

HOW TO... SECURE YOUR LADDER

What is the risk?

Ladders can be a sensible and practical option for low risk and short duration tasks. Setting a ladder up correctly to start with will help you stay safe when working at height, but it's important you also secure your ladder to help prevent it from slipping or moving while in use.

What are the options for securing a ladder?

There are four main ways you can secure your ladder. In order of priority, these are:

- 1. Tying in** - tie the ladder to a suitable secure point, making sure both stiles are tied. You can tie in at the top or near the base, or both.
- 2. Use a ladder stability device** - when used correctly, these devices may help to prevent a ladder from slipping. Speak to the ladder manufacturer for further guidance before using such a device.
- 3. Wedging your ladder** - if it's not possible to tie a ladder and you can't find a suitable stability device, the next option to you is to securely wedge your ladder (e.g. wedge the stiles against a wall). But remember to position it at the correct angle and close to the work to avoid over reaching.
- 4. Footing** - if you can't use any of the options above, foot the ladder. Footing is the **last resort** as it is the least effective way of preventing a ladder slipping.

Tying in - the basics

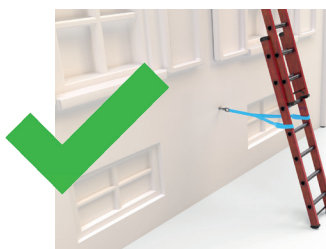
Tying in is the first, most effective and preferred option for preventing a ladder from slipping:

- Make sure the ties are strong enough for the task; strong rope, webbing straps, certain nylon ties or purpose-made devices are good options. Be careful with some synthetic ropes, they can weaken over time and with exposure to the sun.
- Ties should be tight enough to sufficiently prevent movement of the ladder, but they shouldn't be over-tightened as that puts extra load on the ladder and could cause the ladder or stepladder to be overloaded and break.
- Always fix the ties around both sides of the ladder and never tie onto a rung or tread.
- Only tie-in to a secure fixing. This could be existing features (as long as you know they're secure), or you might need to fit anchors to tie into, or you could drive stakes into solid and firm ground to create tie-off points. Whatever you do, **DO NOT** tie into, or rest the ladder against, weak surfaces like plastic guttering, drainpipes or glazing.
- There may be times when you need to tie in a stepladder - before you do, ask yourself if it's the most appropriate choice of equipment for the job. If yes, fix the ties carefully, and never tie onto a tread.

CORRECT - tied at top stiles



CORRECT - tying near base



Footing - your options

Footing is of limited benefit for stabilising a ladder, but we know it's commonplace. If no other securing methods are available and you must foot the ladder, use either of these two options:

- **Option 1** - one foot in the centre of the bottom rung, with the other foot behind you on the ground, and hands firmly on each stile at shoulder height.
- **Option 2** - each foot hard against each stile, with hands firmly on each stile at shoulder height.
- Do not stand on the bottom rung with both feet.

5 KEY POINTS:

1. Secure your ladder at all times
2. Tying in is the preferred option
3. If you can't tie in, use a ladder stability device
4. Only wedge the ladder if tying in or stability devices are not possible
5. Footing is always the last resort

Who needs to know:

- Anyone who uses ladders and stepladders on site
- Managers and site supervisors

Useful references:

- LA455 'Safe Use of Ladders and Stepladders: A brief guide'
- Ladder Association Code of Practice



HOW TO...SECURE YOUR LADDER GUIDANCE FOR MANAGERS

How to use this guidance

This additional guidance has been created for Managers, Supervisors, Safety Leads or any person responsible for delivering the Toolbox Talks on site. It is designed to be used alongside the Toolbox Talk and offers additional, more specific information to help you add value to the topic covered. **The Ladder Association Code of Practice serves as a supporting document for users, supervisors and managers who have completed a Ladder Association course, and is not intended to be a substitute for training.**

What are the options for securing a ladder?

See Ladder Association Code of Practice Section 18. The Toolbox Talk focusses on the preferred option of Tying In, but also covers Footing, as that is recognised as a commonly practiced method for securing a ladder, although it should be the last resort.

- 1. Tying in** - if fitting anchors with eyebolts or other fixings to tie into, anchors should be selected, installed and tested in accordance with BS 8539.
- 2. Use a ladder stability device** - it is not yet clear that any ancillary ladder stability devices that are currently available are effective. Until there is an agreed design standard for ancillary stability devices for ladders, 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 for their guidance before using such a device.
The Ladder Association **categorically does not recommend** any ancillary product which:
 - a) Requires the invasive alteration of the completed ladder or stepladder (i.e. drilling into the product and applying screws, bolts, rivets or other fixings); or
 - b) Relies on the strength of the ladder components for its connection to the ladder (i.e. a device which relies on straps or clamps), without the specific permission of the ladder manufacturer, as such devices could materially affect the performance characteristics of the ladder.
- 3. Wedging your ladder** - with reference to setting up at the correct angle, any leaning ladder (or combination or multi hinge ladder) should be at a 75 degree angle to the ground. The simplest way to achieve the correct angle is to follow the 'one-in-four' rule. This means for every four measures up the 'wall' where the ladder is extended, you need to position the base of the ladder one measure out. **See Ladder Association Code of Practice Section 15.**
- 4. Footing** - leaning ladders can become unstable in four ways: base slip, top slip, flip and top contact (**see Ladder Association Code of Practice Section 21**). Footing a ladder can help improve resistance to base slip and flip, however research has not shown any significant advantages of footing for top slip and top contact.

Tying in - the basics

CORRECT - ladder tied at top stiles **CORRECT** - tying near base



Useful references:

- **LA455 'Safe Use of Ladders and Stepladders: A brief guide'** (available to download free from ladderassociation.org.uk)
- **Ladder Association Code of Practice** (available from ladderassociation.org.uk or via our mobile app)

Footing - your options

- **Option 1** - this method can apply forces towards the ladder using both hands and using the back leg as a brace and is possibly a more stable comfortable position than option 2. Do not apply any unbalanced excessive load to one stile of the ladder, as this could cause the ladder to flip. This position may be less suitable when footing for longer tasks.
- **Option 2** - the benefit here is that the person footing the ladder is 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 option 1. Do not to apply any unbalanced excessive load to one stile of the ladder. On certain types of ladders this method may not be possible if the bottom ends of the ladder stiles are not in contact with the ground i.e. when using certain types of ladder stabilising bar.