

Stonework

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 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. WHS Governance, Duties and Consultation	<ul style="list-style-type: none"> Lack of clear WHS roles, responsibilities and accountability for stonework activities under WHS Act 2011 (PCBU, officer and worker duties) Inadequate consultation with workers, HSRs and contractors about risks associated with bridge saws, polishers, sandblasting, restoration and sealing works Absence of formal WHS policy specific to stonework, including crystalline silica, manual handling, plant and hazardous chemicals Poor integration of stonework WHS requirements into business planning, scheduling and resourcing decisions Inadequate oversight of subcontractors undertaking stone carving, pitching, conservation-restoration and sealing works 	High	<ul style="list-style-type: none"> Establish and maintain a WHS governance framework that allocates and documents WHS responsibilities for officers, managers, supervisors and workers in accordance with WHS Act 2011 Develop a written WHS Policy that explicitly addresses risks associated with stone cutting, polishing, sandblasting, restoration and sealing (including crystalline silica dust and hazardous chemicals) Implement formal WHS consultation arrangements (WHS committee and/or elected HSRs) and regular toolbox talks that specifically cover stonework hazards and controls Include WHS performance for stonework (e.g. silica exposure results, guarding compliance, incident trends) as a standing item on management meeting agendas with recorded actions Establish contractor management procedures requiring pre-qualification, review of their risk assessments, silica management plans, licences/competencies before engagement Ensure officers exercise due diligence by reviewing WHS reports, monitoring implementation of controls, and seeking compliant advice regarding stonework risks Create a process for workers to raise WHS issues related to stone equipment and materials (e.g. guard defects on bridge saws, ineffective dust extraction) with documented follow-up Periodically review the WHS management system against relevant Australian WHS legislation, codes of practice and guidance material for stone benchtop and masonry work 	Medium
2. Planning, Design and Procurement of Plant and Equipment	<ul style="list-style-type: none"> Procurement of bridge saws, bridge polishers, edge/profile polishers and sandblasting units without adequate dust suppression or extraction systems Selection of stone cutting and polishing machinery without appropriate guarding, emergency stops, interlocks and noise/vibration controls Inadequate evaluation of compatibility between plant (e.g. bridge saws) and existing electrical supply, drainage and ventilation systems Purchase or hire of equipment without compliant instructions, maintenance schedules or Australian certification where applicable Failure to consider ergonomic design for stone handling, coping stone layout and profiling (e.g. work height, lifting aids, bench configuration) Insufficient planning for control of airborne silica dust generated from 	High	<ul style="list-style-type: none"> Develop a formal procurement policy requiring WHS and silica control features to be considered and documented before purchasing or hiring any stonework plant Specify minimum safety features for bridge saws, bridge polishers, edge/profile polishers and sandblasting cabinets, including integrated water suppression, local exhaust ventilation, guarding and emergency stops Ensure plant is sourced from reputable suppliers who provide Australian-compliant documentation, instructions in English, and maintenance requirements Engage a competent person (e.g. plant engineer or WHS specialist) to review equipment specifications against WHS legislation, manufacturer guidance and relevant Australian Standards Plan for adequate infrastructure (electrical capacity, residual current devices, drainage for wet cutting, ventilation for enclosed areas) before installation of major stonework equipment Incorporate ergonomic design into workshop layout and coping stone layout areas, including adjustable benches, mechanical lifting aids, trolleys and clear access ways Specify in procurement documents that equipment used for cutting and polishing natural stone must be compatible with the site's dust control strategy (wet methods and/or extraction) Include requirements for bunding, sediment traps, and managed discharge or recycling of polishing and cutting slurry when selecting and installing plant Maintain a register of all stonework plant and equipment with key safety features and required controls recorded 	Medium

