

## Carry Out Angle Grinding Operations 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>	
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. <b>Eliminate</b>	
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	
<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	Electric shock, Slips and trips	3H	<ul style="list-style-type: none"> <li>- Ensure the area is well-lit and dry to prevent slips.</li> <li>- Inspect the angle grinder for any damaged insulation or wiring.</li> <li>- Follow lock-out procedures for electrical equipment.</li> <li>- Wear rubber-soled footwear to reduce electrical hazards.</li> <li>- Use non-slip mats in the work area.</li> <li>- Remove any unnecessary obstructions from the work site.</li> <li>- Ensure appropriate signage is in place.</li> <li>- Conduct a pre-start safety briefing with all workers.</li> <li>- Confirm all personnel are wearing suitable PPE.</li> <li>- Ensure no trailing leads or cables present a trip hazard.</li> </ul>	1L
2. Tool Selection	Incorrect tool fitting, Inappropriate disc type	3H	<ul style="list-style-type: none"> <li>- Verify the correct angle grinder disc is selected for the task.</li> <li>- Check that all tools are in good working order.</li> <li>- Ensure discs are appropriately marked with the RPM rating.</li> <li>- Confirm the disc is fitted securely before use.</li> <li>- Refer to the manufacturer's instruction manual for compatibility.</li> <li>- Avoid using damaged or expired grinding discs.</li> <li>- Ensure the tool is powered off when changing discs.</li> <li>- Regularly inspect discs for signs of wear or damage.</li> <li>- Use only tools that meet Australian safety standards.</li> <li>- Train workers in manual handling and tool selection procedures.</li> </ul>	2M
3. PPE Check	Inadequate eye protection, Respiratory hazards	3H	<ul style="list-style-type: none"> <li>- Supply and mandate the use of safety glasses or full-face shields.</li> <li>- Check respiratory equipment is available and fitted correctly.</li> <li>- Train workers on PPE usage and limitations.</li> <li>- Ensure all PPE is clean and free from defects.</li> <li>- Conduct routine PPE inspections before use.</li> <li>- Wear long sleeves and trousers to protect from sparks.</li> <li>- Provide ear protection if the noise level is high.</li> <li>- Have a first aid kit readily accessible nearby.</li> </ul>	1L

<p>locked escape routes</p>	<p>4A</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>

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>1. De-energize the system and lock out the power source.</div> <div>2. Verify that the system is de-energized using a voltage tester.</div> <div>3. Ground the system to prevent accidental energization.</div> <div>4. Use proper lockout/tagout procedures.</div> <div>5. Wear appropriate PPE, including safety glasses and gloves.</div> <div>6. Follow the manufacturer's instructions for the equipment.</div> <div>7. Ensure that the work area is clear of obstacles.</div> <div>8. Use the correct tools and equipment for the job.</div> <div>9. Avoid contact with live parts.</div> <div>10. Do not touch the equipment until it is fully de-energized.</div>	
6. Power Connection	Electrical faults, Overloading circuits	3H	<div>1. Verify that the circuit is rated for the load.</div> <div>2. Use the correct wire size and type.</div> <div>3. Ensure that the connections are secure and tight.</div> <div>4. Avoid overloading the circuit.</div> <div>5. Use proper grounding techniques.</div> <div>6. Wear appropriate PPE, including safety glasses and gloves.</div> <div>7. Follow the manufacturer's instructions for the equipment.</div> <div>8. Use the correct tools and equipment for the job.</div> <div>9. Avoid contact with live parts.</div> <div>10. Do not touch the equipment until it is fully de-energized.</div>	2M
7. Startup Procedure	Tool kickback, Unexpected movement	4A	<div>1. Ensure that the tool is properly maintained and sharp.</div> <div>2. Use the correct cutting technique.</div> <div>3. Avoid cutting into the back of the workpiece.</div> <div>4. Keep the workpiece steady and supported.</div> <div>5. Wear appropriate PPE, including safety glasses and gloves.</div> <div>6. Follow the manufacturer's instructions for the tool.</div> <div>7. Use the correct tool for the job.</div> <div>8. Avoid cutting into the back of the workpiece.</div> <div>9. Keep the workpiece steady and supported.</div> <div>10. Do not touch the tool until it is fully stopped.</div>	2M
8. Angle Grinding	Noise pollution, Dust generation	4A		2M

[illegible]

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
11. Shut Down Procedure	Electrical hazards, Tool overheating	3H	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	2M
12. Clean-up Process	Waste management, Inhalation risks	3H	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	1L
13. Review and Feedback	Unreported incidents, Lack of performance evaluation	3H	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	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
14. Documentation	Missing records, Inaccurate entries	3H	<div>SAMPLE</div>	1L
15. Continuous Improvement	Stagnation of safety p Resistance to chan		<div>SAMPLE</div>	1L



## 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>

### 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>

### 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>

### 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.

### 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>

### 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>

### 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