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

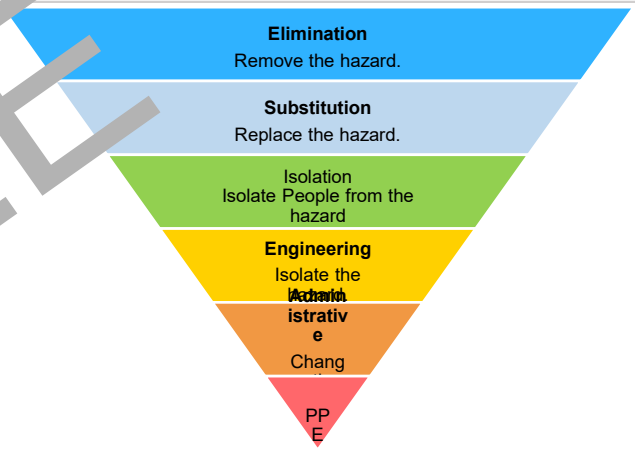
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. 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. WHS Management, Consultation and Planning	• Lack of a formal WHS management system covering automatic gate and door automation activities • Inadequate consultation with workers, subcontractors and PCBUs at shared workplaces leading to unmanaged interface risks • Absence of documented WHS policies and procedures specific to automatic and retractable gates (installation, replacement, modification, decommissioning) • Poor planning of work leading to ad-hoc decisions on site that bypass safe systems of work • Failure to identify all PCBUs with overlapping duties (client, builder, electrician, automation technician, manufacturer, maintenance contractor) • Inadequate resourcing for WHS (time, supervision, competent persons, equipment) resulting in shortcuts • Lack of documented WHS objectives and performance indicators for automation work • Inadequate change management when introducing new gate automation technologies, control systems or products	High	• Establish and maintain a documented WHS management system aligned with the WHS Act 2011 and WHS Regulation, specifically referencing automatic gate and door automation activities • Develop and implement a WHS policy endorsed by senior management that explicitly covers automatic gate installation, electrical safety, and mechanical hazards of door and gate automation work • Implement a formal WHS planning process for each project (including automatic gate opener installation, gate stoppers, mounting gates and replacement of existing gate systems) that identifies scope, risks, responsibilities, timeframes and required competencies • Establish a consultation, cooperation and coordination procedure with all relevant PCBUs at the workplace, including builders, electrical contractors, facility managers and other trades • Use written WHS interface agreements that clearly define roles, responsibilities and handover points for electrical isolation, structural adequacy, commissioning and maintenance of automatic gates • Ensure project risk assessments are prepared at the planning stage and reviewed whenever there are significant changes to design, site conditions, equipment or work methods • Implement a formal change management procedure for introduction of new gate automation products, control systems or software, including review of manufacturer instructions, risk assessment and worker training • Assign clear WHS responsibilities and accountabilities to managers, supervisors and leading hands for door and gate automation work, and include these in position descriptions • Monitor WHS performance indicators such as incident rates, near misses, corrective actions closed out, and audit findings specifically related to automatic gate activities • Conduct periodic management reviews of WHS performance for automation work, ensuring action plans are developed and resourced to address identified shortcomings	Medium
2. Design, Engineering and Procurement of Gates and Automation Systems	• Procurement of automatic gate systems that do not comply with relevant Australian Standards or are not suitable for the intended use and environment • Inadequate engineering design for gate structures, supports, hinges, tracks, posts and stoppers resulting in structural failure or gate derailment • Selection of automation hardware without appropriate safety features (e.g. force limitation, obstruction detection, emergency stop, manual release)	High	• Implement a formal procurement procedure requiring verification that all gates, door automation systems and components comply with relevant Australian Standards and manufacturer specifications • Require that gate structural design (including posts, foundations, hinges, rollers, tracks and stoppers) is carried out or verified by a competent engineer where loads, spans or site conditions warrant it • Specify safety features in procurement documentation for automatic gate openers, including force limitation, obstruction sensing, emergency stop, safe manual release and lockout capability • Ensure design reviews are conducted that integrate mechanical, structural and electrical/control aspects, including retractable gate mechanisms • Apply hierarchy of control principles at the design stage to eliminate or minimise crush, shear, entrapment and impact zones, for example through guarding, fixed barriers and safe operating envelopes	Medium

