

an installer's guide to the use of
ladders and step-ladders
and the Work at Height Regulations 2005



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A BSIA Installer's Guide to assist in the use of Ladders and Step-ladders in compliance with the Work at Height Regulations 2005

Introduction

This guide has been created to assist installers in conforming to the Work at Height Regulations 2005, (the regulations) when using ladders and stepladders.

The regulations replace all the earlier regulations about working at height. The Work at Height Regulations 2005 consolidate previous legislation on work at height and consolidate and implement European Directive 2001/45/EC concerning minimum safety and health requirements for the use of equipment for work at height (the Temporary Work at Height Directive).

This document is a guide only and reference should be made to the Work at Height Regulations 2005. Information and the full text of the regulations can be found at www.opsi.gov.uk/si/si2005/20050735.htm

The responsibility for safety rests fully and unreservedly with the installing company (company). The acceptance of this guide by the company does not in any way absolve the company from that responsibility, nor is it intended to confirm or suggest that the company fully meets the statutory requirements.

BSIA has endeavoured to ensure that the content of this guide is accurate and reflects good practice. The BSIA does not accept liability for errors or omissions.

1. Who the regulations apply to

The Work at Height Regulations apply to all work at height where there is a risk of a fall liable to cause personal injury. They place responsibilities on employers, and any person who controls the work of others.

If you are an employee or working under someone else's control you should:

- a) Report any safety hazard to them.
- b) Use the equipment supplied properly, following any training and instructions.

2. Employers responsibilities

As an employer you should do all that is practicable to prevent anyone from falling. The regulations set out a simple structure for managing and selecting equipment for work at height.

Employers must:

- Avoid work at height where they can.
- Use work equipment or other measures to prevent falls where they cannot avoid working at height.
- Use work equipment or other measures to minimise the distance and consequences of a fall should one occur.
- Take other additional suitable and sufficient measures to prevent a person falling a distance liable to cause personal injury including any additional training and instruction that may be required.

The regulations require the employer to ensure:

- a) All work at height is properly planned and organised
- b) All work at height takes account of weather conditions that could endanger health and safety
- c) Those involved in work at height are trained and competent
- d) A risk assessment is undertaken to ensure safe working
- e) Equipment for work at height is appropriately inspected
- f) The risks from fragile surfaces are properly controlled
- g) The risks from falling objects are properly controlled.

2.1 Planning

- a) Ensure that no work is done at height if it is safe and reasonably practicable to do it other than at height.
- b) Ensure that the work is properly planned, appropriately supervised, and carried out in as safe a way as is reasonably practicable.
- c) Plan for emergencies and rescue.
- d) Take account of the risk assessment carried out under regulation 3 of the Management of Health and Safety at Work Regulations.

2.2 Inspections

'Inspection' is defined by the regulations as 'such visual or more rigorous inspection by a competent person as is appropriate for safety purposes'.

You should ensure (as far as is reasonably practicable to do so) that each individual place at which work is to be done at height is checked on every occasion before that place is used.

You should ensure that any item of equipment is inspected:

- a) After it is assembled or installed if its safety depends on how it is assembled or installed.
- b) As often as it is necessary to ensure safety, and in particular to make sure that any deterioration can be detected and remedied in good time.

You should keep records of the formal periodic inspections until the next inspection has been carried out.

3. Before starting

All employers should have procedures in place to ensure that ladders are only used where other safer means of access cannot reasonably be used.

Before site works begin:

- Identify all types of work where ladders are used;

Where work has to be done at height:

- Identify if other safer means of access can be used such as
 - tower scaffolds; or
 - powered access such as a cherry picker or a scissor lift.
- Identify the remaining short-duration work for which ladders can still be used.

4. Carrying ladders and step-ladders

- a) When carrying or handling ladders/step-ladders, Personal Protective Equipment (PPE), e.g. gloves and safety footwear affording good grip should be considered.
- b) Ensure you know how to get the ladder(s) on and off the vehicle safely.
- c) Carry ladders/step-ladders in accordance with the correct manual handling procedures and ensure that there are enough people to carry the weight safely.
- d) No other equipment should be carried at the same time as ladders/step-ladders.
- e) Plan the route to the working area for the easiest/clearest access path. Seek assistance with any access through doorways, sensitive areas or with long / heavy ladders.
- f) Carry ladder/step-ladder in a position that enables maximum visibility of the planned route.
- g) Never carry ladder/step-ladder in extended/open state.

