Most workplaces have items stored on shelves. Some workplaces, such as warehouses, retail outlets and libraries need to access shelves constantly. Where people need to work at height to access items on shelves there is always a risk of a fall occurring. The OHS (Prevention of Falls) Regulations 2003 require employers to minimise both the risk of a person falling more than two metres and of the person being injured by such a fall.

Sometimes it is reasonably practicable to eliminate the risk of a fall altogether – installing more shelving at lower levels or installing carousel shelving that brings each shelf down to within easy reach are two examples of this. Wherever reasonably practicable, the risk of a fall should be eliminated no matter what the height.

It is essential that employers use the following process to control any fall hazard.

- **Identify** the fall hazard
  (Do people need to access shelves where a fall from height is possible?)

- **Assess** the situation
  (How likely is it someone will fall and be injured while accessing shelves?)
  (What circumstances would contribute to the fall or increase the likelihood of someone falling or being injured?)

  - **Fix it**
    (If a fall is possible, put in place measures to prevent it.)
    (If it’s not possible to prevent a fall completely then put in place measures that will minimise the chance of a fall and/or injuries that may result from it.)

**IDENTIFYING FALL HAZARDS**

By law employers need to identify all tasks that involve shelves being accessed where someone can fall and be harmed. Visual inspection of all shelves should be undertaken to assist in identifying situations where someone may fall and be injured. Situations where falls may occur are:

- when placing or removing items from shelving;
- checking stock levels;
- rearranging items on shelves;
- attaching items such as signs, price tags or shelving attachments;
- cleaning shelves;
- changing shelf heights in adjustable shelving; and
- inspecting and repairing shelving.
PREVENTION OF FALLS – ACCESSING SHELVES

ASSESSMENT OF SITUATION
Where a fall hazard has been identified it is necessary for employers to assess the relevant work task(s) undertaken to determine how likely it is a fall will occur, and the circumstances that would contribute to a fall (or increase the risk of a fall). While undertaking an assessment it’s also a good idea to start considering the safest way of performing the task if it still needs to be done.

When assessing the risks of accessing shelves the following issues should be considered:

- Are the items being accessed still required? (If not have them removed and disposed of safely.)
- Are the items being accessed small or large? Are they compact or bulky? Lightweight or heavy? (Large, heavy and bulky items increase the risk of a fall if adequate safety measures are not in place.)
- Are the shelves being accessed from a stable platform?
- Are devices such as chutes, hoists or forklifts available in the workplace that allow items to be lifted or lowered to the required level without being carried by a person?
- Are the steps, platforms, mechanical aids or ladders used to access shelving regularly inspected, maintained and in good condition?
- Are the steps, platforms, mechanical aids or ladders used in conditions that increase the likelihood of someone slipping and falling? Example: Are the shelves accessed in a chiller room, freezer or a hot environment? Are the shelves located where substances like oil, paint, water or other chemicals present make surfaces slippery?
- Are the shelves located on a mezzanine where someone could fall or be knocked off? (Refer to WorkSafe Victoria information sheet for guidance on Working on Mezzanines.)
- How long does the person need to work at height – a few minutes, few hours or all day? How often? Three to four times a year, every day, somewhere in between?
- Are the objects on the shelves properly packed? Does packing allow for a secure grip?

- Does the method of access to shelves allow items to be handled between knee and shoulder height (Best Working Zone)?
- Do the items on the shelving possibly exceed the individual shelf or overall load capacity?
- Are the shelves accessed in a high traffic area, perhaps near forklifts or other vehicles?
- Are there other factors present that increase the risk of a fall when accessing shelving?

There is also likely to be other risk assessment elements to consider from other OHS legislation, such as manual handling, plant safety, hazardous substances and others that need to be factored in.

If the risk assessment determines a fall is likely, along with the conditions that increase that likelihood, then fall prevention measures need to be put in place.

REDUCING THE HAZARD

Reduce shelf heights or install more shelving
When accessing shelving, the most effective way of reducing the risk of falling from height is to reduce shelving to a height where people can access items from ground level or from a solid platform. If this is not possible, then the next most effective method for reducing the risk of a fall is to install more shelving so items do not need to be stored at heights (where this is reasonably practicable to do).

Use elevated work platforms
If workers need to access shelving above two metres in height then consider using an elevated work platform (fixed, temporary or mobile) that incorporates handrails, secure steps and a railed platform at the top from which to access the shelves and place material. These should comply with the relevant Australian Standards that cover design, manufacture and use of such equipment. Step platforms are a form of elevated work platform that are suitable for accessing shelving in many instances. As with any fall prevention measure, these types of aids should be used only after a risk assessment has been conducted that demonstrates the aid can be used safely.
**PREVENTION OF FALLS – ACCESSING SHELVES**

**Using manual or mechanical aids to lower or raise people or items**

Falling can occur when carrying material and objects manually up and down steps so consideration should be given to work platforms that include manual or mechanical aids for lowering or raising loads to a different height or floor level. Chutes and hoists are available commercially and can assist this situation. Some elevated work platforms come with mechanical hoists included.

**Forklifts**

Where stock picking or stocktaking in a warehouse or storage facility is required, order picking forklifts or elevating work assistance vehicles should be used wherever reasonably practicable.

