

NATIONAL SERVICES TE PAERANGI

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Museum Security

He Rauemi Resource Guide 35

Governance, management, and planning

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Published 2020 by National Services Te Paerangi,
Museum of New Zealand Te Papa Tongarewa

PO Box 467, Wellington, New Zealand

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ISSN 978-0-473-55343-2

Front cover: Security guards Bronte Morris (left) and Wilma Parekura-Tane, Te Papa Tongarewa.

Museum Security

How can you improve your museum's security, and remain friendly and open towards visitors? This resource outlines the tools, tips, and guidelines needed to make good decisions about security.

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Why are security systems and procedures essential?

Security is an essential part of the duty of care every museum has. Your museum is responsible for the safety of the public and staff, as well as collections held on behalf of the community. The safety of people in your museum always comes first. Security systems and procedures for collections are essential too, even if you don't have famous, high value, or rare objects in your collection.

Respect and protect

Regardless of your museum's size or budget, take some basic steps to ensure your museum is trusted to safeguard collections, assets, and people. Your stakeholders will be reassured that visitors, collections, and loans are respected and protected, and that everyone working at your museum knows how to prevent security breaches, accidents, and damage.

Protecting people and all museum assets

Security encompasses the whole range of assets the museum cares for, as well as the supporting activities and essential functions it carries out. This includes public safety, public programmes, exhibitions, collections, intangible culture, storage, research, education, preservation, and conservation.

Theft

Theft is just as likely to be opportunistic as planned. Unsecured small items, including taonga, coins, medals, books, and so on, are always at high risk of theft. They can be picked up and put in a pocket. A sketch or photograph can be slipped into papers or into a laptop bag by a visiting researcher, collector, volunteer or staff member. When security protocols for a collection item are being reviewed,

ensure the highest risks to the item are considered and appropriate controls put in place.

Keeping records

It is just as important to maintain a current record of your collection items and assets as it is to physically protect them. Accurate records, condition reports, and photographs also allow you to audit your collection. A regular audit helps to identify when something has changed, been damaged, been altered, or gone missing.

Accurate collection records support your security systems. Good administrative systems make for better security functions.

Don't assume 'it will never happen here' or rely on any single security technique. A layered approach to security relies on more than just one action or approach to succeed.

Who is responsible for museum security?

Everyone at the museum is responsible for security – the trust board, staff, management, contractors, and volunteers.



Staff, management, contractors, trust board members, and volunteers are all responsible for museum security. Photo courtesy of Mairi Dickson, Waikaha Museum.

A museum's governing body is responsible for providing a safe environment for people and collections.¹ This includes ensuring buildings and facilities are adequate and fit for purpose for all museum functions.

Staff and volunteers are responsible for the security and safety of their workspaces, and for taking care to prevent harm to themselves and others.²

An employer, trust board, or person in a senior leadership position is responsible for ensuring adequate and comprehensive security systems are in place, and that staff are aware of all relevant risks. Written policies and procedures, good communication, and training are crucial for meeting your museum's ethical and legal requirements.

Threats from inside

While the main threats to security may appear to come from outside the museum, international research shows that around 80 percent of museum art thefts are carried out by insiders, including by trusted long-term staff.³ In New Zealand, museum thefts of all types have been carried out by people with inside knowledge. Lack of training, disgruntled staff, or poor attention to procedures and documentation can also lead to significant damage and losses to collections. To mitigate against risks, regular staff training and work relationships should be included in security assessments and procedures.

The most successful approach to preventing security incidents is an integrated approach that includes everyone working in the museum, as well as physical and technical aspects.

It is important to integrate security measures into mission statements, policies, procedures, planning, and all daily activities.

Board members, volunteers, and staff should be aware of the Code of Ethics and Professional Practice, 2013, as it relates to the care of collections.

1. Museums Aotearoa Te Tari o Ngā Whare Taonga, Code of Ethics and Professional Practice, 2013.

2. As required by the Health and Safety at Work Act 2015.

3. Journal of Physical Security 4(1), p31-35 (2010).

Improving your museum security

Involve all staff and volunteers in thinking about security risks and prevention. They are then more likely to realise the importance of adhering to, and improving, procedures.

First steps

- Get buy-in from board and committee members, and all staff and volunteers, to improve security measures.
- Integrate your security policy into the overall museum policy framework.⁴
- Delegate someone to take the lead.
- Consider a set budget, or a commitment to source funds for security improvements.

- Facilitated group workshops with staff can work well to build a culture of security awareness.
- Participants are more likely to take ownership when they are part of the risk identification process.

See Appendix D for sample security policy content.

Easy ways to start

- Develop a written security policy.
- Train staff and volunteers, and listen to their feedback.
- Carry out a risk assessment and security audit.
- Put security procedures in place.
- Communicate and review all incidents or security concerns.

Risk awareness and self-assessment

- This is a technique where staff or volunteers review a part of their daily activity from a security perspective involving, for example, a CCTV footprint, door locks, external lighting, or similar. The check is to see if the security activity is still fit for purpose. Individuals from different areas or museum functions can do this.

⁴ See the New Zealand Museums Standards Scheme for a comprehensive museum framework.

Managing risks to your buildings and collections

Even if you are a small, single-room whare taonga or museum, you can apply methods for identifying and mitigating risks, and make minor procedural changes to improve security.

Know your risks

Damage in museums can be caused by people and the environment, including fire, flood, earthquakes, and system failure.

See also He Rauemi Resource Guide 6: Minimising Disaster and He Rauemi Resource Guide 7: Emergency Procedures.

A risk management approach should take your museum's own circumstances into account.

Know your museum's risks

There are many different ways to look at the security and risk exposure of your museum. Outlined below is the PESTLER model for risk management, which can assist in measuring potential threats to your museum. Situations to consider:

- **Political** – changing governmental or local body arrangements, war, civil unrest, protests, vandalism, pandemics, violence, bomb threats, poor relations with local council and central government.
- **Economic** – recession, fewer visitors and sales, competition, business disruption or failure, less revenue, lower funding availability, less operating funds being assigned.
- **Social and cultural (employees and the public)** – staff losses, fraud, medical emergencies, theft, disruptive and destructive behaviour, human error, adverse publicity.
- **Technological** – obsolete systems; cost of optimal technology; inability to access opportunities arising from technological development; cost of replacing outdated IT equipment, or investing in IT or related capital items.
- **Legal and regulatory** – local and central government regulations and requirements, for example, health and safety or employment legislation; protective security requirements and their alignment; resource management compliance; specialist assessments, such as surveys for asbestos or mould.
- **Environmental** – buildings, facilities and systems, chemical spills, pandemics, hazardous and flammable substances, sea level rises, erosion, landslips, flooding, subsidence, earthquakes, tsunami, renovation, equipment misuse or failure, open flames, smoking, poor housekeeping.
- **Reputation** – what is your organisation's reputation and how can it be enhanced or damaged? How does your organisation conduct itself ethically, morally, and culturally? How does it protect and enhance its profile and relationships with local iwi, stakeholders, schools, and the wider public.

