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Work Health and Safety Induction

Version 28 Jan 2023

Work Health Safety Induction

Introduction

WHS Responsibilities

Common hazards & risks

WHS Risk management

Personal Protective Equipment (PPE)

Workplace incident

Specific risk awareness

Assessment

Introduction

Why is workplace health and safety (WHS) so important?

So you and the people you work with all return home safe and healthy every day

What activities are important to you?

Workplace Injuries

Work injuries prevent you enjoying what's important

Main cause of injury:

- Body stressing – sprains, strains, fractures from lifting, carrying, moving
- Falls, trips and slips – slipping, tripping and falling on or from something
- Hit by moving objects – contact moving parts of power tools, projectiles

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HIA Apprentices Commitment

HIA is committed to ensuring your health, safety and well-being

Work health and safety (WHS) is about having things in place and behaving in ways to protect against hazardous events or conditions harming you, other people at the workplace, and the workplace environment

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WHS Responsibilities

Who's Responsible

Everyone is responsible for work health and safety at the workplace

HIA

Responsible for ensuring your health and safety and making sure you are provided a safe and healthy work environment

YOU

Responsible for taking care of your own health and safety. Not affecting the health and safety of others. Following all reasonable directions given by HIA and Host Trainer

HOST TRAINER

Responsible for the health and safety of all their workers, especially Apprentices, by providing necessary information, instruction, training, supervision, and safe systems of work

WHS Responsibilities

You have the right to refuse to carry out any unsafe work

If you do not feel safe don’t do it!

STOP and ASK your Host Trainer or contact HIA until you feel safe

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Workplace Hazards & Risks

Common Workplace Hazards & Risks


Hazardous Chemicals


Bullying & Harassment


Hit/Hitting Objects

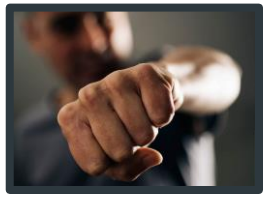

Biological Hazards


Environmental Factors


Manual Handling


Powered Hand Tools


Drugs & Alcohol


Occupational Violence


Structures


Work at Height


Slip, Trip, Falls

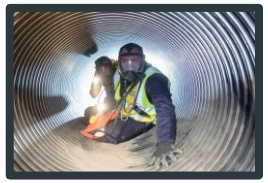

Electricity


Noise


Psychosocial Factors


Extreme Temperatures


Fatigue


Confined Spaces


Driving & Travel


Excavations

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HIA Apprentice Hub

- HIA Safety policies and procedures
- Safety hazard bulletins and alerts
- Safety information
- Employment information (bookmarks)

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WHS Risk Management

Safe and healthy workplaces don’t just happen by chance or guesswork

WHS risk management involves thinking about what could happen if something goes wrong (consequence) and the chance of that happening (likelihood)

Consequence x Likelihood = Risk

Then doing everything ‘reasonably practicable’ to eliminate or minimise risks to health and safety

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WHS Risk Management

A **HAZARD** is something that has potential to cause harm or damage:

- work at height (gravity)
- powered hand tools
- electricity
- hazardous chemicals
- bullying and harassment

A **RISK** is the chance that a hazard will cause harm or damage:

- Death or serious injury falling from a height
- Hand laceration or severed fingers from contact with a power saw blade

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WHS Risk Management

Four step risk management process:

1. Identify what could cause harm (hazard)
2. Assess what could happen if exposed to a hazard and how likely is it to occur (risk)
3. Put controls in place to prevent it happening or minimising the effect
4. Make sure controls implemented are working and effective

Always eliminate hazards first

If that's not possible, minimise risks so far as is reasonably practicable

WHS Risk Management

Two common types of risk assessments:

1. Formal or written risk assessments:
   – Job Safety Analysis (JSA)
   – Safe Work Method Statement (SWMS)

2. Dynamic or ‘on the spot’ risk assessments:
   – Stop – Think – Do
   – S-A-F-E-R

WHS Risk Management

Job Safety Analysis (JSA) is used to identify dangers of specific jobs and a process to complete it safely

Safe Work Method Statement (SWMS) is a document that sets out the high risk construction work activities at a workplace, the hazards, and measures to control the risks.

