

CODE OF PRACTICE

Progressing safety and best practice step by step



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FOREWORD FROM HSE

There has been a steady decline in the number of falls from height at work. However, they remain the most common kind of workplace fatality. More than a quarter of all falls from height are from ladders and, on average, 12 fatalities a year are as a result of a fall from a ladder. It's essential that people use ladders safely and properly and make sure they are right for the planned work.

I am pleased to offer HSE's support for the Ladder Association's guidance in this area. This voluntary code of practice sets out good practice for individuals and organisations using ladders and will help to ensure that health and safety risks in this area are minimised or avoided.



Peter Brown

Head of Work, Environment, Radiation and Gas Division, HSE

INTRODUCTION

The Ladder Association (formerly the BLMA) was formed in 1947 as an association of manufacturers of ladders and stepladders. Its membership now encompasses the entire supply chain of manufacturers, suppliers, training organisations and associates. The Ladder Association logo assures users and specifiers alike that the product has been produced to the highest standards of design and manufacture.

The Ladder Association works closely with the Health and Safety Executive (HSE), Department of Business, Enterprise and Regulatory Reform (BERR) and the British Standards Institute (BSI), to ensure that the voice of both the consumer and the industry is heard during the formulation and revision of legislation relating to access equipment throughout Europe. The Ladder Association is also a founder member of the Access Industry Forum.

The Ladder Association Code of Practice for leaning ladders and stepladders is intended to give specifiers and users advice on the safe and effective use of portable ladders and steps. The Code of Practice also covers the implementation of the European Temporary Work at Height Directive.

This document should be used in conjunction with the manufacturer's instructions provided with the product and current legislation.

Whilst this document may be used as a stand alone reference document for users, employers, the self employed and health & safety professionals, it is not intended to replace training as required by current Regulations, but is a supplementary resource which should serve as a useful reminder for delegates who have attended Ladder Association training courses. The Ladder Association has nationally accredited training schemes for users, supervisors and managers which can be obtained only through Ladder Association approved training centres - Click on www.ladderassociation.org.uk for a geographical listing of local training centres.

THE HEALTH & SAFETY AT WORK (etc.) ACT 1974, SECTION 2

states, "It shall be the duty of every employer to ensure, so far as reasonably practicable, the health, safety and welfare at work of all his employees." The Act goes on to state that the employer's duty will be achieved through:

- Providing and maintaining safe plant and equipment.
- Arranging for the plant or equipment to be handled, stored and transported without risking injury or the health of employees.
- Provision of information, instruction and training so as to handle and use the equipment safely.
- Maintaining a safe working environment where the equipment will be used.
- Provision of facilities and arrangements for the employee's welfare at work.

EMPLOYER'S DUTIES

- As an employer (whether as an individual, partnership or company) you have a duty to ensure that items of work equipment provided for your employees or the self-employed working for you comply with the relevant legislation.
- Employers should conduct a risk assessment for each project to identify and then specify the products or equipment most suited to the application.
- Every employer shall ensure that work equipment is so constructed so as to be suitable for which it is to be used.
- Every employer shall ensure that work equipment is used only for operations for which, and under conditions for which, it is suitable.
- Every employer shall ensure that work equipment is maintained in an efficient state, in efficient working order and in good repair.

DUTIES OF THE SELF-EMPLOYED

- If you are self-employed you have a duty to ensure that work equipment you provide for work or use at work complies with the relevant legislation.
- A risk assessment should be conducted, where appropriate.
- Equipment should be inspected to ensure that it is fit for purpose. If in doubt, do not use the equipment and refer to the manufacturer or distributor for information & advice.

DUTIES OF “THOSE IN CONTROL OF WORK EQUIPMENT”

- If you provide work equipment for use at work where you do not control its use or the premises where it is to be used, you still have a duty to ensure that this equipment complies with the relevant legislation.
- People in control of non-domestic premises, who provide work equipment that is used by other people at work, should also comply with the relevant legislation.

EMPLOYEES PROVIDING THEIR OWN TOOLS FOR USE AT WORK

- Where employers allow employees to provide their own equipment they still have responsibility under relevant legislation.

EMPLOYEES’ DUTIES

- If you are an employee you have specific duties under current legislation:

For example:

- You must report any activity or defect relating to work at height which you know is likely to endanger your safety or the safety of another person.
- You must use the work at height equipment which has been provided for you in accordance with any training you have received in its safe use.
- You must use the work at height equipment provided to you by your employer, or the person who controls your work in accordance with the instructions they provide in compliance with their statutory obligations.

CONSTRUCTION INDUSTRY

There are particular risks in the construction industry, where items of work equipment are often used by a number of different contractors.

- Contractors, including the principal contractor, have a duty to ensure that any work equipment used by their employees (or themselves in the case of self-employed contractors) conforms to and is used in accordance with the relevant legislation.
- The equipment must meet the specific needs of the risk assessment conducted for each individual application.
- Those hiring equipment for others to use will often play the leading role in inspecting and maintaining the equipment since they determine the maintenance schedules and availability.
- At the same time, the users may be more directly concerned with training their employees to use it safely since the conduct of their staff is their concern and not that of the hirer.
- The actions of others (such as hire organisations) does not reduce the employer's or self-employed person's duty to ensure their own compliance with the relevant legislation. Effective co-ordination between the parties is essential in order to satisfy their own legal duties.
- The Construction (Design & Management) Regulations 2007 (CDM) require the the effective co-ordination of health and safety matters on site. Co-operation and exchanging information is vital when equipment is shared. All users need to know:
- Who is responsible for the co-ordination of equipment?
- Who should be informed regarding changes in the condition of the equipment?
- Limitations on the use of equipment.
- How the equipment can be used safely.

THE LADDER ASSOCIATION TRAINING COURSE

provides employers and users with the latest best practice for safe use of ladder products. This course has been written with guidance from the UK's leading authorities on safety and ladder manufacture. For an up to date list of authorised Ladder Association Training Centres go to www.ladderassociation.org.uk

Each person in the chain leading to and including the final user(s) has a duty of care to themselves and others by familiarising themselves with best practice in the use of any access equipment.

Delegates who successfully complete the theoretical and practical assessments of Ladder Association training courses are awarded a Certificate of Competence and **LadderCard** to demonstrate their proficiency.



ESSENTIAL REFERENCE DOCUMENTS

The HSE website www.hse.gov.uk provides up to date information regarding compliance with various relevant legislation.

- Work at Height Regulations (WAHR) 2005
- Provision and Use of Work Equipment Regulations (PUWER) 1998
- Construction (Design & Management) Regulations 2007 (CDM)
- Management of Health and Safety at Work Regulations 1999 (MHSWR)

OTHER REFERENCE DOCUMENTS

- Control of Substances Hazardous to Health (COSHH) (2002)
- Manual Handling Operations Regulations (1992) (as amended 2002)
- Working Alone in Safety (INDG73)

Other regulations may also apply depending on the location and type of work being carried out.

In addition you should also ensure you have the equipment manufacturer's user guides or instruction manuals.

SECTION 3

Work at Height Regulations (WAHR)

DEFINITION OF WORK AT HEIGHT

Work at height means work in any place from which a person could fall a distance liable to cause personal injury, if measures required by these Regulations were not taken. Any reference to carrying out work at height includes obtaining access to or egress from such a place while at work (except by a staircase in a permanent workplace).

WAHR

It is a legal requirement to conduct all work at height in accordance with the WAHR. Failure to comply with the regulations may lead to criminal prosecution.

This section provides a summary of the WAHR. It explains how employers, employees and other duty holders should manage work at height and how the work equipment should be selected.

The WAHR combine all previous requirements on work at height into one goalbased set of regulations. It concentrates on risk management through proper risk assessment, applicable to the wide range of work activities carried out at height.

UNDER THE WORK AT HEIGHT REGULATIONS . . .

Ladders Can Be Used For Access And Egress

Ladders Can Be Used To Work From

Ladders Are Legal where the task (or series of tasks) is of low risk and short duration

The selection and use of a ladder will depend on a number of factors which are explained in more detail in Section 4.

RISK MANAGEMENT

Competence & Training

All employers, employees and the self-employed shall ensure that no person engages in any activity, including the organisation, planning and supervision, in relation to work at height or work equipment unless he or she is competent to do so or, if being trained, is being supervised by a competent person.