Impacts could include loss of:

- staff, volunteers, or visitors
- historically important objects or information
- reputation, publicity, and staff morale
- support, funding, and donations
- premises, resulting in business interruption
- cultural integration, collaboration, support, and awareness
- financial support and sponsorship from key stakeholders.

Collect accurate information on adverse events and how often they occur, and evaluate their level of impact.

Address and manage risk

Some risks cannot be eliminated completely, for example, accidents due to human error or medical emergencies, but most can be reduced to an acceptable level with adequate planning and controls.

The five T's

There are generally five key options available to address and manage risk:

- 1. Tolerate** – the exposure to risk may be tolerable without any further action being taken. A second opinion may indicate the risk is not as high as thought. Always seek an informed or expert opinion to give reassurance.
- 2. Treat** – most risks will be managed this way. The purpose of treatment is to lower the risk profile to an acceptable level without causing any disruption to the organisation or resulting in unacceptable levels of loss, harm, or delay.

- 3. Transfer** – sometimes the best response to a risk is to transfer it to someone else. This option is particularly good for transferring financial risks or asset risks to another party, for example, the transfer of insurance or investment risk (*more on insurance risk below*).
- 4. Terminate** – some risks will only be treatable, containable, or acceptable by terminating or stopping the activity altogether, for example, stopping dangerous work or stalling a project due to a budget blowout.
- 5. Take the opportunity** – not all risks are bad for business. Have a good look at every aspect of your position as this could be an opportunity to rethink processes.

Accepting or insuring against risk

Your management and governing bodies should decide and document the institution's acceptable levels of risk. Remaining risks can be accepted and lived with, or insured against.

- An agreed, fixed monthly or yearly fee can be paid to meet the cost of any possible loss.
- The museum can specify which items are covered. These may only be your most significant or rarest items.
- It may be more affordable to only insure items on inward loan or when being moved outside the museum.

Insuring items that do not belong to the museum is essential.

What is a fine arts insurance policy?

- A type of policy suited to museums.
- Covers all types of museum items and situations, and allows for conservation of damaged items.
- Requires a current valuation of the objects to be insured.

Talk to your insurance broker about steps taken to mitigate against risk and ask their advice.



It is important for museums to undertake a risk-assessment that takes into account of all types of risk, from flood-damage to fire.

Liability insurance

Museums need public liability insurance to cover the risk of damage to property, or the risk of injury or death resulting from negligence to visitors, volunteers, or staff. Such incidents can result in prosecution, fines, or substantial financial losses. Reputational damage is another factor to consider.

Make sure that any contractors or people working with you, who are not employed or volunteering on your behalf, have their own adequate public liability insurance cover during any prescribed works. Your organisation should decide on the level of cover these contractors or business partners should carry before any work commences.

For more information about where to find advice on insuring your museum, contact an insurance advisor.

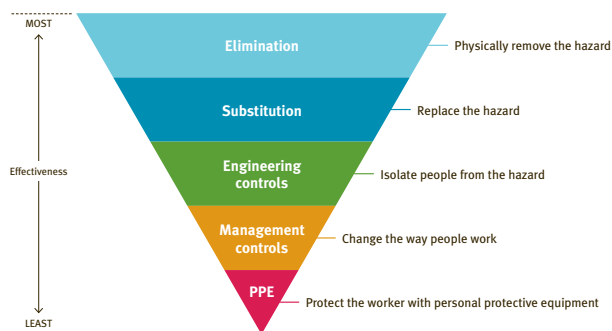
See also *He Rauemi Resource Guide 13: Valuing Your Collections.*

Identifying hazards

Risks to visitors, volunteers, and staff must be eliminated where possible. If this is impractical, then risks must be minimised to an acceptable level. The museum must always operate within the bounds of the law.

Eliminate or minimise hazards

Health, safety, and security are closely aligned. It is important to have a good working knowledge of 'the hierarchy of controls' for all health and safety matters. Identifying hazards and risks are an integral part of the Health and Safety at Work Act 2015. Hazards and risks can be listed in a comprehensive security survey.



Hierarchy of controls

Some things to consider

- **Working machinery and heavy items –** are safety plans adequate? What is the procedure if these need to be moved? Are restraints and barriers in place to prevent injury from falling items? Do all staff, volunteers, and visitors understand, and follow, policies and procedures?
- **Public programmes and events –** are these creating additional risks by blocking access ways and exits? Is the required management plan in place for events? Do all staff and visitors know how to safely evacuate the building?

- **Collections –** are you aware of any chemical, mould, asbestos, or other hazards in your collection? Does your plan cover such hazards and the risks they present?
- Are exhibits secured adequately for earthquakes and safe daily function?
- Are your security systems truly fit for purpose? Have you tested them? How do you know?
- Do you have suitably trained staff performing the right duties with the right skills?
- Have you thought about contracting an independent expert to complete a security audit of your museum?

An evacuation plan and clear emergency and exit signs are required by law, and should be visible to all users. Practice your evacuation routine regularly so all staff and volunteers know what to do.