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	<p>cutting natural stone, pitching and sandblasting</p> <ul style="list-style-type: none"> Poor planning for control of wastewater, slurry and residues from polishing, sealing and restoration processes 			
3. Silica and Dust Exposure Management	<ul style="list-style-type: none"> Uncontrolled generation of respirable crystalline silica during cutting, shaping, pitching and profiling of natural stone Inadequate dust control when operating bridge saws, bridge polishers, edge and profile polishers, or during stone carving by sandblasting Lack of systems to manage dry cutting or dry polishing tasks that may be undertaken for convenience or speed Insufficient maintenance and testing of local exhaust ventilation and water suppression systems leading to degraded performance Inadequate respiratory protective equipment (RPE) program including selection, fit testing and training Failure to undertake health monitoring for workers at risk of silica-related diseases in line with WHS regulations and guidance Poor housekeeping leading to accumulation of dry dust on ledges and equipment that can become airborne 	Extreme	<ul style="list-style-type: none"> Develop and implement a written Silica Risk Management Plan covering all stonework activities (cutting, polishing, sandblasting, restoration and pitching) in accordance with relevant Australian WHS guidance and codes Prohibit uncontrolled dry cutting and polishing of natural stone through policy, procedures and supervision, with any exception subject to documented risk assessment and higher-order controls Install and maintain engineering controls such as wet cutting systems, on-tool extraction, enclosed sandblasting cabinets and fixed local exhaust ventilation with HEPA filtration where appropriate Establish inspection, testing and maintenance schedules for dust control systems, including documented airflow checks, filter changes and water system maintenance Implement a respiratory protection program including selection of appropriate RPE (e.g. P2 disposable or reusable respirators), fit testing, issue records, training and supervision Introduce validated exposure monitoring (airborne silica sampling) at appropriate intervals and when processes or controls change, with results communicated to workers and officers Develop silica-safe housekeeping procedures that avoid dry sweeping or compressed air, and specify wet methods or H-class vacuum cleaners for clean-up of stone dust Maintain a register of workers required to use RPE and ensure health monitoring is provided where legally required, with confidential records kept in accordance with WHS legislation Integrate silica controls into induction, toolbox talks, contractor agreements and supervision routines 	Medium
4. Hazardous Chemicals, Stone Sealers and Restoration Products	<ul style="list-style-type: none"> Use of solvent-based stone sealers, cleaning agents and restoration chemicals without adequate risk assessment Insufficient storage controls for flammable or corrosive products used in stone sealing and conservation-restoration Lack of up-to-date safety data sheets (SDS) and inadequate worker 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<p>information about chemical hazards and safe handling</p> <ul style="list-style-type: none"> • Inadequate ventilation for application of sealers and restoration products in enclosed or partially enclosed areas • Inconsistent use of appropriate personal protective equipment (PPE) when handling chemicals (e.g. gloves, eye protection, RPE) • Poor systems for management of spills, waste disposal and environmental releases from sealing and restoration processes 		[REDACTED]	
5. Plant Safety and Guarding for Saws and Polishers	<ul style="list-style-type: none"> • Inadequate guarding on bridge saws, bridge polishers, edge polishers and profile polishers leading to entanglement, amputation or contact with moving parts • Defeated or bypassed safety devices, emergency stops and other safety features to speed up cutting and polishing work • Lack of systematic pre-use inspection and defect reporting for all stonework plant • Uncontrolled modifications or repairs to plant affecting guarding, stability or electrical safety • Inadequate safe systems of work for maintenance, cleaning and adjustment of bridge saws, polishers and sandblasting equipment • Insufficient controls for noise and vibration generated by heavy stone cutting and polishing operations 	Extreme	[REDACTED]	Medium

