

Heat Gun

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. Procurement and Design Selection	<ul style="list-style-type: none"> • Purchase of heat guns or blowtorches that are non-compliant with Australian Standards or electrical safety requirements • Selection of equipment with insufficient safety features (e.g. no thermal cut-out, no dead-man trigger, poor insulation) • Inadequate consideration of suitability of equipment for the task, materials, and work environment (e.g. using open flame blowtorch where electric heat gun is safer) • Lack of standardisation resulting in multiple models with different controls, instructions and risk profiles • Procurement decisions driven solely by cost rather than risk and lifecycle safety performance • Supply of equipment without appropriate documentation, safety data or manufacturer instructions 	High	<ul style="list-style-type: none"> • Establish a formal procurement procedure that requires WHS risk considerations in line with WHS Act 2011 and WHS Regulation (e.g. consultation with workers, PCBUs and HSRs before purchase) • Specify compliance with relevant Australian standards and electrical safety regulations as mandatory criteria in purchasing documents for heat guns and blowtorches • Standardise on a limited range of approved models with built-in safety features such as over-temperature protection, guarded nozzles, insulated handles, automatic shut-off and robust cords • Include a pre-purchase risk assessment process that evaluates ignition sources, typical work environments, temperature ranges and compatibility with materials to be heated • Require suppliers to provide manufacturer instructions, warranty information, safety data sheets where relevant (e.g. gas cylinders), and evidence of compliance certification at time of purchase • Implement a management of change (MOC) process for introducing new types or models of heat guns or blowtorches to ensure risks are reviewed before deployment • Avoid procurement of low-quality or non-branded devices from online marketplaces where compliance and traceability cannot be verified • Include contractual requirements for suppliers to provide training resources, maintenance information, and replacement part availability over the expected life of the equipment 	Medium
2. Governance, Policies and WHS Management System	<ul style="list-style-type: none"> • Absence of a formal policy for the use of heat guns and blowtorches in the workplace • Inadequate integration of heat gun and blowtorch risks into the organisation's WHS management system • Lack of clarity regarding responsibilities, officer due diligence, and worker responsibilities under WHS Act 2011 for high-temperature tools and ignition sources • Poor communication of expectations regarding safe use, supervision and escalation of issues • No documented process for identifying new tasks involving heat guns or blowtorches and reviewing risks before work commences 	High	<ul style="list-style-type: none"> • Develop and implement a specific hot-work and high-temperature equipment policy that includes the use of heat guns and blowtorches, aligned with WHS Act 2011 obligations to eliminate or minimise risks so far as is reasonably practicable • Integrate heat gun and blowtorch risk management into the broader WHS management system, including hazard identification, risk assessment, incident reporting, training and audit processes • Clearly document and communicate roles and responsibilities of officers, managers, supervisors, and workers with respect to selection, authorisation, use and inspection of heat guns and blowtorches • Establish a formal risk assessment procedure (e.g. JSA/RA templates) for any new or non-routine use of heat guns or blowtorches, including change of work environment or materials • Include heat gun and blowtorch use in the organisation's hot work procedure, hot work permit system (where applicable) and related controls such as fire watch and exclusion zones • Regularly review and update policies and procedures based on incident trends, worker feedback, legislative updates and industry guidance • Ensure consultation with workers and Health and Safety Representatives (HSRs) when developing or revising policies related to heat guns and blowtorches 	Medium

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3. Training, Competency and Authorisation	<ul style="list-style-type: none"> Workers using heat guns or blowtorches without adequate training or competency assessment Lack of awareness of ignition risks, material flammability and heat transfer (e.g. heating metal adjoining combustible materials) Poor understanding of equipment limitations, correct nozzle use, temperature settings and safe distances No formal authorisation system, resulting in inexperienced workers using high-risk tools unsupervised Inadequate instruction on emergency response (burns, fires, gas leaks, electrical faults) and first aid Contractors and temporary workers not inducted into site-specific requirements for heat gun and blowtorch use 	High	<ul style="list-style-type: none"> Implement a structured training program covering the hazards of heat guns and blowtorches, safe operating principles, relevant WHS duties, and site rules Develop competency assessment tools (e.g. practical assessments, checklists) to verify that workers can safely set up, use, shut down and store heat guns and blowtorches before they are authorised Introduce an authorisation system (e.g. permit to work, or manager sign-off) for designated personnel who are permitted to use heat guns or blowtorches, with periodic revalidation Ensure induction programs for new workers and contractors explicitly address heat gun/blowtorch hazards, hot work controls, emergency procedures and required PPE Provide specific training in recognising combustible and heat-sensitive materials, surrounding hazards, and appropriate selection of temperature settings and nozzles Deliver refresher training following incidents, near misses, major equipment changes or updates to procedures Maintain training and competency records, and use them to control access to equipment (e.g. only trained persons can lock out or sign for equipment) Include toolbox talks and safety briefings focusing on seasonal risks (e.g. elevated fire danger periods) and lessons learned from incidents 	Medium
4. Safe Work Procedures and Hot Work Management	<ul style="list-style-type: none"> Inconsistent or undocumented safe work practices for high-temperature tools Use of heat guns and blowtorches near combustible materials, flammable liquids, gases or dusts without systematic controls Inadequate management of hot work on client sites or shared workplaces leading to conflicting controls Failure to plan work sequences and interaction with other trades, increasing ignition and burn risks No requirement to assess environmental conditions (e.g. wind, confined spaces, fire bans) before using open-flame equipment 	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