There are 18 high risk construction work activities (HRCWA) defined in WHS law.

Common HRCWA include:

- Work where there's a risk of falling more than 2 metres
- Work involving movement of powered mobile plant
- Work involving temporary support for structural alterations or repairs
- Work involving disruption of Asbestos

ALWAYS work to written/documented SWMS in place for High Risk Construction Work Activities

SAFER Dynamic Risk Assessment

Stop – think about what you're doing

Assess – what harm could happen

Formulate – how can it be prevented

Enact – implement safety controls

Review – are controls working?

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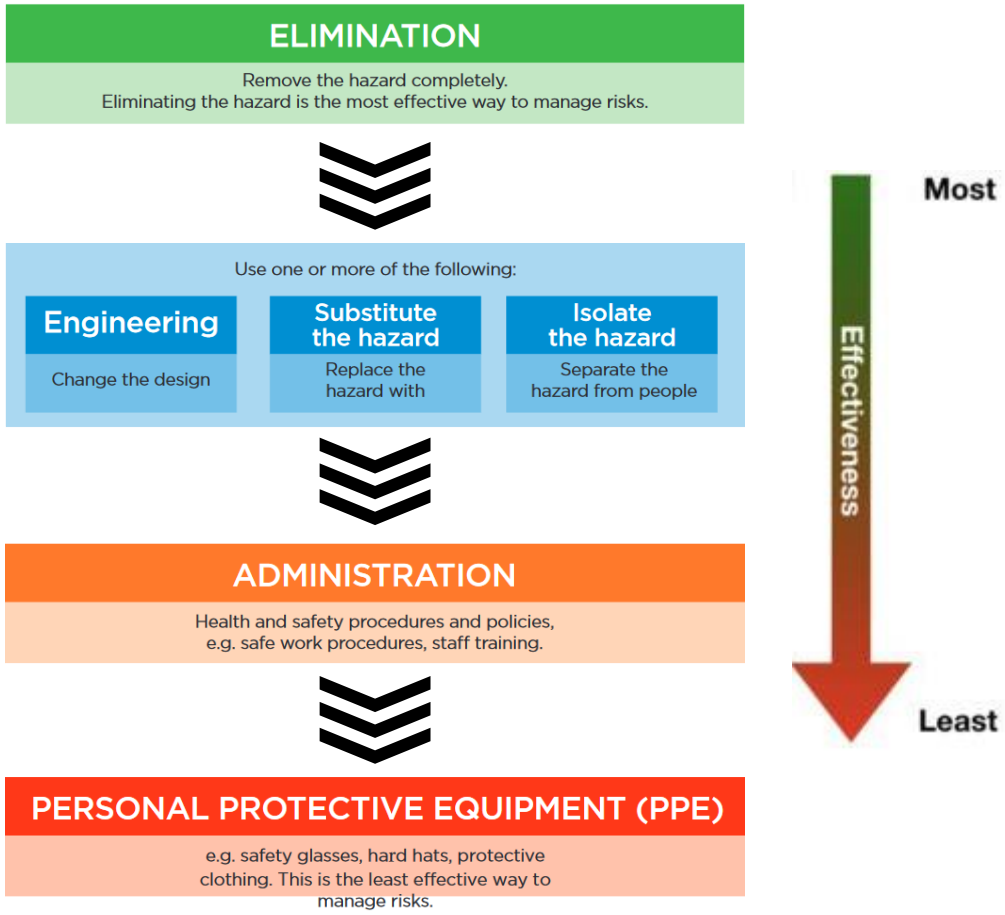
Hierarchy of Control Measures



Control Measures

If possible always try to eliminate the hazard first

Where it is not practical to eliminate a hazard minimise the risk using: Engineering, Substitution, Isolation

Minimise any remaining risk by using administrative controls

If risks remain, the possible impact on people must be controlled using PPE.

