

## Ensure Electrical Safety For Automatic Gates Risk Assessment

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

### THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THE 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	
<b>Consequence Scale:</b>								4. Engineering	
Consequence	People (injury/illness)		Project / Assets		Compliance / Reputation		5. Administrative		
Catastrophic	Fatality or permanent total disability		project shutdown		Significant regulator intervention; criminal prosecution		6. PPE		
Major	Serious injury/illness (hospital > 5 days)		critical delay		Improvement notice; major media coverage		Always document <b>why</b> a lower-order control is accepted if elimination or substitution is not reasonably practicable.		
Moderate	Medical-treatment injury; lost-time > 1 day		moderate delay		Minor breach; adverse client comment		<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>		
Minor	First-aid only, no lost time		negligible delay		Isolated non-conformance				
Insignificant	No injury		no schedule impact		Deviation caught and corrected on site				

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, Equipment malfunction	3H	<ul style="list-style-type: none"> <li>- Conduct site assessment to identify potential electrical risks</li> <li>- Ensure all personnel are trained in electrical safety procedures</li> <li>- Compile and provide safety data sheets for all electrical components</li> <li>- Document risk assessments and update regularly</li> <li>- Verify all personnel have the necessary personal protective equipment (PPE)</li> <li>- Ensure communication devices are available during operations</li> <li>- Review emergency procedures for electrical incidents</li> <li>- Properly label and store electrical equipment</li> <li>- Plan for shutdown of power sources</li> <li>- Ensure a copy of the risk assessment is accessible to all team members</li> </ul>	2M
2. Inspect Electrical Components	Component failure, Electrical short circuit	3H	<ul style="list-style-type: none"> <li>- De-energize electrical systems before inspection</li> <li>- Engage qualified electricians for detailed inspections</li> <li>- Regularly maintain and replace worn components</li> <li>- Use proper diagnostic tools</li> <li>- Keep a record of inspection results</li> <li>- Use lockout/tagout procedures during maintenance</li> <li>- Ensure appropriate PPE is worn at all times</li> <li>- Implement a checklist system for inspections</li> <li>- Provide specific training on the detection of component degradation</li> <li>- Monitor and report any irregularities immediately</li> </ul>	1L
3. Installation of Gates	Improper wiring, Overloading circuits	4A	<ul style="list-style-type: none"> <li>- Use only certified and qualified personnel for installations</li> <li>- Adhere to manufacturer guidelines for electrical installations</li> <li>- Verify proper load calculations for circuits</li> <li>- Install surge protection devices</li> <li>- Conduct tests to ensure no overloading occurs</li> <li>- Perform a visual inspection of all wiring</li> <li>- Implement fail-safe mechanisms for automatic operations</li> <li>- Ensure regular supervision during installation</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
			<ul style="list-style-type: none"> <li>- Maintain an installation logbook</li> <li>- Use appropriate signage during installation</li> </ul>	
4. Testing Functions	Unexpected operation, Voltage fluctuations	3H	<ul style="list-style-type: none"> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> </ul>	1L
5. Regular Maintenance	Wear and tear, Inadequate maintenance schedule	3H	<ul style="list-style-type: none"> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> </ul>	2M
6. Emergency Procedures	Delayed response, Inadequate knowledge of emergency protocols	4A	<ul style="list-style-type: none"> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</li> <li>- [REDACTED]</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. Training and Induction	Lack of knowledge on electrical hazards, Incorrect use of safety equipment	3H		1L
8. Signage and Labelling	Misinterpretation of labels, Safety issues	2M		1L
9. Communication Systems	Communication breakdowns, Faulty equipment	3H		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. Compliance and Monitoring	Non-compliance with safety standards, Inadequate monitoring	4A		2M
11. Decommissioning of Systems	Release of electrical energy, Structural instability	3H		1L
12. Review and Update Processes	Outdated procedures, Lack of continuous improvement	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
13. Visitor Management	Unaware of safety protocols, Accidental interaction with equipment	3H		1L
14. Incident Reporting and Investigation	Underreporting of incidents, Failure to identify root causes	4A		2M
15. Supply Chain Assessment	Substandard materials, Delay in critical component delivery	3H		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
16. Automation and Technology Utilisation	System errors, Inadequate understanding of technology	4A		2M
17. Weather Considerations	Electrical storms, Water ingress	3H		1L
18. Community and Environmental Impact	Noise pollution, Interference with wildlife	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
19. Data Protection	Data breaches, Unauthorised access to control systems	4A		2M
20. Ergonomics and Manual Handling	Repetitive strain injuries, Incorrect lifting techniques	3H		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