

Laminating Veneering and Surface Finishing

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. WHS Governance, Duty of Care and Legislative Compliance	<ul style="list-style-type: none"> Lack of documented WHS management system aligned to WHS Act 2011 and WHS Regulations Unclear allocation of WHS duties for officers, PCBUs, supervisors and workers in laminating and veneering operations Failure to consult workers and HSRs on changes to laminating, veneering and surface finishing processes Inadequate monitoring of compliance with relevant Australian Standards (e.g. AS/NZS 4801 or ISO 45001 principles, machinery and electrical standards) Absence of formal WHS objectives, targets and key performance indicators for laminating and veneering activities Insufficient due diligence by officers in relation to acquisition of heavy presses, laminating machinery and ventilation systems Poor integration of occupational health and safety activities (e.g. maintenance, installation of presses and edge banding lines) into site WHS system 	4A	<ul style="list-style-type: none"> Implement and maintain a formal WHS management system consistent with WHS Act 2011 and recognised standards (e.g. ISO 45001) specifically addressing laminating, veneering and surface finishing operations Define, document and communicate WHS roles, responsibilities and accountabilities for officers, managers, supervisors, workers and contractors involved in laminating and veneering Establish a WHS governance structure (e.g. WHS committee, regular safety leadership meetings) with scheduled review of WHS related to acrylic solid surface fabrication, edge banding, laminated board and veneer pressing Implement formal consultation, cooperation and coordination procedures with workers and PCBUs sharing the workplace, including documented toolbox talks when processes, adhesives or equipment change Develop legislative compliance register for relevant WHS, electrical, hazardous chemicals, plant, fire and environmental requirements linked to laminating and surface finishing activities Require officers to demonstrate due diligence through periodic documented plant inspections, budget allocation for safety upgrades (e.g. guarding, extraction, noise control) and review of incident trends Integrate contractor management procedures (prequalification, induction, safe work documentation verification, supervision) for all third parties installing or maintaining laminating presses, edge-banders and dust extraction systems Schedule annual internal WHS system audits and periodic independent audits focusing on higher-risk plant (heavy presses, CNC routers, edge-banding equipment, glue lines) and hazardous chemical use 	3H
2. Plant Procurement, Design and Guarding for Laminating and Veneering Equipment	<ul style="list-style-type: none"> Purchase of heavy presses, edge-banding machines, laminate cutting saws and CNC equipment that do not meet WHS and ergonomic criteria in specifications Inadequate fixed guarding, interlocks or safety distance on pressing, cutting and trimming equipment Lack of fail-safe controls and emergency stop systems on glue spreaders, conveyors and veneer presses Insufficient risk assessment of infeed and outfeed pinch points on layered laminate lines and melamine door skin attaching equipment 	4A	<ul style="list-style-type: none"> Embed WHS performance specifications in plant procurement processes, requiring compliance with relevant Australian Standards for machinery safety, emergency stops and electrical design Require pre-purchase risk assessments and consultation with operators, maintenance personnel and HSRs for all new laminating, veneering, edging and surface finishing plant Ensure all presses, edge banders, laminate cutting saws, inlay fabrication machines and associated conveyors are fitted with compliant fixed guards, interlocks and two-hand controls where applicable Implement an engineering review and sign-off process for any plant modifications, including guarding changes, to ensure controls remain effective and compliant Establish plant design and layout standards that separate pedestrian walkways from high-risk plant operating zones and material flow paths using physical barriers and marked exclusion zones Standardise emergency stop design (colour, location, function) across all laminating and veneering equipment, and verify functionality through scheduled testing Include noise and vibration criteria in plant procurement and require suppliers to provide measured emission data and recommended control measures 	2M

