

# INSPECTION CLEANING AND MAINTENANCE



*These technical notes are provided as general, best practice advice for conserving places of heritage value. They are not exhaustive and are not to be taken to legitimise works carried out without the necessary approvals.*

## Purpose

This technical note provides owners of Queensland heritage places with an overview of maintenance works, including recommended inspection and cleaning schedules. It outlines the essential elements of a maintenance program including the cycle of inspections, scheduling and undertaking maintenance work, record keeping, and evaluating the effectiveness of the program. A maintenance cycle should be part of a heritage place's conservation management plan.

Diligent inspections, cleaning and maintenance are fundamental to conserving a heritage building and can save money by preventing problems or detecting them early. The importance of maintenance is stressed in Article 16 of the Burra Charter<sup>1</sup>, which sets out best practice for heritage conservation in Australia and forms the basis of this technical note. The charter defines maintenance as 'the continuous protective care of the fabric and setting of a place and is to be distinguished from repair. Repair involves restoration or reconstruction'. Maintenance should include a program of regular inspections, cleaning and minor work designed to retain the condition and operation of the fabric and setting of the place.<sup>2</sup> *The Illustrated Burra Charter* incorporates useful practical examples and is an excellent guide for owners maintaining their heritage places.

## Inspections

A sound maintenance program is based upon scheduled regular inspections. Scheduled inspections help to identify deteriorated or failed building elements and any work that may be required, including cleaning. Appendix 1 contains recommended inspection schedules, which suggest the frequency of inspections and what to look for. Attend to minor repairs and emergency cleaning promptly.

Tailor the inspection program to meet the needs of the building by monitoring the rates of deterioration of the building elements and adjusting the intervals between inspections to suit. Begin with shorter intervals, such as six-monthly, compare the results of sequential inspections, and adjust the program as needed.

Using standard inspection schedules and forms help with consistency and accuracy in monitoring the condition of the fabric over time. Similarly, consider using the same people to carry out sequential inspections.

Do not attempt to carry out work or inspections that may be dangerous or require special knowledge or skills. If necessary, seek the help of specialists with relevant trade or professional skills especially for buildings that have special architectural features or historical interest.

## Termite inspections

Almost every area in Queensland is susceptible to termite infestation and the large number of timber heritage places are particularly vulnerable. Where possible, have a functioning termite management system, such as a chemical or physical barrier installed by a licensed contractor. For high-set and low-set timber buildings, it is important to ensure that functioning stump caps are in place and remain intact. Buildings with slab-on-ground floors are especially vulnerable. While this type of construction is unusual in heritage buildings, it may be present in modern extensions. Termites can also gain access to sub-floor areas of heritage buildings via external masonry walls.

When doing maintenance inspections, ensure that termite barriers are not bridged. This can happen if:

- timber is stacked under buildings or against external walls
- unprotected timber structures are attached to the building
- termite caps are removed, punctured or otherwise breached
- soil, wood chips or bark are heaped against external walls, especially if weep holes in the brickwork are covered

Carry out termite inspections annually or more often in areas where there is a high risk of infestation. Licenced pest controllers provide an inspection service and offer a variety of methods for eradicating termite infestations.

<sup>1</sup> The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance, (Australia, ICOMOS: 2000), Article 16, [australia.icomos.org/publications/charters/](http://australia.icomos.org/publications/charters/)

<sup>2</sup> Meredith Walker, Peter Marquis-Kyle, *The Illustrated Burra Charter: Good practice for Heritage Places*, (Australia, ICOMOS: 2004), Article 1.5, 11.

Signs of termite infestation include:

- termite ‘galleries’, indicated by mud tubes or plastering along cracks or joints, or along stumps and subfloor timbers
- timber that has been hollowed, leaving only a shell of paint or thin timber
- noticeable bulging, staining or rippling of painted wooden surfaces
- stained plaster
- small piles of frass (tiny, hard, smooth pellets) accompanied by pin holes in adjacent woodwork
- small piles of discarded wings.

