Mitre Saw

Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

	SCOPE OF WORKS
Client:	
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

SAMPLE

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RISK MATRIX

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	

Hierarchy of Controls (pyramid):
- **Elimination** — Remove the hazard.
- **Substitution** — Replace the hazard.
- Isolation — Isolate People from the hazard
- **Engineering** — Isolate the hazard
- **Administrative** — Change
- PPE

SAMPLE

Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before the task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:
Remember to apply controls in the preferred order shown by the coloured pyramid:
1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work *(2023) and ISO 45001:2018 clauses 6–8.*

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JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Governance, WHS Duties and Consultation	• Lack of clear allocation of WHS responsibilities for mitre saw ownership, use, inspection and supervision • Failure to identify combination chord cutter and mitre saws as plant requiring formal risk assessment under WHS Act 2011 and WHS Regulations • Inadequate consultation with workers and Health and Safety Representatives (HSRs) about mitre saw risks, changes to equipment, or work procedures • No documented plant risk register capturing all mitre saws (including slide compound saws and drop saws) across the business • Inadequate monitoring and review of mitre saw incidents, near misses and corrective actions at management level • Poor integration of mitre saw controls into the overall WHS management system, leading to inconsistent practices between sites or teams	High	• Assign clear PCBU-level accountability for plant safety, including mitre saw governance, via WHS roles and responsibilities in job descriptions and WHS policy documents • Include all mitre saws (drop saws, slide compound saws, combination chord cutters) in the organisation's formal plant risk register with unique ID, location, owner and inspection status • Undertake a documented risk assessment for mitre saws that specifically references WHS Act 2011 and relevant WHS Regulations (plant, guarding, noise, hazardous manual tasks) and review at least every two years or after significant change • Establish a structured consultation process (e.g. safety committee meetings, toolbox talks) to discuss mitre saw risks, proposed controls, and changes to procedures, ensuring participation by workers and HSRs • Require all mitre saw related incidents, near misses and hazards to be reported into a central WHS reporting system, with trends reviewed by senior management and outcomes communicated to workers • Integrate mitre saw work controls into the overall WHS Management System (policies, procedures, induction, training, audit checklists) so that expectations are consistent across all worksites • Document a specific Mitre Saw / Drop Saw Governance Standard that sets minimum requirements for procurement, guarding, training, inspection, storage and supervision • Schedule regular management reviews (e.g. quarterly) of mitre saw safety performance, including audit findings, incident data and compliance with the Mitre Saw Governance Standard	Medium
2. Procurement, Design and Suitability of Mitre Saws	• Purchase of low-quality or non-compliant mitre saws that do not meet AS/NZS safety requirements or have inadequate fixed and adjustable guarding • Procurement decisions based solely on price without considering risk controls such as braking systems, blade guards, clamping mechanisms, dust extraction ports and noise ratings • Acquisition of saws that are not suited to the specific materials, cutting capacity, or duty cycle required, increasing likelihood of misuse, overloading or modification • Inconsistent brands and models across the business, complicating training, maintenance, and spare parts management	High	• Develop and implement a Mitre Saw Procurement Specification that mandates compliance with relevant Australian Standards for plant safety, electrical safety, guarding and noise, and prohibits purchase of non-conforming equipment • Require WHS and maintenance input into procurement decisions for all mitre saws, ensuring consideration of features such as blade brake, full upper guard, lower retracting guard, robust fences, clamping systems, and integrated dust extraction capability • Standardise on a limited number of approved mitre saw models and manufacturers (including combination chord cutters and slide compound saws) to simplify training, spares, and maintenance processes • Specify minimum performance requirements (capacity, duty cycle, power rating, sliding vs fixed, bevel and mitre ranges) so the saw is fit for purpose and reduces the need for unsafe improvisation • Mandate purchase of compatible, high-quality blades (correct diameter, bore, speed rating and tooth profile) and prohibit generic or unverified blades via a controlled supplier list • Include necessary accessories (stands, extension wings, clamps, length stops, dust extraction attachments) as part of the standard purchase package and document them in the asset record • Implement a pre-acceptance inspection checklist for all new mitre saws confirming guarding, emergency stop or power isolation features, condition of cords and plugs, documentation and manuals before they are put into service	Low

