

Balustrade Installation

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:	
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.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. 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. Governance, Legal Compliance and PCBU Duties	<ul style="list-style-type: none"> Lack of clear assignment of WHS duties for balustrade work under WHS Act 2011 leading to gaps in responsibility and oversight Inadequate understanding of statutory requirements for balustrades (e.g. NCC/BCA, relevant Australian Standards such as AS 1170, AS 1288, AS/NZS 1170.1, AS 1657 and state codes of practice) Failure to consult, cooperate and coordinate with other duty holders (builder, principal contractor, designers, engineers, facility owners) resulting in unmanaged interface risks Absence of a documented WHS management system specific to construction and installation of balustrades (including system for planning, monitoring and review) Insufficient due diligence by officers in monitoring health and safety performance of balustrade projects Poor record keeping of risk assessments, design decisions, engineering verifications, inspections and incident investigations 	High	<ul style="list-style-type: none"> Establish and maintain a documented WHS management system that specifically references balustrade design, fabrication and installation activities and aligns with WHS Act 2011 and WHS Regulations Define and document roles, responsibilities and accountabilities for officers, managers, supervisors and workers in relation to balustrade installation safety, including authority to stop work Implement a formal legal and standards register capturing current legislation, NCC/BCA requirements and applicable Australian standards for balustrades, with a process to review and update at least annually or when changes occur Develop a documented process for consultation, cooperation and coordination with other PCBUs on site, including written interface agreements that clearly define who controls what risks at each project stage Require officers to receive periodic WHS due diligence training focused on construction works and structural elements such as balustrades, and report WHS performance in management meetings Implement a controlled document management system for risk assessments, design verifications, engineering certifications, installation sign-offs, inspections and incident reports with retention periods defined Undergo periodic internal audits and, where appropriate, external audits of the WHS management system with specific focus on high-risk construction work elements such as work at height and structural integrity Ensure project start-up WHS plans include a balustrade-specific section outlining key risks, control standards and verification activities 	Medium
2. Design, Engineering and Structural Integrity Management	<ul style="list-style-type: none"> Balustrade designs not compliant with NCC/BCA and relevant Australian Standards leading to inadequate strength, height or load capacity Lack of formal engineering verification of proprietary or custom balustrade systems prior to procurement and installation Inadequate design consideration of fixings, anchors and substrate suitability (e.g. edge distances, embedment, corrosion, compatibility with building structure) 	High	<ul style="list-style-type: none"> Implement a formal design management procedure requiring all balustrade systems to be designed or verified by a competent engineer with experience in structural and façade elements Mandate written engineering certification and design calculations for balustrade systems, including fixings and substrates, prior to procurement and installation Standardise the use of pre-approved balustrade system designs and fixings with documented design limits (maximum spans, loads, substrates, environmental conditions) Establish a change management process requiring any design or product variation (including alternative fixings or glass types) to be risk assessed and approved in writing by the engineer of record Ensure design documentation (drawings, specification sheets, engineering certificates and installation manuals) is controlled and communicated to supervisors and installers before work starts Include explicit design requirements for corrosion resistance, environmental exposure, child safety, load types and maintenance access in project design briefs and purchase specifications 	Medium

