

CCTV Installation and Electronic Security Systems

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. Governance, WHS Duties and Risk Management Framework	<ul style="list-style-type: none"> Lack of formal WHS policy specific to electronic security and CCTV operations Inadequate understanding of PCBU and officer duties under WHS Act 2011 Absence of systematic risk management process for electronic security work Poor integration of WHS consultation mechanisms with security project planning Inadequate consideration of health and safety in procurement and contract terms 	4A	<ul style="list-style-type: none"> Establish and maintain a WHS management system that explicitly covers CCTV installation, alarm systems, passive infrared sensors, elevator cameras and monitoring centres, aligned with WHS Act 2011 and WHS Regulation Define and document officer due diligence responsibilities for senior managers overseeing electronic security operations, including regular WHS performance review and resourcing decisions Implement a formal risk management procedure (identify, assess, control, review) for electronic security projects, with templates for project risk assessments and change management approvals Embed WHS requirements into contracts and service level agreements for subcontractors, including evidence of competency, insurance, safe systems of work and incident reporting obligations Establish consultative arrangements (H&S committees, toolbox talks, safety alerts) that specifically address emerging technological, privacy and operational risks in CCTV and alarm systems Schedule periodic internal audits of WHS compliance for security system activities, including field verification of controls and system governance reviews 	3H
2. System Design, Engineering Standards and Technical Integrity	<ul style="list-style-type: none"> Poorly designed CCTV and security systems leading to blind spots and ineffective surveillance Non-compliance with Australian Standards (e.g. AS/NZS 2201 for intruder alarm systems, relevant CCTV and cabling standards) Insufficient redundancy or fail-safe design in critical security and alarm circuits Lack of engineering sign-off for integration between CCTV, access control, alarms and elevator cameras Use of incompatible or low-quality components increasing risk of failure or overheating 	4A	<ul style="list-style-type: none"> Mandate that all CCTV, alarm, PIR sensor, elevator camera and electronic security designs are undertaken or reviewed by competent personnel familiar with relevant Australian Standards and manufacturer requirements Adopt and document design standards for camera placement, coverage, lighting requirements and retention times to ensure adequate coverage while minimising safety blind spots Require formal engineering review and approval for system architecture, including redundancy, power supplies, battery backup, surge protection and fail-safe configurations for alarms and monitoring links Implement a product selection policy specifying approved equipment lists, performance specifications, certifications and warranty expectations for all electronic security components Use standardised design templates and drawings that clearly identify cable routes, penetrations, power sources, earthing requirements and separation from other services Include a formal design risk assessment step to identify potential system failure modes, cyber vulnerabilities and life-safety dependencies (e.g. elevator interlocks, duress alarms in high-risk areas) 	2M
3. Procurement, Supplier Management and Subcontractor Control	<ul style="list-style-type: none"> Engagement of unlicensed or unqualified installers for CCTV and alarm systems Procurement of non-compliant or counterfeit equipment lacking safety certifications Inadequate vetting of subcontractors' WHS and quality management systems 	3H	<ul style="list-style-type: none"> Implement a prequalification process for suppliers and subcontractors that requires evidence of licences, security clearances (where applicable), insurances, WHS systems and training records Adopt procurement policies that specify compliance with Australian Standards, electrical safety and relevant telecommunications and cabling regulations for all CCTV and security equipment Use preferred supplier arrangements with vendors who can demonstrate robust quality control, reliable technical support, and formal recall/notification processes for defective components Include WHS and performance-based clauses in supply contracts, covering incident reporting, defect rectification timeframes, and minimum reliability/uptime targets for security systems 	2M

