

Floor Sander

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. Procurement and Design Selection of Floor Sanders	<ul style="list-style-type: none"> • Purchase of floor sanding equipment (belt, drum, orbital, edge, disc, bobbin, spindle, combination belt-disc, metal sanding machines) that is not compliant with Australian WHS legislation, electrical standards or relevant Australian Standards • Selection of plant without adequate guarding, emergency stop devices, dust extraction ports, noise dampening, vibration control or compatible accessories • Acquiring second-hand or modified sanders with unknown history, missing manuals or altered safety systems • Inadequate consideration of the work environment (e.g. residential timber floor sanding and finishing, confined areas, elevated floors) when specifying equipment • Procurement processes driven solely by cost, without formal risk assessment or consultation with workers and Health and Safety Representatives 	High	<ul style="list-style-type: none"> • Establish a formal plant procurement procedure that requires WHS risk assessment and sign-off before purchasing or hiring any floor sander or power sander • Specify compliance with WHS Act 2011, WHS Regulations, Electrical Safety legislation and relevant Australian Standards (e.g. AS/NZS 3000, AS/NZS 6072) or IEC equivalents for hand-held tools, dust and noise standards) in all purchase and hire contracts • Require suppliers to provide manufacturer's instructions, maintenance manuals, safety data for consumables (abrasives, coatings, cleaners) and evidence of conformity (declarations, test reports) for all sanding systems • Standardise on a limited range of sanders and accessories (belt sanders, drum sanders, edge sanders, floor edgers, orbital and combination sanders, metal sanding machines, sanding discs and bobbins) with compatible dust extraction and guarding to simplify training and maintenance • Include mandatory features in purchasing criteria such as emergency stop controls where practicable, clearly marked on/off switches, guards on moving parts, effective dust extraction ports, vibration and noise reduction design, appropriate insulation and IP rating • Prohibit the purchase or use of untested imported plant, non-genuine accessories or makeshift devices (e.g. home-made sanding pads) unless assessed by a competent person and formally approved • Ensure procurement procedures require consultation with end users, WHS advisors and Health and Safety Representatives to capture practical hazards from real sanding tasks including sanding timber subfloors and rough patches • Maintain a plant register that records all floor sanding equipment, serial numbers, key design data, and WHS risk assessment outcomes prior to first use 	Medium
2. Governance, WHS Management System and Legal Compliance	<ul style="list-style-type: none"> • Absence of a documented WHS management system addressing plant safety, particularly for operating floor sanding machines across multiple sites • Senior management not understanding or discharging primary duty of care obligations under the WHS Act 2011 for provision and maintenance of safe plant and safe systems of work • Inadequate consultation with workers regarding risks from belt sanders, drum sanders, floor edgers and other sanding machines used in varied environments • Lack of integration between WHS procedures and business operations such as job quoting, scheduling and subcontractor management for timber floor sanding and finishing 	High	<ul style="list-style-type: none"> • Implement a documented WHS management system aligned with WHS Act 2011 duties, explicitly covering floor sanding and finishing operations, plant safety, hazardous chemicals and contractor management • Define WHS responsibilities and accountabilities for officers, managers, supervisors and workers in relation to procurement, use and maintenance of floor sanders and associated equipment • Embed WHS risk assessment processes into business workflows (quoting, planning, project approval) so that unusual or high-risk sanding environments are identified and controlled before mobilisation • Establish formal consultation mechanisms with workers and Health and Safety Representatives, including regular toolbox talks specifically covering recurring hazards in sanding timber subfloors, rough patches and operating power sanders in occupied buildings • Develop and maintain a compliance register for applicable legislation, codes of practice and Australian Standards related to plant, noise, hazardous chemicals, electrical safety and manual handling in sanding activities • Implement a scheduled WHS audit and inspection program for offices, workshops and sites where sanding equipment is stored or used, with corrective actions tracked to completion 	Medium