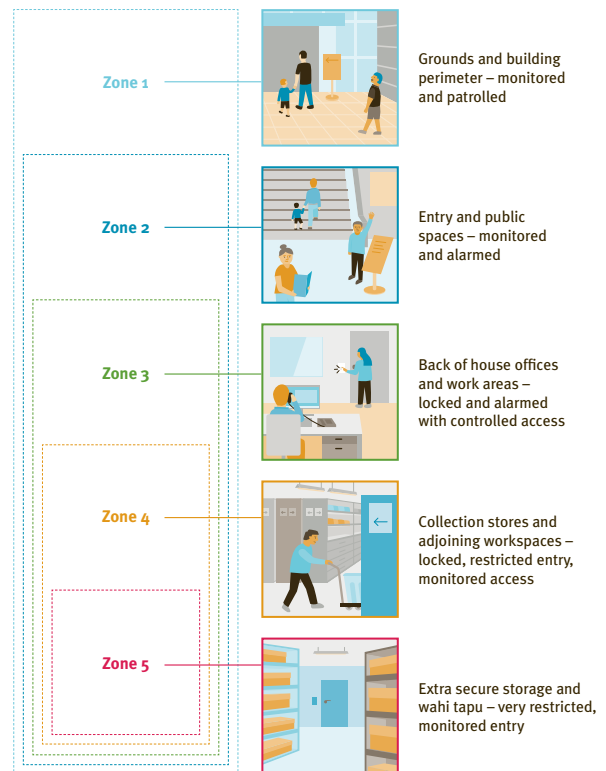
Zone your museum (the layered approach)

Good security systems involve multiple layers that complement each other. This ensures that if there is a failure in one area, other security measures will detect or prevent any loss occurring. It is a tried and tested way of minimising any threats, lowering your risk profile, and successfully managing security risks.

Make a zone diagram of your museum, considering questions such as:

- How do security considerations differ across different zones?
- How will these be managed?
- How will you move collection items from one zone to another?
- Where are your building's access points?
- How strong is the outside shell of your building? Does it meet building standards?
- How many exterior openings and entry points are there?
- Are external doors and windows secure and strong enough to withstand attempted forced entry? Do they meet safety requirements for evacuation?
- Is the exterior well lit?
- Do you know your neighbours?

Security zones

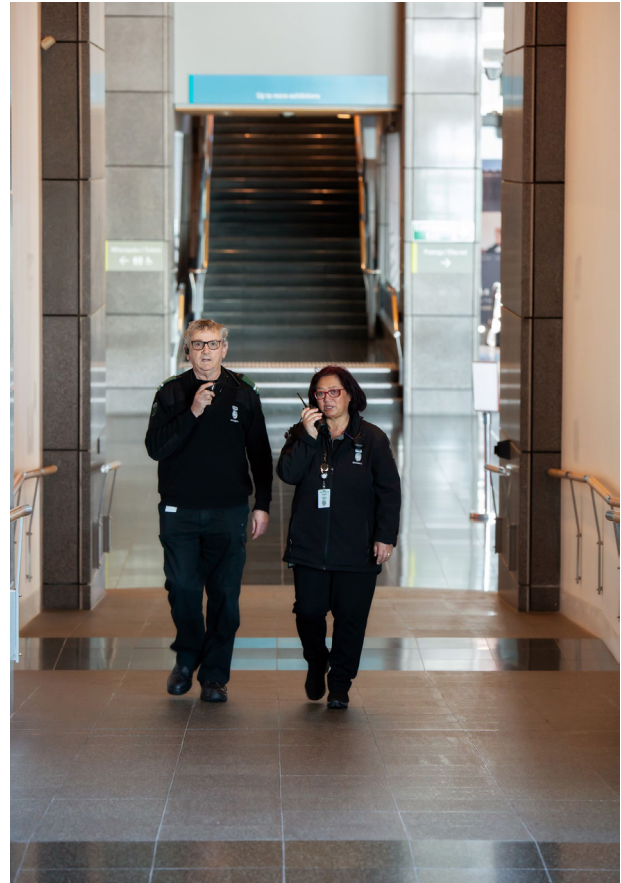


Security for your building's exterior

When considering the security of your museum, don't forget to include all exterior and neighbouring spaces.

Outdoor security checklist

- Check grounds and landscaping – clear lines of sight discourage hiding and vandalism. Wide, clear pathways and dense or thorny low shrubs can discourage hiding.
- Check your outdoor areas for structures, ledges, fire escapes, pipes, ledges, or trees that could allow or encourage intruders to access your windows, skylights, or roof.
- Check that no tools or ladders are left where they could be used to break in to your building. Be aware that scaffolding can create unwanted access for intruders.
- Check there is no rubbish left outside that could encourage arson and pests.
- Check that your access for emergency vehicles is clear, and that parking does not hinder museum operations, such as the movement of collection items.
- Check your buildings look occupied and 'lived in', to discourage unwanted attention and attempted entry or vandalism.



Security guards Hendrik Meintjes and Wilma Parekura-Tane patrol public spaces at Te Papa.

If a building is going to be vacant for any length of time, adequate sensor lighting, monitored alarms, and security checks need to be put in place.⁵

Building security

Larger museums often employ security and protection officers. Usually they have worked in private industry and need to be inducted into the unique museum environment. Security officers can help to train all staff regarding their security responsibilities and risks.

Professional companies license their alarm system technicians and security staff, individually and corporately, via the Ministry of Justice on an annual basis.⁶ If your system is being updated or checked by an external party ensure you check the technician's identification and registration details.

Only deal with reputable and licensed security professionals. The security and integrity of your museum and its collections depend on it.

Mitigation measures for buildings

- Schedule regular building maintenance. Water damage is often the result of internal structural and maintenance faults, such as blocked gutters and downpipes, and leaking plumbing, pipes, roofs, internal gutters, and skylights.
- If you are planning a new building or renovation, incorporate good protection measures into the building and grounds, including external lighting and cameras, secure and robust walls, and attack-resistant windows and doors.
- Any maintenance work being carried out must be agreed and carefully planned in advance and documented.
- Older buildings may need modification to improve weak areas. Contact Heritage New Zealand for further information about listed buildings.
- To protect against intrusion, consider metal or solid wooden doors; grills on chimneys, ducts, vents, and skylights; and laminated glass.
- Fit windows and unused doors with grills or board them over.
- Connect doors in exterior walls leading to non-public and restricted areas to an intruder detection system on a 24-hour circuit.
- When the building is empty, deadlock emergency exit doors with quick release door fittings.
- Ask a master locksmith about the strongest types of locks to use. Request a high specification deadlock with restricted key distribution.
- Use interior-mounted and tamper-proof hinges, and additional interior bolts where hinges are exposed to the outside.
- If the buildings are closed for a long period, follow close-down procedures and maintain security surveillance.
- Keep an updated key register for all keys.
- Restrict exterior key holders to essential staff.

5. See Appendix A for more information about types of sensors and alarms.

6. For a list of registered technicians, see justice.govt.nz/services/private-investigators-and-security-guards/licensing/pisg-registers.

Security for your building's interior

Maintaining a visible, friendly, and welcoming presence is the easiest way to ensure you are not an attractive target for theft or damage.



