

**Epoxy Flooring Resinous Coatings and Anti-Slip**

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			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> 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.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	

  

Risk Rating & Required Action:	
<b>4A</b>	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.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

  

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	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"> <li>Lack of clear allocation of WHS duties under WHS Act 2011 for epoxy flooring and anti-slip operations</li> <li>Boards and officers not exercising due diligence in relation to hazardous chemicals and resinous coatings</li> <li>Inadequate consultation with workers and health and safety representatives about changes to coatings, products or methods</li> <li>No structured process to review incidents, near misses and regulatory changes relevant to resinous flooring</li> <li>Contractual arrangements that obscure PCBUs' overlapping duties on multi-PCBU sites</li> </ul>	4A	<ul style="list-style-type: none"> <li>Establish a WHS governance framework that clearly defines PCBUs, officers, workers and contractors' duties for epoxy flooring and anti-slip activities in line with WHS Act 2011</li> <li>Implement a due diligence program for officers including regular WHS briefings on hazardous chemicals, resin systems, anti-slip treatments and relevant Codes of Practice</li> <li>Develop and maintain a WHS consultation process requiring engagement with workers and HSRs prior to introducing new epoxy products, bonding agents or non-slip systems</li> <li>Create a formal WHS committee or toolbox forum structure to review incident trends, non-conformances and lessons learnt from epoxy and anti-slip projects</li> <li>Implement written agreements with host PCBUs and subcontractors that define shared responsibilities, communication pathways and escalation processes for WHS issues</li> <li>Schedule annual management system reviews to verify compliance with WHS Act 2011, WHS Regulation and relevant Australian Standards for coating systems</li> <li>Maintain documented WHS objectives and KPIs specific to chemical exposure, slips, trips and falls and confined or restricted work areas</li> </ul>	3H
2. WHS Planning, Risk Management and Change Control	<ul style="list-style-type: none"> <li>No systematic risk assessment process for new epoxy resin, anti-slip coatings and bonding agents</li> <li>Failure to consider whole-of-life risks including mixing, application, curing and maintenance of coated surfaces</li> <li>Poor management of change when introducing new products, equipment or application methods</li> <li>Lack of project-specific WHS planning for complex areas (around plumbing fixtures, falls, penetrations, wet areas)</li> <li>Risk assessments focusing only on task steps (SWMS) rather than systemic and organisational failure modes</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a documented WHS risk management procedure aligned with WHS Regulation, requiring project-specific system-level risk assessments for resinous floor coatings</li> <li>Require formal hazard identification and risk assessment before using new epoxy systems, bonding agents or anti-slip treatments, including consultation with suppliers</li> <li>Establish a management-of-change (MOC) process for introducing or substituting coating products, application equipment or surface preparation methods</li> <li>Mandate development of project WHS plans for larger or high-risk jobs addressing restricted access, drainage, plumbing fixtures, wet areas and traffic segregation</li> <li>Integrate risk assessments for mixing, application, curing, re-coating and future maintenance into pre-tender and pre-start planning stages</li> <li>Maintain a central register of risk assessments and MOC records for epoxy and anti-slip systems and ensure periodic review based on incident and industry data</li> <li>Require compatibility and performance assessments (e.g. slip resistance, chemical resistance) as part of design and planning, not left to site improvisation</li> </ul>	3H
3. Product Selection, Design and Specification of Coating Systems	<ul style="list-style-type: none"> <li>Selection of epoxy and anti-slip systems with excessive VOCs, sensitising agents or hazardous additives</li> <li>Inadequate slip-resistance design for intended use, leading to slips on newly coated or non-slip surfaces</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a formal coating system design and selection procedure requiring review of SDS, TDS and supplier guidance for all epoxy resins, hardeners, bonding agents and anti-slip aggregates</li> <li>Specify slip-resistance performance requirements (e.g. AS 4586 classifications) for different zones such as bathrooms, commercial kitchens, ramps and external entries</li> <li>Require compatibility verification between substrates, bonding agents, primers, epoxy layers and anti-slip top coats through supplier sign-off or test patches</li> </ul>	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