Competence can be demonstrated through a variety of means including practical and theoretical knowledge, training and experience.

ORGANISATION & PLANNING

The WAHR require you to:

(a) Assess the risk to identify the safest work method:

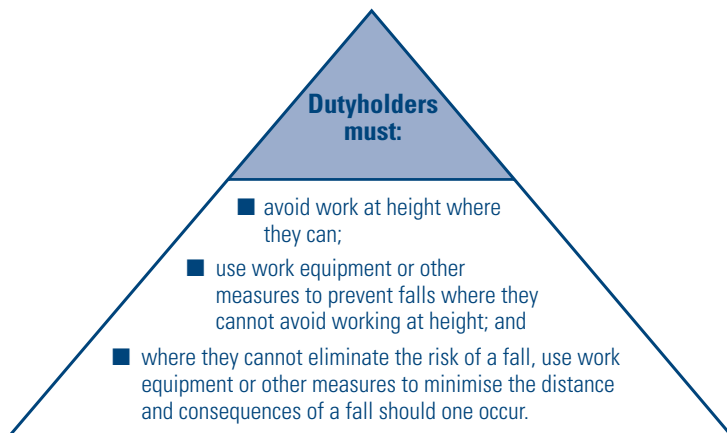
The following list provides some factors for consideration:

- Site information
- Duration of work and the requirement for long term access
- Nature of work (light or heavy)
- The working position
- The danger of overreaching
- Maximum safe working loads
- The need to lift or carry heavy loads
- The need to carry repeat loads
- The need to manoeuvre long or awkward loads
- Strenuous work
- The people involved in conducting the work
- The work equipment and/or other structures to be used

(b) Follow the hierarchy for safe work at height:

1. **AVOID** the risk by not working at height - if reasonably practicable.
2. **PREVENT** falls of people or objects by selection of the right work equipment and completing as much work as possible from an existing work place.
3. **MITIGATE** the consequences by minimising the maximum distance of a fall.
4. **COLLECTIVE** protection through the use of guard-rails, nets, airbags.
5. **PERSONAL** protection through the use of safety harnesses or similar equipment.

WORK AT HEIGHT REGULATIONS - HIERARCHY OF MEASURES



(c) Plan and Organise your work:

Take into account inclement weather conditions.
Plan for potential emergencies

(d) Make sure all those working involved with work at height are competent:

As given in the definition above.

(e) Make use of appropriate work equipment:

This important issue is covered in this Section under 'Selection of Work Equipment'

(f) Manage risks from working on or around fragile work surfaces & from falling objects:

- The surface must be strong enough to bear the combined load of all persons & equipment (including carried loads).
- Certain areas of a surface may be fragile and difficult to see.
- Consideration must be given to dynamic forces - such as someone falling onto a surface.
- Risk of falling materials can be minimised by keeping work surfaces clear of loose materials, installing toe boards or solid barriers and ensuring personal items, such as mobile phones are properly secured.

(g) Inspect and maintain all work equipment and conduct inspections of the work areas:

Ladder inspection, storage and maintenance is covered under Section 3 of this guide.

RISK ASSESSMENT

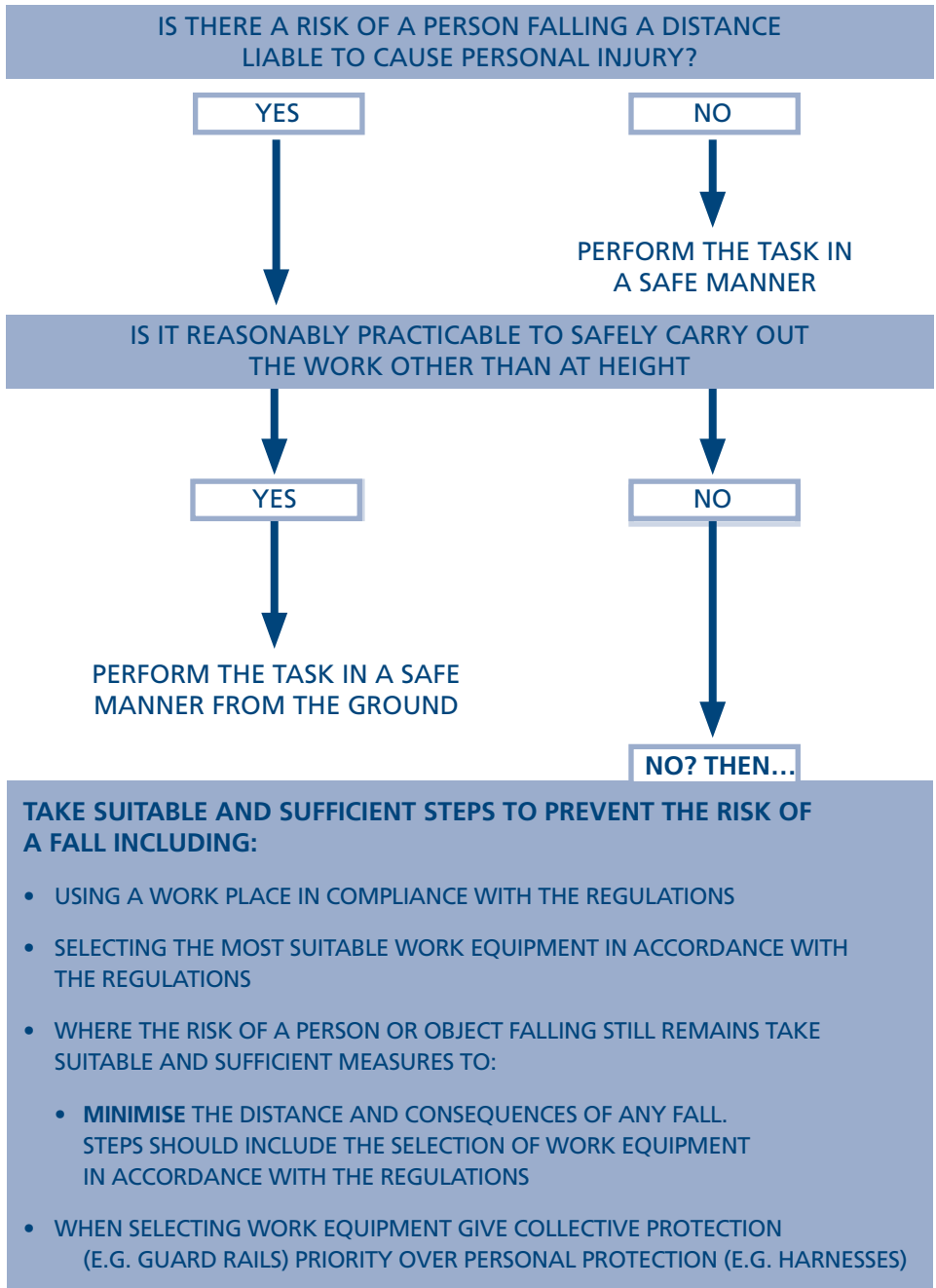
Before working at height a competent person must complete a detailed risk assessment. The LADDER ASSOCIATION RISK GUIDES for users of leaning ladders and step ladders can be found on page 38.

The aim is to:

1. Establish that you have **NO** alternative other than to work at height
2. Identify the most suitable work equipment to allow safe and practicable work method
3. Identify actions to be taken to prevent falls and to minimise the consequences.

THE RISK ASSESSMENT FLOW CHART

The following flow chart summarises risk assessment.



RISK ASSESSMENT TEMPLATE

The issues given in the following table should be considered when carrying out a risk assessment. The list is not exhaustive.