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	<ul style="list-style-type: none"> Insufficient communication of design assumptions and limitations to installers, supervisors and principal contractor Uncontrolled design changes or site variations (e.g. substituting fixings, changing glass thickness, altering post spacing) without engineering approval Failure to consider lifecycle issues such as corrosion, glass breakage, impact loads and child-resistant features in the design phase 		<ul style="list-style-type: none"> Require design reviews at tender and pre-construction stages involving WHS, engineering and construction representatives to identify constructability and safety issues (e.g. access for installation, lifting points) Maintain a design decisions register for each project that records key assumptions, constraints and safety-critical decisions related to balustrade 	
3. Procurement, Supply Chain and Contractor Management	<ul style="list-style-type: none"> Procurement of non-compliant or sub-standard balustrade components, glass, fixings or anchors due to cost-driven purchasing Use of suppliers or subcontractors without appropriate licensing, competence, insurance or WHS systems Inadequate verification that supplied components match engineered design specifications (e.g. wrong glass type, incorrect grade of stainless steel, non-rated fixings) Poor communication of WHS and quality expectations to suppliers and installers, leading to inconsistent standards Fragmented supply chain (designer, manufacturer, installer and different entities) creating gaps in accountability for safety-critical interfaces No formal process to assess supplier performance in quality and WHS outcomes on balustrade projects 	High	<ul style="list-style-type: none"> Develop procurement procedures that require balustrade products and components to be selected from pre-qualified suppliers who can demonstrate compliance with relevant Australian Standards and provide evidence of testing/certification Implement subcontractor pre-qualification process that assesses WHS management capability, relevant licences, insurance, experience with balustrade work and history of incidents or non-conformance Mandate that purchase orders and contracts for balustrades explicitly reference required standards, engineering specifications, installation manuals and inspection requirements Introduce a goods-inward verification process to check critical attributes of balustrade components against engineering design (e.g. glass thickness and type, fixing type and grade, post and rail dimensions) Formally allocate responsibility for design-supply-install coordination in contracts, including who holds ultimate responsibility for structural adequacy and code compliance Require principal subcontractors for balustrade installation to submit a project-specific WHS plan and risk assessment addressing high-risk elements such as work at height, manual handling and glass handling systems Establish a supplier and subcontractor performance review system that tracks defects, rework, near misses, incidents and audit findings related to balustrade works, with consequences for repeated non-conformance Prohibit unauthorised substitution of components by including clear clauses in purchasing contracts and requiring written approval for any product changes 	Medium
4. Competency, Training and Supervision	<ul style="list-style-type: none"> Installers and supervisors lacking specific competency in balustrade systems, structural fixings and glass handling Insufficient understanding of engineering documentation, installation manuals and tolerances, leading to misinterpretation 	High	<p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> Inadequate training in WHS obligations, hazard identification and reporting processes for balustrade projects Poor supervision of new or inexperienced workers, especially on high-risk activities such as work at height and handling heavy glass panels Absence of verification that subcontractor workers hold required high-risk work licences or tickets (e.g. EWP, dogging, rigging where relevant) Language or literacy barriers preventing workers from understanding procedures, drawings or safety information 		[REDACTED]	
5. Planning, Scheduling and Interface Coordination	<ul style="list-style-type: none"> Poor sequencing of balustrade installation with other trades leading to overcrowded work areas, clashes and increased risk of falls or dropped objects Insufficient planning for temporary edge protection or fall prevention while balustrades are incomplete Inadequate consideration of crane, hoist or mechanical aid availability in the program, resulting in manual handling or unsafe improvisation Time pressure and unrealistic deadlines increasing likelihood of shortcuts, non-compliance with procedures and inadequate inspections Lack of coordination with principal contractor about access routes, lifting zones, exclusion zones and storage areas for balustrade materials Failure to plan for weather conditions, especially for external balustrades at height 	High	[REDACTED]	Medium

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6. Plant, Equipment and Fall Prevention Systems Management	<ul style="list-style-type: none"> Inadequate selection and management of fall prevention systems (guardrails, scaffolds, work platforms) for balcony edges and voids during balustrade works Use of non-compliant or poorly maintained access equipment such as scaffolds, EWPs, ladders or temporary work platforms Lack of a systematic inspection and maintenance regime for anchors, fixings, torque tools and lifting equipment used in balustrade installation Improvisation of lifting methods for glass and heavy components due to unavailability or unsuitability of mechanical aids Inappropriate use of ladders as primary work platforms for extended installation tasks Insufficient control of plant movement and exclusion zones for work at height locations 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium
7. Material Handling, Storage and Logistics Systems	<ul style="list-style-type: none"> Ineffective systems for receipt, storage and movement of glass panels, metal balustrade sections and fixings on and off site Inadequate storage racking or stillages for glass and long sections leading to instability, toppling or breakage Poor planning of delivery times causing unloading in congested or unsafe conditions, including public interface Lack of procedures for manual handling risk assessment of heavy or awkward balustrade elements, leading to musculoskeletal injuries Mixing of components from different systems or batches due to poor labelling and inventory control 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> Uncontrolled waste and offcuts storage, creating trip hazards and potential for cuts or punctures 		[REDACTED]	
8. Quality Assurance, Inspection and Verification Systems	<ul style="list-style-type: none"> Lack of systematic inspections to verify balustrades are installed as per design, with correct fixings, spacings and heights No formal hold-points or sign-off stages to prevent access to incomplete or non-compliant balustrades Inadequate competency of persons conducting inspections or sign-offs, leading to critical defects being missed Absence of structured defect management and rectification process for balustrades identified as non-conforming Failure to verify that repairs, repairs or replacements maintain original design strength and code compliance Incomplete or inaccurate records of inspections and tests, creating uncertainty about installed safety performance 	High	[REDACTED]	Low
9. Incident Management, Consultation and Continuous Improvement	<ul style="list-style-type: none"> Under-reporting of near misses, minor incidents or defects related to balustrades, masking systemic issues Inadequate investigation and root cause analysis of balustrade-related incidents such as glass breakage, fixings failure or falls 	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> • Lack of worker consultation and feedback mechanisms on the practicality and effectiveness of control measures • No structured process to capture lessons learned from one project and apply them to future balustrade works • Insufficient monitoring of health indicators such as fatigue, stress or musculoskeletal complaints linked to balustrade tasks • Failure to update procedures, training and design standards following significant changes in technology, standards or incident findings 		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	

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 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>

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 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-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) Regulation 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>

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>

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

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.