	<ul style="list-style-type: none"> <li>Using incompatible bonding agents, primers or substrates causing coating failure, delamination or trip hazards</li> <li>Failure to consider hygiene, chemical resistance and cleaning requirements in wet or plumbing-intensive areas</li> <li>Supplier data sheets not reviewed, outdated or not aligned with Australian conditions and standards</li> </ul>		<ul style="list-style-type: none"> <li>Include consideration of drainage, coving, falls to floor wastes and detailing around plumbing fixtures to avoid ponding, water ingress and microbiological growth</li> <li>Standardise preferred product lists prioritising low VOC, low-sensitiser and isocyanate-free systems where reasonably practicable</li> <li>Document design assumptions (traffic type, cleaning regime, chemicals used, expected lifespan) to inform later maintenance and refurbishment decisions</li> <li>Require engineering or specialist review for complex environments (e.g. food processing, health facilities, abattoirs, wet industrial plants)</li> </ul>	
4. Hazardous Chemicals Management (Epoxyes, Hardeners, Bonding Agents)	<ul style="list-style-type: none"> <li>Inadequate hazardous chemicals register and labelling for epoxy resins, hardeners, bonding agents and solvents</li> <li>Lack of access to current SDS leading to misuse or poor emergency response</li> <li>Incompatible storage of flammable or reactive components (A and B packs, solvents, cleaning agents)</li> <li>Insufficient controls for sensitising agents causing dermatitis, respiratory sensitisation or asthma</li> <li>Poor decanting and mixing controls leading to spills, exothermic reactions or uncontrolled vapour</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Ventilation, Fume and Dust Control for Mixing and Application	<ul style="list-style-type: none"> <li>Insufficient ventilation when mixing epoxyes and bonding agents leading to inhalation of vapours</li> <li>Use of solvent-containing systems in enclosed or poorly ventilated spaces without atmospheric monitoring</li> <li>Generation of dusts during substrate preparation or application of anti-slip aggregates on non-slip surfaces</li> <li>Inadequate engineering controls for confined or semi-enclosed spaces (plant rooms, basements, bathrooms)</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	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
	<ul style="list-style-type: none"> <li>Reliance on PPE instead of effective engineering controls for airborne contaminants</li> </ul>		[REDACTED]	
6. Worker Competency, Licensing and Training Systems	<ul style="list-style-type: none"> <li>Inadequate training on epoxy chemistry, exothermic reactions and pot life leading to unsafe practices</li> <li>Poor understanding of anti-slip performance requirements and slip-rating standards among supervisors and applicators</li> <li>Lack of competency in managing work around plumbing fixtures, floor wastes and wet areas</li> <li>Insufficient training in hazardous chemicals management, SDS interpretation and emergency response</li> <li>No formal verification of on-the-job competency for new workers or subcontractors</li> </ul>	3H	[REDACTED]	2M
7. Contractor and Supplier Management	<ul style="list-style-type: none"> <li>Use of subcontractors/applicators without adequate WHS systems or chemical management procedures</li> <li>Suppliers providing products without sufficient technical support or local compliance evidence</li> <li>Inconsistent standards for non-slip performance, curing times and re-coating information across multiple suppliers</li> <li>Lack of oversight of contractor supervision, supervision ratios and language or literacy barriers</li> <li>Poor integration of subcontractor SWMS and risk assessments with principal contractor systems</li> </ul>	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
8. Planning of Work Environments, Access and Traffic Management	<ul style="list-style-type: none"> <li>Poor segregation of work zones leading to public exposure to uncured epoxy or wet anti-slip coatings</li> <li>Inadequate control of pedestrian and vehicular movement around coated areas, ramps and stairs</li> <li>Insufficient planning for alternative access around bathrooms, kitchens or plant rooms under treatment</li> <li>Inadequate lighting or wayfinding around partially completed non-slip flooring surfaces</li> <li>Emergency egress routes obstructed or compromised by coating works and temporary barriers</li> </ul>	4A	[REDACTED]	2M