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Personal Protective Equipment (PPE)

You must use or wear PPE that has been provided to you

You must use PPE properly when required and how you're instructed to use it

You must not misuse or wilfully damage your PPE

You must advise the host trainer or HIA if PPE isn't working properly or you need new or replacement PPE

Types of PPE includes:

Eye protection

Safety boots

Protective gloves

Respiratory equipment

Hearing protection

High vis clothing

Safety helmet

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QUIZ

Who’s responsible for WHS?

What’s a hazard?

What’s a risk?

What is a dynamic risk assessment?

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Workplace Incident

Workplace Incident

All incidents including:

- Injuries
- Illnesses
- dangerous events
- near misses

Must be reported immediately to the Host Trainer and HIA Apprentices field officer

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Workplace Incident

What to do if you are injured, have a work-related illness, or are involved in a dangerous event or ‘near miss’ incident:

- Make sure you and others are free from any further or potential harm
- Alert your Host Trainer immediately and get appropriate medical attention if required (first aid, ambulance, hospital, medical practitioner)
- Advise your HIA Apprentices field officer immediately or as soon as practicable
- Assist with the incident investigation
- Participate in all workers’ compensation, rehabilitation and return to work processes

Speak Up!

Be involved in solutions to make your work and workplace safer

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Risk Awareness

Specific Risk Awareness

Work at height

Slips, trips, falls

Manual handling

Bullying & Harassment

Silica Dust Inhalation

Powered hand tools

Work at Heights

Work at height means working where you could fall from one level to another

Work at height of at least 2 metres is a high-risk construction work activity and the major cause of death and serious injury on construction worksites.

Most serious and fatal falls are from a height of less than 4 metres.

Potential hazards include:

- working on or near unprotected edges
- using ladders unsafely or that isn't right for the task
- using unsafe or incomplete scaffolds and other elevated work platforms.
- **NEVER** work at height unless competent to do so and control measures are in place to prevent you falling any distance

ALWAYS check and work according to the SWMS

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Work at Heights Safety Videos

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Manual Handling

Manual handling is any activity where you exert force to lift, lower, push, pull, carry or move, hold or restrain anything

Hazardous manual tasks involve one or more of the following:

- high or sudden force
- exposure to vibration
- repetitive movement
- repetitive or sustained force
- sustained or awkward posture

Potential hazards include:

- Repetitive bending, reaching or twisting
- Prolonged same posture or awkward work position
- Fast repetitive work
- Awkward shaped objects
- Lifting and carrying heavy weights
- Applying large forces to carry out a task
- Unstable work surfaces
- Poor lifting technique

Manual Handling

General tips:

- follow controls or systems of work for the activity
- use lifting and carrying aids such as trolleys and barrows
- avoid tasks requiring over stretching or twisting
- take regular breaks when manual handling is repetitive
- use safe and appropriate lifting technique
- team lift heavy objects

Safe lifting technique:

- Stop & think - Plan the lift. Size up the load – shape, size, weight, where, how
- Move & carry loads as close to your body as possible and secure your grip
- Always bend and use your knees keeping your back straight
- Raise the load with your legs
- There is no set weight limit that is considered safe – do a dynamic risk assessment

Manual Handling

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Silica Dust Inhalation

Crystalline silica is found in materials like quartz, some stone, rock, sand, gravel and clay and in the following products:

- Bricks & Mortar
- Tiles
- Concrete
- Artificial or engineered stone

Silica dust is very fine dust created when these products are cut, drilled, grinded, chipped or sanded

CONCRETE

BRICK

TILES AND SLATES

ARTIFICIAL STONE

MORTAR

STONE

Silica dust can be harmful if breathed in (respirable), and can result in serious lung disease: cancer, silicosis, emphysema and bronchitis

Exposure to hazardous levels of respirable silica dust can be reduced by avoiding processes such as dry cutting, grinding, crushing, drilling, or sweeping materials containing crystalline silica