Visitor reception: an easy way to improve your museum security

Monitor those entering and leaving the building by following these guidelines:

- Create a single public entry and exit area to help enable monitoring.
- Position a workstation in the entry area.
- Interact with all visitors, letting them know what they can see and do.
- Keep a visitor count as a safety measure and a deterrent to opportunistic theft or damage.
- Register all contractors.
- Keep all money and personal valuables out of sight of the public.
- Cover donation boxes outside opening hours and handle cash out of public sight.
- Involve all staff and volunteers.
- During pandemic alert levels record and check all visitor, staff, and volunteer contact details.

Bags and food in exhibition areas

Visitors' bags can be used to conceal stolen items, or tools, and can also be a nuisance in tight spaces, where they may accidentally damage items. Tikanga Māori (protocol) requires that no food or drink is brought into areas where taonga are stored or displayed. Bags containing food can also create problems when scraps attract pests or spillages cause damage. Politely request that visitors leave their bags, shopping, and backpacks at the entry area. A locked cupboard and numbered tags can be provided for this.

No food, drink, or smoking should be allowed in any area where collection items are stored, accessed, or displayed.

Dealing with suspicious behaviour

- Approach suspicious or disruptive visitors and politely ask if they need assistance. Don't wait for a member of the public to complain.
- Camera use can be annoying to other visitors, and images may infringe copyright and tikanga. Develop a clearly signed policy about what you allow.
- Be aware that disruptive or unusual behaviour or alarm activation may be staged to create a distraction so that a theft can be carried out.
- Contact police in more extreme cases, such as protests or threatening behaviour that cannot be dealt with by staff or security personnel.

- If unattended bags or clothing are found in the museum, it is best to leave them where they are, and for one staff member to keep watch while another identifies the owner. There may be risk of a bomb threat, which would initiate an evacuation of the building and a police response.
- Do not share information about security or the monetary value of objects with visitors or in public – this is an essential rule of security.
- Where possible have two people countersign or approve any processes involving cash or items of higher value. This adds a layer of insurance to high risk or high value transactions, while allowing for greater transparency for the museum.

All unusual or suspicious visitor behaviour, or persistent questions about value or security measures, should be taken seriously. Alert other staff if a visitor or group seems unusually focused on entry and exit points or staff routines, tries locks, or focuses on a specific collection item for a long period.

Be prepared

Staff on duty should be trained to handle any situation, including medical emergencies, and someone on staff should hold a valid first aid certificate.

- Establish a method for volunteers to call for help, such as a silent, local alarm or panic button to summon assistance. Some companies offer affordable cellphone-based alarm systems.
- Staff and volunteers should always work in pairs, not alone, whenever possible. If they are working alone, or in a remote area, decide how they would raise an alarm in case of emergency.
- Good relationships and communication with neighbours, emergency services, and council, and between staff and within committees, will help develop a safe environment.

See also He Rauemi Resource Guide 6: Minimising Disaster and He Rauemi Resource Guide 7: Emergency Procedures.

Security in exhibition areas

Any item worth accessioning into the museum collection or on temporary loan needs your protection

Exhibition areas are vulnerable when there is no staff presence. Items on open display to the public in areas where there is inadequate supervision are at greater risk of theft or damage. Blind spots can be closed off or checked regularly or security cameras angled to cover these.



Install security alarms to cover any blind spots.

Ensure that all objects are secured inside locked display cases, or if you don't have enough secure cases, use barriers to prevent easy access to objects.

Display cases

The benefits of display cases include:

- better security from theft
- better protection against damage from touching and accidents
- restricted pest access and protection from dust
- a partial buffer against extreme environmental conditions, pollution, and light in the museum.

Things to consider when designing or retrofitting display cases:

- Plan for safe physical access.
- Have more than one staff member or volunteer present when cases are opened.
- Fit repurposed cabinets and display cases with tamper proof locks and safety glass.
- Ensure ventilation is sufficient to prevent heat build-up in cases with internal lighting. Seek expert advice about the type of lighting to use.

Open display



This is best for:

- reproductions
- long-term exhibitions where items are too large to be enclosed (for example, large pieces of furniture, machinery, or vehicles)
- parts of an historical house on display.

Larger items on open display can usually be protected by barriers, and paintings can

be secured using hangers that prevent easy removal. Act on health and safety requirements if items have moving parts or could fall over.

High value and high risk items



High value fragile items should be kept secure in display cases. Photo courtesy of Kaiapoi Museum.

Reduce risk to these items by:

- ensuring careful placement and supervision
- keeping items like medals within a clear line of sight of staff
- fitting internal sensor alarms to cases, and using multiple alarms
- using inner rooms and secure zones away from easy exit points.

Firearms, munitions, and weapons always need specialised high security provisions. Your local police station and arms officer can advise on requirements for display and storage.

Handy tips

- Allow enough space for traffic flow, particularly in high use areas, to prevent accidental damage.
- Use security screws, which can only be unlocked with a special key.
- When an item is removed from display, place a card in the display case to show who removed it and why.
- Have a policy regarding photography in the museum that includes information about control, copyright, and cultural considerations.

Always secure these items in locked display cases:

- items that can be easily damaged by handling, such as paper-based objects, photographs, costumes, textiles, ceramics, and glass
- items that could be hidden under a coat or in a pocket or small bag
- precious metals and jewellery
- firearms
- weapons
- coins, currency, and stamps
- medals

Hands-on activities with collection items

Careful, supervised handling of objects is an opportunity to share information on the work your museum does to preserve collections for the future.

Most museum objects can be damaged unless preventive measures are followed. Damage can include breakages, stains caused by skin contact, or mould growing on soiled items.

Reduce these risks by:

- only allowing careful, supervised handling of items that are not fragile or vulnerable
- using recommended handling practices, for example, gloves, trays, trolleys, or padded tables; and having enough staff to manage large objects
- starting an education collection of duplicates and non-collection items for handling purposes.

See also He Rauemi Resource Guide 5: Preventive Conservation.

If a member of the public or staff damages a collection item, a museum staff member should:

- stay with the item
- avoid touching or handling the item
- call for assistance
- manage the visitor responsible – reassure them and avoid confrontation
- alert the registrar or curator who knows how to deal with the item
- write an incident report; document and photograph the item for records, police, and insurance purposes
- call the police if a crime has been committed
- prepare a condition report
- revise procedures if needed, and discuss how the incident could have been avoided or better handled.