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	<ul style="list-style-type: none"> Failure to monitor and review WHS performance and incident trends relating to sanding operations (e.g. dust exposure, noise complaints, electrical incidents, near misses) 		<ul style="list-style-type: none"> Establish a WHS performance reporting process that captures incidents, near misses and health monitoring outcomes related to sanding (e.g. respiratory issues, hearing tests, hand-arm vibration symptoms) and reports them to management for review and action Ensure officers receive due diligence training emphasising their obligations for safe plant, safe systems of work and provision of resources to control risks from floor sanders 	
3. Competency, Training and Supervision for Floor Sanding Operations	<ul style="list-style-type: none"> Workers operating belt and orbital sanders, drum sanders, edge sanders, spindle and bobbin sanders, and metal sanding machines without formal competency assessment Inadequate instruction on system-level risks, focusing only on basic operation rather than dust, noise, fire and vibration hazards Supervisors lacking specific knowledge of floor sander risks and unable to verify safe systems of work in varied job environments Use of inexperienced labour hire or subcontractors for timber floor sanding and finishing without verification of training or licences No refresher training to prevent skill fade and normalisation of unsafe shortcuts when sanding rough patches or subfloors 	High	<ul style="list-style-type: none"> Develop a structured competency framework for roles involved in operating floor sanding machines, specifying required training, assessment and authorisation before unsupervised work Implement task-specific training modules covering floor sanding machines: belt sanders, orbital sanders, drum sanders, floor sanding disc and combination belt-disc sanders, metal sanding machines, bobbin and spindle sanders and edge sanders Include in training the system risks of dust explosions, combustible timber dust, static build-up, electrical hazards, noise induced hearing loss, hand-arm vibration syndrome and manual handling associated with moving heavy floor sanders Require supervisor on-the-job training and sign-off by a competent supervisor before workers operate floor sanding machines independently, particularly in residential premises or confined spaces Maintain training records, licences and competency assessments within a central system, with automatic reminders for refresher training and verification of competency when new equipment types are introduced Ensure supervisors receive leadership and WHS training that enables active monitoring of sanding activities, coaching on safe behaviours and enforcement of procedures Establish minimum competency and induction requirements for subcontractors and labour hire workers, including evidence of training in floor sanding machines and awareness of company WHS policies Periodically review incident and near-miss data to identify training gaps and update training content accordingly 	Medium
4. Plant Registration, Documentation and Change Management	<ul style="list-style-type: none"> No central register of all floor sanding machines, making it difficult to track machine condition, age, recalls and maintenance status Missing or outdated operating manuals for specific machines such as combination belt-disc sanders, drum sanders and metal sanding machines Uncontrolled modifications to sanders (e.g. non-standard guards, home-made dust shrouds, altered plugs) without risk assessment by a competent person Failure to manage changes to plant, processes or materials (e.g. introduction of new coatings or abrasives) leading to new unmanaged hazards 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> Inconsistency between site-specific procedures and original manufacturer recommendations 		[REDACTED]	
5. Maintenance, Inspection and Testing Regime	<ul style="list-style-type: none"> Failure to service floor sanders leading to mechanical failure, unexpected movement, loss of control or excessive vibration during sanding of timber subfloors and rough patches Worn or damaged electrical cords, plugs and switches on portable belt sanders, floor edgers and orbital sanders causing electric shock or fire Blocked or ineffective dust extraction on drum sanders, edge sanders and metal sanding machines increasing airborne dust and fire risk Unrecorded defects identified by workers not being mentioned, resulting in continued use of unsafe plant Use of incompatible sanding belts, discs, drums and bobbins that can break under load 	High	[REDACTED]	Low
6. Dust, Airborne Contaminants and Fire/Explosion Management	<ul style="list-style-type: none"> Generation of fine timber dust when sanding timber floors, subfloors and rough patches leading to respiratory hazards and potential occupational asthma Accumulation of combustible wood dust, particularly from drum sanders, belt sanders and floor edgers, creating risk of fire or dust explosion in poorly ventilated areas 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Inadequate local exhaust ventilation or vacuum systems on belt, orbital, disc, spindle and bobbin sanders, leading to high airborne dust concentrations Ignition sources from overheated sanding belts or discs, electrical faults, static discharge or nearby hot work and smoking Mixing of timber dust with flammable vapours from coatings, thinners or adhesives used in timber floor sanding and finishing 		[REDACTED]	
7. Noise, Vibration and Health Monitoring	<ul style="list-style-type: none"> Prolonged exposure to high noise levels from drum sanders, belt sanders, metal sanding machines and industrial dust extractors leading to noise-induced hearing loss Hand-arm vibration from ongoing use of orbital sanders, edge sanders, belt sanders and floor Sanders causing circulatory and nerve disorders Whole-body vibration and awkward postures when operating large walk-behind floor sanders on uneven subfloors Inadequate health surveillance for workers regularly operating power sanders and floor sanding machines Workers unaware of early symptoms of hearing damage or vibration-related injury, leading to delayed reporting 	High	[REDACTED]	Medium
8. Electrical Safety, Isolation and Portable	<ul style="list-style-type: none"> Use of floor sanders and power sanders with damaged cords, plugs or insulation leading to electric shock or fire 	High	[REDACTED]	Low

