



WorkCover

Safety in the wood products industry

Kitchen manufacturing and joinery



Safety guide for joinery and kitchen manufacturing

Whether you're running a business or working in one, you'll know that an injured worker can't get the job done. Because of this, it's important to make sure you build kitchens safely.

To help you with this, WorkCover NSW has created this Safety in the wood products industry guide. Each guide sheet focuses on one of the stages in your work process, from receiving materials and cutting and assembling them, to delivering the finished pieces and installing them. The guide sheets also explain the key hazards in each work area, and some solutions that can help you manage these hazards.

Important safety tips

While many of the solutions in this guide include mechanical aids and equipment, there are some simple things you can do now to make your workplace safer:

- Remove the cause of the problem eg order timber in smaller sizes and weights, outsource noisy work.
- Reduce the problem by changing the way the work is done:
 - store materials at the right height and close to where they will be used
 - place tools, controls and equipment so that work can be done at a comfortable height (ie between shoulder and knee height)
 - make sure workers know how to safely lift and carry materials correctly
 - have two workers carry material between work areas, rather than one worker
 - use a second person to help guide the wood through the machines
 - have workers do a variety of work tasks during the day or take regular breaks.

It is important to talk to your workers and contractors about these hazards and to make sure they are adequately trained and supervised, and hold relevant licences to use any new equipment. Remember to keep all equipment serviced and in good working order.

By avoiding some common hazards and following the suggested solutions in this guide, you'll not only be making your business safer but also be saving some time and money.

Claims information shows that if your worker gets injured it will cost you more than you think.

Hazard	Resulting Injuries	Average days off work per claim
Moving wood by hand	Back	90
	Shoulder	125
	Hernia	85
Using unsafe hand tools	Muscle stress injuries to nerves, joints, hands	30
Using unsafe nail guns	Nail gun injuries	15
Inadequate machine guarding	Serious cuts to hands and fingers	70
Wood dust	Asthma and lung disease	105

To find out more about work health and safety, visit workcover.nsw.gov.au or call WorkCover on 13 10 50.



Receiving goods

Wood is delivered to your workshop for unloading and moving to storage or work areas.

Problems



Poorly designed delivery area

Delivery areas that are difficult for workers to access and are located a long way from storage and work areas put workers at greater risk of injury from extra lifting and carrying.



Poor traffic control

Poor traffic control in delivery areas can cause workers to be injured by forklifts and mobile plant.



Moving timber by hand

Constantly unloading and moving timber sheets by hand can cause serious back, shoulder and hernia/stomach injuries.

STOP

Reduce unloading by hand to stop workers getting injured.



Solutions

Improve your delivery area

- Locate unloading areas close to assembly or storage areas.

Improve traffic control

- Clearly mark unloading areas with lines and/or barriers to prevent people colliding with forklifts and other mobile plant.
- Install fixed or mobile platforms and docking bays so that workers have easy access to vehicle trailers.

Improve your handling of materials

- Order raw materials to be delivered in smaller sizes and weights.
- Use mechanical handling equipment such as pallet trucks to unload goods from trucks.
- Make sure there is enough room for mechanical handling equipment to safely operate within the delivery area.
- Make sure workers are aware of the correct way to unload the material.
- Store wood materials between waist and shoulder height.

DO

Install barriers in delivery docks to reduce the risk of hitting workers.



Have loading dock at truck height so mechanical aids can unload from the vehicle.



Equipment that can help

Hydraulic pallet truck
fork lifter to unload
wood from trucks.



Walkie stacker or A-frame trolley
to move wood sheets to storage
or work areas.



Racking systems for easy storing
and access to wood materials.

Cutting

Wood is moved to the cutting area for sawing into specific pieces.

Problems



Moving wood by hand

Constantly moving timber sheets by hand can cause serious back, shoulder and hernia/stomach injuries.



Inadequate machine guarding

Inadequate machine guarding and blunt and unprotected saws can cause serious cuts and amputation.



Noise and wood dust

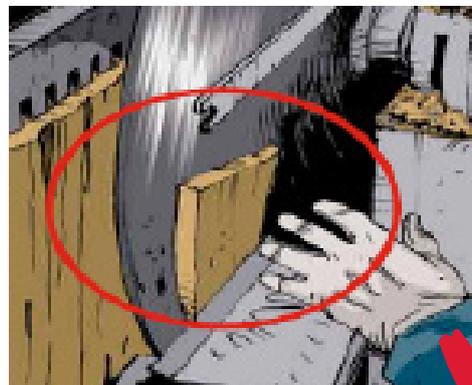
Inadequate protection from high noise levels can cause hearing loss.