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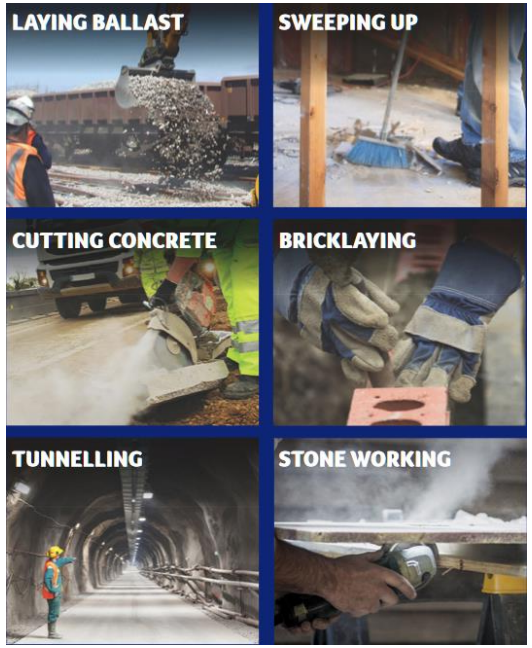
Silica Dust Inhalation

General tips:

- If possible, eliminate tasks that generate respirable silica dust
- Check manufacturer/supplier product label, safety recommendations, and Safety Data Sheet (SDS)
- Apply water suppression systems to reduce dust generation
- Use dust on-tool dust extraction and water suppression on portable tools



Safety Precautions:

- Use appropriate and well maintained respiratory protective equipment (RPE)
- Use wet methods to clean dusty floors or surfaces
- Don’t take dusty clothes home – where possible remove and clean your clothes at the workplace

ALWAYS check and work according to the SWMS

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Silica Dust Inhalation

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Slips, Trips and Falls (STF)

Slips, trips and falls (on the same level) are leading causes of injuries on construction workplaces.

Slips occur when your foot loses traction with the ground surface

Trips occur when you catch your foot on an object or surface and lose balance

Falls can result from a slip or trip but also due to low heights such as steps, stairs and curbs, falling into a hole or a ditch

Safety Precautions:

- Check the floor or ground surfaces regularly for hazards
- Maintain good housekeeping practices - clean up any spills, waste materials, or debris as soon as possible
- Don’t run or rush on site – walk deliberately and always be mindful of your surroundings
- Only work and move around the site in well-lit areas
- Take notice of signage in place to indicate hazardous areas or conditions

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Slips, Trips and Falls (STF)

The most common injuries that occur as a result of STFs are:

- musculoskeletal injuries (sprains and strains),
- lacerations, scrapes and cuts,
- bruises
- fractures and dislocations

More serious injuries can also occur such as permanent incapacity and death.

Safety Precautions:

- To reduce the risk of falls, use appropriate plant such as ladders and accessible step stools to reach heights safely instead of unstable objects
- Always wear appropriate required personal protective equipment (PPE) including slip resistant and sturdy footwear

ALWAYS check and work according to the SWMS

Slips, Trips and Falls (STF)

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Bullying and Harassment

Workplace bullying and harassment is NOT ACCEPTABLE under any circumstances

Workplace bullying is repeated, unreasonable behaviour directed at a person to threaten, intimidate, degrade, or humiliate

Harassment is conduct that causes a person to be offended, humiliated or intimidated

Bullying and harassment can cause both psychological and physical harm

Treat everyone at the workplace with dignity, courtesy and respect

Never use abusive, insulting or offensive language or belittling and humiliating comments and behaviour

Never use aggressive or intimidating conduct

If you are being bullied or harassed report it to your Field Officer immediately or as soon as possible

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Bullying and Harassment

Workplace Bullying

– Employee Rights

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QUIZ

What is meant by “Working at height”?

What is the set weight limit for manual handling?

Where can silica be found?

What should you do if you experience bullying or harassment?

