

Glazing Windows

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:	

SAMPLE

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 for the task parts. 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. Legislative Compliance and WHS Governance	<ul style="list-style-type: none"> Failure to comply with WHS Act 2011 and WHS Regulations leading to systemic breaches in glazing activities (e.g. cutting, drilling, acid etching, assembly of large window units, shop front installations) No formal WHS management system or inadequate integration of glazing-specific risks (glass handling, leadlighting, mirrors, curtain walls, emergency repairs) Inadequate consultation with workers and Health and Safety Representatives regarding glazing tasks and changes to procedures Lack of documented roles, responsibilities and accountability for WHS in glazing work (including site supervisors, project managers, subcontractors) Poor change management when introducing new glazing methods, products or chemicals (e.g. new acid etchants, new curtain wall systems, new glass composition) Insufficient review of incidents, near misses and regulatory updates relevant to glass and window works 	High	<ul style="list-style-type: none"> Establish and maintain a documented WHS Management System aligned with the WHS Act 2011, WHS Regulations and applicable glazing standards (e.g. AS/NZS 2208, AS 1288, AS 1735, AS/NZS 4667, AS/NZS 1170 series) Define and communicate WHS roles, responsibilities and authorities for officers, PCBUs, site supervisors, leading hands, and workers undertaking glazing activities (including contractors) Implement a formal governance process including regular WHS meetings, toolbox talks specific to glazing operations (glass cutting, acid etching, curtain wall installation, emergency repairs, leadlight work) Ensure consultation arrangements with Workers and Health and Safety Representatives are documented and operational, including involvement in the development and review of glazing procedures and risk assessments Implement a documented change management procedure for introduction of new glass products, chemicals (for acid etching), tools, equipment and work methods, including specific risk assessments and training before use Maintain a legal register capturing relevant WHS legislation, codes of practice and Australian Standards for glazing and schedule periodic compliance reviews Establish processes for reporting, investigating and analysing incidents, near misses and non-compliances related to glass handling, breakages, structural failures, chemical exposure and manual handling injuries Conduct scheduled management reviews of the WHS system to ensure controls for glazing activities remain effective and reflect current legal requirements and industry best practice 	Medium
2. Design, Engineering and Structural Suitability	<ul style="list-style-type: none"> Incorrect specification of glass type, thickness or treatment for the intended use (e.g. inadequate strength for large window units, shop fronts, curtain wall systems, balustrades, bathroom mirrors) Insufficient structural design of framing, curtain wall grid systems, window flashing interfaces, and fixings leading to glass failure or water ingress Lack of engineering verification for non-standard glazing designs or site-specific conditions (wind loads, impact risks, human loadings) Failure to consider safety glazing requirements in high-risk locations (e.g. 	High	<ul style="list-style-type: none"> Mandate that all glazing designs comply with relevant Australian Standards for glazing in buildings (including AS 1288 and AS/NZS 2208), structural loading (AS/NZS 1170 series) and façade design, verified by competent designers or engineers Implement a formal design review and approval process that checks glass type, strength, thickness, fixing details and compatibility of glass with its framing system for each project, including shop fronts and curtain walls Require engineering certification for curtain wall grid systems, large window assemblies, structural glass, and any non-standard or high-risk applications before procurement and installation Develop internal design guidelines and checklists for safe glazing design, including mandatory use of safety glazing in specified high-risk locations and compliant mirror installations Ensure flashing and waterproofing details around windows and curtain walls are coordinated between designers, builders and glaziers, and reviewed prior to site works 	Medium