Order picking forklifts are designed to allow the operator to be raised on an integral platform and to pick stock to a pallet or bin with reduced risk of falling. Operators are protected against falling by partial guard rails on the platform and the use of a full body harness and a lanyard tether travel restraint system.

Before using a maintenance cage for any task a risk assessment must be carried out in accordance with the OHS (Plant) Regulations.

Australian Standards AS 2359 Part 1 ‘Powered Industrial Trucks – General Requirements’ and AS 2359 Part 2 ‘Powered Industrial Trucks – Operation’ provide guidance on the safe working procedures that should be followed when using a maintenance cage or purpose-built work platform. A summary of these standards and additional information on working with forklifts is contained in the WorkSafe Victoria information sheet titled Prevention of Falls – Forklifts.

Further information on the stability of a forklift under the weight and dynamic loads of the work platform and occupants at the working height should generally be obtained through consultation with the manufacturer or supplier. In any event, a forklift should always be capable of lifting the potential and actual load at its maximum lift height safely.

**Use of forklifts near mezzanines**

Where shelving is located on a mezzanine and a forklift is being used to move items or people between levels, safety gates or some equivalent measure should be in place on the mezzanine. This is to minimise the chance of a fall in case the forklift either hits a person located on the mezzanine or hits the mezzanine itself. This requirement does not generally apply where order picking forklifts are being used.

For more information on working on mezzanines refer to WorkSafe Victoria guidance titled ‘Prevention of falls – mezzanines’.

**Use of ladders**

Where the above safety measures are not reasonably practicable then and only then should ladders (fixed or temporary) be considered for accessing shelving. In such circumstances ladders should only be used if a risk assessment determines the ladder can be used safely at all times. (Refer to WorkSafe Victoria information sheet on using ladders.) Three-point contact with the ladder should be maintained continuously while climbing up or down the ladder and the ladder should be set up and secured properly. Ladders should not be used for moving large, bulky or heavy items to shelving or to ground level.

Ladders may be suitable where small, lightweight items such as a file, book or infrequently requested stock needs accessing a few times a year.

Ladders may also be suitable for inspecting or doing minor maintenance on shelving in some cases. Examples: inspecting and re-affixing screws, nuts, bolts or signs that have come loose on shelving and the job is only going to take a few minutes.

**Unacceptable methods for accessing shelving**

At no time is it acceptable for someone to be accessing shelves by climbing on the shelving or using a device that has not been designed for work at height such as a piece of furniture or plant.

Large, heavy or bulky items should also never be carried up or down a ladder as the risk of a fall is high in this situation.

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3.0 Stock picker.

Forklifts (other than purpose-built order picking lift trucks) are designed to lift loads, not people. They usually do not have fail-safe devices to prevent the load carriage falling in the event of equipment failure or a sudden stop.

The OHS (Plant) Regulations prohibit the lifting of people on plant that is not specifically designed for that purpose. Despite these shortcomings, forklifts with a purpose-built maintenance cage or work platform firmly attached to the forklift’s fork arms can be used to gain access to shelving for maintenance or irregular inspection tasks that are of short duration.

Maintenance cages or purpose-built work platforms attached to forklifts should not be used for stock picking or stocktaking if other plant specifically designed to raise people is reasonably practicable.
MORE INFORMATION

WorkSafe Victoria
Specific information on working at heights can be obtained by contacting WorkSafe on 1800 136 089.

Acts and Regulations
Occupational Health and Safety Act 2004
Occupational Health and Safety (Prevention of Falls) Regulations 2003
Occupational Health and Safety (Plant) Regulations 1995
Occupational Health and Safety (Manual Handling) Regulations 1999
Acts and regulations are available from Information Victoria on 1300 366 356 or online at www.dms.dpc.vic.gov.au.

Publications
Prevention of Falls in General Construction (Code of Practice No. 28, 2004)
Prevention of Falls in Housing Construction (Code of Practice No. 29, 2004)
Manual Handling (Code of Practice No. 25, 2000)
Guide to Manual Order Picking
Forklift Safety
These Codes and other falls prevention information are available from WorkSafe at www.workcover.vic.gov.au.

Australian Standards
Standards Australia has some useful information on ladders and fall protection devices available from www.standards.com.au.

Other tools that may assist with fall prevention
• Job analysis sheets
• Visual observations of work process
• Industry and union publications and forums
• Professional Association newsletters and forums
• Suppliers and suppliers magazines
• Manufacturer’s instructions
• Consultation with Emergency Services on emergency procedures required for a particular job

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On 18 June 2017, the Occupational Health and Safety Regulations 2017 (OHS Regulations 2017) replaced the Occupational Health and Safety Regulations 2007 (OHS Regulations 2007), which expired on this date. This publication has not yet been updated to reflect the changes introduced by the OHS Regulations 2017 and should not be relied upon as a substitute for legal advice.

Information on the key changes introduced by the OHS 2017 Regulations can be found in the guidance titled Occupational Health and Safety Regulations 2017: Summary of changes - available at https://www.worksafe.vic.gov.au/__data/assets/pdf_file/0011/207659/ISBN-OHS-regulations-summary-of-changes-2017-04.pdf. However, this guidance document contains material of a general nature only and is not to be used as a substitute for obtaining legal advice.