Work Stage	Type of risks that could occur at this stage
Planning the Task To ensure any task, no matter how small, will be carried out with reasonable levels of safety and efficiency requires some level of thought and planning. For example, prior to commencing work you should decide or consider some or all of the following: ● What task is to be carried out and how long will the task take? ● What goals are to be achieved by performing the task? ● Are the abilities, experiences and the number of the potential users adequate? ● Does this experience and ability match the technical requirements for using the equipment properly? ● What are the implications of performing the task on both the users and other persons who may be in the area?	● Lack of awareness of the limitations of the access equipment by managers and planners. Particularly in relation to its suitability for utilisation by the potential users. ● The creation of unsafe and/or inefficient access or working positions through the use of unsuitable equipment. ● The increased frequency of using the access equipment. Longer periods of use and greater numbers of persons using the equipment increases the risks to safety and to the efficiency of performing the task. ● Using or allowing access equipment to remain in areas used by others or for the passage of vehicles.
Setting up the Job Once work starts on site, there will be an interaction between the requirements of the access equipment and the site conditions. The work content and the actual nature of the labour force may vary. Therefore, although the work should be set up in accordance with the pre-produced plan, this may require modification. Any such modifications however, must be undertaken by a suitably competent person, to avoid serious risk to safety and the effectiveness of the work. In doing this, you may need to consider the following factors: ● The access equipment should be procured from a suitable source and suitable for the task. ● It should be erected properly and arranged to avoid interference with others in the vicinity as much as possible. ● The consequences of the position and location of the equipment, the usage period, the timing of the work and the usage frequency.	● Failing to comply with the law (and potential prosecution) will only result in delays to the work schedule and damage to a company's reputation. ● Using access equipment that is poorly maintained and in an unsuitable condition. ● Difficulties in getting the equipment to site area. ● The access equipment being in an unsuitable position or at the incorrect height for the task. ● Injuries arising from the manhandling of the access equipment, particularly in confined spaces. ● Damage caused to the access equipment and/or to the surrounding structures during its handling and transportation. ● Lack of space for the correct deployment of the access equipment and/or lack of suitable foundations to place it upon. ● Injury caused to other persons by the access equipment. ● Problems of unauthorised use of the access equipment by workers, thieves, children or other trespassers. ● Allowing the access equipment to be placed so as to give unauthorised access into areas that are hazardous, such as places where unguarded machinery is in operation or where there are bare electrical conductors.

Work Stage	Type of risks that could occur at this stage
Carrying out the Task The safe and successful outcome of performing the task, no matter how large or small, is influenced by a number of factors: ● Appropriate managerial control. ● The proper use of the access equipment. ● The correct erection and dismantling of the access equipment. ● The minimisation of the frequency that the access equipment must be climbed or moved. ● Using suitable competent persons for the work. ● Taking adequate precautions when using loose tools and electric power tools. ● The correct use of adequate Personal Protective Equipment.	● Lack of suitable and full instructions on how to proceed with the work. ● Lack of appropriate training or experience that ensures that the user's skills and ability is adequate to the usage requirements of the access equipment. ● Carrying or imposing unsuitable or heavy loads on the access equipment. ● Access equipment has become unstable through poor erection, impact damage or other factors. ● Injuries and persons falling from access equipment due performing inappropriate activities or lack of suitable protection. ● Injuries caused by tools by using them in an inappropriate manner or location when working from the access equipment. ● Injuries caused by inappropriate erection or dismantling of the access equipment. ● Injuries caused to others while work is being done from the access equipment, such as falling tools and other items. ● Consequences of tiredness or ill health. ● Accidents due to the effects of severe weather conditions. ● Accidents due to faults not discovered during regular inspection raising concerns about the frequency of inspection in relation to frequency of use.
Caring for & Maintaining Equipment The ongoing reliability of access equipment depends on: ● The Inspection Procedure ● The correct care of the access equipment ● Adequate maintenance of the access equipment ● Correct identification of parts.	● Inadequate inspection and ineffective repair of latent defects. ● Unsuitable storage of access equipment. ● Ineffective control of maintenance work ● Unidentified wear leading to the weakening of critical components and parts. ● Use of items of equipment that are incompatible with each other.
Review and Evaluation Any successful operation requires a full review and evaluation of the plan at regular intervals.	Prevention is better than cure.

WORK EQUIPMENT RISKS

Having established the necessity to work at height, the next step in the risk assessment process is to consider specific risks associated with the type of equipment that is to be used. If you have selected leaning ladders or step ladders as suitable equipment, you must then evaluate the specific risks associated with their use. This principle applies to all work equipment such as scissor lifts, towers and scaffolds.

SELECTION OF WORK EQUIPMENT

General Principles

- Account for the need for easy and timely evacuation and rescue in an emergency.
- Account for equipment that gives collective protection priority over personal protection.
- Take account of any distance that may need to be negotiated for access or egress.
- Identify and minimise the distance and consequences of any fall.
- Consider the duration and frequency of use.
- Allow for any additional risk posed by the installation, use and removal of the proposed work equipment. Different types of work equipment have different risks associated with their use. For example, towers may have higher levels of risk associated with their erection and use. However, the long duration required to perform the task may justify their use.
- Ensure the equipment is appropriate to the nature of work, the foreseeable loadings and has suitable dimensions to allow passage without risk.

RECORDS OF INSPECTION

WAHR stipulate that regular inspections are conducted by a competent person for all work at height equipment. The records of formal inspections are legally required to be made available to a health and safety inspector. Storage of the records must be made in a way which is accessible but protected from interfering or being tampered with by others.

Records may be kept electronically if they are secure but in a format that can be printed. Note that some equipment comes under separate and specific regulations. All inspections must conform to more comprehensive examinations pertaining to these regulations.

Particulars to be included in an Inspection Report:

- The name and address of the person for whom the inspection was carried out.
- The location of the work equipment inspected.
- The description of the work equipment inspected.
- Details of work being undertaken and the work equipment used to perform the task.

- The date and time of the inspection.
- Details of any matter identified that could give rise to a risk to the health or safety of any person.
- Details of any action taken as a result of any matter identified above.
- Details of any further action considered necessary.
- The name and position of the person raising the report.

The Ladder Association recommends the use of Ladder Inspection Labels as a useful visual indicator of the inspection status of ladders or stepladders. In addition, the Ladder Association has developed a specific module in its training programme to equip those who have special responsibility for Ladder Inspection.

RECORD OF INSPECTION *the* **LADDER**
ASSOCIATION

ID Number: _____
 Inspected By: _____
 Date: _____ Expiry Date: _____

IMPORTANT - Use of any work at height equipment should only be undertaken by users who are trained and competent. Contact The Ladder Association for details of training courses and full approved training centres.
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The Ladder Association Secretariat, PO Box 26870, Glasgow, G3 9DS
 Telephone: 0141 206 1104 e-mail: info@ladderassociation.org.uk

LADDER STANDARDS & CLASSIFICATION

Recommendations for the design and performance of ladders are contained in the following British and European Standards:

- | | |
|------------------------|---|
| BS EN 131: 2007 | "Ladders" Part 1. Specification for terms, types, functional sizes. |
| BS EN 131: 1993 | "Ladders" Part 2. Specification for requirements, testing, marking. |
| BS 2037: 1994 | Specification for "Portable aluminium ladders, steps, trestles and lightweight stagings". |
| BS 1129: 1990 | Specification for "Portable timber ladders, steps, trestles and lightweight stagings". |

Equipment displaying the Ladder Association logo will always represent the ultimate in quality design, manufacture and value and may be marked with the British Standard Kitemark, or other equivalent testing authorities. Ladders are classified according to the general conditions and possible frequency of use:

- **Industrial Ladders:** For heavy duty where relatively high frequency and onerous conditions of use, carriage and storage occur. **BS2037 Class 1** and **BS1129 Class 1** ladders are suitable for industrial applications.
- **Light Trades Ladders:** For medium duty where relatively low frequency and reasonably good conditions of use, carriage and storage occur. **BS EN131** ladders are suitable for light trades applications. In addition, the higher rated **BS2037 Class 1** and **BS1129 Class 1** ladders can also be used for light trades applications.
- **Domestic Ladders:** For light duty where frequency of use is low and good carriage and storage conditions occur. **BS2037 Class 3** and **BS1129 Class 3** ladders are suitable for domestic applications. **BS2037 Class 3** and **BS1129 class 3** ladders **ARE NOT SUITABLE FOR ANY LIGHT TRADES, TRADE OR INDUSTRIAL APPLICATIONS.**

INTRODUCTION TO SAFE USE OF LADDERS AND STEPS

Having concluded that work at height is unavoidable, and that a ladder or step is the appropriate equipment for the task, the next step in the risk assessment process is to ensure that:

- You have taken all the necessary steps to eliminate or minimise any risks.
- The work is correctly organised and planned.
- You have selected the correct equipment i.e. the correct class, material and size of the ladder or step.

