

## TOOLBOX TALK

# USING LADDERS

LET'S TALK CONSTRUCTION SAFETY



### ABOUT THIS TOOLBOX TALK.

This toolbox talk can be delivered by construction supervisors, and provides basic safety tips for workers who use ladders.

A person in control of a business or undertaking (PCBU) has the responsibility to ensure the safety of workers, including consulting with workers and providing the appropriate safety systems and equipment on site.

Planning for safety, using safe work method statements (SWMS), holding toolbox talks and providing safety equipment that eliminates or controls the risk, helps ensure workers go home safely at the end of the day.

On-the-spot fines of up to \$3,600 apply, for failing to protect workers from the risk of falls from heights.

### INCLUDE THESE WORKERS IN YOUR TALK:

- Sub-contractors
- Labourers
- Employees
- Labour hire workers
- Trade supervisors.

### PREPARING FOR THE TALK:

- Choose whether you will cover either an A-frame style **step ladder** or **extension ladder** for this talk – you can do the other one next time.
- Depending on what you decide, have an A-frame style **step ladder** or **extension ladder** available for the demonstration.

- Check the ladder is in good condition and industrial rated (120kg).
- If you chose an **extension ladder**, have safety equipment on hand such as a portable ladder bracket and suitable ties to secure the ladder.
- Find a quiet area, free from loud noise, so that your workers can hear you.
- Have a pen and notebook to jot down any safety suggestions from workers.
- Print out the SafeWork NSW “Working at heights in construction” web page to hand out to workers – or send them the web link.
- Consider showing the “[Safe use of ladders](#)” SafeWork NSW video on YouTube - or send workers the web link.

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### THE FACTS

#### Read out to workers

Falls from heights is the biggest killer on NSW construction sites.

Most serious and fatal falls are from a height of less than 4 metres. That's the equivalent of about a single storey.

When it comes to falls from ladders, serious and fatal falls can happen from both step ladders and extension ladders.

It doesn't matter how far you fall. If you land on your head on concrete, you can be seriously injured or even killed.

Workers are most at risk of falling from an A-frame style step ladder if they are:

- standing on the top 2 steps and/or
- over-reaching.

Workers are most at risk of falling from an extension ladder:

- if the ladder slips either outwards or sideways
- if they lose balance, or
- when getting on or off the landing space.

### SELECTING AND SETTING UP THE LADDER

#### Read out to workers

Lots of workers just want to get in and get the job done. But a little bit of up-front planning can make the difference between going home safely or living with a life-long devastating injury.

There are other types of equipment that may be safer to use than a ladder such as work platform, scissor lift, elevating work platform or scaffold.

#### Ask your workers

- 1) If you must use a ladder, what things should you check on the ladder itself before using it?

#### Possible answers for selecting the ladder:

- Is the ladder the correct height for the task to avoid reaching or stretching?
- Is the ladder rated for industrial use?
- Is the ladder free from defects and in good working order?

#### Ask your workers

- 2) What should you do to set your ladder up safely?

#### Possible answers for setting up the ladder:

- Ensure the surface you place the ladder on is appropriate - eg even and not slippery
- For A-frame ladders -
  - ensure all 4 feet are in contact with the ground
  - ensure the arms are extended fully and all locking devices secure.
- For extension ladders -
  - ensure the ladder is not too close or too far from the support structure. The ratio should be 4:1. That means the base of the ladder is 1 metre away from the supporting structure for every 4 metres of height
  - the ladder should extend 1m past the top landing (if accessing a roof or platform)
  - wherever possible, the ladder should be secured at the top and bottom
  - consider location of electrical sources such as service lines.

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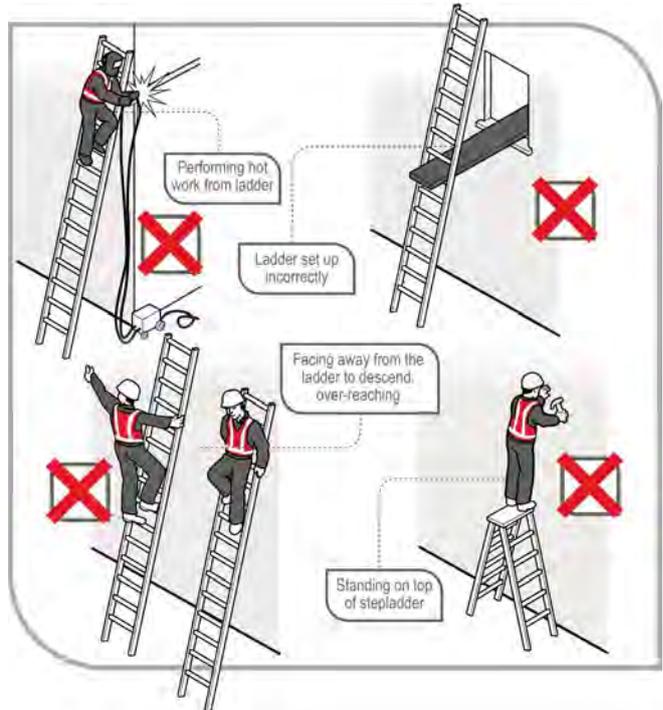
### WHAT TO DO IF THE LADDER LOOKS UNSAFE

#### Ask your workers

What should you do if the ladder looks unsafe?

