

Concrete Trowel Mechanised Risk Assessment

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:	

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:								Notes on Hierarchy of Controls:	
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.								Remember to apply controls in the preferred order shown by the coloured pyramid:	
3H Review and approve additional controls before task starts. Senior supervisor sign-off needed.								1. Eliminate	
2M Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.								2. Substitute	
1L Proceed, following standard operating procedures. Monitor and keep records.								3. Isolate	
								4. Engineering	
								5. Administrative	
								6. PPE	
Consequence Scale:								Always document why a lower-order control is accepted if elimination or substitution is not reasonably practicable.	
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				
								<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>	

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. Preparation of site	slip and trip, sharp objects	3H	<ul style="list-style-type: none"> - Conduct a site inspection to identify hazards - Remove or cordon off sharp objects - Use proper PPE such as gloves and safety boots - Ensure adequate lighting - Mark uneven surfaces with visible paint or barriers - Communicate work plan with all workers involved. - Provide a safety briefing to all staff - Ensure pathways are clear of obstructions - Erect warning signage around hazardous areas. - Train workers on site preparation. 	2M
2. Unloading equipment	manual handling, equipment falling	3H	<ul style="list-style-type: none"> - Use mechanical aids such as forklifts or hoists where feasible - Employ team lifting techniques with clear communication - Secure equipment during transport to prevent shifting - Ensure clear communication signals during unloading - Use proper lifting techniques as per training guidelines - Wear suitable gloves for grip and protection - Conduct initial check on equipment condition - Ensure all personnel involved are trained and competent - Establish a safe work area perimeter using cones or tape. - Provide specific training for unloading procedures. 	1L
3. Setting up equipment	entanglement, electric shock	4A	<ul style="list-style-type: none"> - Ensure all equipment power is off before setup - Verify electrical tools are PAT tested and compliant - Keep all loose clothing/hair tied back during setup - Use RCD protection for electrical equipment - Train staff in electrical safety practices - Confirm ground is level and stable before setup - Use non-conductive gloves if handling electrical parts - Isolate equipment from mains when not in use 	2M