9. Substrate Preparation, Bonding Systems and Coating Integrity	<ul style="list-style-type: none"> <li>Systemic failure to verify substrate condition and moisture levels before applying bonding agents and epoxy layers</li> <li>Use of incompatible preparation methods (grinding, shot blasting) without engineering controls for dust and noise</li> <li>Inadequate control of bonding agent coverage and cure leading to delamination, blistering or trip hazards</li> <li>Poor detailing around plumbing penetrations, drains and fixtures causing water ingress and microbial growth</li> <li>Lack of documented acceptance criteria for substrate profile, cleanliness and bond pull-off strength</li> </ul>	4A	[REDACTED]	2M
10. Slip Resistance, Surface Profiling and Long-Term Performance	<ul style="list-style-type: none"> <li>Failure to achieve or maintain specified slip resistance on non-slip flooring surfaces, leading to slips, trips and falls</li> <li>Inconsistent application of anti-slip aggregates causing localised high or low friction zones</li> <li>No program to re-verify slip resistance after cleaning, maintenance or wear</li> </ul>	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
	<ul style="list-style-type: none"> <li>Cleaning and maintenance regimes that degrade anti-slip performance or gloss levels</li> <li>Lack of integration between design slip ratings and real-world contaminants such as oils, soaps or process fluids</li> </ul>		[REDACTED]	
11. Health Monitoring, PPE Management and Exposure Control	<ul style="list-style-type: none"> <li>Chronic exposure to epoxy components, solvents and bonding agents due to inadequate systemic controls</li> <li>Contact dermatitis or sensitisation from repeated skin contact with resins and hardeners</li> <li>Inconsistent PPE selection, fit and maintenance across different sites and crews</li> <li>Lack of health monitoring where required for specific hazardous components</li> <li>No process for managing health restrictions, allergies or chronic sensitisation among workers</li> </ul>	3H	[REDACTED]	2M
12. Emergency Preparedness, Spills and Incident Response	<ul style="list-style-type: none"> <li>Lack of site-specific emergency plans for chemical spills, toxic reactions or fire involving epoxy and solvents</li> <li>Inadequate spill containment or clean-up systems for uncured resins and bonding agents</li> <li>Workers unaware of first aid measures for skin, eye and respiratory exposure to epoxy systems</li> <li>Insufficient planning for emergency evacuation from partially coated, slippery or obstructed areas</li> <li>Poor incident reporting and investigation processes resulting in repeat system failures</li> </ul>	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
13. Environmental Management and Waste Handling	<ul style="list-style-type: none"> <li>• Improper disposal of uncured epoxy, bonding agents and solvent waste causing environmental contamination</li> <li>• Washing tools or equipment into stormwater or plumbing fixtures not designed for chemical waste</li> <li>• Insufficient controls for airborne dusts and overspray affecting neighbouring properties or sensitive environments</li> <li>• Non-compliance with waste tracking and manifest requirements for hazardous wastes</li> <li>• Leaks from waste containers or intermediate storage areas at depots or work sites</li> </ul>	3H	[REDACTED]	2M
14. Asset, Plant and Equipment Management	<ul style="list-style-type: none"> <li>• Poor maintenance of mixers, pumps, spreaders and application equipment leading to mechanical failure or unsafe operation</li> <li>• Use of incompatible or improvised tools for mixing epoxies, increasing risk of exothermic reaction or splashing</li> <li>• Electrical safety risk where powered equipment is used in wet areas or around plumbing fixtures</li> <li>• Inadequate inspection of ladders, platforms and mobile plant used to access coated floors and adjoining areas</li> <li>• Lack of calibration and maintenance of testing equipment (e.g. moisture meters, slip testers, thermohygrometers)</li> </ul>	3H	[REDACTED]	2M
15. Documentation, Records and Continuous Improvement	<ul style="list-style-type: none"> <li>• Inadequate documentation of risk assessments, product selection and quality checks leading to repeat failures</li> <li>• Loss of traceability for which products, batches and methods were used on particular projects</li> <li>• Insufficient recording of curing times, environmental conditions and deviations from specified procedures</li> </ul>	3H	[REDACTED]	1L

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
	<ul style="list-style-type: none"> <li>• Failure to review and update WHS procedures in response to incidents, audits or regulatory change</li> <li>• Poor communication of lessons learnt across crews, regions or subcontractors</li> </ul>		<div style="background-color: black; height: 15px; width: 100%;"></div> <div style="background-color: black; height: 15px; width: 100%;"></div> <div style="background-color: black; height: 15px; width: 100%;"></div>	

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.