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			[REDACTED]	
6. Workshop Layout, Traffic and Manual Handling Systems	<ul style="list-style-type: none"> Poor workshop layout creating congestion and collision risks between forklifts, trolleys and workers moving heavy stone slabs Inadequate systems for safe manual handling of stone pieces during coping stone layout, cutting, shaping and restoration work Lack of dedicated storage systems for slabs, off-cuts and finished stone leading to instability and crush hazards Insufficient planning for access, egress and emergency evacuation paths around bridge saws, polishers and sandblasting areas Improper use or selection of lifting equipment such as clamps, slings, A-frames and overhead cranes Uncontrolled pedestrian access into high-risk stone cutting and polishing zones 	High	[REDACTED]	Medium
7. Competency, Training and Supervision	<ul style="list-style-type: none"> Workers operating bridge saws, polishers, sandblasting and restoration equipment without adequate competency or supervision Insufficient training on silica risks, control measures and correct use of RPE and PPE Lack of formal verification of competency for high-risk tasks such as stone carving by sandblasting, stone pitching and conservation-restoration of historic structures Inadequate training of supervisors in WHS responsibilities and hazard identification specific to stonework 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Failure to provide site-specific and task-specific inductions for new workers and subcontractors Reliance on informal on-the-job instruction without documentation or assessment 		[REDACTED]	
8. Safe Work Procedures and Documentation	<ul style="list-style-type: none"> Absence of documented safe work procedures for cutting, shaping, polishing, sandblasting and sealing of stone Procedures that are overly generic and fail to capture specific risks associated with bridge saws, coping stone layout and stone restoration Inconsistent application of procedure between day, night or weekend shifts and between different supervisors Failure to update documentation following incidents, near misses or changes to plant and processes Workers and contractors not having ready access to current procedures at the point of work 	High	[REDACTED]	Low
9. Contractor and Subcontractor Management	<ul style="list-style-type: none"> Contractors performing high-risk stonework (e.g. sandblasting, conservation-restoration, external stone sealing) without alignment to the PCBU's WHS system Lack of clarity over who controls the workplace and plant when contractors use fixed stone cutting and polishing equipment Inadequate review of contractor risk assessments, SWMS and silica management strategies 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Poor communication of site-specific hazards, emergency procedures and exclusion zones to visiting contractors Insufficient monitoring of contractor compliance with agreed WHS requirements, including RPE/PPE use and dust control 		[REDACTED]	
10. Inspection, Maintenance and Calibration Systems	<ul style="list-style-type: none"> Lack of planned preventive maintenance for bridge saws, polishers, sandblasting units and dust control systems leading to sudden failures and increased risk Inadequate inspection regimes for lifting equipment, slings, storage racks and A-frames used in stone handling Failure to identify and repair critical components such as blades, belts, guards and extraction ducting No calibration or verification of monitoring equipment such as airflow meters, noise meters and silica sampling devices where used Poor record-keeping of maintenance activities and outstanding corrective actions 	High	[REDACTED]	Low
11. Health Monitoring, Injury Management and Wellbeing	<ul style="list-style-type: none"> Failure to provide required health monitoring for workers exposed to respirable crystalline silica, noise and hazardous chemicals 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> • Delayed reporting and management of musculoskeletal injuries from repetitive handling, pitching and polishing of stone • Inadequate systems for early intervention and rehabilitation following stonework-related injuries or illnesses • Poor recognition of cumulative impacts from vibration, awkward postures and repetitive tasks in stone shaping and restoration • Lack of support for workers experiencing stress or fatigue due to high workloads, deadlines or physically demanding stonework tasks 		[REDACTED]	
12. Emergency Preparedness and Incident Management	<ul style="list-style-type: none"> • Inadequate planning for emergencies associated with stonework, including severe injuries from plant, chemical exposures and dust incidents • Lack of clear procedures for plant-related emergencies involving edge saws, polishers and abrasting units • Insufficient first aid equipment and trained first aiders relative to the risks and workforce size • Poor incident reporting and investigation processes leading to repeated stonework-related events • Limited coordination with emergency services for sites undertaking high-risk stone restoration or external sealing works 	High	[REDACTED]	Low
13. Auditing, Review and Continuous Improvement	<ul style="list-style-type: none"> • WHS systems for stonework becoming outdated and not reflecting current legislative requirements, technology or industry best practice 	High	[REDACTED]	Low

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	<ul style="list-style-type: none"> Lack of systematic verification that silica controls, plant safety measures and procedures are implemented as intended Minimal involvement of workers in review processes, resulting in missed opportunities to identify practical improvements Ineffective follow-up on audit findings, incident recommendations and corrective actions Failure to benchmark performance against industry expectations or regulatory guidance for stonework and silica management 		<p>[REDACTED]</p> <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/factsheets-and-resources/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.