Good security safeguards the collection's long-term preservation and use.

Security in office areas

Close control and secure administration of access to work areas, keys, and swipe cards is essential.



It is important for all back of house visitors to sign in.

Identification and access measures

- Sign in, and out, all visitors, researchers, business visitors, and contractors working in museum grounds and buildings, and provide a numbered pass. This is your best opportunity to explain security and safety requirements.
- Provide locked storage outside restricted areas for researchers' personal belongings, including any bags, briefcases, backpacks, and laptop cases.
- Lock all storage areas and all non-public areas (for example, staff workrooms and offices) to prevent access by anyone but authorized personnel.
- Accompany all visitors to back of house areas.
- Issue photo ID cards to staff and volunteers.
- Secure any confidential information, such as donor files and research records, in an area that is only accessed by essential staff.

Key security

- Keep an up-to-date register of all key holders and ensure lost keys are reported immediately.
- Limit master keys to a few essential key holders.
- Only provide cards and keys to staff with reasons to enter areas regularly.
- Only keys needed to open the building and to secure it at closing times may be taken from the building. All other keys should be supervised and locked away.
- Always keep your key cupboard locked. Keys should not identify location or user. Staff should be unable to make copies of keys.
- Extra care should be taken when there is increased risk, for example, when extra keys have been allocated for exhibition installation or renovation.
- Police and security companies can be given current lists and details of key holders.

Access systems

Doors, barriers, and gates can be fitted with an electronic access control system, such as a control card with a magnetic stripe, barcode stripe, or chip. The key fob system uses magnetic, infrared, barcode, or proximity technology. Other systems are being developed to work on biometrics. These need a continuous power source, so back-up power is essential.

See Appendix A for more information about choosing a security system. Consult with a qualified security consultant or company about the best system for your museum.

Security in collection stores

Collections always need to be stored in high security areas when not on display.

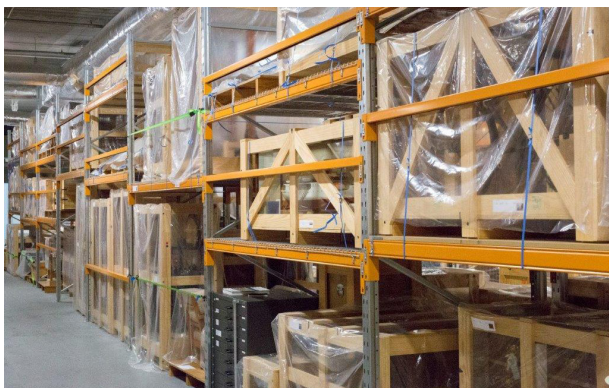
Access to collection stores

- Needs to be strictly controlled and recorded.
- Entry should be by access card, key, or combination lock only.
- Only registered personnel should be permitted to enter these areas.

Other high security areas in larger museums are conservation, collection preparation areas, computer server rooms, and security control rooms. Consider limiting the entry of managerial staff without operational reasons to these areas.

Preventing damage and loss

Risks to collections on display or in storage include partial or total destruction of a collection or damage to objects.



Good collection care is essential to prevent deterioration and structural damage.

Some potential types of damage

- Physical – poor object handling, breakage, distortion, abrasion.
- Light and UV radiation – fading, yellowing, structural damage.
- Incorrect temperature – embrittlement, splitting, fracture.
- Incorrect relative humidity – mould, swelling, dehydration, fracture.
- Fire – complete or partial destruction, scorching, soot, smoke, water damage.
- Water and flood damage – tide marks, efflorescence, warping, shrinking.
- Criminal activity – theft, vandalism, unauthorised copying.
- Pests – destruction through perforation, chewing, soiling.
- Contaminants and unsafe materials – staining, disintegration, organic vapours.
- Irreversible damage caused through lack of knowledge: ill-advised repair or restoration.
- Loss of data – losing collection records or information.
- Dissociation – losing the item or information about how the item can be located; losing connection to information about why the item is in the collection, its provenance, and its significance.
- Security breaches – leading to intentional or opportunistic theft.

Follow recommended museum practices, procedures, and standards of care to

prevent most harm. Use monitoring devices and alarm systems to monitor environmental conditions.

See also He Rauemi Resource Guide 5: Preventive Conservation.

Collection store access

Use and monitor a sign-in system that records every entry consistently. If possible, use security swipe cards and a programmable reader that records and identifies all physical entries, or use a keypad lock with pin codes that are regularly changed. CCTV can also be used. Guard against any code sharing and more than one person trying to enter on one swipe card.

If the museum doesn't have a locked collection storeroom, or if staff and volunteers work in the area, you can still improve security around collections.

- Do not allow staff to take personal items and bags into these areas.
- Provide locked storage outside any restricted areas to store researchers' personal belongings. Always supervise visitors.
- Do not allow food, drink, or smoking in any areas where collections are stored, used, processed, or displayed.
- Restrict working alone, especially outside usual work hours.
- Carry out regular audits of high risk and high value items.
- Cover or secure other collection items when researchers or visitors are in secure storage areas.
- Plan to develop locked and secure collection storage.

Hazardous collection items

Certain collection items can pose a risk to people or other items.

Obvious hazards

- Firearms and munitions
- Explosives and combustible substances, such as gas and chemicals
- Swords, knives, blades, and spears
- Natural history rock collections, such as asbestos and radioactive items
- Animal products preserved with formaldehyde, such as heads and wall-mounted pieces

Less obvious hazards

- Materials or processes used in the past, such as asbestos, poisons, explosive materials, radioactive elements, gasmask filters, and linoleum
- Deterioration leading to flammability, such as nitrate film used into the 1950s, or certain plastics or batteries
- By-products of deterioration, such as corrosion, dust, or gases
- Toxins from historic treatments may be present in pharmacy collections, ethnographic materials, or taxidermy, such as human secretions, pesticides, arsenic, mercury, and lead
- Dormant diseases present in certain human and animal remains, skins, or building materials
- Mould that can damage collections or make people ill if inhaled
- Items that may involve cultural hazard, such as kōiwi tangata (human remains).

Minimising hazard risks

- Identify, notify, and control or remove hazards.
- Look for problem objects and identify possible hazards.
- Don't acquire items that are possibly a health risk without taking advice.
- Label all hazardous items.
- Seek advice on the identification and removal of culturally sensitive or hazardous materials.
- Provide safe storage, including wāhi tapu for kōiwi tangata (human remains).
- Update your collection information.
- Ensure nitrile gloves, coveralls, and masks are always worn when objects that have

any likelihood of risk are handled.