As part of your risk assessment, where the intention is to use ladders or steps, you will need to consider the following, as a minimum:

SITE

- Is the ground or resting surface suitably dry, flat, level, firm and strong?
 - If not, is it possible to modify the surface to make it suitable?Additional consideration for ground and resting surface – Is the surface slippery? (Bear in mind that some shiny surfaces can be slippery without being contaminated)
- You have taken all the necessary steps to eliminate or minimise any risks.
- Can the ladder or step be positioned correctly?
- Is it possible to position a ladder or step close enough to the task to avoid working sideways and prevent over-reaching?
- Is it possible to place a ladder at the correct angle?
- Is it possible to extend and raise the ladder safely?
- Can the ladder be tied in or otherwise stabilised?
 - What is the best way to stabilise a ladder?
- What measures are needed to protect other people?
 - Do you need to cordon off the work area or take other protective measures?
- Is the weather going to prevent you from working safely?
 - When should you delay the task?

TASK

- What is the duration of the task?
 - What is the maximum time you can work on a ladder or step?
- Can the ladder or step be climbed safely?
 - How should you climb the ladder or step?
- What loads will the task create and how could they affect the stability of the ladder or step?
 - Is the work going to cause the ladder or step to move and become unstable?
- Can you maintain a firm grip on the ladder or step?

EQUIPMENT

- What class and type of ladder or step do you propose to use?
 - Is it the right class and type for the task?
- What size and material of ladder or step do you propose to use?
 - Is it the right size and constructed from the right material for the task?

PEOPLE

- Are the person(s) carrying out the work competent in the use of ladders or steps, and physically suited to the task?
 - Who has the required competency levels?
- How many people are needed for the task?
 - Do you need help to position and secure the ladder or step?
- What PPE is required?
 - Apart from the correct footwear and clothing, what other PPE is necessary?

THE IMPORTANCE OF BEING A STEP AHEAD

Planning ahead for your work is a vital part of working safely. To make this easier to remember, the factors to consider are contained in the acronym STEP.

STEP

SITE
TASK
EQUIPMENT
PEOPLE

SITE

This section is divided into the following parts:

1. Positioning
2. Stabilising
3. Protecting other Persons
4. Weather Conditions



Always read the manufacturers instructions and the information labels on the side of ladder!

1. Positioning

(a) Is the ground/resting surface suitably dry, flat, firm, strong and secure?

The surfaces on which the feet and the top of a ladder rest or the ground on which the feet of a step stand should be:

- **Dry** - Not slippery, free from mud, algae, leaves, oil or other contaminants that would reduce the grip of the ladder or steps feet. Slippery surfaces and surfaces that are contaminated with algae, leaves, oil or other contaminants, should be washed or cleaned. If it is not possible to sufficiently remove the contaminants, then you need to take other measure to prevent the ladder or step from slipping.



- **Flat** - Without bumps, steps, gaps, or other variations that would cause the ladder or step to become unstable. On uneven surfaces, the ladder or step should be positioned to avoid the variations. Be careful to avoid placing a ladder or step near to an edge or step to avoid any risk of slipping off. If possible, level the variations but do not stand the feet of a ladder or step on bricks, small pieces of wood or other items as they may become dislodged when working.



- **Level** - Without slopes that would cause the ladder to become unstable. Do not use a ladder or step on excessive slopes. If you need to work on small slopes you must take measures to prevent the ladder slipping.

- **Firm** - Sufficiently solid to prevent the feet of the ladder or steps from sinking, deforming the surface or sliding. Do not use a ladder or step on soft ground or lawns. If the surface is not firm, stand a ladder or step on a large flat wooden board or another suitable material of sufficient thickness, to prevent the feet sinking.



- **Strong** - Sufficient to support the weight of the ladder and the person on it without movement, including any tools and materials they will carry, and any forces they may exert when working. Do not place the top of a ladder against a gutter or on tiles or other surfaces that may give way. Do not lean a ladder against a hedge or trees. Special ladders are available for working against telegraph poles and similar structures or surfaces.

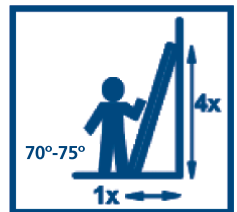
(b) Is the ladder or step close enough to the task?

- You must position a ladder or steps sufficiently close to the task so that you will not over-reach. As a guide, your belt buckle must remain within the sides of the ladder or steps. Stand centrally and keep both feet on the same rung or tread.
- If necessary, come down and move the ladder or steps, it will not take long and minimises risk of serious injury or even save your life.
- Where possible, position a ladder or steps face-on to the task. Steps are designed to work in this way and are the most stable if used in this direction.
- Avoid working side-on using a ladder or step as it takes very little effort to push over in this direction. Simply pushing a drill against a wall or over reaching to the side could easily result in the ladder or steps toppling over.
- Never work facing backwards on a ladder or steps, as they will become very unstable.



(c) Setting a Ladder at the Correct Angle:

- Ladders must be used at an angle of 70 to 75 degrees. If you use a ladder at a lesser angle it may break or slip away at the base. If you use a ladder at a steeper angle it may slip sideways or outwards from the top.
- Some ladders have labels with lines that are vertical when the ladder is at the correct angle.
- A simple rule for estimating the correct angle is 1 out for 4 up. For every 4 measures up the “wall” where ladder is extended, you need to position the base of the ladder 1 measure out.
- Check that the ladder rungs are horizontal and ladder sides are vertical and never use a ladder that is leaning sideways.

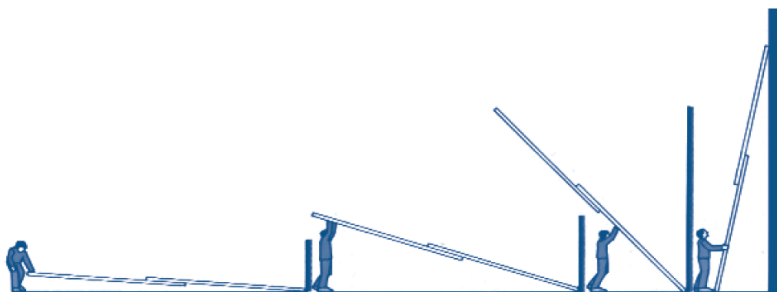


(d) Extending and Raising a Ladder Safely:

You may need help to position and raise a ladder safely. If you only need to extend the ladder less than 2m, it may be possible to do this after the ladder has been raised into position. For longer or very heavy ladders, you should extend the ladder to the correct height (see section - Equipment Selection - Selecting the Right Height on page 28 before you raise it). You can extend rope-operated ladders once they have been raised. Be careful of striking overhead obstructions whenever you raise a ladder.

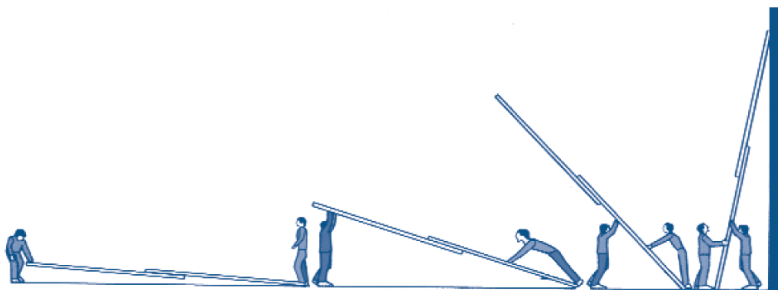
If the ladder is short and light enough to be raised by one person, proceed as follows:

- Place the foot of the ladder against a solid surface such as the base of a wall, to prevent it sliding away and lifting up.
- Raise the top end above your head.
- Facing the base of the ladder, slowly raise the ladder up by holding onto the rungs and walking forwards until the top of the ladder can be rested against the supporting surface.
- Slide the base of the ladder outwards until the safe working angle of 70-75 degrees (1 out for 4 up) is achieved.