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Powered Tools & Equipment

Personal Protective Equipment (PPE)

Always wear the appropriate PPE for the task involved

All Personal Protective Equipment (PPE) should be well maintained, clean, and reliable

It should fit comfortably for users to ensure they are protected and they can work efficiently

Powered Hand Tools

Common workplace powered hand tools include:

- nail guns
- circular and drop saws
- drills and angle grinders

Improper powered hand tool selection and use can result in serious incidents and severe life changing injuries

If you haven’t received adequate explanation, guidance, direction or training in the tool you’re required to use, don’t use it

Safety Precautions:

- Operate tools in accordance with manufacturer instructions and safe operating procedures
- Select and use the right powered hand tool for the job
- Ensure tools are in good working condition before use
- Wear PPE i.e. eye protection, ear plugs, gloves etc
- Use powered hand tools in a way that is comfortable and non-restrictive and only in well lit areas
- Follow safe electrical practice

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Work With Powered Hand Tools

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WHS Risk Management

Common workplace plant and equipment includes:

- Scaffold
- Extension / step ladder
- Cement mixer
- Residual Current Device (RCD)
- Electrical extension leads
- Utility knife

Improper selection and use can result in serious incidents and severe life changing injuries

Not sure how to operate plant & equipment - don’t use it – Ask!

Plant and Equipment

Step Ladder

- Appropriate for task
- Industrial rated 120kg+
- Level & stable ground
- Only use in fully open position
- No higher than 3rd top rung
- 3 points of contact

Cement Mixer

- Level & stable ground
- Electrical test & tag
- Connected through RCD
- All safety guards are in place
- Mechanically sound
- Not left running unattended

Extension Ladder

- Appropriate for task
- Industrial rated 120kg+
- Level & stable ground – secure at top and bottom
- Angled at a ratio of 1:4
- At least 1 metre overhang
- 3 points of contact

- Appropriate for task
- Tested/checked regularly (before use)
- Electrical test & tag
- Rated for industrial use
- Clear and dry work area
- Uncoiled when in use

Scaffold

- Appropriate for task
- Level & stable ground
- Erected, maintained, amended by competent person only
- Check complete with no missing components or gaps in decks/platforms before use

Utility Knife

- Appropriate for task
- Clean and sharp
- Cut away from body
- Use required PPE
- Do not use when distracted

Powered Tools & Equipment Use and Safety Awareness

Step Ladder

Compound Mitre Saw

Framing Nail Gun

Extension Ladder

Angle Grinder

Circular Saw

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Compound Mitre Saw

Compound Mitre Saw (chop saws or drop saws) are a variation of the portable powered saw.

They consist of a blade and a motor which is mounted onto a short portable bench.

They are widely used for cutting studs, skirting, architraves, etc.

Compound Mitre Saw – Main Parts

Identified Hazards

- Ejected Waste (flying objects)
- Eye Injuries
- Noise
- Electricity
- Sharp Moving Parts
- Waste / Off-cut Materials
- Dust

How Do Injuries Happen?

Some of the most frequent injuries that may occur when you are working with a drop saw are eye injuries

Ear injuries can be caused by loud/sharp noised of the drop saw

Physical injuries may also occur when working with a drop saw. The most common of these is off-hand injury.

This normally occurs when you cross your hand over the blade as it is moving

PRE-Operation Safety Checks

When using a drop saw always begin by setting-up your work area safely to avoid trip hazard, uncomfortable working conditions, electrical hazards, crowded work spaces and other dangerous situations.

Operating Safely

Look for nails or knots that may cause the blade to kick back

Check and understand how the safety switch and trigger work before cutting

Ensure all adjustments are secure before making a cut

Use clamps to secure and support the workpiece to a stable platform

Before turning on the saw, perform a dry run of the cutting operation to ensure no problems will occur when the cut is made

Operating Safely

The blade guard should never be removed or tied back

Never place your fingers between the work piece and the fence

Ensure your timber is pushed hard back into the fence

Ensure saw has started and is up to speed before cutting timber

Remove timber using two hands

Nail Guns

Three power types of nail guns

- Gas
- Compressed air
- Battery

Please ask your host for a demonstration on the use of a nail gun before using

Nail Gun – Main Parts

Identified Hazards

- Flying Objects (Ricocheting Nails)
- Compressed Air
- Noise
- Tripping Hazards (Air Hose)
- Penetrating Injuries (Nails)

How Do Injuries Happen?