- Do not allow the public to handle items that can be a risk, especially not in open displays or in touchable or educational collections.
- Be aware of how to handle and store heavy and fragile objects.
- Keep clear records of munitions that have been deactivated (for example, World War II grenades) to prevent unnecessary alarm.

Be aware of risks when working with collections, seek advice, and plan action.

Security in highly restricted areas

It is important that museums and galleries with responsibility for human remains and other materials of cultural sensitivity establish tikanga appropriate to their care and management.⁷



Wai Māori (blessed water) should be provided outside a museum's wāhi tapu. This is used to assist with the transition between sacred (tapu) and everyday (noa) spaces. Kaitiaki Taonga Collection Manager Humanities, Moana Parata, Te Papa, Ngāti Toarangitira, Te Atiawa, Ngāti Raukawa, Ngāti Mutunga.

Collections of human remains and material of cultural significance should be housed securely and respectfully within the highest level security zones.

Collections with a living connection to communities have their own handling and cultural requirements for transport, movement, display, storage, and photography.

Security of wāhi tapu (sacred storage areas), taonga (treasures), ngā tangata kainga (staff), tangata whenua (local people), and ngā tangata manuhiri (visitors), and protection of ira atua (ancestral) and ira tangata (living) dimensions, should be ensured in consultation with kaitiaki and iwi liaison.

To ensure Māori values associated with the security of the museum's wāhi tapu, taonga, ngā tangata kainga, and ngā tangata manuhiri

are upheld, staff and volunteers should receive training in associated Māori tikanga and values. Advice should be sought from kaitiaki and iwi liaison personnel before any security changes or in advance of new security proposals.

Consider handling and display protocols, placement of taonga, and reproduction and photography of taonga within the museum, and loans and collections. Ensure there is appropriate iwi liaison on tikanga and kawa (protocols). The presence of kaumātua or kaitiaki is often required. Iwi should be consulted about the significance of any item for insurance and security purposes.

Stakeholder groups who have a special connection with objects and intangible culture in the museum should also be considered as partners when it comes to security arrangements for any use, loan, or display.

Wai Māori (blessed water) is provided outside a museum's wāhi tapu. This is used to assist with the transition between sacred (tapu) and everyday (noa) spaces. It is essential to be guided by iwi when caring for ancestral remains to ensure they are kept securely and respectfully.

Refer to the Museums Aotearoa Code of Ethics, 2013, National Repatriation Policy for Kōiwi Tangata and Associated Burial Taonga within Aotearoa, 2020.

⁷ *Museums Aotearoa Code of Ethics and Professional Practice, 2013, p12.*

Security of ownership

A museum needs to ensure ownership of its collection is secure.

Transfer of legal title

Objects only belong legally to a museum when these steps have been followed:

- A formal agreement between the former owner(s) and the museum body has been signed.
- The object has been accessioned into the collection. Use an object receipt form every time to ensure your accession is complete and legal.

All other items are loans and are under the guardianship of the museum on a temporary basis.

Museums must comply with national and international laws relating to the export and import of cultural property. Items acquired outside of these laws pose a security risk. See page 30 for a list of legislation that may apply to your museum.

A museum may be able to prove physical legal ownership through the formal receipting of objects, but at times this excludes cultural ownership. A memorandum of understanding with communities, including tangata whenua and iwi Māori, may provide for object security in a museum where cultural and intangible ownership continues.

Good record-keeping

It is important to know and record what your collections contain, where they are, and their historic, cultural, and financial values.

Recording and maintaining collection records, and backing up your records, is an essential tool for safeguarding your collection. Items that have been catalogued and photographed have a better chance of being tracked and identified if stolen or misplaced. Accurate, current documentation and condition reporting helps to ensure that items remain safe in storage, transit, and on display.

Consider the following

- Identify collection objects to be retrieved first in case of an emergency and keep a record of their location on hand.
- Secure collection databases and information, and make backup copies.
- Use at least a two-hour rated fireproof cabinet for storage of irreplaceable museum records, and make photocopied or electronic duplicate copies that can be stored offsite.
- Begin an annotated photographic record of collection items, if a full cataloguing project cannot be resourced.
- Carry out a complete inventory periodically, or make it part of your regular activity to randomly identify, physically locate, and examine an object or group of objects in storage and on display.

Loans and transport

Objects on loan from outside the organisation need to be documented and given the same standard of care as collection items. Items moving outside the organisation for conservation, care, treatment, or display are also at risk and procedures must be carefully managed.

Consider the following

- Safe packaging, labelling, and recording of the item being transported.
- The method of transport – is the method secure or should the museum use a personal courier?
- Tracking – is there a process in place to show if packages reach their correct destination?
- Any cultural requirements from stakeholders, such as karakia and the presence of kaitiaki for taonga Māori.
- Unpacking and repacking instructions.
- Condition reporting before, during, and after a loan.
- The method of exhibiting – mounts, lighting, and environment.
- Additional or special security arrangements.
- Any other conditions for exhibiting the item, such as credits, photography, and regular environmental monitoring and reporting.

Firearms and some wildlife items need specialist provisions for storage and transport. See Appendix C.

Loading bays

- Be aware of the risk of theft or losses during freighting and posting operations.
- Strictly control your museum's loading bay area to minimise risk.
- Keep it locked when not in use.
- Record all staff and visitor access, and all inward and outward transactions.

See also He Rauemi Resource Guide 23: Managing Loans.

Preventing fire

Fires are the most common and devastating of all known risks to museums and heritage buildings.



Fire alarms should be installed at locations prescribed in the Building Code.

Your response to fire is part of your emergency plan.

Common sources of fire include:

- faulty wiring and appliances
- oily rags
- flammable chemicals and gas leaks leading to explosions
- arson
- open flames and smoking
- renovation and building works
- a natural event such as lightning or earthquake
- fires lit in rubbish and clutter near buildings.

Seek advice from the appropriate building consent authority before starting any fire safety-related work on a heritage building.

Prevention

- Build a good relationship with local fire personnel.
- Familiarise fire personnel with the museum building, its collections, priority areas, and artefacts.
- Use heat and smoke detectors and local fire suppression systems (extinguishers), as per building regulations. It is preferable to have a detection system that links to the fire station or monitoring company.
- Use automatic fire dampers and fan shut-offs in all ducts, to help prevent the spread of fire and smoke throughout the building.

