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

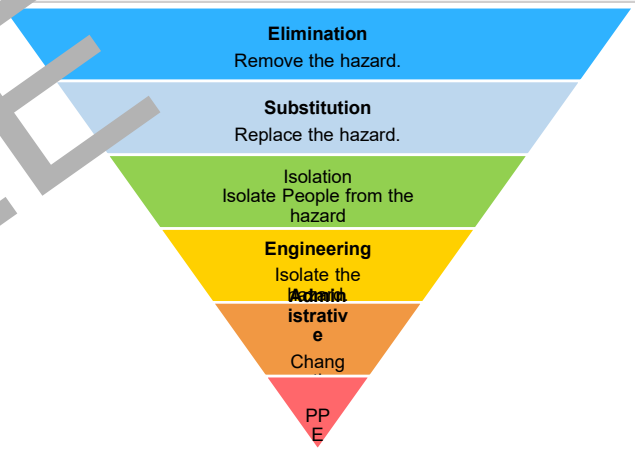
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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 Governance, Legal Compliance & PCBU Duties	• Lack of clearly defined WHS responsibilities for elevator and escalator maintenance under the WHS Act 2011 and WHS Regulations • Failure to identify plant as 'registrable' and subject to specific designer, manufacturer, supplier and installer duties • Inadequate consultation, cooperation and coordination between building owner, lift contractor, tenants and other PCBUs • No documented WHS policy specific to elevator, lift shaft and escalator maintenance activities • Failure to ensure safe systems of work when adjusting elevator speed controls, set elevator floor levels or test elevator brakes • Poor oversight of contractors performing installation or repair of elevators or escalators, including removal of existing ele • Non-compliance with Australian Standards (e.g. AS 735 serie 1657, AS 2550.6, A 501 / IS 45001) and plant registration requirements • Inadequate review of st notices, improvement notices or incident findings related to lift systems • Failure to ensure consultation with workers about changes to systems of work, including new load test or non-destructive testing regimes	4A	• Establish and maintain a WH management syst aligned with WHS Act 2011, WHS Regulations and relevant Australian Standards fo ft and escalator p • Define and doc ent PC l duti officer due iligence obligations and line management responsibiliti or elevator aintena e gov ance • Implement fo al consu tion and co ination arrangements between building owners, facility mana lift co ac s, other contractors and workers, including documented interface agreements • Main n egal re ter identifying all applicable WHS legislation, plant registration requirements, Australi n S ndards d manufacturer instructions for installed lift systems • Develo a Wi policy that explicitly covers elevator and escalator maintenance, including activities such a d te ting, r -destructive testing of lifts, removal of existing elevators and lift shaft cleaning • Introd a formal change management procedure to assess WHS impacts when modifying systems (e.g. adjust elevator speed controls, replace buffer springs, replace suspension ropes, secure elevator ca to building) • Require officers to review WHS performance reports and audit outcomes on lift-related activities at defined intervals • Ensure formal processes to review external regulator alerts, manufacturer bulletins and safety data related to elevator motors, cables, sheaves and braking systems • Include elevator and escalator maintenance activities in periodic WHS audits and management reviews, with corrective actions tracked to closure	3H
2. Contractor Selection, Competency & Licensing	• Engagement of lift maintenance providers without appropriate licences, registration or accreditation • Inadequate verification of technician competence to service elevator motors, fix elevator doors, deal with unexpected	4A	• Implement a formal contractor pre-qualification process including verification of trade qualifications, high-risk work licences, electrical licences and industry accreditations relevant to elevator and escalator maintenance • Maintain a competency matrix for all personnel undertaking work on lifts and escalators, linked to tasks such as adjust elevator speed controls, test elevator brakes, load test of elevator and non-destructive testing of lifts	2M