There are seven major risk factors that can lead to a nail gun injury

Some risks are:

- Unintended nail discharge from double fire
- Unintended nail discharge from knocking the safety contact with the trigger squeezed
- Nail penetration through timber work piece
- Nail ricochet after striking a hard surface or metal feature
- Missing the work piece
- Awkward position nailing
- Bypassing safety mechanisms

Nail Gun Triggers

All nail guns rely on two basic controls:

- Finger trigger
- Contact safety tip located on the nose of the gun

Two trigger types:

- Sequential trigger
- Bump fire trigger

Pre-Operational Checks

Select SINGLE FIRE type nail gun with SEQUENTIAL trigger operation, NOT Rapid / Bump Action type

Inspect the nailing gun for any obvious damage

Ensure suitable & safe work area

Establish an appropriate exclusion zone

Use the correct air pressure for the particular gun being used

Always assume the gun is loaded

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Operating Safely

Maintain a firm grip to ensure you have control of the gun.

Don’t rapid-fire nails (Bump fire) by continuously holding the trigger.

Not all nail guns have the same safety features, read the manufacturer’s instruction manual before you use any nail gun. **Ask questions!**

Never, under any circumstances, point a nail gun at or towards anyone.

Don’t carry a nail gun around with your finger on the trigger.

Operating Safely

Skew nailing – don’t exceed a 45 degree nailing angle

Fix timber on a flat surface when possible

When nailing studs start with the top nail first

Operating Safely

Maintain minimum 150mm hand away from contact tip

Hang nail gun from tool belt if you are working off a ladder

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Power Saw/Circular Saw

Power saws are tools that cut and shape material such as wood, metal, and ceramics.

Power saws use a toothed or abrasive disc or blade to cut different materials using a rotary motion spinning around an arbor.

Power Saw- Main Parts

Identified Hazards

- Ejected waste (flying objects)
- Eye injuries
- Moving, rotating and sharp parts
- Waste/off-cut material
- Noise
- Dust
- Electricity
- Kickback

How Do Injuries Happen?

There are several major risk factors that can lead to an injury from a saw

Most circular saw incidents occur due to kickback, a term used when the blade becomes jammed by the material being cut

Another common injury is eye injuries. This can be from dust or larger particles. Make sure you have angled the dust away from yourself by adjusting the dust port

Long term ear or hearing injuries can also occur due to the noise of the tool. To avoid this ensure you have correctly fitted and appropriate hearing protection

Pre-Operational Checks

When using a power saw always begin by setting-up your work area safely to avoid the following: trip hazard, uncomfortable working conditions, electrical hazards, crowded work spaces and other dangerous situations

The power saw should be used only in designated area. If you don’t know where this is ask

Inspect the electrical cord for cuts or kinks and an RCD is being used. If you’re using a battery powered saw make sure the battery is correctly inserted and there is sufficient charge

Pre-Operational Checks

Ensure the work piece you're cutting is clamped or securely held and is free of any loose parts such as knots which could jar the saw or you, damage the blade or become jammed in the material being cut

Be prepared to firmly grip the tool when in use

Plan your cut to ensure that your blade will not cut anything unintentionally and you have enough room to complete you cut

Make sure the guard is working correctly and springs back after being retracted

Operating Safely

Before using a power saw, check the base plate and angle adjustments to be sure they are tight and where you want them. Don’t assume they are right if you haven’t checked yourself.