Fire detection systems

- Several different types of smoke detection systems are available.
- By law, systems need regular testing and maintenance, specifically cleaning, or they may not work properly when needed.
- Manually activated fire alarms should be installed at locations prescribed in the Building Code.

Staff training in the effective use of equipment is essential.



Staff should be well versed in health and safety procedures.

Fire suppression systems

All fire suppression systems should be installed by registered providers, tested regularly, and properly maintained. Museums must adhere to the Building Code and standards.

The three main types of fire suppression systems are: handheld fire extinguishers and hose reels, sprinklers, and gas systems.

Sprinklers

Sprinklers could have saved nearly every marae, museum, and historic building destroyed by fire over the past century.

Fully automatic fire sprinklers offer the best protection for your collection. Sprinklers are effective in saving lives and can prevent fires from reaching destructive proportions. They work well to limit fires as they only operate in the area where the fire is burning.

Compartmentalise collections into smaller spaces to inhibit the spread of fire. Collection store areas should have at least a two-hour fire wall rating. Securely box collections to add another level of protection from smoke, water, and fire damage.

See the Fire and Emergency New Zealand website for more on managing fire risks. fireandemergency.nz

It is essential to be well prepared for any incidents and to avoid security breaches in your museum. Remember that security is a key issue for the entire museum, involving key stakeholders and board members, staff, all visitors, collections, all assets, records, and data.

Appendices

Appendix A: Electronic security systems and monitoring

System type	How it works	Important points	Uses
Passive infrared motion detectors (PIR)	Detect heat by registering a change in temperature within zone. Signal is sent to alarm panel. Can be wireless and battery powered.	Complete regular walk-throughs and checks to ensure temporary walls, banners, and so on are not obscuring motion sensors.	All areas. Detect interior motion at night – intruders may have stayed behind after closing or broken in later.
Magnetic contact switches	Low current magnetic contact switches connected to an alarm panel.	Get advice on switches that are less likely to make false alarms or be activated by electrical interference.	Emergency exits, doors, windows, and some display cases.
Swipe cards	Magnetic stripe cards, smart cards, and optical cards store coded information. Provide access to areas and include some form of automatic data collection and identification technology.	Ensure cards do not identify place of work.	Register access to restricted facilities and all non-public secure areas.
Ultrasonic detectors	Actively transmit high frequency ultrasonic waves beyond human hearing range. Use sound waves to detect movement.	Complete regular walk-throughs and checks to ensure temporary walls, banners, and so on are not obscuring motion sensors.	Detect intruders.
Microwave volumetric detectors	Actively emit microwave beams. Human bodies reflect fewer microwaves and are detected. A digital transmitter and receiver create an invisible detection zone that alerts when unwanted intrusions occur.	Complete regular walk-throughs and checks to ensure temporary walls, banners, and so on are not obscuring motion sensors.	Detect intruders inside and outside.
Photo electric beams	Visible or infrared light beams are transmitted and detect intruders. Point-to-point beam system.	Ensure systems are compatible.	Detect intruders inside and outside.
Broken glass and shock detection	Alarms that detect broken glass or shock.	Ensure systems are compatible.	Vulnerable windows and display cases.

Appendix A: Electronic security systems and monitoring

System type	How it works	Important points	Uses
Smoke and heat detectors	Detect smoke and/or heat. Ionization detectors and/or photoelectric detectors. Devices may be powered by a 9-volt or lithium battery, or hardwired.	Ensure batteries are replaced regularly.	Detect fire, give early warning, and save lives.
Fire alarm systems	Early warning alarm activated by anyone in proximity (glass screen).		Protect people and property.
Sprinkler systems	Wet or dry pipe systems that deliver water to site of fire only. Single or double interlock pre-action systems that can be configured to allow time for alternative fire extinguishment before the sprinklers are activated.	A sprinkler system and smoke alarms provide the highest level of protection from fire. Sprinkler systems can be installed in ways that prevent accidental discharge. Like all systems, maintenance is required. Water damaged items can be conserved but burnt items cannot. NZS 4541 applies to all types of buildings and is mandatory for larger buildings.	Quickly stop the spread of fire and save taonga.
Alarm panels	All passive and active systems are connected to alarm panels. Some alarms are silent and may be attached to a monitoring station in the museum or offsite. These systems can sound an alarm or send a signal over a phone line. They need to be backed up by a cellular or radio system.	Larger museums may use a PC-based system. Smaller museums can use a keypad with zones, door contacts, and motion detectors, and/or computer-based systems. All systems need to be integrated, tested regularly, and properly maintained. Equipment must be compatible.	Attached to all detection devices and some display cases.
Personal duress or panic alarms	May be linked directly to a police station. Some security firms offer this service.		Use where staffing is sole charge.
Closed-circuit television cameras and recorders (CCTV)	For use in conjunction with security staff. Recordings after the event have limited use, depending on recording quality.		Use to protect high value items.

Appendix A: Electronic security systems and monitoring

System type	How it works	Important points	Uses
Digital cameras	Can be activated to record by infrared detectors.		
Monitoring	Be aware of response times and contract conditions.	Staff responsibilities and procedures should be clear, particularly after hours.	Get detailed quotes and plans from several reputable alarm companies. Make sure your written contract contains a full service agreement. It must also contain normal warranties for equipment and service.
Landline	Uses regular phone line.		Useful for all areas, but needs cellular back up.
Wireless	Uses cellular/battery-powered system.		Useful for remote locations, but needs back-up.
IP monitoring	Uses specialist internet monitoring service to check for IP breaches.		

Appendices

Appendix B: Pre-employment screening

- Choose staff carefully, check all references, and integrate a security or police check into the recruitment process (including for temporary or substitute staff).
- Treat volunteers as staff, request references, and provide close supervision.
- Ask staff to declare collecting interests and any collections they hold.
- Be aware of increased risk associated with disciplinary issues, grudges, and financial problems.
- Make sure that former staff don't retain any access.
- Ensure codes and pins are not shared.
- Don't allow copying of keys, and use a registered locksmith and security keys.
- Change all locks if necessary.
- Designate a security role.
- If you have reason to suspect an internal theft, it may be best to allow a period of quiet surveillance before making the theft public. Take advice from police about how to proceed.