Pay particular attention to areas close to the building’s perimeter, as infestations usually originate from nests located outside the building. In masonry buildings, termites gain access through cracks and small openings in the external walls. In high-set timber buildings, they will usually need to negotiate stumps or piers. When inspecting the property, look at:

- sub-floor areas, including piers, stumps and ant-caps
- parts of the building in contact with the ground, especially the edges of building slabs
- the lower courses of brickwork where there are spaces between bricks, cracks or gaps around service pipes that penetrate the slab or bricks
- skirting boards, architraves, cornices and mouldings, especially on the inside of external walls.

Termites prefer moist areas so pay close attention to damp or humid areas including areas around hot water systems, bathrooms and laundries and areas where plumbing or taps are located. Ensure that leaking taps and plumbing are repaired promptly.

Termites also prefer dark areas and in these locations signs of their activity are not readily observable. Carefully check timber in these areas such as softwood roof timbers in ceiling spaces and subfloor timber.

If termite activity is found, do not disturb it; contact a licensed termite controller as soon as possible.

## Programming maintenance and cleaning

At least two levels of programming are needed:

- long-term maintenance—carried out at intervals of several years, deals with the gradual deterioration of the building fabric
- short-term maintenance—carried out at intervals of 12 months or less, is designed to fix issues that need to be attended to promptly, such as drainage, security, storm hazards and termites.

Ensure the maintenance program is adequately funded. The maintenance budget can be determined from records of previous expenditure. It will become more accurate over time as detailed records of maintenance expenditure are accumulated and a pattern of regular maintenance is established.

## Cleaning a heritage place

Include regular cleaning in your maintenance program. Appendix 2 provides specific guidance about cleaning methods and schedules. Neglecting cleaning, such as failing to clear roof gutters, can lead to extensive and avoidable damage to building fabric or equipment.

Ensure that the fabric of the building is not damaged by cleaning products or methods. Obtain specialist advice before attempting to clean early or fragile fabrics and finishes. Before cleaning any surface, test a small area. If a test sample indicates that the cleaning will cause damage, seek advice from the department or a conservation consultant before proceeding. Be aware that the full range of surface variations may not be represented in the test area so allow for flexible treatments on the larger surface. Do not use cleaning devices that use a high-pressure spray.

General principles for cleaning:

- Ensure that only necessary cleaning is carried out. ‘Over cleaning’ can accelerate deterioration and wear of older building fabric.
- Note the areas identified in the maintenance program or conservation management plan that require special care or advice, such as early or fragile fabrics and finishes and areas containing potentially dangerous fabric like asbestos and lead paint. (See below and refer to Technical Notes 2.2 Roofs: asbestos cement, 3.3 Walls: asbestos cement cladding, and 5.1 Paint: surface preparation).
- Select a cleaning method that is appropriate for the job and the condition of the building fabric.
- Be mindful that some cleaning methods may damage early or fragile fabrics and finishes, and taking steps to guard against this.
- Avoid strong alkalis or acids or any abrasive methods.
- Remove graffiti as quickly as possible.
- Use cleaning as an opportunity to check the condition of finishes.
- Adhere to safety advice and environmental guidelines.
- Seek advice if in doubt.

## Undertaking maintenance work on a heritage place

The Burra Charter is an essential guide to carrying out work on heritage buildings. Also refer to the other technical notes in this series on the department's website.

Apply to the department for approval before carrying out work not covered by the General Exemption Certificate. Details of work included under General Exemption are listed on the department's website. Discuss any proposed work that is not covered under General Exemption with the department's heritage officers before applying to carry it out.

## Maintaining fabric containing asbestos

Asbestos is a naturally occurring mineral that has excellent durability, fire resistance and insulating properties. However, inhaled asbestos fibres are a proven cause of fatal illnesses such as lung cancer and mesothelioma. Asbestos building products were introduced into Australia as early as 1903 and are likely to be found in buildings constructed before 1990. It was used in many building material including:

- roof sheeting, capping, guttering, gables, and eaves
- wall sheeting and cladding
- water pipes and flues
- disconnecter trap surrounds
- electrical switchboards
- fencing
- waterproofing membrane
- some window putty
- expansion joints
- packing under beams
- concrete formwork
- vinyl/asbestos floor tiles
- the backing of vinyl sheet floor covering and carpet
- carpet underlay
- inside fireplaces
- inside cavity brick walls
- inside fire doors
- sprayed-on vermiculite insulation material
- lagging.