#### Possible answers:

- Do not use the ladder if it is not in good condition or cannot be set up properly.
- Use an alternate work platform.
- Hang an 'out of service' or 'no access' sign on the ladder.
- Throw it out if it is broken.
- Advise other trades it is unsafe.
- Talk to your supervisor.



# TOOLBOX TALK: USING LADDERS

## USING THE LADDER - WHAT COULD HAVE BEEN DONE DIFFERENTLY?

These scenarios are taken from real-life incidents reported to SafeWork NSW.

Choose either the **A-frame step ladder** or **extension ladder** scenario to talk with your workers about. You can cover off on the other ladder next time.

### Scenario 1: Read out to workers

#### Fall from an A-frame style step ladder

Jake\* was building a pergola on a raised deck. The deck had handrails around the perimeter. Jake was installing triple grips to the rafters and beam of the new pergola. As he moved the 6 foot A-frame style step ladder to the next rafter, he found he couldn't quite reach, so he climbed on to the top step of the ladder and reached over to the rafter. The ladder tipped, causing him to lose balance and fall over the top rail of the deck. Jake fell 3.6 metres and landed on concrete pavers, hitting his head. He sustained fractures to both wrists, concussion, left shoulder soft tissue damage and two fractured ribs.

This meant Jake couldn't work, drive, play footy or pick up his baby daughter for the next 8 weeks. His partner had to help him with all basic life tasks.

Note: the height of the deck railing would have been ok if he was working from the deck surface, but when working on the ladder he was too high for the deck railing to stop his fall.

#### Ask your workers

What could have been done differently?

#### Possible answers:

- Use a work platform instead (eg mobile scaffold), preferably with rails
- Use a taller ladder so he did not have to stand on the top step to reach
- Moved the ladder over so he didn't have to reach
- Install a temporary rail or two, mid-way through the gap between the deck's top rail and pergola beam, or provide some other form of fall protection

\*Name changed to protect the privacy of the injured worker.

### Scenario 2: Read out to workers

#### Fall from an extension ladder

Zhang Wei\* was sub-contracted to do some electrical work. In order to commence the job, he leant an extension ladder against an internal wall of the building so he could reach the ceiling.

As he was climbing the ladder, it suddenly slipped outwards, away from the wall on the smooth concrete floor.

Zhang Wei fell 3.5 metres on to concrete, hitting his head and breaking his right wrist.

He was lucky his injuries weren't more serious, but it still meant he couldn't work or play the guitar for the next 6 weeks. This also meant money was tight and he couldn't support his family overseas.

#### Ask your workers

What could have been done differently?

#### Possible answers:

- Do the work from the floor using extension poles
- Use a mobile scaffold or a scissor lift instead
- Use a platform ladder instead
- Secure the bottom of the ladder
- Used a spotter to hold the ladder in place
- Use an A-frame style step ladder - making sure it is tall enough so he doesn't have to stand on the top 2-3 steps.

\*Name changed to protect the privacy of the injured worker.

# TOOLBOX TALK: USING LADDERS

## LADDER SAFETY DEMONSTRATION

Choose either an **A-frame style step ladder** or **extension ladder**.

Point out to your workers what to look for on a ladder to make sure it is safe to use. Also use the below image to help you identify the key safety checks workers can do.

### A-FRAME STYLE STEP LADDER

**Step 1** - Make sure your ladder is tall enough so you don't have to stand on the top two rungs (standing on the upper two rungs de-stabilises the ladder).

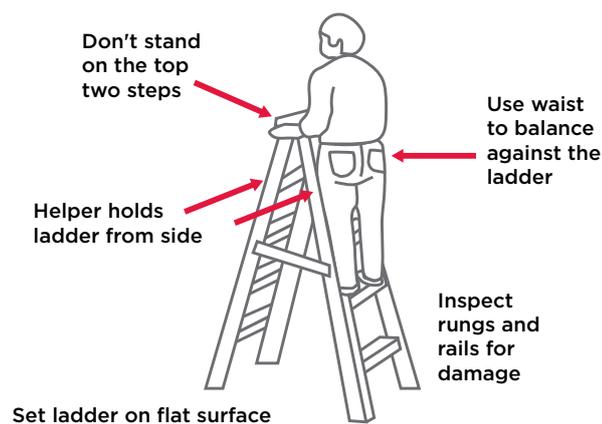
**Step 2** - Ensure the ladder is rated for industrial use, is well maintained, and free of obvious visual defects (cracks, significant bending, missing rivets/fasteners etc).