If the ladder is longer and heavier than a single person can manage safely, then two persons should raise the ladder by proceeding as follows:

- Position the base of the ladder at the spot where it is to stand and get one person to place one foot on the bottom rung to prevent the ladder sliding and lifting as it is raised.
- The second person should raise the top end of the ladder above their head.
- The second person should face the base of the ladder and slowly raise the ladder up by holding onto the rungs and walking forwards.
- The person at the base of the ladder can assist by standing with both feet on the bottom rung, holding onto one of the rungs above, at approximately shoulder height, pulling the ladder towards them whilst leaning back thus using their body weight as a counterbalance to assist the person who is lifting the ladder.
- Raise the ladder until it is nearly vertical and the second person raising the ladder has full control and the ladder is balanced. The first person should then step off the bottom rung and assist the first person to rest the ladder against the supporting surface.
- Check the base of the ladder is positioned to provide a safe working angle of 70 -75 degrees (1 out for 4 up).
- You should not undertake any activities with which you do not feel comfortable.
- In certain circumstances, some ladders may not be suitable for erection using either of the methods. In these cases, alternative equipment such as rope operated ladders should be considered.



(f) Setting Up a Step Correctly:



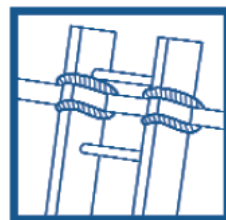
- Make sure the front and rear sections of the steps are fully opened before you climb them.
- Check the treads and platform are horizontal and the steps are not positioned on a slope.
- Steps may be fitted with ropes, webbing or folding metal braces to restrain the opening of the front and rear sections. Make sure metal braces are locked in the open position.
- Always check the platform of Platform steps is in locked in the down position before you climb them.
- Never use a step in the closed position by leaning it up against a surface. It will be very unstable and it is not designed to work like this and may break.
- Always position the ladder so that all four feet are firmly in contact with the ground.
- Be careful when using a combination ladder as a step. These ladders may have special clips or braces, which must be positioned and operated in a certain way. Read the manufacturers instructions and the warning labels on the ladder.



2. STABILISING

(a) Tying In:

Steps are designed to work without the need for further stabilising and if you need to tie in a step it may not be the most appropriate choice of equipment. If it is necessary to tie in a step, you must be very careful where you fix the ties and never tie onto a tread. You can use strong rope, webbing straps, nylon ties or purpose-made devices. Ensure they are sufficiently strong for the task. Be careful when using certain types of synthetic ropes as they can degrade with age and exposure to the sun.



Ties should be tensioned just sufficiently to prevent movement. Never over-tighten rope or webbing ties. You may induce additional loads which, when combined with your own weight, will cause the ladder or step to be overloaded and break.

Always fix the ties around both sides of the ladder. Never tie onto a rung. Tie-in to a secure fixing. You may use existing features of the site but be careful that they are secure. Do not use guttering, drainpipes or other features that you cannot be sure are secure.



If no existing features are available you may need to fit eyebolts or other fixings to tie into. You may also be able to tie-in the base to an existing secure feature. You can drive stakes into solid and firm ground to create tie-off points

(b) Supplementary Stabilising Devices:

The Ladder Association welcomes and encourages any technology which improves the safety and stability of ladders. However, although there are many claims, it is not at all clear that any ancillary stability devices currently available aid significantly the prevention of **all** unstable states which could arise from the improper use of ladders. Until there is an agreed standard for stability, the Ladder Association can make no recommendations in respect of these products.

However, individual ladder manufacturers may, after careful consideration, allow the use of some ancillary stability devices with their products - you should consult the manufacturer of your ladder or stepladder for their guidance before using such a device.

The Ladder Association categorically does **not** recommend any ancillary product which requires the invasive alteration of the completed ladder or stepladder, (for instance, by drilling into the product and applying screws, bolts, rivets or other fixings); or which relies on the strength of the ladder components for its connection to the ladder, (for instance, a device which relies on straps or clamps), without the specific permission of the ladder manufacturer, since such devices could materially affect the performance characteristics of the ladder or stepladder.

In the event that a ladder manufacturer has given specific permission for such an ancillary stability device to be used with their product(s), the ladder manufacturer must also undertake, as an express condition of that permission, to thereafter advise the ancillary stability device manufacturer of any and all changes to the ladder design or specification which may materially affect the connection upon which the device relies, (for instance, any change to the material dimensions or mechanical properties of the relevant ladder components).

The European Standard, EN131, is currently under review and it is anticipated that standards for resistance to overturning of stabilising devices will be incorporated.

(c) Footing:

Footing is of limited benefit for stabilising a ladder. However, if it is impossible to secure a ladder or steps by tying-in or to use other more appropriate methods of stabilisation then you should ask another person to secure the base by footing. This must be carried out properly to prevent the ladder or step becoming unstable. The person footing must maintain the footing position when you are climbing, working and descending.

Footing a ladder primarily improves resistance to flip, (unstable states are discussed in detail in the section under Task, headed "What loads will the task create?" on Page 26). There are 3 possible footing methods which could be considered:

a. Standing on the bottom rung with both feet is not recommended by the Ladder Association.

Although research indicates that this is the most effective method of improving resistance to flip, the ladder duty rating is exceeded, and the imposed load on the ladder is excessive and could result in damage or failure.

b. Standing with one foot in the centre of the bottom rung, with one foot behind you on the ground and a hand firmly on each stile of the ladder at shoulder height.

This is a method preferred by the Fire Brigade and some of the armed forces. It has the advantage that it can effectively apply forces towards the ladder using both hands and using the back leg as a brace and, it is argued, is a more stable comfortable position than the alternative method c. It is important not to apply any unbalanced excessive load to one stile of the ladder, as this could induce a flip condition. This position may be less suitable when footing for longer tasks.

c. One foot positioned hard against each stile, and a hand firmly on each stile of the ladder at shoulder height

This is a method preferred by some of the armed forces and some manufacturers, since it has the advantage that those footing the ladder are not encouraged to put any additional load on the bottom rung. It may be argued that the person footing the ladder has a slightly less stable position than method b. It is important not to apply any unbalanced excessive load to one stile of the ladder, as this could induce a flip condition.

This method may not be possible where the bottom ends of the ladder stiles are not in contact with the ground because of an integral component which increases the width of the ladder base e.g. combination type ladders.

Research does not indicate any significant material advantages of either method of footing in respect of other unstable states.

3. PROTECTING OTHER PERSONS

You should consider what precautions are necessary to protect other persons in the event of a ladder or steps, tools or materials falling. You should consider preventing other persons or vehicles from accidentally colliding with a ladder or step, causing it to fall.

Cordon off the work area, if necessary, and get someone to stand at the base of the ladder or steps to act as a look out. You must be careful never to block an emergency exit when positioning a ladder or steps for work.

You must be careful when working near doorways or windows, that could be opened without warning, thus causing accidental contact.

4. WEATHER CONDITIONS

How they can affect the use of Ladders and Steps

You must consider how adverse weather conditions may affect the use of ladders or steps. Wind, rain, snow and ice are all conditions that challenge the user when carrying out tasks using steps and ladders. Ladders should not be used outside in severe weather conditions.



Excessive winds may cause a ladder or steps to become unstable very quickly. Never use ladders or steps in strong winds. Be careful if areas where wind funnelling may occur eg. outside between tall buildings or inside in shafts or stairwells.

Rain will make both the ground and resting surfaces slippery and extreme care is needed. Rain also makes the rungs of ladders and the treads and platforms of steps slippery and you should exercise great care or even consider delaying the work, if necessary. Snow and ice have the same effects and you must consider delaying the task if these conditions occur. You should not work if there is any risk of lightning.

Take into account weather forecasts and, if necessary, delay the work until conditions are more favourable.

TASK

This section is divided into the following parts:

1. Duration of Tasks
2. Climbing and Descending Safely
3. What loads will be created by the task and how will they affect ladders or steps?
4. Can you maintain a firm handhold?

1. DURATION OF TASKS

Maximum 30 Minutes

You should not undertake a single task using a ladder or step that will take longer than 30 minutes. If your task will take longer, then you should consider using other work equipment.

2. CLIMBING AND DESCENDING SAFELY

The Right Way and the Wrong Way

- The Ladder Association recommends you consider how you can avoid carrying items whilst ascending/descending, by the use of such as tool belts or backpacks, (taking care not to overload). If it is unavoidable, ensure you can still maintain a firm grip at all times.
- Always face the ladder rungs or the step front when climbing.
- Never climb down a ladder or steps with your back towards it. The ladder or steps will be very unstable, your feet will not be secure on the rungs or treads and you cannot maintain a handhold.



In respect of leaning ladders, current best practice is as follows:

- Firstly, if a handrail is present, it should be used. If not, there are two climbing methods which are in common use, with preference expressed in some industries, the Ladder Association advises users to select an appropriate method depending on the nature of the work to be undertaken.

