

Panel Saw (Horizontal)

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS 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

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

SAMPLE

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			Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	Engineering Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	Administrative Change	
								PPE	

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 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.

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 Change Management	<ul style="list-style-type: none"> Lack of clear allocation of WHS duties for panel saw ownership, supervision and budget approval under WHS Act 2011 (PCBU, officers and workers' duties) No formal change management process when acquiring or modifying horizontal or vertical panel saws (e.g. new guarding, dust extraction, layout changes) Inadequate consultation with workers and Health and Safety Representatives (HSRs) on panel saw risks and controls Failure to integrate panel saw risks into the organisation's WHS risk register and strategic planning Insufficient resourcing (time, funds, competent people) to maintain safe systems for both horizontal and vertical panel saws 	High	<ul style="list-style-type: none"> Define and document WHS governance for panel saws in the WHS management system, specifying PCBU, officer, manager, supervisor and operator responsibilities consistent with WHS Act 2011 and WHS Regulations Implement a formal plant change management procedure that requires risk assessment, Safe Design review, consultation, and sign-off before purchase, major repair, relocation or alteration of any horizontal or vertical panel saw Establish a WHS committee or forum where panel saw risks, incidents and improvement actions are a standing agenda item, ensuring participation by HSRs and relevant workers Include panel saw risk controls and performance indicators (e.g. training completion, guarding compliance, incident rates) in the organisation's WHS plan and regular management review process Ensure senior officers receive due diligence training that specifically covers plant risk management, including panel saw hazards and their legal obligations Allocate and review budgets for maintenance, guarding upgrades, dust extraction and competency development for both horizontal and vertical panel saws as part of annual WHS planning 	Medium
2. Plant Procurement, Design and Suitability (Horizontal and Vertical Panel Saws)	<ul style="list-style-type: none"> Selection of panel saws that do not comply with relevant Australian Standards (e.g. AS 4024 for safety of machinery - applicable woodworking machinery standards) Procurement driven by cost rather than safety features (inadequate guarding, emergency stops, interlocks, braking, riving knives, clamping devices, dust extraction ports) Imported machinery lacking compliant documentation, control labelling, or safe operating information in English Panel saw design not suited to the type, size and weight of panels handled, increasing risk of overreach, manual handling injuries and loss of control Failure to specify or integrate effective dust extraction, noise reduction and electrical safety requirements at the design/procurement stage 	High	<ul style="list-style-type: none"> Develop and apply a formal plant procurement procedure requiring demonstration of compliance with WHS legislation and relevant Australian Standards for panel saws, including documented safety features and supplier declarations Use a pre-purchase checklist for horizontal and vertical panel saws that covers guarding, interlocks, emergency stops, braking systems, blade enclosures, riving knives, clamping/holding systems and dust extraction compatibility Require suppliers to provide evidence of conformity (e.g. manuals, risk assessments, test certificates) and safe use information in clear English before purchase approval Involve competent persons (e.g. WHS advisor, experienced operator, maintenance representative) in specification and selection of panel saws to ensure suitability for typical panel sizes, materials and production volumes Specify integrated dust extraction connection points, noise control measures and compliant electrical design (including lockable isolators and correct IP rating) as mandatory procurement criteria Include contractual requirements for commissioning support, operator training, and initial verification of safety devices from the supplier upon installation 	Low

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3. Installation, Layout and Workshop Environment	<ul style="list-style-type: none"> Inadequate clearance around horizontal and vertical panel saws leading to congestion, awkward handling of large panels and collision with other workers or plant Poor workflow design causing cross-traffic of pedestrians and mobile plant through the panel saw operating area Incorrect installation of guards, fencing, light curtains or interlocks, or bypassing of safety systems during installation or commissioning Insufficient lighting and visibility around the saw, especially at measurement scales, control panels and cut lines Noise, dust and kickback paths not considered in layout, exposing other workers in the vicinity to secondary risks 	High	<ul style="list-style-type: none"> Adopt a plant layout design process that uses risk assessment to determine minimum safe clearances, loading and outfeed areas for both horizontal and vertical panel saws, including space for mechanical handling aids Implement designated panel saw work zones with floor markings, signage and, where appropriate, physical barriers to separate pedestrian walkways and forklift routes from the saw operating envelope Require installation and commissioning of panel saws to be carried out or verified by a competent person following manufacturer specifications, with documented confirmation that all guards, interlocks and emergency stop are fully functional Ensure adequate, glare-free lighting levels at the saw, measurement points and blade area in accordance with relevant lighting guidelines and routinely review effectiveness Position dust extraction ducting and discharge so as not to create tripping hazards, visibility issues or dust exposure risks to other nearby workstations Include noise and dust considerations in layout design, such as locating saws away from quiet work areas and installing acoustic treatments or enclosures where practicable 	Medium
4. Panel Saw Guarding, Safety Devices and Interlocks	<ul style="list-style-type: none"> Inadequate or incorrectly adjusted blade guarding on horizontal or vertical saws exposing operators to contact with the blade Interlocks and safety devices overridden, defeated or poorly maintained, allowing operation with guards open or removed Lack of system for regular inspection and testing of emergency devices and braking performance Guards or covers designed such that routine cleaning or blade changing encourages removal and non-replacement Failure to standardise or document acceptable configurations for ripping, cross-cutting and handling large sheets, leading to inconsistent safe setups 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Low
5. Training, Competency and Authorisation	<ul style="list-style-type: none"> Untrained or inexperienced persons operating panel saws without 	High		Medium