**Step 3** - Make sure the ground is solid and level so that all 4 feet of the ladder are in contact with the ground when set up.

**Step 4** - Ensure all locking devices (legs or bracket) on the ladder are secured.

**Step 5** - When working on the ladder, have both feet and one other point of contact i.e. hand, waist or upper torso in contact.

**Step 6** - Don't overreach. Move the ladder if you need to. Never lean so far that your belt buckle is outside the ladder stiles.



### EXTENSION LADDER

**Step 1** - Make sure your ladder is tall enough for the job. If you are using it to access a roof or another level, it needs to extend at least 1 metre past the landing.

**Step 2** - Make sure it is rated for industrial use and in good working order.

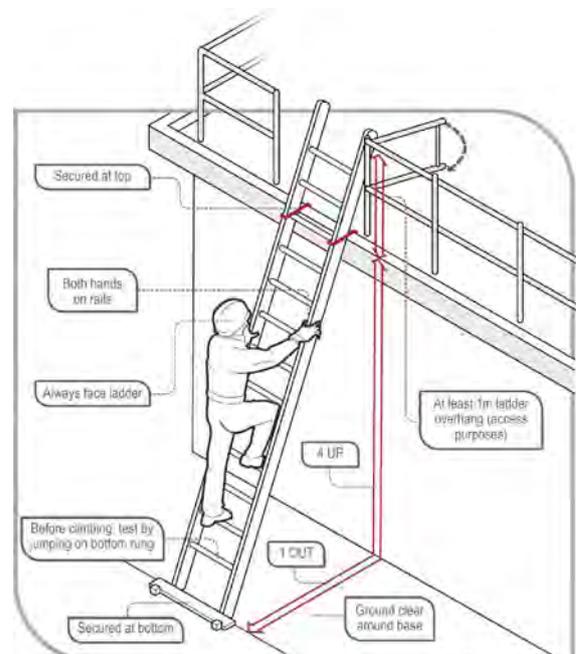
**Step 3** - Set it up so that it is not too close or too far from the support structure. The ratio should be 4:1. That means the base of the ladder is 1 metre away from the supporting structure, for every 4 metres of height.

**Step 4** - Wherever possible the ladder should be secured at the top and bottom.

**Step 5** - When climbing, face the ladder and grip it with both hands whilst having at least one hand and one foot in contact with the ladder at all times.

**Step 6** - When working on the ladder, have both feet and one other point of contact i.e. hand, waist or upper torso in contact.

**Step 7** - Use a tool pouch or similar if you need to carry tools.



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### WHAT DO WE DO NOW?

#### Read out to workers

There are so many ways where you can work more safely. Planning, preparation and the right safety equipment can mean the difference between workers going home at the end of the day, or facing a lengthy and painful recovery.

Safety is everyone's responsibility. Speak up on site about safety if you have any concerns.

#### Site supervisor notes:

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### AFTER THE TALK

- Consider using work platforms, instead of ladders
- Consider the answers workers provided during the talk to see if there are any improvements you can make
- Review and update your safe work method statement and/or site rules
- Communicate any changes/safety improvements to workers
- Check your workers are using ladders safely
- Prepare for your next toolbox talk.

### WHERE TO GET HELP

Contact SafeWork NSW on 13 10 50 or see [www.safework.nsw.gov.au](http://www.safework.nsw.gov.au)

#### Other resources:

- [Safe work method statement template](#)
- [SafeWork NSW - Ladder safety web page](#)
- [SafeWork NSW small business \\$500 rebate](#)
- [Construction supervisor working at heights safety checklist](#)
- [Code of Practice - Managing the risk of falls in housing construction](#)
- [Code of Practice - Managing the risk of falls at workplaces](#)

# TOOLBOX TALK: USING SCAFFOLDS

## RECORD OF TOOLBOX TALK

BUSINESS NAME

DATE

NAME OF SUPERVISOR OR PRESENTER

TIME

### WORKERS PRESENT

NAME

SIGNATURE

NAME

SIGNATURE

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### TOPICS DISCUSSED

### COMMENTS/FEEDBACK

#### Disclaimer

This publication may contain information about the regulation and enforcement of work health and safety in NSW. It may include some of your obligations under some of the legislation that SafeWork NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website

[www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)

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