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	<ul style="list-style-type: none"> • Cost-driven purchasing decisions compromising system reliability and safety • Poor management of warranties, lifecycle support and availability of replacement parts 		<ul style="list-style-type: none"> • Maintain a centralised register of approved equipment and suppliers, with periodic review based on incident data, system failures and end-user feedback • Ensure procurement decisions consider whole-of-life costs and safety implications, including maintenance accessibility, spares availability and support for firmware and cybersecurity updates 	
4. Competency, Licensing, Training and Supervision	<ul style="list-style-type: none"> • Insufficient technical competence in CCTV, alarm and PIR sensor configuration leading to unreliable operation • Lack of training on WHS obligations, hazard identification and risk controls for electronic security work • Inadequate supervision of apprentices, new workers or subcontractors during complex installations • Unlicensed performance of security work where state or territory licensing required • Limited understanding of emergency procedures, isolation requirements and client site rules 	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. Client Site Interface, Access and Induction Management	<ul style="list-style-type: none"> • Incomplete understanding of client-specific WHS requirements, induction processes and permit systems • Uncontrolled access to secure or hazardous areas during CCTV and alarm installations • Conflicting work with other contractors leading to congestion, interference or unsafe conditions • Failure to identify site-specific risks such as asbestos, live electrical installations or confined spaces • Poor coordination with building management and elevator service providers when installing elevator cameras 	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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			[REDACTED]	
6. Electrical Safety, Power Supply and Cabling Management	<ul style="list-style-type: none"> Exposure to live electrical parts during connection of power supplies for CCTV, alarms and monitoring equipment Overloading circuits or incorrect earthing leading to fire, equipment damage or electric shock Poor cable management causing trip hazards, damage to insulation or overheating Uncontrolled work near existing electrical and communication services Inadequate isolation and lockout procedures for testing and commissioning 	4A	[REDACTED]	2M
7. Working at Heights, Access Equipment and Structural Interfaces	<ul style="list-style-type: none"> Unsafe access to elevated positions for CCTV and PIR sensor installation (ladders, EWP, roof access) Inadequate design of mounting points leading to camera or equipment detachment and falling off Poor coordination with structural and façade elements causing water ingress or structural weakening Inadequate rescue and emergency response planning for work at heights Uncontrolled access to roof areas and plant decks by untrained personnel 	4A	[REDACTED]	2M
8. System Commissioning, Testing and Alarm Management	<ul style="list-style-type: none"> Failure of CCTV and alarm systems to operate as designed due to inadequate commissioning procedures 	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> • High rates of false alarms causing alarm fatigue and desensitisation of monitoring staff • Incomplete testing of integration between sensors, alarms, monitoring stations and emergency response systems • Uncoordinated testing of audible alarms and sirens impacting nearby workers, public or vulnerable persons • Inadequate documentation of commissioning results and baseline performance parameters 		[REDACTED]	
9. Monitoring Centre Operations and Human Factors	<ul style="list-style-type: none"> • Monitoring staff fatigue and reduced vigilance when observing multiple CCTV feeds • Inadequate alarm response processes leading to delayed or inappropriate responses • Insufficient training on incident recognition, escalation and emergency coordination • Poor ergonomic design of monitoring stations contributing to musculoskeletal disorders and visual strain • Reliance on a single operator with no backup during critical periods 	3H	[REDACTED]	2M
10. Maintenance, Inspection, Repairs and Lifecycle Management	<ul style="list-style-type: none"> • Degradation of CCTV and alarm performance due to lack of scheduled maintenance • Failure to identify damaged or tampered equipment, cables and sensors 	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> Repairs undertaken without proper isolation, documentation or testing Obsolescence of hardware or software leading to unsupported, unreliable systems Inadequate management of spare parts and critical component replacement 		[REDACTED]	
11. Cybersecurity, Data Integrity and Network Resilience	<ul style="list-style-type: none"> Unauthorised access to CCTV and security systems via network vulnerabilities Compromise of recorded footage or alarm data, impacting investigations and legal processes Weak password and account management practices for cameras, NVRs and monitoring platforms Inadequate patching and firmware updates leading to exploitable security flaws Loss of service due to cyber-attack ransomware or network outages 		[REDACTED]	2M
12. Privacy, Surveillance Governance and Ethical Use	<ul style="list-style-type: none"> Unlawful or inappropriate surveillance of workers, contractors or members of the public Failure to comply with privacy legislation and relevant state-based surveillance devices laws Inadequate signage and notification regarding CCTV and audio recording Misuse or unauthorised disclosure of recorded CCTV footage or alarm data 	3H	[REDACTED]	2M

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	<ul style="list-style-type: none"> • Psychosocial impacts on workers due to perceived over-surveillance or misuse of monitoring data 		[REDACTED]	
13. Emergency Management, Critical Incident Response and Business Continuity	<ul style="list-style-type: none"> • Failure of CCTV and alarm systems during emergencies such as fire, power outage or security incidents • Lack of clear protocols for using CCTV and alarms to support emergency response and evacuation • Inadequate backup power or communication paths for critical monitoring functions • Poor coordination between security monitoring, emergency services and client representatives • Loss of critical evidence or event logs following an incident 	4A	[REDACTED]	2M
14. Incident Reporting, Investigation and Continuous Improvement	<ul style="list-style-type: none"> • Under-reporting of incidents, near misses and system failures involving CCTV and security systems • Superficial investigations that do not identify root causes or systemic issues • Failure to implement corrective actions or share learnings across projects and sites • Fragmented data on system performance, false alarms and downtime • Repeated occurrence of preventable failures or safety incidents 	3H	[REDACTED]	2M

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			[REDACTED]	
15. Contractor, Visitor and Public Interface Safety	<ul style="list-style-type: none"> • Uncontrolled interaction between security technicians and members of the public or building occupants • Work areas for CCTV and alarm installations encroaching into public access routes • Inadequate communication with occupants about temporary system outages or testing activities • Confusion about roles and responsibilities between client security staff, contractors and building management • Psychosocial risks to technicians from aggressive or confrontational behaviour during work in public or high-stress environments 	3H	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [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.