

Guardrail Installation 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:

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. Preparation	Slips, trip hazards, unprepared worksites, inadequate training techniques, incomplete safety gear preparation, incorrect tools usage, unforeseen weather conditions, ground instability, incomplete hazard assessment, communication breakdown, improper documentation, worksite inaccessibility, inaccurate measurement, inadequate transportation facilities, lack of environmental considerations, potential delays and schedule mismanagement, cluttered workspace, fatigue, critical information gaps, material mismanagement, worker unfamiliarity, misplaced confidence, poorly maintained tools, landscape misinterpretation, emergency unpreparedness, oversight of local fauna., initialRisk:"3H"	3H	<ul style="list-style-type: none"> - Conduct site inspection and hazard identification - Ensure all workers are trained in safety protocols - Check weather conditions and plan for contingencies - Confirm all safety gear is present and properly worn - Use only approved tools and equipment - Maintain clear communication channels among workers - Conduct a thorough risk assessment and update regularly - Secure site access and egress areas - Ensure all documentation is current and accessible - Verify transportation logistics for materials and equipment - Respect environmental regulations and site-specific guidelines 	2M
2. Site Setup	Electrical hazards, loose debris, initialRisk:"3H"	3H	<ul style="list-style-type: none"> - Secure electrical connections by a licensed electrician - Remove any loose debris from the work area - Install protective coverings over electrical outlets - Conduct regular site inspections for potential hazards - Use signage to warn of electrical hazards - Ensure proper grounding of all electrical equipment - Implement lockout/tagout procedures where necessary - Train workers on electrical safety protocols - Use insulated tools and equipment - Standardize emergency response plans for electrical incidents 	2M
3. Delivery of Materials	Manual handling injuries, vehicle accidents, initialRisk:"3H"	3H	<ul style="list-style-type: none"> - Use mechanical aids for lifting heavy materials - Train workers on safe lifting techniques - Ensure all delivery drivers are licensed and trained - Implement traffic management plans - Conduct regular vehicle maintenance checks - Use high-visibility clothing for workers involved 	1L

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			<ul style="list-style-type: none"> - Provide clear communication signals for vehicle operators - Institute designated delivery zones - Engage spotters as required - Follow safe unloading procedures to avoid lifted loads 	
4. Installation of scaffolding	Falls from height, unstable scaffolding, initialRisk:"4A"	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Marking out guardrail positions	Line marking errors, measuring inaccuracies, initialRisk:"2M"	1L	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	1L
6. Drilling and securing posts	Hearing damage, flying debris, initialRisk:"3H"	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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7. Guardrail assembly	Pinch points, unsafe assembly processes, initialRisk:"3H"	3H		2M
8. Fixing guardrails into position	Incorrectly secured rails, manual handling injuries, initialRisk:"3H"	3H		2M
9. Safety net installations	Falls from height, entanglement, initialRisk:"4A"	2M		1L

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10. Inspection and testing	Structural integrity failures, incomplete checks, initialRisk:"3H"	3H		1L
11. Site cleanup	Trip hazards, unidentified waste, initialRisk:"3H"	2M		1L
12. Review and closeout	Incomplete documentation, missed hazards, initialRisk:"2M"	2M		1L

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13. Demobilisation of equipment	Equipment damage, logistical failings, initialRisk": "3H"	3H		2M
14. Environmental rehabilitation	Soil erosion, water pollution, initialRisk": "3H"	3H		2M
15. Worker De-mobilisation	Fatigue, incomplete handovers, unclear demobilisation policy comprehension amongst workers, delayed worker evaluations, incorrect personal	3H		1L

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	<p>belongings management, incomplete paperwork related to worker movements, skills mismatch in reassignment, personal item misplacement, inadequate stress management, potential welfare neglect, suboptimal worker comfort assessment, inefficient travel arrangements, shift mismanagement, possible cross-contamination among belongings, missed opportunities for workforce feedback, delay in recreational leave processing, potential grievances due to mishandling, disregarded worker preferences in future reassignments, errors in tailored communications, missed performance appraisals, mismanaged expectations around next assignments, independent contractor misunderstandings, variable confidence during transition, initialRisk:"3H"</p>		<p>[REDACTED]</p>	
16. Final Sign-off	<p>Non-compliance with standards, errors, initialRisk:"3H"</p>	3H	<p>[REDACTED]</p>	1L
17 Post-Operation Monitoring	<p>Delayed recognition of jeopardizing factors, insufficient crisis readiness</p>	3H	<p>[REDACTED]</p>	1L

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	immediately after closure, initialRisk": "3H"		<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	

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.