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	• Lack of standard accessories (workpiece clamps, length stops, stands, extension tables) increasing the need for makeshift arrangements and unsafe workarounds • Purchase of incompatible blades (e.g. wrong kerf, tooth design or speed rating) leading to increased risk of kickback, blade failure or poor cut quality		• Maintain records of all mitre saw purchases, including model, serial number, manuals and supplier safety information, in the plant register for traceability and recall management	
3. Installation, Layout and Fixed Location Management	• Mitre saws installed in cramped or poorly laid-out areas leading to awkward body positions, collision with other workers, or restricted access to emergency stop or isolation points • Inadequate anchoring or securing of saws and stands, increasing risk of movement or tipping during use • Lack of dedicated mitre saw stations resulting in ad-hoc setup on benches, pallets or the ground, compromising stability and guarding effectiveness • Poor management of in-feed and out-feed space, encouraging manual support of long materials and unsafe reaching • Insufficient lighting at the cutting area leading to misalignment, poor visibility of blade and workpiece, and increased error rate • Inadequate power supply management (overloaded power boards, trip hazards from extension leads, use of indoor-rated equipment outdoors) • Lack of defined exclusion zones around fixed mitre saw stations, exposing bystanders to flying debris or inadvertent contact with moving parts	High	• Develop an Installation and Layout Standard for mitre saw stations specifying minimum clearances, in-feed and out-feed lengths, access to isolators, and worker circulation space • Require all fixed or semi-fixed mitre saws to be mounted on purpose-built stands or benches and mechanically secured to prevent movement or tipping during operation • Designate permanent mitre saw workstations where practicable, rather than temporary or roaming setups, and document their location and configuration in site plans • Engineer in-feed and out-feed support systems (extension tables, rollers, material supports) as part of the workstation design to minimise manual holding of long materials and awkward postures • Specify lighting requirements for mitre saw areas (e.g. minimum lux levels) and ensure task lighting is provided and maintained for accurate alignment and measurement • Implement power management controls including dedicated circuits where needed, prohibition of daisy-chaining power boards, and use of appropriately rated extension leads and RCD protection in accordance with electrical safety policies • Mark and signpost exclusion zones around mitre saw stations using floor markings and barriers where necessary, to keep non-essential personnel away from the cutting zone and line of fire • Include mitre saw layout and station checks in periodic WHS inspections and site audits to verify ongoing compliance with the Installation and Layout Standard	Medium
4. Access Control, Authorisation and Supervision	• Unrestricted access to mitre saws allowing untrained or unauthorised persons to operate them • Lack of clear rules about who may set up, adjust or change blades on mitre	High		Medium

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	saws, increasing risk of incorrect configuration • Insufficient supervision of apprentices, new workers or labour hire personnel when using mitre saws • Use of mitre saws outside of normal hours without oversight, potentially bypassing standard procedures and PPE requirements • Inadequate control of portable or site-based mitre saws being loaned, moved or used by other teams without competency verification				
5. Competency, Training and Information	• Workers using mitre saws (including combination chord cutter and compound mitre saws) without formal training or verification of competency • Training focused only on basic operation and not on system controls such as pre-use inspection, isolation, guarding principles and emergency response • Inconsistent training between sites or contractors, leading to varying understanding of low-risk and high-risk activities when cutting mitres or sliding cuts • Inadequate instruction on selection and inspection of blades, clamps and accessories, resulting in inappropriate set-ups • Lack of refresher training, particularly following incidents, plant changes or procedure updates • Training materials that are overly generic or not aligned with the specific models and configurations in use • Limited understanding by supervisors of their responsibilities for monitoring mitre saw use and enforcing controls	High			Medium

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6. Safe Work Procedures, Permits and Documentation	• Absence of documented safe work procedures (SWPs) or safe operating procedures (SOPs) for mitre saw use, blade changes, adjustments and isolation • Procedures that are overly task-specific and do not address underlying system controls such as supervision, authorisation, inspection and reporting • Out-of-date or conflicting guidance documents across different sites or teams, creating confusion for workers • Lack of integration between mitre saw procedures and related systems such as lock-out tag-out (LOTO), hazardous manual tasks, and noise management • Workers not referring to or understanding procedures because they are poorly formatted, inaccessible or overly complex • No defined process for approving, reviewing and updating mitre saw procedures in response to incidents or changes in plant	High		Low
7. Inspection, Pre-Use Checks and Preventive Maintenance	• Failure to identify worn, damaged or missing guards, fences, clamps or safety devices before use • No systematic preventive maintenance program for mitre saws, leading to degraded braking performance, inaccurate cuts and increased vibration • Inadequate inspection of power leads, plugs and RCDs, increasing risk of electric shock or fire • Use of dull, damaged or inappropriate blades due to poor blade management and maintenance systems • Reliance on informal or ad-hoc checks rather than documented pre-use checklists	High		Medium

