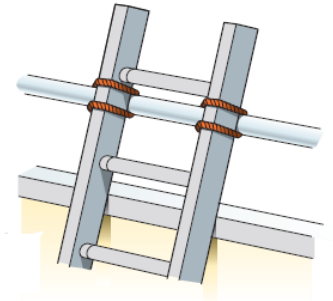
-  **Do not** extend a ladder whilst standing on the rungs
-  **Do not** use them if any of the rungs or styles are damaged
-  **Do not** paint or use any wooden ladders which have been painted as the paint may hide cracks / damage.





## Safe use of Ladders

- ❶ **Do not** use the top three rungs
- ❷ Ladders used for access should project at least 1m above the landing point and should be tied
- ❸ **Only** industrial or commercial type ladders should be used
- ❹ Footing of a ladder is the last resort and should be avoided
- ❺ Where reasonably practicable – either tie the ladder or use a suitable ladder stability device
- ❻ Always ensure that the ladder is long enough for the job.





## Safe use of Ladders

Prior to using any ladders it is imperative that you:

- ① Check for missing, damaged or worn anti-slip feet on metal and fibreglass ladders as these are essential for good grip
- ① Check for items stuck in the feet of the ladders such as swarf, stones, grease or dirt, preventing the feet from making direct contact with the ground
- ① Check for mud, grease or oil either on the steps or the stiles (the sides).





## Safe use of Ladders

- ② Check for cracks in the rungs or stiles of the stepladder and missing, broken or weakened steps
- ② Check for damaged or weakened rungs and missing or damaged tie rods
- ② Check metal stepladders for cracked or damaged welds and missing or loose screws or rivets.

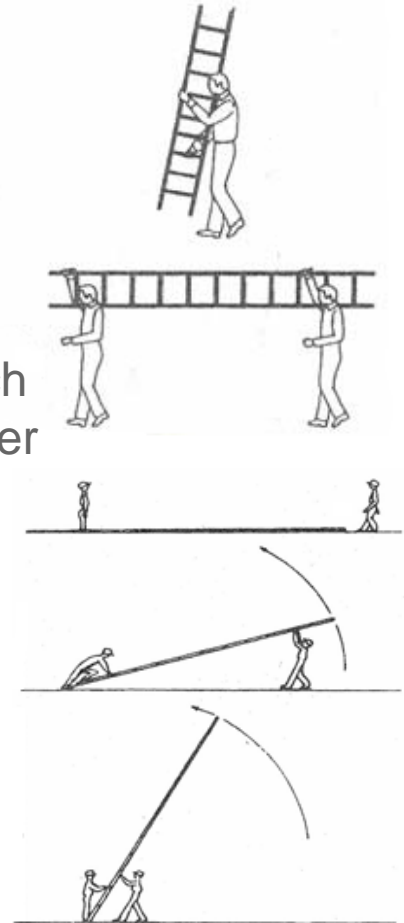




## Safe use of Ladders

Always carry ladders in a safe manner. Long ladders should be carried by two persons.

- ② To erect a ladder, place its foot against a fixed object such as a wall and raise the other end by progressing hand over hand, from rung to rung until upright
- ② Make sure the ladder is erected the right way up.
- ② If it is wooden ensure the tie rods are underneath the rungs, if it is aluminium check the rung profile is the right way round.







## Safe use of Stepladders

- ② **Do not** use the top two steps unless it has a suitable handrail
- ② **Do not** use the top three steps of a swing-back or double sided stepladder, where the top step forms the very top of the stepladder
- ② **Only** use Industrial or commercial type stepladders
- ② Always ensure that the stepladder is long enough for the job.





## Work at height – Employees Responsibilities

- ② Report any unsafe work activity or equipment defect relating to work at height to your employer / supervisor
- ② The employee **must** use all work equipment and safety devices provided by their employer / supervisor
- ② The employee **must** follow any training that has been given in respect of working at height
- ② The employee **must** obey any instructions / safe system of work, risk assessment, method statement and manufacturers instructions.





## Basic Checklist for Users

- ② Is the ladder or stepladder the right equipment for the work?  
  
If so, is the equipment in good condition and free from slippery substances?
- ② Can the leaning ladder be secured at the top? If not,
  - (a) Can it be secured at the bottom?
  - (b) If (a) cannot be achieved, will a second person stationed at the base provide sufficient safety?
- ② Is the top rung level with a working platform and is there an adequate hand hold at the place of landing?
- ② Is the ladder positioned at the angle correct?





## Basic Checklist for Users

- ② Is the support for the ladder adequate at both the upper point of rest and the foot?
- ② Is the ladder properly positioned?
- ② If it is necessary to carry tools and equipment and has provision been made for carrying them so that the user can keep their hands free for climbing?
- ② If an extension ladder is used is there sufficient overlap between sections?





## Basic Checklist for Users

- ② On stepladders are the stays, chains or cords in good condition?
- ② Can the stepladder be placed sufficiently near the work and on a firm level surface?
- ② Is the ladder clear of overhead electric cables?





## Remember

Always consider alternative access equipment