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	<ul style="list-style-type: none"> doors, low-level windows, wet areas, schools, childcare, aged care) Poor design integration between glazing systems and building elements (e.g. flashing details, thermal movement, deflection limits) leading to long-term failure or detachment Inadequate consideration of lead exposure and fragility in leaded light and leadlighting implementation Inadequate design review for emergency egress and access when replacing windows or undertaking shop front installations 		<ul style="list-style-type: none"> Include assessment of lead-based systems in design (for leaded lights and leadlighting), including minimisation of lead content where possible and design features that reduce disturbance and breakage during maintenance Require documented consideration of emergency egress, access and security when specifying glass and framing for replacement windows, shop fronts and emergency repair strategies Maintain records of design calculations, engineering certificates and approvals for all critical glazing systems for traceability and future review 	
3. Procurement, Supplier Management and Materials Quality	<ul style="list-style-type: none"> Procurement of non-compliant or substandard glass (including toughened, laminated, mirrored or decorative glass) that does not meet relevant Australian Standards Sourcing curtain wall grid components, window flashing, beads and glass strips from suppliers without adequate quality controls or traceability Purchasing unsuitable chemicals for acid etching or putty application without proper safety data and compatibility checks Lack of verification of lead content and quality in leaded light materials and leadlighting products Inadequate quality assurance on replacement panes, mirrors, shop front glass and emergency repairs, leading to recurring failure or safety issues Absence of clear procurement specifications for tolerances associated with cutting and shaping, drilling, bead glazing and bedding glass 	High	<ul style="list-style-type: none"> Develop procurement specifications that mandate compliance with Australian Standards for all glass products, framing systems, adhesives, sealants, putties, flashing and accessories used in glazing work Establish an approved supplier list for glass, curtain wall systems, mirrors, leadlight components and chemicals, based on demonstrated quality systems, certifications and product traceability Require suppliers to provide certificates of compliance, test reports or product conformity statements for safety glass, structural glass and specialised glazing products (including mirrors and shop front glass) Include in purchase orders clear specifications for glass type, thickness, edge finish, drilling patterns, tolerances and any special treatments (such as acid etching or coatings) Ensure all chemicals used for acid etching, putty application and cleaning are accompanied by up-to-date Safety Data Sheets (SDS) and are reviewed for compatibility with the glass and frame systems Implement incoming goods inspection and quarantine procedures for glass and glazing components, including checks for defects, incorrect sizing, edge damage and non-conformances Specify requirements for lead content, jointing materials and structural integrity of leaded lights, and source from reputable manufacturers with proven track records Maintain records of supplier performance, including defect rates, non-conformances and corrective actions, and periodically re-evaluate suppliers against WHS and quality criteria 	Medium
4. Competency, Licensing, Induction and Training	<ul style="list-style-type: none"> Workers performing glazing tasks (cutting, drilling, assembly, bead glazing, bedding glass, leadlighting, mirror replacement, shop front installation) 	High	[REDACTED]	Medium

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	<p>without suitable trade qualifications or experience</p> <ul style="list-style-type: none"> • Inadequate training on hazards specific to glass handling, including large unit assembly, heavy panels, brittle failure and sharp edges • Lack of competency in using specialised tools and equipment for cutting, shaping, drilling, acid etching and installing curtain wall grid systems • Insufficient understanding of chemical hazards associated with acid etching, putties and sealants, leading to exposure or misuse • Limited awareness of lead exposure risks and control measures during leaded light repairing and leadlighting implementation • Poor induction for new workers, contractors and emergency repair crews on site-specific glazing risks and procedures • No refresher or ongoing training to address changes in standards, equipment and materials used in glazing 		<p>[REDACTED]</p>	
5. Planning, Job Scheduling and Site Coordination	<ul style="list-style-type: none"> • Poor planning of glazing works leading to time pressure and shortcuts, especially on replacing windows, shop front installations and emergency glass repairs • Inadequate site assessment before commencing work, including access constraints, overhead services, public interface and weather influences on glass handling • Work sequences that create clashes between glaziers and other trades, particularly around installing window flashing, curtain wall grids and large window units • Inadequate planning for after-hours or emergency repair work resulting in 	High	<p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> under-resourced teams, insufficient supervision and increased risk-taking • Failure to plan for safe access to high or awkward glazing locations when replacing panes, mirrors or adjusting the fit of installed glass • Insufficient consideration of noise, dust, fumes and public safety during cutting, shaping, drilling and acid etching glass on or near occupied premises 		[REDACTED]	
6. Equipment, Tools and Plant Management	<ul style="list-style-type: none"> • Use of unsuitable, damaged or poorly maintained tools and equipment for cutting, shaping, drilling and handling glass • Failure of lifting equipment or glass handling aids (suction lifters, trolleys, cranes, hoists) when assembling large window units, shop fronts or curtain wall grids • Uncontrolled use of powered tools for drilling and cutting glass without engineering controls for noise and vibration • Inadequate inspection and testing of electrical tools and equipment used during glazing works • Improvised equipment for adjusting the fit of installed glass, installing or removing and installing glass strips • Lack of dedicated equipment for safe storage and transport of large panes, mirrors and leaded lights on and off site 	High	[REDACTED]	Medium
7. Glass and Materials Storage, Handling and Transport Systems	<ul style="list-style-type: none"> • Incorrect storage of glass leading to tipping, uncontrolled breakage or collapse of multiple panes • Unsafe manual handling of large or heavy glass units, shop front panels, mirrors and assembled leaded lights • Inadequate systems for securing glass during transport between workshop, 	High	[REDACTED]	Medium