5. Set-up of ladders

- a. All ladders should be identifiable by a unique serial number and be inspected by a competent trained person at least every six months. Documented records of inspections should be maintained.
- b. As well as the formal inspection by a trained competent person, ladders should be given a pre use visual check by the user before being brought into use each time.
- c) Where defects are found, either at the formal inspection or pre-use check stage, the equipment in question should be isolated to stop other persons using it and reported to the person responsible for the repairs or replacement.
- d) It is the responsibility of the user to ensure that nothing about the way that ladders are erected, or used, affects the safety of the user or any other person.
- e) Ladders should be erected on firm level ground at an angle of four units up for every one unit the base is away from the wall. Ladders should only be erected and used in accordance with the manufacturers instructions.
- f) Ensure that the ladder will not reach into an area where there are exposed live electrical conductors, or in an area where other hazards may exist. Safe working distances from overhead power lines can be obtained from the local supply generating authority.
- g) The top of the ladder should rest against a solid surface and able to withstand the applied loads.
- h) If the ladder is to be used to gain access to a working platform the top of the ladder should extend at least one metre beyond the working platform to ensure a firm hand hold whilst gaining access / egress.
- i) Wherever possible, tie a ladder to prevent it from slipping. This can be at the top, the bottom or both. Preferably both stiles should be tied at the top. An eyebolt inserted into the wall of the building can be used to assist tying the ladder at the top. Never tie a ladder by its rungs only. Fixing devices using a rung and a stile may be employed.
- j) Methods of securing the bottom of a ladder include, stabilising devices, sand bags, stopper mats, staking and tying, blocks or digging into a firm level base.
- k) There should be at least a two rung overlap on extension ladders up to five metres in length and a three rung overlap on ladders over five metres.

- l) Extension ladders should be raised and lowered from the base ensuring that the latching hooks are properly engaged.
- m) In any area where people are likely to be passing through, ensure that a colleague stands near the foot of the ladder at all times unless guarding is erected. Appropriate men at work signage should be used.

6. Use of ladders

- a) Only use ladders for short duration work – a maximum of 30 minutes, depending upon the task you are doing.
- b) Only use ladders for light work – carry no more than 10kg when climbing or working on a ladder.
- c) Whenever possible when working from a ladder, try and maintain three points of contact with it at all times (e.g. both feet and one hand). Wherever practicable, when a particular task requires two hands to be used and is of short duration, the ladder should be secured, and the use of a safety harness or line should be considered.
- d) Ladders should never be used near doors unless all reasonable precautions have been taken to protect the user, i.e. barriers, lock the door, a second person or leave the door open.
- e) Position the ladder close enough to the task so as to facilitate safe working without the risk of over reaching.
- f) When ascending/descending you should face the ladder with the hands in contact with the stiles. Hands should be kept free of tools or equipment when ascending / descending the ladder. If hand tools or power tools are to be used, the use of a tool belt and/or holster should be employed.
- g) Where practicable, the use of a hoist line should be considered to raise equipment to the working position.
- h) Only one rung at a time should be climbed on each step up or down the ladder.
- i) Only one person should use the ladder at any one time.

7. Set-up of step-ladders

- a) All step-ladders should be identifiable by a unique serial number and be examined by a trained competent person at least once every six months. In addition the following checks should be carried out before use.
- b) The steps should be checked for excessive damage to treads, sides, hinges and metal or rope stays.
- c) All treads should be clean and free from contamination likely to cause slippage such as grease or oil etc.
- d) Ensure that there are no splinters or rough edges. These could cause you to pull your hand back and lose balance.
- e) If any defect is found that cannot be immediately rectified, remove the stepladder from use.
- f) Always use steps of adequate height for the job. Never work higher than three treads from the top of the step-ladder unless the step ladder is designed so that a handrail or handhold is available above this level.

- g) Never stand on the top platform or bucket area unless they are platform top steps provided with a suitable handrail above the platform.
- h) Steps should always be opened to their full width.
- i) Never leave articles on any tread of the steps.
- j) Move the steps as necessary to maintain a comfortable and balanced position at all times. Do not over-reach.
- k) Steps should never be placed near doors unless all reasonable precautions have been taken to prevent the door being opened and striking the steps. Post notices on the other side of the doorway or lock door.
- l) In any area where people are likely to be passing through ensure that a colleague stands near the foot of the steps at all times unless guarding is erected. Appropriate men at work signage should be used.
- m) Always ensure that the surface on which the steps are mounted is flat and free from stones and any other debris that would impair a good working foundation.
- n) Avoid side-on working, face the task to make sure the step-ladder is more stable.

8. Use of step-ladders

- a) Only use step-ladders for short duration work – a maximum of 30 minutes depending upon the task you are doing.
- b) Only use step-ladders for light work – carry no more than 10kg when climbing or working on a step-ladder.

9. Useful documents

- The Work at Height Regulations: A Brief Guide.
- Safe use of ladders and stepladders: An employer's guide.
- Top tips for ladder and stepladder safety.

Visit: <http://www.opsi.gov.uk/si/si2005/20050735.htm>