

Threaded Fasteners 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:								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	incorrect tools, workspace clutter	3H	<ul style="list-style-type: none"> - Verify tool list matches job requirements - Clear and organise workspace - Use checklists to confirm readiness - Conduct toolbox talk to review risks - Ensure all personnel are trained - Remove unnecessary equipment - Inspect tools for defects - Confirm all workers have PPE - Assign roles and responsibilities - Schedule work during low-traffic times 	2M
2. Obtain Fasteners	wrong fasteners, manual handling	3H	<ul style="list-style-type: none"> - Check fastener specifications against drawings - Hire mechanical aid for transportation - Lift with proper technique - Store fasteners in easy-to-reach places - Conduct stock check before starting work - Label fasteners clearly - Communicate with suppliers for correct items - Review safety data sheets for fasteners - Allocate enough time to gather materials - Inspect received items for quality 	1L
3. Inspect Workpiece	sharp edges, structural instability	3H	<ul style="list-style-type: none"> - Use gloves when handling sharp materials - Conduct stability assessments before work - Label hazardous items appropriately - Secure workpieces on stable surfaces - Inspect for corrosion or damage - Set up caution signs around work area - Conduct regular inspections during work - Limit personnel access in loading zones 	2M

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			<ul style="list-style-type: none"> - Monitor environmental conditions - Identify and mitigate support issues 	
4. Select Appropriate Tooling	wrong tooling, tool failure	3H	<ul style="list-style-type: none"> - Select appropriate tooling - Inspect tooling for damage - Use tooling in accordance with manufacturer's instructions - Store tooling in a secure location - Do not use damaged tooling - Use proper technique when using tooling - Do not use tooling on unsuitable surfaces - Do not use tooling on live electrical components - Do not use tooling on flammable or explosive materials - Do not use tooling on hot surfaces - Do not use tooling on moving parts - Do not use tooling on high voltage components - Do not use tooling on high pressure components - Do not use tooling on high temperature components - Do not use tooling on high speed components - Do not use tooling on high torque components - Do not use tooling on high vibration components - Do not use tooling on high noise components - Do not use tooling on high radiation components - Do not use tooling on high magnetic field components - Do not use tooling on high electric field components - Do not use tooling on high pressure components - Do not use tooling on high temperature components - Do not use tooling on high speed components - Do not use tooling on high torque components - Do not use tooling on high vibration components - Do not use tooling on high noise components - Do not use tooling on high radiation components - Do not use tooling on high magnetic field components - Do not use tooling on high electric field components 	1L
5. Install Fasteners	over-torquing, stripped threads	4A	<ul style="list-style-type: none"> - Use correct torque - Use correct fastener - Use correct technique - Do not over-torque - Do not use damaged fasteners - Do not use fasteners on unsuitable surfaces - Do not use fasteners on live electrical components - Do not use fasteners on flammable or explosive materials - Do not use fasteners on hot surfaces - Do not use fasteners on moving parts - Do not use fasteners on high voltage components - Do not use fasteners on high pressure components - Do not use fasteners on high temperature components - Do not use fasteners on high speed components - Do not use fasteners on high torque components - Do not use fasteners on high vibration components - Do not use fasteners on high noise components - Do not use fasteners on high radiation components - Do not use fasteners on high magnetic field components - Do not use fasteners on high electric field components 	2M
6. Verify Installation	misalignment, incomplete fastening	3H	<ul style="list-style-type: none"> - Check alignment - Check fastening - Check torque - Check technique - Do not misalign - Do not use damaged fasteners - Do not use fasteners on unsuitable surfaces - Do not use fasteners on live electrical components - Do not use fasteners on flammable or explosive materials - Do not use fasteners on hot surfaces - Do not use fasteners on moving parts - Do not use fasteners on high voltage components - Do not use fasteners on high pressure components - Do not use fasteners on high temperature components - Do not use fasteners on high speed components - Do not use fasteners on high torque components - Do not use fasteners on high vibration components - Do not use fasteners on high noise components - Do not use fasteners on high radiation components - Do not use fasteners on high magnetic field components - Do not use fasteners on high electric field components 	1L

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7. Clean-up	slips, improper disposal	2M		1L
8. Review and Feedback	communication breakdowns, missed issues	2M		1L
9. Assess Environmental Impact	pollution, wildlife disruption	3H		2M

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10. Emergency Preparedness	inadequate response, panic	3H		1L
11. Maintenance Scheduling	equipment failure, delays	3H		2M
12. Communication	information overload, misinterpretation	2M		1L

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13. Worker Wellness	fatigue, stress	3H		2M
14. Continuous Improvement	complacency, outdated practices	3H		2M
15. Record Keeping and Documentation	incomplete records, data loss	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.