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	<ul style="list-style-type: none"> • Use of non-compliant or modified guarding that can be easily bypassed or removed by operators • Poor layout of plant leading to interaction between pedestrians and moving materials handling equipment around presses and laminating lines • Failure to consider noise and vibration emissions from edge banders, sanders and trimming saws during plant selection 		<ul style="list-style-type: none"> • Maintain a plant register including design risk assessments, OEM manuals, and records of safety features for each piece of laminating and veneering equipment 	
3. Hazardous Chemicals, Adhesives and Resins Management	<ul style="list-style-type: none"> • Uncontrolled use of solvent-based contact cements, resins and adhesives for laminating and veneering • Lack of up-to-date safety data sheets (SDS) and chemical risk assessments for glues, hardeners and cleaning solvents • Inadequate ventilation and local exhaust systems during glue laminating, spray application and curing processes • Poor controls for decanting, storage and labelling of flammable and combustible liquids used in surface finishing • Inadequate systems for managing isocyanate-containing products, catalysts and high-VOC finishes • Insufficient training on chemical hazards leading to skin and respiratory sensitisation and long-term health effects • Improper disposal of waste adhesives, contaminated rags and solvent containers leading to fire, exposure and environmental risks 	4A	<ul style="list-style-type: none"> • Maintain a hazardous chemicals register specific to laminating, veneering and surface finishing products, ensuring all SDS are current and readily accessible • Undertake formal hazardous chemicals risk assessments for primary adhesive systems, contact cements, solvents and resin systems, and document required controls • Implement engineering controls such as local exhaust ventilation at glue-spreading stations, spray booths and curing areas, with regular performance verification and maintenance • Develop and enforce procedures for procurement, storage, segregation and labelling of adhesives, resins and flammable liquids in compliant cabinets and stores • Standardise to lower-toxicity, low-VOC and water-based adhesives where practicable, supported by supplier evidence and compatibility testing • Provide competency-based training covering chemical hazards, SDS interpretation, health monitoring requirements (where applicable), and emergency response for spills and exposures • Implement a controlled waste management system for adhesive residues, contaminated rags, filters and containers, including licensed waste disposal where required • Establish permit or approval processes for introducing any new adhesive, resin or finishing product to ensure risk assessment and control measures are in place prior to use 	2M
4. Dust, Fume, Vapour and Airborne Contaminant Control	<ul style="list-style-type: none"> • Generation of fine dust from cutting, trimming and sanding plastic laminate, acrylic solid surface and melamine boards • Release of fumes and vapours from heating processes, edge-banding hot-melt adhesives and curing operations 	4A	<p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<ul style="list-style-type: none"> Inadequate design, capacity or maintenance of dust extraction and filtration systems on cutting, routing and sanding equipment Accumulation of combustible dust in ducting, filter housings and overhead structures creating fire and explosion risks Lack of monitoring of airborne contaminants against relevant Workplace Exposure Standards Poor housekeeping leading to settled dust becoming airborne from foot traffic and compressed air cleaning Insufficient training on the health impacts of inhalable and respirable dusts, particularly when working with composite and acrylic products 		[REDACTED]	
5. Manual Handling, Ergonomics and Material Flow	<ul style="list-style-type: none"> Repetitive manual handling of heavy laminate sheets, acrylic solid surface slabs, melamine doors and veneered panels Awkward postures when handling oversized boards in presses, edge-banders and inlay machines Inadequate mechanical aids for lifting and transferring layered laminates, door skins and core materials Poor layout of storage presses and cutting stations increasing carrying distances and twist/turn movements Insufficient assessment of manual tasks leading to gradual onset musculoskeletal disorders among laminating and veneering workers High force tasks when clamping, positioning and aligning veneers, inlays and door skins during pressing operations 	3H	[REDACTED]	2M
6. Machine Operation, Isolation and Maintenance Systems	<ul style="list-style-type: none"> Lack of formal lock out tag out (LOTO) or isolation procedures for presses, 	4A	[REDACTED]	2M

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	<p>edge-banders, glue spreaders and trimming machines</p> <ul style="list-style-type: none"> • Inadequate preventive maintenance programs for critical safety components (interlocks, emergency stops, pressure relief valves, guarding) • Unauthorised bypassing of safety features to increase production speed on laminating and veneering equipment • Poorly controlled access to maintenance and service areas during operation of heavy presses and automated lines • Unplanned breakdowns due to poor maintenance leading to rushed repair work, exposure to moving parts and stored energy • Insufficient training of maintenance personnel on specific hazards associated with glue laminating, hot presses and inlay equipment 		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	
7. Fire and Explosion Risk Management (Flammable Liquids, Dust and Heat Sources)	<ul style="list-style-type: none"> • Use of flammable solvents, contact adhesives and cleaning agents near ignition sources in laminating and finishing areas • Build-up of combustible dust from sanding and cutting laminates, melamine and acrylic solid surfaces in enclosed spaces • Inadequate hazardous area classification and control around hot presses, curing ovens and spray application areas • Poor control of hot work activities (grinding, welding, cutting) near laminating lines and adhesive storage • Insufficient fire detection, alarm and suppression systems in high fire-load areas containing wood products, laminates and packaging • Lack of emergency planning for fire scenarios, including egress from areas 	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