Inadequate and poorly maintained dust extraction systems increases risks from breathing in wood dust. Inadequate protection from wood dust can cause lung disease.

STOP

Blunt and exposed blades can slice and trap workers' hands and body.



©WorkSafeBC. Used with permission.

Solutions

Improve your handling of materials

- Use mechanical aids such as A-frame trolleys, scissor lifts, roller conveyors and air tables to move raw wood to the cutting area.
- Ensure all walkways are clear and power cords do not run across the floor.

Install machine guarding

- Protect workers' hands and body from saws and cutting blades.
- Ensure guards can be adjusted correctly and cannot be bypassed or disabled.
- Make sure workers know how to check and adjust the guard each time they use the machine.

Check and reduce noise and wood dust

- Test the noise levels in the work area and ensure workers have correct hearing protection to prevent hearing loss.
- Where workers are required to wear hearing protection carry out audiometric testing of new workers within three months of commencing work and all workers once every two years.
- Regularly check and maintain your equipment, noise dampening material and prevent loose bearings etc.
- Install and regularly maintain a dust exhaust system to reduce workers' exposure to dust.
- Regularly vacuum and empty waste collection bags.
- Keep the floor surface free from dust to stop workers from slipping on wood dust.

DO



Install machine guarding to protect workers from serious cuts or amputation.



Equipment that can help



Scissor lifts and air tables to move wood to cutting area.



Floor surface treatments or floor mats near machines to prevent workers slipping on wood dust.



Noise monitors, signage and hearing protection, eg ear muffs, to assess and reduce exposure to noise.



Local exhaust ventilation system attached to the saw, and respirators to protect workers' lungs from wood dust.

Assembly

Cut wood is moved to assembly area to build kitchen cabinets.

Problems



Working at wrong height

Constantly moving or working with heavy timber sheets at incorrect heights can cause serious back, shoulder and hernia/stomach injuries.



Unsafe hand tools

Cheap, noisy, heavy tools can be awkward to use, have high vibration, and require excessive force. This can result in painful disorders of the blood vessels, nerves, hands and finger joints.



Noise

Inadequate protection from high noise levels can cause hearing loss.

STOP

Working at incorrect heights and awkward positions causes workers to get injured



Image courtesy of National Institute of Health and Human Services, USA



Solutions

Work at the right height

- Use mechanical aids such as roller/conveyors to move cut wood to the assembly area, and finished cabinets to the despatch area.
- Raise or lower work benches so that workers perform tasks at the right height (between shoulder and knee height).
- Use a vacuum lifter or correct racking to hold cabinets during assembly.

Use safe hand tools

- Use light weight, low vibration, air power tools and nail guns that can be operated in confined spaces at a comfortable height by workers.
- Ensure the power tools are double insulated, and have restart and overload protection, a safety clutch, and are fitted with silencers to reduce noise levels.

Reduce noise levels

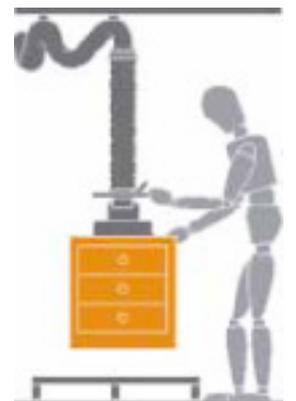
- Relocate air compressor outside to reduce noise, and ensure it is regularly serviced and maintained.
- Test the noise levels in the work area, and ensure workers have correct hearing protection to prevent hearing loss.

DO



Image courtesy of HSE UK

Use adjustable vacuum workbenches to hold cabinets and work at correct height.



Vacuum handling device to move finished cabinets.
Image courtesy of HSE UK.

Equipment that can help



Noise monitors, signage and hearing protection, eg ear muffs, to assess and reduce exposure to noise.



Low vibration air tools with silencer to reduce noise.



Adjustable height scissor lift work bench to work without excessive bending.

Despatch

Assembled cabinets are moved to storage area and delivery vehicles ready for despatch.

Problems



Poorly designed despatch area

Despatch areas that are difficult for workers to access and are located a long way from work areas put workers at greater risk of injury from extra lifting and carrying.



Poor traffic control

Poor traffic control in delivery areas can cause workers to be injured by forklifts and mobile plant.



Moving cabinets by hand

Constantly moving finished cabinets to despatch area and loading them on to delivery trucks by hand can cause serious back, shoulder and hernia/stomach injuries.

STOP

Reduce lifting by hand to stop workers getting injured.



Solutions

Improve your despatch area

- Look at workflow and workshop layout to reduce the distance workers travel between assembly and despatch areas.
- Use raised docking bays or dock-levellers to allow cabinets to be loaded at the same height as the trucks.
- Use trucks with tail gate loader (a powered drop down tray) to raise the product for loading.