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			[REDACTED]	
5. Equipment Inspection, Maintenance and Testing	<ul style="list-style-type: none"> • Deterioration of electrical insulation, cords, plugs or regulators leading to electric shock, short circuits or fires • Blocked air inlets or nozzles causing overheating or uncontrolled flame/heat direction • Gas leaks from blowtorch cylinders, hoses or fittings due to poor maintenance or damage • Use of damaged, modified or non-standard components (e.g. home-made nozzles, incorrect regulators) • Lack of scheduled servicing and tagging, resulting in undetected defects • Inadequate storage conditions leading to corrosion, perishing of hoses, or damage to electrical components 	High	[REDACTED]	Low
6. Fire Safety, Emergency Preparedness and First Aid	<ul style="list-style-type: none"> • Inadequate fire detection, firefighting equipment or emergency response arrangements in areas where heat guns and blowtorches are used • Workers not trained to respond to small fires, gas leaks or thermal runaway incidents safely • Absence of clear procedures for burns management, including for serious burns requiring urgent medical attention • Poor planning for evacuation in case of fire or explosion, particularly in confined or high-occupancy areas • No formal post-incident review process to learn from fire or near-miss events involving heat guns/blowtorches 	High	[REDACTED]	Medium

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			[REDACTED]	
7. Work Environment, Layout and Ventilation	<ul style="list-style-type: none"> • Use of heat guns or blowtorches in poorly ventilated or confined spaces leading to heat stress, build-up of fumes or products of combustion • Cluttered or poorly organised work areas increasing the risk of contacting combustibles with hot air or flame • Inadequate separation between hot work areas and flammable storage, public areas or escape routes • Use of equipment in wet or damp conditions increasing electrical and slip hazards • Insufficient lighting leading to misdirection of heat stream or failure to identify surrounding hazards 	High	[REDACTED]	Medium
8. Personal Protective Equipment and Health Monitoring	<ul style="list-style-type: none"> • Reliance solely on PPE instead of higher-order controls to manage burns, eye injuries and inhalation exposures • Inadequate specification or inconsistent supply of PPE such as heat-resistant gloves, eye protection or flame-resistant clothing • Workers not using PPE correctly due to discomfort, lack of fit, or limited understanding of its purpose • Failure to identify workers with pre-existing health conditions (e.g. respiratory or skin conditions) that may increase susceptibility to heat, fumes or burns 	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> No system for monitoring signs of heat stress or cumulative exposure to fumes where heat is applied to coated or treated materials 		[REDACTED]	
9. Contractor and Supplier Management	<ul style="list-style-type: none"> Contractors using their own heat guns or blowtorches that do not meet site standards or Australian requirements Inconsistent application of hot work controls by different contractors or subcontractors Poor coordination between PCBUs resulting in overlapping work, ignition hazards and unclear emergency arrangements Suppliers or service providers conducting repairs, demonstrations or commissioning without following site WHS procedures 	High	[REDACTED]	Medium
10. Documentation, Records, Monitoring and Continuous Improvement	<ul style="list-style-type: none"> Incomplete or inaccurate records relating to training, maintenance, inspections, incidents and permits for heat gun and blowtorch use Lack of systematic monitoring of performance indicators (e.g. near misses, equipment failures, burns, small fires) No structured review of risk controls over time, leading to outdated practices and creep in risk levels Failure to incorporate regulatory updates, Australian Standards revisions or industry best practice into existing systems 	Medium	[REDACTED]	Low

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			[REDACTED]	
			[REDACTED]	

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.