In considering the most suitable, users should take into account:

- Climbing a ladder holding the rungs, has the advantages that the anti-slip surface of the rung can improve grip, and its shape makes it easier to wrap your fingers completely around the rung, thus arguably making it easier to maintain a more secure grip.
- Climbing a ladder using the stiles has the advantage that you can slide your hands up or down the stile and can therefore maintain continuous contact with the ladder. However, there are some disadvantages in using the stiles in some circumstances, as the stiles can be quite large and therefore difficult to wrap your fingers around completely and they may have obstructions such as stops, brackets and the changes of continuation of stile section due to the overlaps on multiple section ladders.
- The selection of one method in preference to the other will depend on the particular ladder you have selected and nature of the work you are undertaking.
- There may be circumstances when it is not possible to maintain a hand-hold on a stepladder, such as carrying a box or pasted wallpaper up a stepladder. Further consideration must be given to the risks involved in such work, (ref. to HSE Ladders Leaflet IND(G)402)

3. WHAT LOADS WILL THE TASK CREATE?

How could loads affect the stability of the ladder or step?

You must consider how the work you will carry out could affect the stability of the ladder or step you are using.

Ladders become unstable in four ways:

1. **Base Slip** The base of the ladder slides away
2. **Top Slip** The top of the ladder slips sideways
3. **Flip** The ladder rotates
4. **Grip** The top of the ladder comes away

If you tie-in a ladder correctly as detailed on page 21, under Stabilising, and you work with care, then you can minimise the risks of the ladder becoming unstable.

Steps become unstable in three ways

1. **Sideways Tip** The step falls over sideways
2. **Back Tip** The step falls over towards the user
3. **Base Slip** The feet of the step slide on the ground

If you work with care, you can minimise the risks of the steps becoming unstable.

NEVER apply excessive side loads as ladders and steps can become unstable very quickly when subjected to sideways forces.

If you are overreaching (ie. Your belt buckle is outside the sides of the ladder or steps side; or you are working overhead and you need to stretch upwards) then you are already applying dangerous loads to the ladder or steps. You should stop immediately and:



- Move the ladder or steps closer to the work.
- Climb further up the ladder or step but not beyond the last safe working rung or tread. (Ref. to 4. below for an explanation)
- Extend the ladder or get a taller ladder or steps.

If you are overreaching and then carry out tasks such drilling holes, using a saw, manipulating materials, you are in extreme danger as the ladder or step will become very unstable.

Even if you are not overreaching, you should be extremely careful when carrying out these types of tasks as you may apply a heavy load that will cause the ladder or steps to become unstable.



If you are working and you are unsure if the ladder is stable
STOP IMMEDIATELY.

Descend the ladder or step and reconsider how you should complete the task.

If you are working and feel the ladder or step start to move then
STOP IMMEDIATELY.

Very carefully descend the ladder or steps and reconsider how you should complete the task.

4. Can you maintain a firm handhold?

When climbing and descending, you should maintain a firm grip on the ladder or steps using your hands and feet. Once you have reached the working height you can transfer your hand to grip a secure feature within reach, but you should try to maintain a handhold at all times. Stand centrally and keep both feet on the same rung or tread.



With ladders, remember to allow at least 1m, (3 rungs), to extend beyond the highest rung that you will stand on. In the case of stepladders, you should not stand on the top 2 treads unless a suitable handrail is provided on the step - you may stand on the platform of platform steps but never climb on to the handrail.

In the case of swingback or double sided stepladders, where a step forms the top of the stepladder, don't use the top three steps. This will ensure you can always hold onto the ladder or steps and maintain a firm grip.

EQUIPMENT

This section is divided into the following parts:

1. Selecting the Right Class
2. Selecting the Right Material
3. Selecting the Right Height
4. Selecting the Right Type



Always read the manufacturers instructions and the information labels on the side of ladder!

1. SELECTING THE RIGHT CLASS

What class of ladder or step do you propose to use?

Ladders are classified according to the general conditions and possible frequency of use:

CLASS	APPLICATIONS
BS2037/BS1129 Class 3	Domestic Use
EN131	Trade, Light Industrial
BS2037/BS1129 Class 1	Heavy Duty & Industrial

- **Industrial Ladders:** For heavy duty where relatively high frequency and onerous conditions of use, carriage and storage occur. **BS2037 Class 1** and **BS1129 Class 1** ladders are suitable for industrial applications.
- **Light Trades Ladders:** For medium duty where relatively low frequency and reasonably good conditions of use, carriage and storage occur. **BS EN131** ladders are suitable for light trades applications. In addition, the higher rated **BS2037 Class 1** and **BS1129 Class 1** ladders can also be used for light trades applications.
- **Domestic Ladders:** For light duty where frequency of use is low and good carriage and storage conditions occur. **BS2037 Class 3** and **BS1129 Class 3** ladders are suitable for domestic applications. **BS2037 Class 3 and BS1129 class 3 ladders ARE NOT SUITABLE FOR ANY LIGHT TRADES, TRADE OR INDUSTRIAL APPLICATIONS.**

2. SELECTING THE RIGHT MATERIAL

What material ladder or step do you propose to use?

Ladders and steps are manufactured in aluminium, steel, wood or fibreglass. They all have particular and individual properties that make them suitable for some applications and unsuitable for others.

Aluminium

Aluminium ladders and steps are lightweight and so easy to move around and position. They should not be used where there is a risk of electrical shock as they are very good conductors of electricity.

Fibreglass & Wood

If you are working where there is any risk of electric shock you should consider using a ladder or step made from fibreglass or wood. These materials have electrically isolating properties but they must be kept dry and clean to ensure their non-conductive properties are maintained. Wooden ladders must have some moisture content otherwise they will crack. However if the moisture content is too great they will conduct electricity.



Steel

Steel ladders are generally heavy and therefore difficult to move around. However, their weight and durability may be suitable for longer-term temporary access in scaffolding applications.

3. SELECTING THE RIGHT HEIGHT

What size ladder or step do you propose to use?

Make sure the ladder or step you intend to use is long enough (or tall enough) for the job. Never over-reach and never stand a ladder or step on boxes, bricks, blocks or similar items to gain extra height!

Get the right height product!

Ladders:

- Always select your ladder so that it is long enough
- The fully extended length of a ladder shown in the catalogue or on the label is not the Maximum Safe Working Height.
- Different extension ladders will have different section overlaps. Check the manufacturers data or the product label to find out the fully extended length.
- You need to allow additional length for the working angle of 70-75 degrees.
- Remember to allow at least 1m of ladder to extend beyond the highest rung that you will stand on. This means that you can always hold onto the ladder with one hand.
- If you are using a ladder for access to another level, always allow 1m to project above the landing point/platform, to provide a hand hold when climbing on and off.
- Remember: Always maintain a firm grip



Steps:

- Always select your step so that it is tall enough to avoid over-reaching
- The open or closed height of a step shown in the catalogue or on the label is not the Maximum Safe Working Height. You need to allow additional height because you should not stand on the top 2 or 3 treads or the top of a step. This means that you can always hold onto the step with one hand.
- On platform steps you may stand on the platform to work but never climb onto the handrail.
- If the product is labelled to indicate the last climbing rung, always follow the instructions and never stand above this rung.
- Remember: Always maintain a firm grip



4. SELECTING THE RIGHT TYPE

What type of ladder or step do you propose to use?

Ladders and steps come in several different types:

- Ladders are available as single section ladders, and 2 and 3 section extension ladders.
- Some extension ladders are fitted with ropes and wheels at the top to enable the upper sections to be extended easily.
- Steps are available with and without platforms.
- Combination ladders are available in 2 and 3 sections and may be used either as extension ladders or steps.

PEOPLE

This section is divided into the following parts:

1. Selecting Competent People to do the Task.
2. Selecting the Right People to do the Task.
3. Ensuring there are Sufficient People to do the Task.
4. What Personal Protection Equipment (PPE) is necessary for working on ladders/steps?



Always read the manufacturers instructions and the information labels on the side of ladder!

1. Selecting Competent People to do the Task

Are the people carrying out the work competent?

