

## Threaded Stud 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			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> 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.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	
<b>Risk Rating &amp; Required Action:</b>								<b>Notes on Hierarchy of Controls:</b>	
<b>4A</b> 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:	
<b>3H</b> Review and approve additional controls before the task starts. Senior supervisor sign-off needed.								1. <b>Eliminate</b>	
<b>2M</b> Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.								2. Substitute	
<b>1L</b> Proceed, following standard operating procedures. Monitor and keep records.								3. Isolate	
								4. Engineering	
								5. Administrative	
								6. PPE	
<b>Consequence Scale:</b>								Always document <b>why</b> 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	slip hazards, incorrect PPE	3H	<ul style="list-style-type: none"> <li>- Ensure clean, dry work area to prevent slips.</li> <li>- Conduct pre-task briefing to discuss safe work practices.</li> <li>- Verify all workers have appropriate PPE including safety boots and gloves.</li> <li>- Check that safety glasses are available for all workers.</li> <li>- Place warning signs around work area.</li> <li>- Confirm all workers are trained on emergency procedures.</li> <li>- Ensure work permits are obtained and valid.</li> <li>- Secure loose materials in the workspace.</li> <li>- Use non-slip mats in high-risk areas.</li> <li>- Conduct safety check before beginning the task.</li> </ul>	2M
2. Collecting Materials	manual handling injuries, falls from heights	3H	<ul style="list-style-type: none"> <li>- Use mechanical aids like trolleys to transport materials.</li> <li>- Instruct workers on correct manual handling techniques.</li> <li>- Store materials at waist height where possible to minimize bending.</li> <li>- Use height safety equipment when retrieving items from elevated areas.</li> <li>- Assign tasks based on individual capacity and training.</li> <li>- Perform team lifts for heavy items.</li> <li>- Develop a layout plan to minimise material movement.</li> <li>- Ensure clear access to all materials.</li> <li>- Provide adequate lighting for the task area.</li> <li>- Regularly inspect and maintain safety equipment before use.</li> </ul>	1L
3. Inspect Threaded Studs	sharp edges, mislabeled parts	2M	<ul style="list-style-type: none"> <li>- Use cut-resistant gloves during inspection.</li> <li>- Place damaged or mislabeled parts in quarantine area for evaluation.</li> <li>- Train workers on identifying and understanding parts labels.</li> <li>- Organize parts visually for easy identification.</li> <li>- Maintain a checklist for threaded stud specifications.</li> <li>- Implement a double-check system for all inspected materials.</li> <li>- Provide immediate feedback for incorrect labelling.</li> <li>- Secure sharp parts in labeled containers.</li> </ul>	1L

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
			<ul style="list-style-type: none"> <li>- Clean workstations after inspections.</li> <li>- Use magnification tools for precise inspection.</li> </ul>	
4. Installing the Studs	tool misuse, overhead load risks	3H	<ul style="list-style-type: none"> <li>- Use correct tooling and technique for installation.</li> <li>- Ensure stud is correctly aligned and seated.</li> <li>- Use appropriate lifting technique to avoid overhead load risks.</li> <li>- Wear appropriate PPE (hard hat, safety glasses, gloves).</li> <li>- Ensure work area is clear of obstacles.</li> <li>- Use correct torque specifications for stud tightening.</li> <li>- Avoid over-tightening the stud.</li> <li>- Use correct sequence for installing studs.</li> <li>- Ensure stud is fully engaged in the hole.</li> <li>- Use correct tooling for stud removal.</li> <li>- Avoid using excessive force when removing the stud.</li> <li>- Use correct technique for stud removal.</li> <li>- Ensure stud is fully removed from the hole.</li> <li>- Use correct tooling for stud removal.</li> <li>- Avoid using excessive force when removing the stud.</li> <li>- Use correct technique for stud removal.</li> <li>- Ensure stud is fully removed from the hole.</li> </ul>	2M
5. Securing the Studs	incorrect torque specifications, vibration hazards	3H	<ul style="list-style-type: none"> <li>- Use correct torque specifications for stud tightening.</li> <li>- Avoid over-tightening the stud.</li> <li>- Use correct sequence for installing studs.</li> <li>- Ensure stud is fully engaged in the hole.</li> <li>- Use correct tooling for stud removal.</li> <li>- Avoid using excessive force when removing the stud.</li> <li>- Use correct technique for stud removal.</li> <li>- Ensure stud is fully removed from the hole.</li> <li>- Use correct tooling for stud removal.</li> <li>- Avoid using excessive force when removing the stud.</li> <li>- Use correct technique for stud removal.</li> <li>- Ensure stud is fully removed from the hole.</li> <li>- Use correct tooling for stud removal.</li> <li>- Avoid using excessive force when removing the stud.</li> <li>- Use correct technique for stud removal.</li> <li>- Ensure stud is fully removed from the hole.</li> </ul>	2M
6. Testing and Quality Check	equipment failure, incorrect testing procedure	4A	<ul style="list-style-type: none"> <li>- Use correct testing procedure.</li> <li>- Ensure equipment is calibrated and in good working order.</li> <li>- Use correct tooling for testing.</li> <li>- Avoid using excessive force when testing.</li> <li>- Use correct technique for testing.</li> <li>- Ensure testing is performed in a safe and controlled manner.</li> <li>- Use correct sequence for testing.</li> <li>- Ensure testing is performed in a safe and controlled manner.</li> <li>- Use correct sequence for testing.</li> <li>- Ensure testing is performed in a safe and controlled manner.</li> <li>- Use correct sequence for testing.</li> <li>- Ensure testing is performed in a safe and controlled manner.</li> <li>- Use correct sequence for testing.</li> <li>- Ensure testing is performed in a safe and controlled manner.</li> <li>- Use correct sequence for testing.</li> <li>- Ensure testing is performed in a safe and controlled manner.</li> </ul>	2M

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
7. Clean-up and Debrief	trip hazards, chemical exposure	2M		1L
8. Equipment Maintenance	defective tools, oil spill	3H		1L
9. Site Management	unauthorised access, electric shock	4A		2M

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
10. Tools Return	misplaced tools, loss of tools	3H		1L
11. Debriefing	communication barriers, not identifying improvement areas	2M		1L
12. Documentation and Reporting	loss of information, inaccurate reports	3H		1L

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
13. Final Inspection	missed defects, incomplete reviews	3H		2M
14. Environment Control	air quality issues, noise pollution	2M		1L
15. Task Completion and Handover	incorrect completion, miscommunication	2M		1L

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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	

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.