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	elevator movement or inspect traction of the sheave • Use of inexperienced personnel for complex tasks such as replace elevator cables, replace suspension ropes or secure elevator cab to building • No verification of high-risk work licences or electrical licences where required • Lack of competency in working in lift shafts, on elevator car tops or in pits, including clean elevator pit and lift shafts cleaning • Insufficient knowledge of specific manufacturer systems and software for speed control adjustment and brake testing • No process to ensure subcontractors meet the same WHS and training standards as primary contractors		• Require evidence of OEM (original equipment manufacturer) training where technicians alter control systems, elevator speed settings or safety interlocks • Specify minimum experience thresholds for critical tasks such as replace elevator cables, replace suspension ropes, secure elevator cab to building and remove existing elevator • Include WHS performance history, incident records and references in contractor selection criteria • Establish procedures to approve and monitor subcontractors, ensuring they adhere to the principal contractor's WHS standards and procedures • Conduct periodic on-site competency assessments and supervision checks for technicians performing work at height on elevator cabin tops, in pits or within lift shafts • Maintain training and licence records, with an alerts system for expiry and recertification requirements	
3. Design, Engineering Controls & Plant Integrity	• Elevator or escalator design not meeting current Australian Standards or safety category requirements • Inadequate machine guarding or fixed barriers around sheaves, pulleys, elevator motors and drive components • Lack of compliant safe access to elevator pits, lift shafts and top-of-car workspaces (e.g. no compliant ladders, platforms or guardrails) • Insufficient engineering controls to prevent unintended elevator movement during maintenance or when elevator cab is secured to building • Inadequate fall protection anchorage points when workers climb to top of elevator cabin or access lift shafts • Poor design of control panels for speed control adjustment, floor levelling and brake testing, increasing risk of human error	4A	• Ensure all elevator and escalator systems are designed, procured and installed in accordance with relevant Australian Standards (AS 1735 series, AS 1170, AS 1657, AS 2550.6) and engineering codes of practice • Engage competent engineers to verify structural adequacy and compatibility of key components such as elevator guide rails, buffer springs, suspension ropes, sheaves and braking systems prior to installation or replacement • Provide engineered safe access solutions to pits, car tops and lift shafts, including fixed ladders, platforms, handrails, toe-boards and compliant anchor points for fall-arrest systems • Install mechanical locking, parking devices or safety gear that positively prevents unintended elevator movement during maintenance and testing activities • Design control systems for adjusting elevator speed controls, set elevator floor levels and test elevator brakes with interlocks, key control and clear human–machine interfaces to reduce error • Specify robust guarding and physical segregation around moving parts such as elevator motors, pulley systems and traction sheaves, preventing inadvertent contact during normal maintenance access • Incorporate engineered means of isolation for power, hydraulics and control circuits, allowing secure lock-out during elevator motor servicing, brake testing and cable replacement • Implement an engineering change approval process for modifications to lift control software, speed settings, braking parameters or escalator logic, including documented risk assessment and testing	2M

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Underspecified buffer springs, cables or suspension ropes not suited to loads identified in load test of elevator • No redundancy or fail-safe features for braking systems or traction sheaves during testing or commissioning • Incompatible or poorly integrated components when installing or repairing elevators or escalators, or when removing existing elevator and installing new systems		• Require independent design or installation verification and commissioning reports for new installations, major upgrades and removal/replacement of existing elevators or escalators	
4. Maintenance Strategy, Inspection & Testing Regime	• Absence of a structured preventive maintenance program for elevators, lifts and escalators • Reactive-only maintenance leading to deterioration of cables, suspension ropes and buffer springs • Inadequate frequency of inspections for elevator motors, pulleys, sheaves and braking systems • No formal system for non-destructive testing of lifts and key components such as hooks, shackles and structural supports • Poorly planned or undocumented load test of elevator activities risking overload or failure • Failure to schedule and verify periodic inspection of lift shafts, car platforms, pits and safety gear • Inadequate systems for identifying and managing end-of-life components such as elevator cables, ropes and escalator drive chains • Lack of documented test procedures for unexpected elevator movement mitigation, brake testing and overspeed protection verification • No process to verify integrity of systems after major work such as remove existing elevator or replace suspension ropes	4A	[redacted]	2M

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
5. Isolation, Lock-out Tag-out & Unintended Movement Control	• Unexpected elevator movement while technicians are in the pit, on the car top or working within the lift shaft • Failure to isolate power, control circuits or hydraulic energy prior to work such as adjust elevator speed controls, test elevator brakes or service elevator motors • Inadequate control of stored energy in counterweights, tensioned ropes, suspension systems and buffer springs • Incorrect bypassing of safety circuits during installation or repair of elevators or escalators • Uncontrolled release of mechanical loads during remove existing elevator or secure elevator cab to building • Lack of clear status indication (in service/out of service) for elevators and escalators during maintenance • Multiple contractors working simultaneously on same lift system without coordinated isolation procedures	4A	[redacted]	2M
6. Work at Height, Fall Prevention & Access to Pits/Shafts	• Falls from height when workers climb to top of elevator cabin or access equipment in lift shaft • Slips, trips and falls while entering / exiting elevator pits during clean elevator pit or lift shafts cleaning • Unprotected openings at floor landings when lift doors or landing doors are removed during fix elevator doors or remove existing elevator • Inadequate fall protection when working on overhead machinery, pulleys or sheaves • Improper use or absence of anchor points for fall-arrest systems on car tops or in machine rooms • Restricted or awkward access increasing manual handling, fall and entrapment risks	4A	[redacted]	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
	• Lack of safe egress from pits in the event of flooding, unexpected movement or emergency		[redacted]	
7. Electrical Safety, Control Systems & Automation	• Electric shock or arc flash from elevator motors, control cabinets and escalator drive systems • Incorrect wiring or control system modifications when adjusting elevator speed controls, setting floor levels or testing elevator brakes • Uncontrolled software or firmware changes to lift controllers leading to unexpected elevator movement • Lack of segregation between power and control circuits, increasing risk of energisation during maintenance • Defective earthing, insulation or circuit protection in motor rooms and control panels • Inadequate labelling of circuits, fuses and isolation points causing errors during fault-finding • Use of non-compliant electrical components or temporary wiring during installation or repairs of escalators or escalators	4A	[redacted]	2M
8. Mechanical Lifting, Cables, Ropes & Components Handling	• Failure or snap of elevator cables, suspension ropes or buffer springs during replacement, testing or normal operation • Mechanical overload or collapse of lifting equipment used to remove existing elevator components or secure elevator cab to building • Crushing, entanglement or amputation hazards around sheaves, pulleys and rotating shafts during inspect traction of the sheave or inspect elevator pulley system • Inadequate handling and storage of heavy components such as elevator	4A	[redacted]	2M