Although ladders and steps are fairly simple pieces of work equipment, you must be competent to use them safely. Competence can be demonstrated by a variety of means including practical and theoretical knowledge, training and experience. However, the Ladder Association recommends that all of those involved in the use of ladders and steps undertake training at an Approved Ladder Association Training Centre.

2. Selecting the Right People to do the Task

Are the people carrying out the work physically suited to the task?

Your physical ability may limit the tasks that you can carry out. Do not use ladders or steps if you are not fit enough. You should never work at height if you are not confident at heights, suffer from vertigo, if you are unwell, are taking any form of medication or if you have any other condition which may affect your ability to work safely.



3. Ensuring there are Sufficient People to do the Task

How many people are needed for the task?

Depending on the size and weight of the ladder or step, you may need help to position and secure it. You should always observe Manual Handling guidance and ensure that you do not work in a way that will put you or others at risk. The regulatory requirements in respect of lone workers must be considered if you intend to work alone. You must plan in your risk assessment for what you would do if an accident occurs, specifically if you are working on your own.

4. What Personal Protection Equipment (PPE) is necessary for working on ladders/steps?

- Whenever climbing or working on ladders or steps you must wear strong soled, flat shoes with a good grip. Ensure laces are tied properly. Prior to you climbing the ladder or step always ensure that you clean off any mud, oil or other contaminants that could cause you to slip.



- When working with ladders or steps, always wear suitable clothing that is properly fastened so that it cannot catch.
- The selection and use of safety harnesses and fall arrest equipment should only be undertaken after a detailed assessment by a competent person, taking into account the suitability of the equipment including the effect of an arrested fall on the ladder and its stability

TAKING CARE OF LADDERS AND STEPS

Maintaining ladders in good working order requires:

- 1. Pre-Use Checks By The User**
- 2. Detailed Inspections**
- 3. Handling, Storage & Maintenance**

It is recommended that where a company has a number of ladders that they maintain, a register is kept to assist in the organisation and planning of inspections and maintenance. The format for a register can be whatever format the company finds most appropriate for its business. All ladder owners and users should be able to identify their ladders by labels. Labels should not weaken the ladder or hide defects.

Ladders with visible defects must be marked as unfit for further use, and immediately withdrawn from use for either destruction or repair.

1. Pre-use checks by the user

The aim of a pre-use check is to quickly establish whether a ladder is safe to use NOW. A user must carry out a pre-use check prior to setting up a ladder (this may only need to be done once a day for frequently used ladders). A pre-use check is a visual and functional check. The user should be able to identify obvious defects on a ladder that prevent its correct use.

The following list details examples of such defects and is not exhaustive:

- Stiles: warped, cracked, bent, rotten or of different lengths
- Rungs: missing, bent, worn, loose and damaged rung – stile connections
- Anti-slip feet: any missing top or bottom, their condition, excessive wear or contamination
- Hinges: the action of hinges must be free through their movement
- Tie rods: missing, bent or corroded
- Operation and condition of push up or rope operated devices
- Generally is the ladder twisted or distorted
- Makeshift repairs
- Operation of the ladder, Eg. Does it have loose joints or connections leading to excessive sway.
- Screws: any missing
- Welds: any cracked or corroded
- Rivets: any missing
- Paint or dirt on the ladder that may hide defects

2. Detailed Inspections

Detailed inspections of work equipment, as required by Work at Height Regulations, are more in-depth visual and functional inspections than pre-use checks and need to be carried out by competent persons. For example, in a pre-use check you would check that rivets were not missing. In a detailed inspection you would check that rivets were not loose or missing.

The aim of the detailed inspection based upon a ladders' current condition, is to establish that it is safe for continued use or that maintenance and remedial work is necessary.

To be competent in undertaking an inspection, a person should know what types of defects or deterioration that could be present; whether the defect or deterioration found is serious enough to prevent further use of the ladder (disposal or repair); or if increased inspections (interim inspections) are necessary.

The Ladder Association has devised a specialist Inspection training module to equip those whose duties involve detailed ladder inspection. For further details, click on www.ladderassociation.org.uk

FREQUENCY OF INSPECTIONS

In-depth visual and functional inspections should be carried out at set intervals depending upon the frequency of use (see below). A record of the most recent inspection should be kept. In between these detailed inspections, interim inspections should be carried out if the employer's risk assessment has identified significant risks that could result in deterioration in the condition of the ladder. For example, if a ladder has been used in extreme conditions such as in a corrosive environment, or if it is likely to have incurred damage such as being struck by a vehicle, overloaded, blown over in high winds, dropped, etc. These interim inspections must be recorded.

Detailed inspections will depend upon the frequency of use of the equipment and as a guide:

- It is recommended that ladders that are subject to frequent use (on a daily basis) should be inspected at least once every 3 months.
- Ladders that are subject to occasional use (on a weekly basis) should be inspected at least once every 6 months.
- Ladders that are subject to infrequent use (used in periods in excess of monthly) should be inspected at least once every 12 months to check that they have not deteriorated or been damaged during storage.

RECORDS OF INSPECTION

It is recommended that training information and refresher training of users is recorded along with any assessment of their ability to carry out checks. Inspections must be recorded. Inspections must also contain the following information, as a minimum:

- Identification marking of ladder
- Description of ladder (Eg. single section leaning wooden ladder)
- Date of inspection
- Who did the inspection
- Any significant damage or wear (type and location) relevant for the next inspection
- Whether the ladder was fit for use and if not, what action was taken (e.g. repaired or destroyed)
- If the ladder was fit for continued use and the next inspection date (month and year)
- If a ladder cannot be found at the next interval, a ladder stock check should be undertaken to establish that the company no longer has the ladder
- If a ladder is destroyed or repaired as the result of a user check, this information should be entered into both the record and the register
- The record can be whatever format the owner finds most appropriate to their business. These records can be linked to the ladder register.
- The Ladder Association recommends the use of the Ladder Association Ladder Inspection Record as a visual indicator of its inspection status, available from the Ladder Association.

RECORD OF INSPECTION *the* **LADDER**

ID Number: _____

Inspected By: _____

Date: _____ Expiry Date: _____

IMPORTANT – Use of any work at height equipment should only be undertaken by users who are trained and competent. Contact The Ladder Association for details of training courses and local approved training centres.
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ASSOCIATION

The Ladder Association Secretariat, PO Box 20970, Glasgow G3 9DS
Telephone: 0845 280 1045 • website: www.ladderassociation.org.uk

LADDERS ON HIRE

Ladders provided by hire companies should be subjected to a pre-use check prior to hire, normally carried out on its return, to establish if any repairs are necessary. Whilst on site it is the responsibility of the user/hirer to ensure that the ladder has undergone pre-use checks, detailed and interim inspections, as required, depending upon the task, site conditions and duration of hire. The hire company should provide, on request, information and advice on the suitability of ladders for any particular task. However, it is the duty of the employer/self-employed person to select suitable access equipment for a task.

HANDLING, STORAGE & MAINTENANCE

Ladders must be maintained in accordance with the manufacturers' guidelines. The need to keep ladder anti-slip feet clean is of paramount importance so that the coefficient of friction is maintained between the foot of the ladder and the ground. The ladder also needs to be kept clean so defects are not hidden behind paint, dirt, etc.

The ropes/pulleys must be maintained in accordance with the manufacturers' instructions.

Wooden ladders should not be painted as this can hide defects. Wooden ladders, when coated, should be coated with a transparent finish (e.g. varnish, shellac or a clear preservative).

HANDLING AND STORAGE

- Always assess the route/size and weight of equipment/manual handling implications/practical implications of moving in confined conditions.
- A short ladder (generally 2.5m or less) may often be comfortably carried vertically, thus avoiding fouling in confined situations, but users must beware of overhead obstructions.
- Longer ladders, (generally more than 2.5m), will require 2 or more people to handle and manoeuvre, and will normally be carried horizontally.
- Use caution when carrying ladders through passageways, doorways or any place where your view is obstructed.
- Ensure that you and your buddy are on the same side when carrying a ladder, stay in step, work out in advance any hand or voice signals to coordinate stopping or changing direction.

Ladders should be stored in accordance with the manufacturer's instructions and advice, and handled with care to avoid damage to either the equipment or the person handling the equipment. When being transported, ladders need to be firmly secured and properly supported to prevent damage. Always secure the ladder properly - use proprietary devices if available.