Appendices

Appendix C: Legislation with security implications for museums

New Zealand laws

Arms Amendment Act 2019
Building Act 2004
Conservation Act 1987
Copyright Act 1994
Crimes Act 1961
Cultural Property (Protection in Armed Conflict) Act 2012
Employment Relations Act 2000
Evidence Act 2006
Fisheries Act 1996
Health and Safety at Work Act 2015
Heritage New Zealand Pouhere Taonga Act 2014
Human Tissue Act 2008
Marine Mammals Protection Act 1978
Official Information Act 1982
Privacy Act 1993
Protected Objects Act 1975
Public Records Act 2005
Treaty of Waitangi Act 1975
Wildlife Act 1953

Available at legislation.govt.nz.

International laws

UNESCO Convention for the Protection of Cultural Property in the Event of Armed Conflict. First Protocol, 1954; Second Protocol, 1999
unesco.org

UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property 1970
unesco.org

Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973
cites.org

UN Convention on Biological Diversity 1992
cbd.int/doc/legal/cbd-en.pdf

Unidroit Convention on Stolen and Illegally Exported Cultural Objects 1995
unidroit.org/instruments/cultural-property/1995-convention

UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001
en.unesco.org/themes/underwater-cultural-heritage

UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage 2003
unesco.org/culture/ich/en/

Appendices

Appendix D: Security policy guidelines

A security policy is a statement of intent that defines what role security plays within the museum. Security policies may outline:

- security goals and objectives
- assets for protection, levels of protection
- individual responsibilities for security within the organization
- the scope and function of security personnel
- planned security and communication responses to incidents
- the museum's legal, regulatory, and standards of due care
- specific procedures developed in line with the museum's policies.

Security

- Physical security measures are in place to protect the museum's collections, buildings, visitors, and employees.
- Plans are maintained that enable timely and effective responses to emergencies, evacuations, and disasters.
- All legislative requirements relating to security are met.
- All museum staff contribute to security duties and security awareness at all times.

Building security

- The security of the building is the responsibility of the museum's manager/director.
- The building complies with warrant of fitness requirements and the requirements of the Health and Safety at Work Act 2015 at all times.
- All employees, volunteers, and trades people report to the manager/director (or their designee) when they enter and leave the building.

- Individual employees are responsible for their designated areas of building security on a daily basis.
- Security clearances and a key register are kept up to date.

Collection security

- The security of the collection and exhibits is the responsibility of the manager/director.
- Staff maintain and update security systems, including establishing and maintaining a register of transactions, and ensure the security of collection items.
- Collection storage areas are designated secure areas and are accessible only to authorised staff.
- All researchers, contractors, tradespeople, and so on are under the supervision of authorised staff.
- Staff ensure that artefacts on display are presented in such a way as to minimise risk of damage or theft.

Cultural security

- Tikanga Māori protocols are observed when taonga Māori are collected, stored, and exhibited. This will include ensuring taonga are handled with care and respect, away from food and toilets at all times.

Information security

- Documents that are deemed valuable and essential for running the museum, in both hard copy and electronic form, are backed up regularly and stored offsite to ensure their safety.
- Databases that are accessible to the public must have read-only capacity. Access to data entry and editing must be limited to delegated museum staff only.

Further reading

Museum of New Zealand Te Papa Tongarewa He Rauemi Resource Guides:

- 5: Preventive Conservation
- 6: Minimising Disaster
- 7: Emergency Procedures
- 8: A Guide to Guardians of Iwi Treasures | He Tohu ki ngā Kaitiaki o ngā Taonga-ā-iwi
- 13: Valuing Collections
- 22: Bicultural Governance
- 23: Managing Loans
- 31: Mātauranga Māori and Museum Practice
- 34: Governance Guidelines

Other resources

Covid-19 lockdown checklists

A template from Museums Galleries Scotland, 2020.

museumsgalleriesscotland.org.uk/media/1932/mgs-museum-security-checklist-for-lockdown.pdf

A checklist from Museum Development East Midlands, 2020.

collectionstrust.org.uk/resource/museums-site-visit-checklist

Environmental visual assessment (EVA)

A guide to a technique for informally assessing security threats, 2013.

collectionstrust.org.uk/collections-link/risk-management/security/item/1783-security-in-museums-and-galleries-the-environmental-visual-assessment-eva

The security audit

A guide to more formal assessment of your security provisions for collections, 2013.

collectionstrust.org.uk/resource/the-security-audit/

Fire safety and heritage places

A guide from Heritage New Zealand, 2012.
heritage.org.nz/resources/sustainable-management-guides

Handbook on emergency procedures

A handbook from the International Council of Museums, 2010.

network.icom.museum/fileadmin/user_upload/minisites/icms/pdfs/2019_Emergency_Handbook_english.pdf

Suggested practices for collections space security

Procedures for museum collections space security. American Alliance of Museums, 2013.

aam-us.org/wp-content/uploads/2018/01/suggested-practices-for-museum-collections-space-security.pdf

Security in museums and galleries: the security audit

A security audit template. Arts Council England, 2013.

obs-traffic.museum/sites/default/files/ressources/files/ACE_CT_Security_Audit.pdf

Security in museums and galleries: threats to museum collections

A practical guide to potential threats. Arts Council England, 2013.

https://326gtd123dbk1xdkdm489u1q-wpengine.netdna-ssl.com/wp-content/uploads/2016/11/ThreatsToMuseumCollections_02.pdf

Fire and Emergency New Zealand online services

Services available online from Fire and Emergency New Zealand.

onlineservices.fire.org.nz/

Suggested practices for museum security

Recommended protection practices from the Museum, Library and Cultural Properties Council of ASIS International and the Security Committee of the American Association of Museums, 2008.

<https://www.aam-us.org/wp-content/uploads/2018/01/suggested-practices-for-museum-security.pdf>

Insurance advisers

The Insurance Council of New Zealand
icnz.org.nz/

Insurance Brokers Association of New Zealand
ibanz.co.nz/

Financial Planners and Insurance Advisers Association
<https://financialadvice.nz/>

Insurance and Savings Ombudsman
ifso.nz

Acknowledgements

This resource guide was developed by National Services Te Paerangi, Museum of New Zealand Te Papa Tongarewa. National Services Te Paerangi thanks those whose experience and expertise contributed to the development of this resource - Rebecca Keenan, Julian Columbus, Vicki-Anne Heikel, and Jason Yorston.

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Notes



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TE PAERANGI

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