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	• Lack of maintenance records, making it difficult to verify that mitre saws are safe and fit for service			
8. Guarding, Safety Devices and Engineering Controls	• Removal, bypassing or maladjustment of blade guards, particularly lower retractable guards on slide compound saws • Inadequate design or positioning of fixed guards, fences and blade covers allowing access to moving parts • Reliance on administrative controls alone rather than engineering solutions increasing exposure to kickback and contact with the blade • Use of non-standard jigs or modifications that interfere with guarding or safety devices • Failure to maintain or calibrate safety features such as electric brakes, depth stops and positive mitre locks	High		Medium
9. Housekeeping, Work Environment and Dust/Noise Management	• Accumulation of off-cuts, sawdust and debris around mitre saw stations creating slip, trip and fire hazards • Poor management of airborne wood dust and other particulates, contributing to respiratory issues and non-compliance with exposure standards • Excessive noise from mitre saw operation affecting hearing and communication, particularly in enclosed or reflective spaces	High		Medium

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	• Inadequate storage systems for materials and off-cuts leading to unstable stacks and hazardous retrieval • Lack of systems to control trailing leads, hoses and hoses for dust extraction, causing trip hazards				
10. Personal Protective Equipment (PPE) Management	• Inconsistent or inadequate use of PPE such as eye, face, hearing and respiratory protection during mitre saw operation • Reliance on PPE as the primary risk control for hazards that could be better managed through engineering or administrative means • PPE not fit for purpose (e.g. incorrect impact rating for eye protection, incompatible respiratory filters for the type of dust) • Poor PPE maintenance, replacement and storage systems leading to damaged or contaminated equipment • Lack of clear guidance to workers about when certain PPE items are mandatory for different mitre saw tasks or environments	Medium			Low
11. Contractor and Labour Hire Management	• Contractors and labour hire workers operating mitre saws without meeting the organisation's competency, training and authorisation requirements • Inconsistent application of mitre saw procedures by external parties who follow their own systems rather than site rules	High			Medium

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	• Poor communication of specific site hazards and local controls relating to mitre saws during contractor induction • Lack of clarity regarding responsibilities between PCBUs for maintenance, inspection and incident reporting involving contractor-used saws			
12. Emergency Preparedness and Incident Management	• Inadequate planning for response to serious injuries such as lacerations or amputations resulting from mitre saw incidents • Lack of first aid resources or trained first aiders in locations where mitre saws are used • Delayed or incomplete reporting and investigation of mitre saw incidents and near misses, leading to repeat events • Insufficient testing of emergency response procedures scenarios involving mitre saws (e.g. entanglement, electric shock, fire) • Workers unaware of isolation points or how to safely stop the saw in an emergency	High		Medium
13. Monitoring, Audit and Continuous Improvement	• Failure to detect deterioration in mitre saw safety performance due to lack of systematic monitoring and auditing • Controls implemented but not sustained over time, leading to gradual return to unsafe practices • Lack of measurable performance indicators specific to mitre saw safety	Medium		Low

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	(e.g. inspection completion rates, non-conformance trends) • No structured review of new technology or safer alternatives (e.g. improved guarding, automated cutting systems) that could further reduce risk			

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES ANY STATES THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory
Work Health and Safety Act 2011
Work Health and Safety Regulations 2011
Legislation QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws
Codes of Practice QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice
Legislation ACT: https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations
Codes of Practice ACT: https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice

Victoria
Occupational Health and Safety Act 2004
Occupational Health and Safety Regulations 2017
Legislation VIC: https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations
Codes of Practice VIC: https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-practice

Western Australia
Work Health and Safety Act 2020
Work Health and Safety Regulations 2022
Legislation Western Australia: https://www.commerce.wa.gov.au/worksafe/legislation
Codes of Practice WA: https://www.commerce.wa.gov.au/worksafe/codes-practice

Northern Territory
Work Health and Safety (National Uniform Legislation) Act 2011
Work Health and Safety (National Uniform Legislation) Regulation 2011
Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws
Codes of Practice NT: https://worksafe.nt.gov.au/forms-and-resources/codes-of-practice

Safe Work Australia Links
Law and Regulation (All States): https://www.safeworkaustralia.gov.au/law-and-regulation
Model Codes of Practice: https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice

South Australia
Work Health and Safety Act 2012 (SA)
Work Health and Safety Regulations 2012 (SA)
Legislation for SA: https://www.safework.sa.gov.au/resources/legislation
Codes of Practice for SA: https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

Tasmania
Work Health and Safety Act 2012
Work Health and Safety (Transitional and Consequential Provisions) Act 2012
Work Health and Safety Regulations 2012
Work Health and Safety (Transitional) Regulations 2012
Legislation for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations
Codes of Practice for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.