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
	• Lack of design integration between mechanical gate components, retractable mechanisms and electrical/control systems • Failure to consider pinch, crush, shear and entrapment zones in the design of retractable gates and automatic gate openers • Insufficient consideration of vehicle and pedestrian traffic patterns, visibility and access control within the site layout and gate position • Use of non-compatible or low-quality aftermarket components when replacing electric gates or door systems • Inadequate documentation from suppliers (drawings, ratings, installation manuals, maintenance instructions, electrical schematics) • Failure to account for environmental conditions such as wind load, corrosio water ingress, dust, UV exposure and temperature on gate performance and automation equipment		• Include traffic engineering or layout planning to separate pedestrians and vehicles at gate approaches, and ensure adequate sight lines and queuing space • Prohibit the procurement of non-approved aftermar components that may compromise system safety, and maintain an approved products list for repla ient parts • Require suppliers to provide comprehens technical d mentation, including design loads, duty cycles, rated usage, electrical diagrams and tallatio aintenance instructions in English • Specify environmental requirements (IP rating orrosion resis nce, wind ratings) in procurement documents to ensure suitabili for the installation vironme • Include whole-of-life considera ns in design and p ement (inspection access, maintenance requirements, spar vailab , upgrade option for safety features)	
3. Electrical Safety Management for Automatic Gates	• Inadequate elect al safety systems for connection, isc ion and t f automatic gates an tomatio equipment • Work on or near energised part ue to poor lockout/tagout proce or production pressures • Incorrect selection, installation or protection of electrical components (cables, conduits, control panels, RCDs, overcurrent devices) • Lack of verification testing, earthing checks and insulation resistance testing before energising automatic gates • Unauthorised or unlicensed electrical work performed by installers on gate motors, controls and associated circuits • Exposure to electrical hazards during inspection or adjustment of retractable	High	• Develop and implement an electrical safety management procedure that addresses planning, isolation, testing, commissioning and maintenance of automatic gate electrical systems • Ensure all electrical work on automatic gates and associated control systems is carried out by or under the direct supervision of appropriately licensed electricians, in accordance with state and territory legislation • Implement a mandatory lockout/tagout system for installation, inspection, maintenance and replacement of electric gates or door systems, with documented steps and designated responsibilities • Require pre-work verification of existing electrical infrastructure, including supply capacity, protection devices, RCD coverage and identification of circuits to be used for gate automation • Establish testing and verification requirements before energising automatic gates, including continuity of protective earthing, insulation resistance, polarity, fault-loop impedance and RCD trip tests where applicable • Maintain up-to-date single line diagrams, circuit schedules and control schematics for each automatic gate installation, stored in an accessible location for workers and maintenance personnel • Implement a permit-to-work system for high-risk electrical tasks, including work near live parts where de-energisation is not reasonably practicable (in line with WHS Regulation requirements)	Medium

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
	gate mechanisms and automatic gate openers • Inadequate management of underground or concealed services when installing posts, tracks or power supplies to gates • Poor documentation of electrical circuits, drawings and test results for automatic gate installations • Failure to maintain residual current devices (RCDs) and protective devices in accordance with regulatory and manufacturer requirements		• Ensure procedures require the use of appropriate test instruments, calibrated equipment and verification of de-energisation before any intrusive work on gates or controllers • Incorporate requirements for location and protection of underground cabling in project planning, including use of service plans, dial-before-you-dig enquiries and non-destructive digging where necessary • Implement a scheduled inspection and testing program for RCDs, earth connections, enclosures and cable integrity for all automatic gate systems • Provide workers with training and information on electrical hazards specific to automatic gates, including stored energy within drives, backup power supplies and control circuits	
4. Contractor, Competency and Training Management	• Use of installers, electricians or automation technicians who lack specific competency in automatic gate and door automation systems • Insufficient training on hazards associated with retractable gate mechanisms, crushing zones and moving gate leaves • Lack of documented competency standards or verification processes for workers performing installation, inspection and replacement of electric gates • Inadequate induction of subcontractors regarding site-specific WHS requirements, safe work procedures and emergency arrangements • Reliance on informal on-the-job learning without structured assessment of knowledge and skills • Failure to provide training in relevant Australian Standards, manufacturer instructions and regulatory requirements for automatic gate installations • Language or literacy barriers leading to misunderstanding of procedures, signage or control interfaces on automated systems • Inadequate supervision of apprentices, new workers or contractors when	High	[redacted]	Medium