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	motors, drive units, guide rails and counterweights • Use of incompatible or non-certified lifting gear, slings or attachments during installation or repair of elevators or escalators • Poor torque control on fasteners affecting structural integrity of pulleys, brakes and suspension systems • Inadequate verification of rope terminations, clamps and socketing after replace suspension ropes or replace elevator cables		[redacted]	
9. Housekeeping, Environmental Conditions & Confined Spaces	• Accumulation of debris, oil, water or rubbish in elevator pits and lift shafts creating slip, trip, fire or biological hazards • Poor ventilation or limited airflow in pits, shafts or machine rooms leading to heat stress or accumulation of fumes • Confined space–type risks when workers enter deep pits or enclosed lift shafts during clean elev[redacted] lift shaft cleaning or inspectio[redacted]asks • Ingress of water [redacted]o pits causing electrical hazards, [redacted] of drowning in extreme cases • Exposure to hazardous substanc[redacted] such as lubricants, cleani[redacted]s and corrosion inhibitors • Inadequate lighting in pits, shafts or around escalator machinery increasing error and injury risk • Noise and vibration exposure from elevator motors, gearboxes and escalator drives	3H	[redacted]	2M
10. Public Interface, Building Occupant Safety & Site Security	• Unauthorised public access to lift shafts, pits or escalator machinery areas during maintenance or removal of existing elevators • Building occupants exposed to falls through open lift openings when doors	3H	[redacted]	2M

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	are removed during fix elevator doors or installation activities • Public using lifts or escalators that are under test, including during load test of elevator or after adjustments to elevator speed controls or floor levels • Interference with barricades, lockable doors or isolation devices by building occupants or other contractors • Lack of communication with building management about operational status of lifts and escalators during major works • Inadequate emergency egress arrangements when multiple lifts or escalators are removed from service		[redacted]	
11. Planning, Scheduling, Fatigue & Resource Management	• Fatigue and reduced alertness due to after-hours work or extended shifts during major installation or repair of elevators or escalators • Rushed work, shortcuts or inadequate testing when lift systems are returned to service under time pressure • Insufficient staffing levels or supervision for complex tasks, such as remove existing elevator, replace suspension ropes or load test of elevator • Poor coordination of multiple trades working concurrently in lift shafts, machine rooms or plant areas • Inadequate planning for access equipment, lifting devices and specialised tools leading to unsafe improvisation • Failure to allocate sufficient time for thorough inspection, non-destructive testing of lifts and commissioning following significant modifications	3H	[redacted]	2M
12. Documentation, Procedures, Training & Communication	• Lack of clear, task-specific procedures for critical activities such as adjust elevator speed controls, set elevator floor levels and test elevator brakes	3H	[redacted]	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
	• Outdated or inconsistent documentation for different models or generations of lift and escalator plant • Inadequate training for workers on new technologies, control systems or safety features introduced during upgrades • Informal communication of hazards, changes or lessons learned leading to repeated incidents • Poor recordkeeping for inspections, non-destructive testing of lifts, maintenance and defects • Language or literacy barriers affecting understanding of critical safety information		[redacted]	
13. Emergency Preparedness, Rescue & Incident Management	• Delayed response to technicians trapped in pits, on car tops or within lift shafts due to unexpected elevator movement or mechanical failure • Inadequate procedures for rescuing persons trapped in elevator cars during testing, speed adjustments or floor levelling work • Lack of awareness [redacted] building management and contractors of emergency roles, contacts and procedures • Insufficient first aid resources for injuries arising from work at height, electrical shock, crushing or entanglement • Poor incident reporting and investigation processes leading to repeated system failures	3H	[redacted]	2M

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