Ensure you consider the risk of fall when securing ladders/stepladders to roof/ladder racks (this is also working at height).

As a guide, ladders should be:

- Stored in covered, ventilated areas, protected from the weather and away from too much dampness, heat or cold.
- Ladders can fall if stored vertically, so take particular care and, if possible, secure the top.
- Never hang a ladder vertically from a rung.
- Don't store a ladder in any place where a child might be tempted to climb it.
- Store ladders on one edge, in racks or hung from a stile with enough supports to prevent sagging.
- Wooden and steel ladders should be stored in the dry and off the ground to prevent rot and corrosion.
- For long term storage, ladders should be protected from the elements.
- Ladders should be stored horizontally but clear of the ground, protect from weather and avoid too much heat/dampness/cold, and supported at intervals of not more than 2.0m.
- Keep ladders locked and secured so as to prevent unauthorised use. For security reasons, as well as good maintenance, don't store a ladder on view outdoors where it could be stolen or used in a break in.
- Avoid placing other loads on ladders as this can cause deformation/sagging

TRANSPORTATION

- Maximum overhang front or rear not more than 2.0m and must have side and/or end markers (Source: Highway Code).
- Avoid placing other loads on ladders as this can cause deformation/sagging during transportation.
- Pad racks on vehicles with soft material to reduce wear and road shocks.
- Do not allow a ladder to overhang more than 2.0m from last support point on roof rack.
- Be aware that overhang can cause obstructions to, for instance, boot/rear door opening.
- Evenly distribute ladder loads across both the length and breadth of the roof rack

ROOF LADDERS

The Ladder Association makes these recommendations as current best practice in the use of Roof Ladders

Summary of steps to take before working at height

- Ensure you are adequately trained in risk assessment and safe working at height techniques.
- Determine and evaluate the fall risks.
- Ensure that all elements of the system are compatible.
- Ensure that the selected equipment is in compliance with the law and the standards in force.
- Do not work alone unless an appropriate rescue procedure has been put in place.
- Do not allow any modifications to the system components without the manufacturer's prior agreement.
- Report any defect, anomaly, wear or fall that might affect the integrity of the system.

REQUIREMENTS

Any work at height should only be undertaken by people who are competent. Competence can be demonstrated by a variety of means including practical and theoretical knowledge, training and experience.

The Ladder Association recommends that users are trained in the appropriate category of the Ladder Association training scheme.

- The leaning ladder should be secured by tying in where possible or using any other system which is equally effective.
- To ensure safe access to the roof, the roof ladder should be securely attached to the leaning ladder using an appropriate attachment.
- The operator should use suitable personal protective equipment (e.g. cow's tail, rope grab, harness, etc), which must be used in the correct manner, to minimise the risk of a fall.

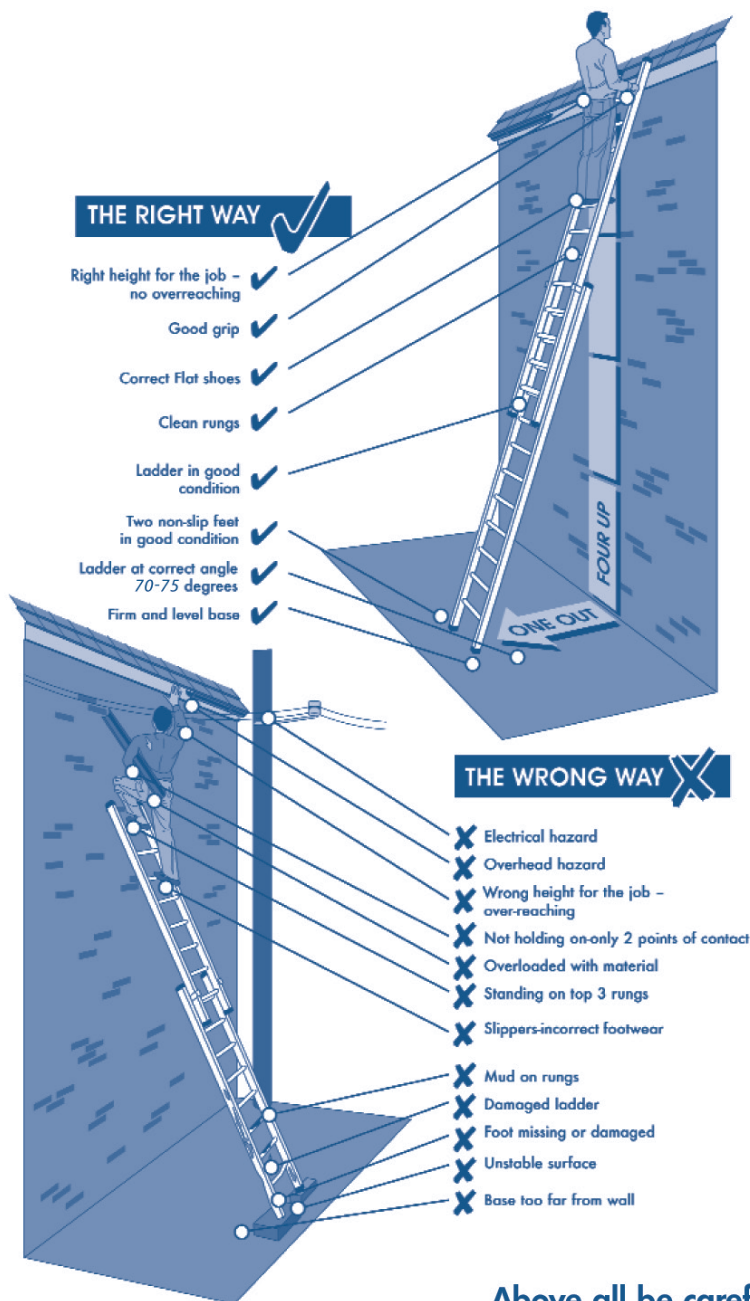
RISKS/CARE POINTS

- Before use of any equipment, consult the manufacturers' instructions.
- Climbing the leaning ladder whilst carrying and raising an extended roof ladder into position requires great care.
- Sliding the roof ladder over the eaves and apex of the roof requires the operator to work "off centre" to the leaning ladder.
- Over zealous tightening of the web straps may cause permanent damage to the ladder(s) – especially when securing the leaning ladder to the wall.

All PPE must be suitable for the task in hand and for the equipment used.

LADDER

Work the safe way



...Above all be careful

THE RIGHT WAY ✓

- Step in good condition ✓
- Right height for the job-
no over-reaching ✓
- Good grip ✓
- 3 points of contact ✓
- Front towards work ✓
- Correct Flat shoes ✓
- Clean treads ✓
- Four feet in good condition ✓
- Firm and level base ✓



THE WRONG WAY ✗

- ✗ Overhead hazard
- ✗ Wrong height step for the job-
over-reaching
- ✗ No grip on step-only 2 points
of contact
- ✗ Standing on top handrail
- ✗ Slippers-incorrect footwear
- ✗ Loose tools
- ✗ Working side on
- ✗ Slippery treads
- ✗ Uneven soft ground, no flat board
- ✗ Damaged stiles & treads
- ✗ Missing feet



...Above all be careful



Risk Assessment guidelines for use of LEANING LADDERS post equipment selection

NAME of person completing assessment:

SITE:

Activity: Using Leaning Ladders for access or in a work place for cleaning, maintenance, painting, decorating, ceiling work, electrical work, plumbing, inspections etc.

Hazards (most common):

Overreaching:

Sideways loading e.g. drilling:

Losing balance:

1. Ladder becomes unstable

2. User; Ladder, tools strike persons below

3. User; Ladder, tools strike persons below

People at Risk:



Risk Assessment guidelines for use of STEPLADDERS post equipment selection

NAME of person completing assessment:

SITE:

Activity: Using Stepladders in a work place for painting, decorating, ceiling work, electrical wiring, light fixings, plumbing, inspections etc.

Hazards (most common):

Overreaching:

Sideways loading e.g. drilling:

Losing balance:

1. Steps become unstable

2. User; Steps, tools fall

3. User; Steps, tools strike persons below

1. User pushes himself off Steps and falls

2. User; Steps, tools strike persons below

1. User loses balance

2. User grabs Steps, and Steps become unstable

3. User; Steps, tools fall

4. User; Steps, tools strike persons below

People at Risk: Users and others on site

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