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
	carrying out high-risk aspects such as mounting gates into position or setting operating limits		[redacted]	
5. Site Planning, Traffic Management and Access Control	• Poor site layout around gate locations, leading to interaction between moving gates, vehicles and pedestrians • Inadequate traffic management when mounting gates into position or replacing existing electric gate systems • Uncontrolled public access to work areas during installation, inspection or adjustment of automatic gate components • Insufficient segregation between operating gates and pedestrians, particularly near schools, childcare, strata complexes or commercial premises • Lack of clear signage and demarcation around gate travel paths and exclusio zones • Inadequate planning for emergency access/egress if automa tes fail in the closed or partiall pen position • Insufficient lightin around gat reas for safe operation, nd fa finding during low ligh conditions • Failure to manage interactions wi delivery vehicles, mobile anes involved in transporting and installing gates	High	[redacted]	Medium
6. Safe Systems for Mechanical Handling, Mounting and Adjustment	• Uncontrolled movement or collapse of gates while lifting, mounting or aligning into final position • Crush and pinch points when installing gate stoppers, hinges, rollers and retractable mechanisms • Use of inappropriate lifting equipment or supports for large or heavy gates and door systems • Manual handling of heavy components leading to musculoskeletal injuries	High	[redacted]	Medium

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
	• Inadequate securing of gates during adjustment, testing or inspection, including retractable gate mechanisms • Lack of standardised procedures for setting travel limits, forces and safety devices on automatic gate openers • Unexpected gate movement during commissioning due to incorrect wiring, programming or control settings		[redacted]	
7. Commissioning, Functional Safety and Handover	• Incomplete functional testing of safety systems before automatic gates are placed into service • Failure of obstruction detection, force limitation or emergency stop functions due to incorrect commissioning • Lack of verification that all crush, shear and entrapment zones are adequately controlled by design or protective devices • Inadequate documentation and handover information to clients regarding safe use, [redacted] and maintenance requirements • Commissioning conducted under time pressure, leading to bypassed safety checks or temporary overrides left in place • Lack of formal acceptance and sign-off by a competent person before the gate is used by the public or occupants	High	[redacted]	Low
8. Maintenance, Inspection and Lifecycle Management	• Absence of a planned inspection and maintenance regime for automatic and retractable gates post-installation • Progressive deterioration of mechanical and electrical components leading to gate failures or unsafe operation	High	[redacted]	Medium

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
	• Failure to identify wear or damage in retractable gate mechanisms, hinges, cables, chains, rollers and stoppers • Maintenance conducted without appropriate isolation and control of stored energy within springs, counterweights or drive units • Use of untrained personnel or general handypersons to adjust or repair automatic gate systems • Lack of records of inspections, tests, repairs and replacements, reducing the ability to identify recurring issues or systemic faults • Failure to reassess risks when gates are modified, upgraded or connected to new control systems (e.g. access control, remote operation) • Non-genuine or incompatible replacement parts used when replacin electric gates or door systems, compromising safety performance		[redacted]	
9. Emergency Management, Incident Response and User Information	• Inadequate planning fo gency release or manual o ation of automatic gates d g power failure, fire or other emergenc • Gate entrapment inc ents not bein reported, investigated or communic d effectively within the organisation • Lack of clear, accessible instructions for occupants, visitors and emergency services on how to safely operate or release gates in an emergency • Failure to manage risks associated with remote operation or automatic closing features that can activate without users being in direct line-of-sight • Poorly understood or untested emergency procedures at sites with high occupant turnover, such as residential complexes or commercial car parks	High	[redacted]	Low

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
			[redacted]	
10. Documentation, Compliance and Continuous Improvement	• Incomplete or inaccurate WHS documentation relating to automatic gate design, installation, inspection and maintenance • Non-compliance with the WHS Act 2011, WHS Regulation and applicable Australian Standards due to lack of monitoring and review • Failure to maintain and control current versions of procedures, forms, drawings and risk assessments • Lack of systematic review of industry alerts, regulator guidance and manufacturer safety bulletins relating to door and gate automation • Inadequate internal auditing of WHS practices across projects involving automatic gate installation and replacement • Poor retention or [redacted]	Medium	[redacted]	Low

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 FOR 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 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-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/forms-and-resources/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