Adjust your blade depth to the timber you are cutting. The blade should be only just deeper than the material you’re cutting. Around 2 to 5mm is sufficient

Do not make depth adjustments while power saw is plugged in (corded or battery) and never adjust while making a cut

If using a fence guide make sure it is set to the required width and is tighten so the fence won’t move when making your cut

Operating Safely

Always keep both hands on the saw by holding the saw only by the handle and the front knob

Always place the power saw base on the timber with the blade not touching the material before starting the saw

The widest part of the base plate rests on the timber and the off cut should be to the smaller part of the base plate

Be aware of flying debris, dust and particulates. Aim debris away from yourself and other people

Operating Safely – Ripping Timber

Hold the saw with both hands during a cut

Use an appropriate support surface, such as a bench or sawhorses with the material secured with a clamp

Don’t pull back the guard

Don’t cut while in an awkward or restricted posture. Stop the saw completely when repositioning yourself for longer cuts

Never rip using one hand. Your hands should both be on the power saw and never under the material or in front of the saw

Grinders

An angle grinder is a handheld power tool that can be used for a variety of metal fabrication jobs that include cutting, grinding, deburring, finishing and polishing.

The most common types of angle grinder tools are powered by electricity; either corded or battery powered

Grinder – Main Parts

Identified Hazards

- Abrasive, Rotating & Sharp Parts
- Eye injuries
- Disintegrating wheel/disc
- Waste/off-cut material
- Hot sparks and burns
- Noise
- Dust
- Electricity
- Kickback

How Do Injuries Happen?

There are seven major risk factors that can lead to a grinder injury

Some risks are:

- Angle grinder kickback
- Worn or damaged wheel/disc
- Missing or incorrectly positioned wheel/disc guard
- Incorrect wheel/disc for the task
- Awkward position of use
- Single handed operation
- Bypassing safety mechanisms

Pre-Operational Checks

When using a grinder always begin by setting-up your work area safely to avoid the following: trip hazard, uncomfortable working conditions, electrical hazards, crowded work spaces and other dangerous situations

The grinder should be used only in designated area. If you don’t know where this is ask

Inspect the electrical cord for cuts or kinks and an RCD is being used. If you’re using a battery powered saw make sure the battery is correctly inserted and there is sufficient charge

Pre-Operational Checks

Check that the disc, guards & handle are secure and that the safety guard covers half of the disc.

Check for and remove / make safe any potential combustible material or relocate work area

Operating Safely

Do not fit a grinding disc that has been dropped, damaged or become wet at any stage

Be aware of flying hot sparks. Hold the grinder so that any sparks fly away from you and anyone nearby, and away from all combustible materials

Allow the grinder to reach operating speed, then apply load gradually. Maintain a constant pace to avoid uneven surfaces

Maintain complete control. Operate with both hands. Maintain proper & steady footing at all times

Operating Safely

Do not apply excessive force – this could cause the disc to disintegrate

Be aware of the potential for violent kick-back to occur, particularly when cutting

Before making any adjustments to the grinder, bring the machine to a complete standstill then disconnect from the power source

Turn off after use. Do not place the grinder down until the disc has completely stopped rotating