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	<p>storage and site, including during emergency repairs</p> <ul style="list-style-type: none"> • Poor segregation of different glass types (toughened, laminated, annealed, coated) leading to mix-ups and misuse • Lack of processes for handling offcuts, broken glass, sharp edges and waste from cutting, shaping and drilling operations • Inadequate controls for environmental exposure (heat, moisture, chemicals) affecting stored glass, putties and sealants 		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	
8. Chemical, Lead and Hazardous Substances Management	<ul style="list-style-type: none"> • Exposure to corrosive or toxic chemicals used for acid etching glass and cleaning glazing surfaces • Inhalation or skin contact with solvent sealants, adhesives, putties and other chemicals used for bedding glass, applying putty and installing flashing • Lead exposure due to leaded glass repairing and leadlighting implementation, including dust, fumes and ingestion from poor hygiene practices • Inadequate storage and labelling of hazardous substances used in glazing works • Use of hazardous chemicals without reference to SDS or appropriate risk assessments • Improper disposal of chemical and lead-containing waste, leading to environmental contamination and regulatory breaches 	High	<p>[REDACTED]</p>	Medium

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9. Contractor, Subcontractor and Emergency Repair Management	<ul style="list-style-type: none"> • Use of subcontracted glaziers or emergency repair services without adequate WHS systems or competency for complex glazing works • Poor communication of site-specific hazards and procedures to contractors performing window replacements, shop front installations or after-hours emergency repairs • Inconsistent application of company WHS standards on sites controlled by others (e.g. shopping centres, residential properties, commercial buildings) • Lack of verification that subcontractors manage high-risk activities appropriately, including working at heights, electrical work and structural modifications related to glazing • No formal process for reviewing performance or incidents involving contractors engaged for glazing and related works 	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>	Medium
10. Working at Heights, Access and Public Interface Management	<ul style="list-style-type: none"> • Inadequate systems for working at heights during installation of curtain wall grids, large window units, shop fronts and high-level window replacements • Unsafe use of ladders, scaffolds or EWPs to reach glazing locations, particularly for adjusting the fit of installed glass or installing flashing • Uncontrolled exposure of the public and building occupants to falling objects, glass fragments or construction activities during glazing works • Poor traffic and pedestrian management around shop front installations and emergency glass repairs in public areas 	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"> Insufficient planning for rescue and emergency response in the event of an incident while working at height 		[REDACTED]	
11. Incident Management, Monitoring and Continuous Improvement	<ul style="list-style-type: none"> Under-reporting of glass-related incidents, near misses, cut injuries, structural failures or chemical exposures Lack of systematic investigation of glazing incidents, leading to repeat events and unaddressed root causes Inadequate health monitoring for workers regularly exposed to specific risks (e.g. lead, hazardous chemicals, high noise levels from cutting and drilling) No structured program of workplace inspections and audits focused on glazing activities Failure to review and update risk assessments and procedures in light of incident findings, regulatory changes or new technologies 	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>

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.