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	<p>understanding kickback, binding and entanglement risks</p> <ul style="list-style-type: none"> • No formal competency standard or assessment for panel saw operators, leading to inconsistent practices across shifts and sites • Insufficient instruction on differences between horizontal and vertical panel saw operation, limitations and specific hazards • Lack of training for supervisors on how to monitor and enforce safe panel saw practices • Inadequate refresher training or failure to update operators when equipment, materials or procedures change 		[REDACTED]	
6. Safe Systems of Work, Procedures and Monitoring	<ul style="list-style-type: none"> • Absence of documented safe operating procedures (SOPs) or work instructions for panel saw use, set-up and shutdown • Inconsistent use of pre-start checks, leading to operation of saws with missing guards, defective brakes or inoperable emergency stops • Production pressure encouraging unsafe practices such as rushing, using incorrect settings or bypassing safety devices • Failure to manage non-routine activities (e.g. clearing jams, test cuts, short runs) within the safe system of work • Lack of systematic supervision and verification that procedures are being followed on all shifts 	High	[REDACTED]	Medium
7. Maintenance, Inspection and Asset Management	<ul style="list-style-type: none"> • Lack of a planned maintenance regime leading to worn blades, malfunctioning brakes, inaccurate fences and degraded safety devices • Breakdown maintenance only, increasing the likelihood of catastrophic 	High	[REDACTED]	Medium

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	<p>failure or serious incident before defects are identified</p> <ul style="list-style-type: none"> • Inadequate lock-out tag-out (LOTO) systems during maintenance, cleaning and blade changes exposing workers to unexpected start-up or stored energy • Poor record-keeping of inspections, repairs and modifications to panel saws • Use of non-genuine or incompatible parts (e.g. blades, guards, switches) that compromise safety performance 		[REDACTED]	
8. Dust, Noise and Environmental Controls	<ul style="list-style-type: none"> • Inadequate dust extraction for panel saw operations leading to airborne wood dust and composite board dust, posing respiratory and combustible dust risks • Noise levels from panel saws exceeding exposure standards and affecting both operators and nearby workers • Accumulation of offcuts, dust and debris around panel saws contributing to fire risk, slip/trip hazards and reduced visibility • Lack of monitoring of dust and noise exposure over time, resulting in unrecognised long-term health impacts 	High	[REDACTED]	Medium
9. Manual Handling, Load Management and Ergonomics	<ul style="list-style-type: none"> • Systems that require operators to manually handle large, heavy or awkward panels without suitable mechanical aids, increasing risk of musculoskeletal disorders 	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> Poorly planned storage and staging of panels resulting in excessive carrying distances, twisting, overreaching or working above shoulder height, particularly with vertical saws Insufficient consideration of ergonomics when choosing control panel height, viewing angles and operating positions for both types of panel saw Lack of procedures for team lifting, coordination and communication when multiple workers handle large panels near the saw 		[REDACTED]	
10. Contractor Management and Third-Party Interface	<ul style="list-style-type: none"> Contract maintenance technicians, installers or electricians working on panel saws without understanding site-specific hazards, isolation points and procedures Inadequate communication and coordination of tasks when contractors are working near operating panel saws leading to conflicting activities and uncontrolled risks Contractors bypassing or altering guarding, interlock or control systems during works without proper authorisation or verification Lack of verification that contractors are competent and suitably qualified/licensed to work on panel saws and associated electrical and extraction systems 	Medium	[REDACTED]	Low
11. Incident Reporting, Investigation and Continuous Improvement	<ul style="list-style-type: none"> Under-reporting of near misses, minor injuries and unsafe conditions involving panel saws, leading to missed opportunities to improve controls Superficial or informal investigations that do not identify root causes related to systems, training or design Failure to share lessons learned from panel saw incidents across shifts or sites, allowing repeat events 	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> No systematic review of panel saw risk assessments and procedures following incidents or organisational changes 		[REDACTED]	
12. Emergency Preparedness and Response	<ul style="list-style-type: none"> Inadequate emergency procedures for serious lacerations, amputations, entanglement or eye injuries associated with panel saws Workers unaware of how to use emergency stops, isolators or how to respond if a person is caught in or near the blade Insufficient first aid resources or training for likely panel saw injuries (e.g. bleeding control, shock management, eye irrigation) Lack of drills or practice responding to emergencies such as fire originating from dust or mechanical failure at the panel saw 	High	[REDACTED]	Medium

SAMPLE

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 FOR ANY STATE 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-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/laws-and-compliance/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.