

## Safe Use of Ladders

### Introduction

Every year there is a large number of workplace accidents involving ladders, which result in people being seriously injured, sometimes fatally. When a job is of short duration, there is often a temptation to take short cuts. This temptation should be strongly resisted because at times like these the risk of mishap is greater.

Ladders, including stepladders, are used in a variety of applications in virtually all workplaces. They can be made from timber or aluminium and will vary in length. Whatever their size and shape, it must be remembered that they have been designed with a particular type of use in mind. Ordinarily, they are used as a means of access to a place of work. They may however be used as a place from which to work. When considering the job as a whole, the safest method should be the preferred option. This might entail using a working platform, such as a tower scaffold or mobile elevated working platform.

There are various workplace safety regulations which govern the use of ladders, scaffolding and other lifting devices. You should acquaint yourself with the various regulations concerning your specific occupancy and lifting devices.

### Training

Training in the use of ladders deserves particular attention because it can be such a high risk activity. It is not only the person who is climbing the ladder that needs to be trained. All those involved in the use and maintenance of ladders need a level of training appropriate to their responsibilities. The person in overall charge of the job needs to have a good understanding of all the issues; the person climbing the ladder needs to understand the do's and don'ts

associated with ladder use and the person footing the ladder needs to understand the implications of their role.

Whenever training is provided, it is good practice to record what training has been given and who has received it.

### Use

Ladders should be strong enough so that they do not break while they are being used. They should also be secured in position so that they do not slip at the base or topple sideways. To secure a ladder in position, it should be tied or clamped near to its upper resting place. If this is not possible, it should be securely fixed at the base. While it is being secured at the upper end, a person should "foot" the ladder to prevent it slipping.

If the ladder is to be used as access between two working places then the top end should extend at least 1.1m above the upper landing point, so that there is an adequate hand hold.

The surface on which the ladder is placed should be stable and level. It is not acceptable to place the ladder on other equipment to gain extra height. At the upper end it is important to ensure that the surface on which the ladder rests is strong enough to support it.

The optimum angle to minimize the risk of a ladder slipping is around 75 degrees to the horizontal. This equates to the base being 1m away from the vertical surface for every 4m in ladder height.

To prevent overbalancing and enable both hands to be free for holding the ladder, materials and equipment being carried should be kept to a minimum. Purpose designed belts are available for

light tools and small lifting appliances should be considered for any materials that are required.

There is often a temptation to stretch too far to the side when working from a ladder. This can cause the ladder to become unstable and topple sideways. It can also cause the user to overbalance and lose his handhold or footing. It is far safer to descend the ladder and reposition it so that the point in question can be reached more easily.

### **Examinations/Maintenance**

To help ensure that ladders remain in a safe condition, they should be examined at least every six months. Records of examinations should be maintained. Where there are several ladders in use, each should be numbered and the number entered in a schedule so that the inspection programme can be monitored.

It is also beneficial for users to inspect ladders before they use them. Wooden ladders should not be painted as this may hide splits, cracking and rot. Items to be considered during examination and inspection include: obvious damage, (e.g., distortion, dents); loose rungs; movement of stiles across the width of the ladder and along its length; condition of moving parts; and fittings and fasteners.

### **Key Action Steps**

- Carry out a risk assessment of the task.
- Ensure the ladder to be used is suitable for the job.
- Any person using or maintaining a ladder should be adequately trained. Training should extend to those who are supervising and those who are assisting, (e.g., the person footing the ladder).
- The base on which the ladder is to rest should be firm and level and the upper end should be able to support the ladder and its load. The bottom of the ladder should not rest on other equipment.
- Ladders should be secured to prevent slipping and toppling. While being secured at the upper end, they should be “footed” at the base.
- Provide adequate hand holds if the ladder does not extend far enough above the dismount point.

- Use means other than carrying to deliver tools and equipment to the work place.
- Do not overreach when working from a ladder.
- Ladders should be inspected at least every six months and records of inspections should be maintained.

### **References:**

Occupational Health and Safety Act  
Construction Projects Regulation 213/91  
Health Care and Residential Facilities Regulation 67/ 93  
Industrial Establishments Regulation 851  
Window Cleaning Regulation 859