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	with large presses and dense storage racks			
8. Noise, Vibration and Occupational Health Monitoring	<ul style="list-style-type: none"> High noise levels from cutting, sanding, pressing and edge-banding processes in enclosed workshops Cumulative hearing damage due to long-term exposure without effective noise management program Localised hand-arm vibration exposure from powered sanders, grinders and trimmers used on laminate and acrylic solid surface products Lack of systematic health monitoring for workers exposed to hazardous noise, isocyanates, solvents or significant dust Insufficient communication of monitoring results and required controls to workers and supervisors 	3H	[REDACTED]	2M
9. Competency, Training and Supervision for Laminating and Veneering Operations	<ul style="list-style-type: none"> Inadequate competency verification of operators of heavy presses, edge-banders, inlay machines and CNC cutters Reliance on informal on-the-job learning without documented training or assessment criteria Lack of specific training on hazards associated with acrylic solid surface fabrication, layered laminate work and machine-made inlay products Insufficient supervision of new or young workers in high-risk laminating and finishing tasks Skills fade due to infrequent use of certain equipment or emergency procedures 	3H	[REDACTED]	2M
10. Work Planning, Scheduling and Fatigue Management	<ul style="list-style-type: none"> Production-driven scheduling that encourages bypassing of safety systems or rushing of laminating and veneering tasks Extended shifts or overtime during peak orders for laminated doors, 	3H	[REDACTED]	2M

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	<ul style="list-style-type: none"> veneered panels and inlaid products leading to fatigue-related errors Inadequate planning for curing times, adhesive set periods and press cycles contributing to process shortcuts Insufficient coordination between design, production and maintenance functions leading to last-minute changes and unsafe workarounds Lack of formal fatigue management arrangements for shift workers in continuous or seasonal production runs 		[REDACTED]	
11. Storage, Handling and Housekeeping of Materials and Finished Products	<ul style="list-style-type: none"> Unstable storage of laminate sheets, acrylic solid surface slabs and veneered panels leading to collapse or impact injuries Inadequate racking systems for heavy or oversized products such as melamine door skins and layered laminates Poor housekeeping with offcuts, adhesives, inlay materials and packaging obstructing walkways and emergency exits Uncontrolled stacking of pressed panels near heavy presses and lamination lines Insufficient segregation of raw materials, in-process work and finished products leading to congestion and manual handling risks 	3H	[REDACTED]	2M
12. Contractor and Supplier Management for Plant, Chemicals and Services	<ul style="list-style-type: none"> Contractors installing or maintaining presses, edge-banders or extraction systems operating outside site WHS procedures Suppliers introducing new adhesives, laminates or surface finishes without adequate hazard information or risk assessment Poor coordination between multiple PCBUs during plant upgrades or layout changes in laminating areas 	3H	[REDACTED]	2M

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	<ul style="list-style-type: none"> Inadequate verification of contractor competencies for high-risk activities (electrical work, pressure systems, working at height on extraction ducting) Failure to capture lessons learned from contractor incidents or near misses for system improvement 		[REDACTED]	
13. Change Management, New Processes and Continuous Improvement	<ul style="list-style-type: none"> Introduction of new laminating technologies, heavy presses or adhesives without structured risk assessment Incremental changes to inlay processes, glue types or curing methods leading to unforeseen risk interactions Failure to review WHS impacts of production scale-up for layered laminate, inlaid work or acrylic fabrication lines Poor capture of worker feedback and incident data to drive safety improvements in laminating and veneering operations 	3H	[REDACTED]	2M
14. Emergency Preparedness, Response and First Aid	<ul style="list-style-type: none"> Inadequate preparedness for incidents involving heavy presses, entrapment or crush injuries Poorly planned response to spills of adhesives, resins or solvent used in laminating and veneering Insufficient first aid capabilities for burns, cuts, eye injuries and respiratory exposures common to laminating operations Lack of coordination with emergency services regarding layout, hazardous materials and plant shut-down procedures Confusing or obstructed emergency exit routes from high-density laminating and storage areas 	3H	[REDACTED]	2M

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.