Improve traffic control

- Clearly mark loading areas with lines and/or barriers to prevent people colliding with forklifts and other mobile plant.

Improve your handling of finished cabinets

- Use mechanical aids, eg vacuum lifters, roller tables or moveable conveyors, walkie stackers or height adjustable trolleys, to move finished cabinets to storage and despatch areas.
- Store finished products in racking systems for easy storing and access while waiting for despatch.

DO

Truck is backed to a docking bay at the same height and trolley is used to move cabinets on to the truck.



Equipment that can help



Line marking and movable barriers to prevent people and vehicles from entering loading area.



Movable conveyors or electric walkie-stackers to move finished goods to despatch area.



Access ramps, skids, tailgate lifter or dock leveller to load finished cabinets on to truck.

Installation

Finished cabinets are driven to client's site, unloaded and installed.

Problems



Poor access and obstructions on site

Client sites can be difficult to access and create problems for workers in unloading and installing kitchen cabinets. Not knowing what these risks are up front and managing them correctly can cause serious injuries to your workers.



Unloading and installing cabinets by hand

Unloading, carrying and installing finished cabinets on client's site by hand can cause serious back, shoulder and hernia/stomach injuries.

STOP

Difficult access to the site can put workers at risk of being injured.



Solutions

Assess the site and plan the delivery

- Before you despatch the goods, check the delivery site.
- Make sure there is adequate access and no obstructions.
- Talk to your client and workers about the potential risks on site and the correct way to lift and install the goods.
- Organise the delivery time in advance and ensure your workers can drive the delivery vehicle close to the site.
- Conduct a site-based risk assessment and fill out a safe delivery form, which is available on the WorkCover web site, workcover.nsw.gov.au
- Give the completed safe delivery form to your workers.

Install cabinets safely

- Where possible, deliver the products as flat-packs which can be moved more easily to the installation point on site.
- Use trucks with tail gate loader (a powered drop down tray) to lower the product for unloading.
- Ensure the finished product is unloaded and installed by two workers using lifting aids – eg height adjustable trolleys.
- Ensure workers use props and stands when installing overhead cabinets.

DO

Do a safe delivery check before delivering and installing the finished product.



Ensure finished cabinets are unloaded and installed by two workers.



Equipment that can help



Height adjustable and A-frame trolleys to move finished cabinets on site.



Tailgate lifter to lower and unload cabinets on site.

If an injured worker is off work

Problems

It's bad for your business

You lose the worker's experience and skills as well as their productivity. You then need to increase the load on other workers, or spend time and money finding and training a replacement. It can also affect morale in the workplace and your reputation in the market.

It's bad for the worker

Evidence shows that staying at work or returning to work as soon as safely possible is good for the worker's health – whether in their normal job or on suitable duties. The longer they are off work, the more it affects their health, relationships and financial situation.

Solutions

Stay connected with the worker

- Contact them early and regularly, and get their workmates to do so as well.
- Talk to your worker about them staying and recovering at work.
- Discuss with them what activities they can do.
- Include the worker in things like team meetings.

Find duties the worker can do

- Think what work duties you can offer that match the workers capacity.
- Get the insurer or workplace rehabilitation provider to help you explore options.
- If you can't offer any duties, talk with your work contacts to see if they can help.

Where to go for help

For assistance with helping an injured worker return to work, contact your insurer.

More information

Phone: 13 10 50

Fax: 02 4325 4145

Web: workcover.nsw.gov.au

Acknowledgements

WorkCover would like to acknowledge the following organisations for their permission to use their images in this publication:

- WorkSafe Victoria
- WorkSafe BC (British Columbia, Canada)
- HSE UK (Health and Safety Executive, United Kingdom)
- National Institute for Occupational Safety and Health (NIOSH), United States of America

We acknowledge the support of our action plan partners.

- Furnishing Industry Association of Australia (FIAA)
- Timber Trade Industrial Association (TTIA)
- Timber and Building Materials Association (TABMA)
- Housing Industry Association (HIA)
- Master Builders Association (MBA)
- Construction, Forestry, Mining and Energy (CFMEU) – Forestry & Furnishing Products Division

Catalogue No. **WC03970**

WorkCover Publications Hotline **1300 799 003**

WorkCover NSW, 92–100 Donnison Street,
Gosford, NSW 2250

Locked Bag 2906, Lisarow, NSW 2252

WorkCover Assistance Service **13 10 50**

Website workcover.nsw.gov.au

ISBN 978 1 74341 327 2 ©Copyright WorkCover NSW 0313