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Equipment Management	<ul style="list-style-type: none"> • Overloading of temporary electrical supplies on construction or renovation sites when operating multiple sanders and dust extractors • Use of non-RCD protected outlets or inappropriate extension leads for high-load drum sanders and metal sanding machines • Inadequate systems for isolation and lock-out during maintenance and cleaning of sanding machines • Lack of clear responsibility for managing electrical risks across multiple contractors on the same site 		[REDACTED]	
9. Work Environment, Job Planning and Site Coordination	<ul style="list-style-type: none"> • Operating floor sanding machines in occupied building without adequate segregation from other trades, tenants or public, increasing vibration and exposure risks • Insufficient planning for sanding timber subfloors on elevated levels, leading to access, egress and manual handling issues • Poor lighting and housekeeping around sanding areas, increasing slip, trip and fall risks for operators and others • Inadequate coordination with other work activities such as painting, electrical work or hot work, leading to conflicting hazards (dust, fumes, ignition sources) • Failure to consider site-specific factors such as confined spaces, stairwells, 	High	[REDACTED]	Medium

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	narrow corridors or heritage flooring in planning		[REDACTED]	
10. Hazardous Chemicals, Coatings and Finishing Systems	<ul style="list-style-type: none"> • Use of solvent-based coatings, adhesives and cleaners during timber floor sanding and finishing without adequate ventilation systems • Inadequate review of Safety Data Sheets for coatings, thinners, cleaning agents and metal treatment products used with sanding operations • Incompatible storage of flammable liquids, aerosols and timber dust leading to increased fire risk • No formal procedure for selection, authorisation and substitution of hazardous chemicals used before, during and after sanding • Inadequate training for workers on correct mixing, application and curing times, resulting in exposure to harmful vapours 	High	[REDACTED]	Medium
11. Contractor, Labour Hire and Subcontractor Management	<ul style="list-style-type: none"> • Use of subcontracted floor sanders and finishing crews without verification of WHS systems, training and supervision • Misunderstanding of overlapping duties between PCBUs regarding floor sanding risks on shared worksites • Inconsistent application of company WHS procedures by external operators using their own floor sanding machines and power sanders • Labour hire workers not inducted into site-specific risks such as electrical 	High	[REDACTED]	Medium

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	<p>supply arrangements, dust controls and emergency procedures</p> <ul style="list-style-type: none"> • Difficulty enforcing safe systems of work where payment is closely tied to speed or output of sanding work 		[REDACTED]	
12. Emergency Preparedness, Incident Management and Continuous Improvement	<ul style="list-style-type: none"> • Inadequate emergency planning for fires, electric shock, serious injury or dust events during floor sanding operations • Workers uncertain about how to respond to entanglement, contact with rotating parts or unexpected machine movement • Delayed or incomplete incident reporting leading to missed opportunities to identify systemic failures and systems and management controls • No structured process to review risk assessments, procedures and training following incidents or near misses • Insufficient first aid equipment or trained first aiders at sites where sanding is occurring 	High	[REDACTED]	Low

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.