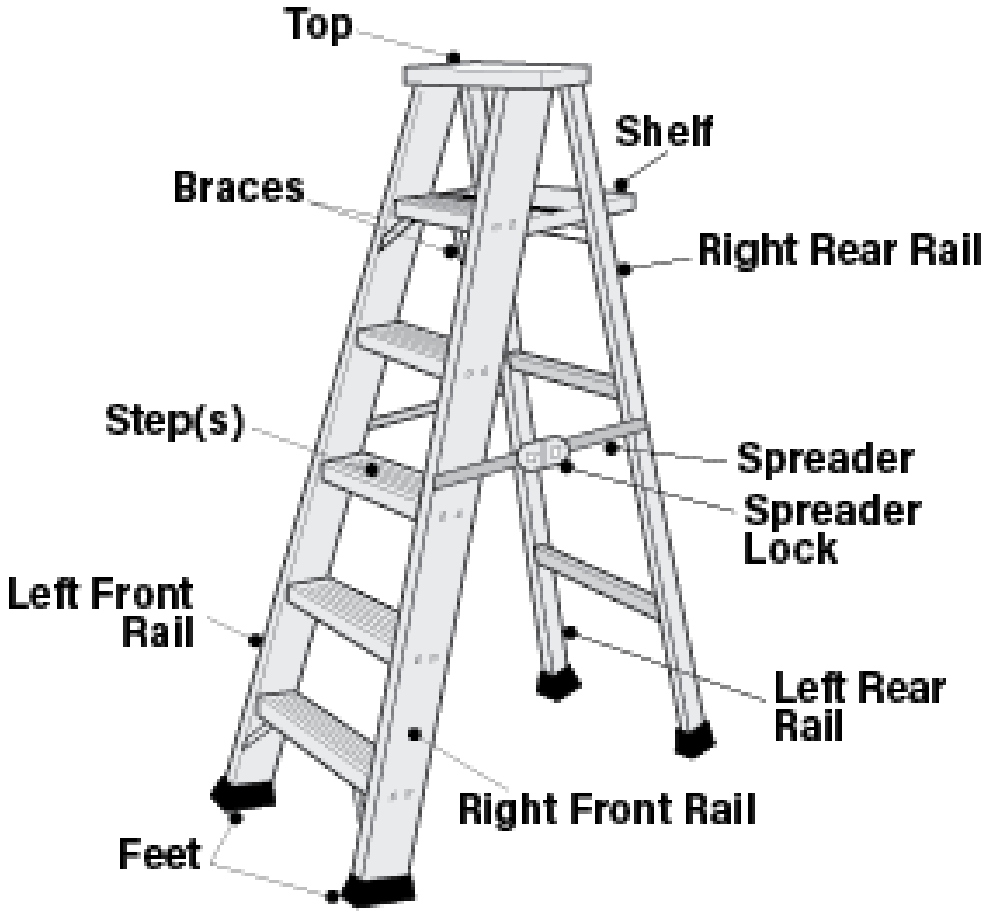
Ladders – Extension and Step

Extension ladders usually have two sections that operate with brackets or guides that allow for the ladder to be used at adjustable lengths

Extension ladders are not self-supporting and require a stable structure that can withstand the intended load

Step ladders have two sections that operate to create an A frame with a support member securing the two outer rungs

Ladder – Main Parts



Identified Hazards

- Falls to same and lower levels
- Overhead objects
- Slips
- Electricity

How Do Injuries Happen?

There are seven major risk factors that can lead to a ladder injury

Some risks are:

- Selecting the wrong type of ladder
- Using worn or damaged ladders
- Incorrect use
- Incorrect placement
- Over reaching when working from a ladder
- Stepping off the ladder incorrectly
- Coming down the ladder

Pre-Operational Checks

When using a ladder always begin by setting-up your work area safely to avoid the following: trip hazard, uncomfortable working conditions, electrical hazards, crowded work spaces and other dangerous situations

Is a ladder the safest, practical means of access for the task (can the task be done another way?

Is the ladder industrial rated at 120kg or greater and to be used only for the purposes for which it was designed

Pre-Operational Checks

Inspect the ladder for obvious damage including non-slip feet, stiles, steps / rungs / cleats, spreader bar, handrails and platform (where fitted).

Treads / Steps - pay particular attention to any cracks in welds, loose, worn or missing rivets and damaged or worn press fittings.

Spreader Bar - pay particular attention to those that are damaged, missing, bent, or worn. Also damaged or missing rivets or bolts connecting spreader bars or to stile

Operating Safely – Extension Ladder

Ladder based on firm footing and secured against slippage

Straight ladders positioning: place the ladder base at a 1:4 ratio from the vertical (horizontal / vertical)

Face the ladder when ascending and descending keeping three points of contact at all times when climbing

Operating Safely – Step Ladder

Avoid over reaching or working adjacent an edge where you can fall to a lower level

- Ladder to be re-positioned if needed. Re-assess suitability of ladder
- Limit side reaching - your centre of body should not extend beyond the side rail

Ladder to be based on firm footing and not place on any other items to increase height

Ladder opened fully and ladder locks, spreaders or braces engaged before climbing

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Assessment