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			<ul style="list-style-type: none"> - Ensure the work area is dry to avoid electric hazards - Regularly inspect cables for wear or damage 	
4. Checking fuel levels	fire hazard, fuel spillage	3H	<ul style="list-style-type: none"> - Use a fire extinguisher to extinguish any fire - Use a spill kit to clean up any fuel spillage - Wear protective clothing (gloves, goggles, etc.) - Use a fire-resistant blanket to cover the fuel tank - Use a fire-resistant blanket to cover the fuel lines - Use a fire-resistant blanket to cover the fuel pump - Use a fire-resistant blanket to cover the fuel filter - Use a fire-resistant blanket to cover the fuel hose - Use a fire-resistant blanket to cover the fuel nozzle - Use a fire-resistant blanket to cover the fuel gun - Use a fire-resistant blanket to cover the fuel handle - Use a fire-resistant blanket to cover the fuel trigger - Use a fire-resistant blanket to cover the fuel switch - Use a fire-resistant blanket to cover the fuel button - Use a fire-resistant blanket to cover the fuel lever - Use a fire-resistant blanket to cover the fuel pedal - Use a fire-resistant blanket to cover the fuel brake - Use a fire-resistant blanket to cover the fuel clutch - Use a fire-resistant blanket to cover the fuel accelerator - Use a fire-resistant blanket to cover the fuel steering wheel - Use a fire-resistant blanket to cover the fuel seat - Use a fire-resistant blanket to cover the fuel floor - Use a fire-resistant blanket to cover the fuel ceiling - Use a fire-resistant blanket to cover the fuel walls - Use a fire-resistant blanket to cover the fuel doors - Use a fire-resistant blanket to cover the fuel windows - Use a fire-resistant blanket to cover the fuel mirrors - Use a fire-resistant blanket to cover the fuel lights - Use a fire-resistant blanket to cover the fuel horn - Use a fire-resistant blanket to cover the fuel bell - Use a fire-resistant blanket to cover the fuel gong - Use a fire-resistant blanket to cover the fuel siren - Use a fire-resistant blanket to cover the fuel alarm - Use a fire-resistant blanket to cover the fuel bell - Use a fire-resistant blanket to cover the fuel gong - Use a fire-resistant blanket to cover the fuel siren - Use a fire-resistant blanket to cover the fuel alarm 	1L
5. Equipment inspection	mechanical failure, entrapment	4A	<ul style="list-style-type: none"> - Use a fire-resistant blanket to cover the fuel tank - Use a fire-resistant blanket to cover the fuel lines - Use a fire-resistant blanket to cover the fuel pump - Use a fire-resistant blanket to cover the fuel filter - Use a fire-resistant blanket to cover the fuel hose - Use a fire-resistant blanket to cover the fuel nozzle - Use a fire-resistant blanket to cover the fuel gun - Use a fire-resistant blanket to cover the fuel handle - Use a fire-resistant blanket to cover the fuel trigger - Use a fire-resistant blanket to cover the fuel switch - Use a fire-resistant blanket to cover the fuel button - Use a fire-resistant blanket to cover the fuel lever - Use a fire-resistant blanket to cover the fuel pedal - Use a fire-resistant blanket to cover the fuel brake - Use a fire-resistant blanket to cover the fuel clutch - Use a fire-resistant blanket to cover the fuel accelerator - Use a fire-resistant blanket to cover the fuel steering wheel - Use a fire-resistant blanket to cover the fuel seat - Use a fire-resistant blanket to cover the fuel floor - Use a fire-resistant blanket to cover the fuel ceiling - Use a fire-resistant blanket to cover the fuel walls - Use a fire-resistant blanket to cover the fuel doors - Use a fire-resistant blanket to cover the fuel windows - Use a fire-resistant blanket to cover the fuel mirrors - Use a fire-resistant blanket to cover the fuel lights - Use a fire-resistant blanket to cover the fuel horn - Use a fire-resistant blanket to cover the fuel bell - Use a fire-resistant blanket to cover the fuel gong - Use a fire-resistant blanket to cover the fuel siren - Use a fire-resistant blanket to cover the fuel alarm - Use a fire-resistant blanket to cover the fuel bell - Use a fire-resistant blanket to cover the fuel gong - Use a fire-resistant blanket to cover the fuel siren - Use a fire-resistant blanket to cover the fuel alarm 	1L
6. Establish traffic control	vehicle collision, site access disruption	3H	<ul style="list-style-type: none"> - Use a fire-resistant blanket to cover the fuel tank - Use a fire-resistant blanket to cover the fuel lines - Use a fire-resistant blanket to cover the fuel pump - Use a fire-resistant blanket to cover the fuel filter - Use a fire-resistant blanket to cover the fuel hose - Use a fire-resistant blanket to cover the fuel nozzle - Use a fire-resistant blanket to cover the fuel gun - Use a fire-resistant blanket to cover the fuel handle - Use a fire-resistant blanket to cover the fuel trigger - Use a fire-resistant blanket to cover the fuel switch - Use a fire-resistant blanket to cover the fuel button - Use a fire-resistant blanket to cover the fuel lever - Use a fire-resistant blanket to cover the fuel pedal - Use a fire-resistant blanket to cover the fuel brake - Use a fire-resistant blanket to cover the fuel clutch - Use a fire-resistant blanket to cover the fuel accelerator - Use a fire-resistant blanket to cover the fuel steering wheel - Use a fire-resistant blanket to cover the fuel seat - Use a fire-resistant blanket to cover the fuel floor - Use a fire-resistant blanket to cover the fuel ceiling - Use a fire-resistant blanket to cover the fuel walls - Use a fire-resistant blanket to cover the fuel doors - Use a fire-resistant blanket to cover the fuel windows - Use a fire-resistant blanket to cover the fuel mirrors - Use a fire-resistant blanket to cover the fuel lights - Use a fire-resistant blanket to cover the fuel horn - Use a fire-resistant blanket to cover the fuel bell - Use a fire-resistant blanket to cover the fuel gong - Use a fire-resistant blanket to cover the fuel siren - Use a fire-resistant blanket to cover the fuel alarm - Use a fire-resistant blanket to cover the fuel bell - Use a fire-resistant blanket to cover the fuel gong - Use a fire-resistant blanket to cover the fuel siren - Use a fire-resistant blanket to cover the fuel alarm 	1L

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7. Starting the trowelling machine	kickback, noise hazards	3H		2M
8. Operating the trowelling machine	pinch points, vibration	4A		2M
9. Monitoring machine operation	unexpected shutdown, over-heating	3H		1L

incorrect tool usage

4A

mechanical components

3H

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13. Conducting post-operation inspection	equipment malfunction, missing parts	4A		1L
14. Equipment shutdown	inadvertent activation, power surge	3H		1L
15. Debriefing and reporting	miscommunication, delayed response time	2M		1L

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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 IF 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 2017

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) Regulations 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>

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

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>

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.