Do not disturb or clean materials containing asbestos. Restrict maintenance work to monitoring the condition of the material by regular inspections. Obtain specialist advice if it becomes necessary to remove or do any work on materials that may contain asbestos. Refer to the Queensland Government's asbestos website at [www.deir.qld.gov.au/asbestos](http://www.deir.qld.gov.au/asbestos).

## Maintaining surfaces coated with lead-based paints

Lead is a health hazard. Small amounts are not always harmful but ingested lead is stored in the body and can build up to harmful levels. Lead can damage body organs including the liver, kidneys and brain. Young children are most at risk.

In the past, lead was used as a white pigment in most interior and exterior house paints and in pink and red-lead primers. Paints from before 1950 can have a lead content of up to 50 per cent. By 1970 this was limited to one per cent, though some paints dating to later than this time can contain lead which exceeds this level. From 1992, a maximum lead content of 0.25 per cent was recommended.

Do not disturb lead paint in good condition. It becomes a health risk if it is chalky or flaky or during removal. It can also become a hazard if it is scraped or hit, or is in locations, such as railings, where it can be chewed by small children. Test any paint suspected of containing lead before starting any work on it. If it contains lead, employ the recommended safe working methods for lead-based paint (see below) or use a qualified painter. Lead paint is best made safe by coating it with a layer of well-maintained lead-free paint.

For information about testing and working with lead-based paint, refer to the Queensland Government's website at [www.deir.qld.gov.au/workplace/subjects/hazardousmaterials/lead/paint/index.htm](http://www.deir.qld.gov.au/workplace/subjects/hazardousmaterials/lead/paint/index.htm). Refer to the other technical notes that deal with painting available on the department's website.

## Record keeping

Keep good records to help monitor the effectiveness of your maintenance program. Good records help:

- monitor the property's condition
- track specific areas of concern
- determine how often inspections should be carried out
- show whether a building element is being damaged through inappropriate use
- highlight design or material defects
- continuously improve maintenance practices by monitoring the effectiveness of materials and procedures
- ensure continuity of care when there are changes in maintenance personnel
- predict future problems and costs.

As a minimum, records should include:

- the dates and results of inspections, including any defects observed
- details of any work carried out, including a description, date, who performed it, and the cost
- dated photographs, where appropriate, including photographs of any defects observed during inspections and any work carried out.

Store records of inspections with the building manager or where they can be easily accessed.

## Review

Review the effectiveness of your maintenance program regularly to help future decisions and budgeting. Issues to consider include the timing of inspections and the effectiveness and appropriateness of any work carried out.

## Further information

The majority of the work described in this technical note is approved under the General Exemption Certificate and does not require further approval by the department or Queensland Heritage Council.

For more information about approvals under General Exemption or other matters related to conserving heritage places, visit the department's website [www.ehp.qld.gov.au](http://www.ehp.qld.gov.au) or phone 13 QGOV (13 74 68) and ask to speak to a heritage officer in your region.

## Further reading

'Asbestos', Queensland Government website, [www.deir.qld.gov.au/asbestos](http://www.deir.qld.gov.au/asbestos).

'Asbestos in the Home', Queensland Health, [www.health.qld.gov.au/asbestos](http://www.health.qld.gov.au/asbestos)

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Kerr, James Semple, *The Conservation Plan*, 7th Edition, Australian ICOMOS website, <http://australia.icomos.org/publications/the-conservation-plan/>.

'Lead alert facts: Lead and your health', Department of Sustainability, Environment, Water, Population and Communities, Australian Government, [www.environment.gov.au/atmosphere/airquality/publications/health.html](http://www.environment.gov.au/atmosphere/airquality/publications/health.html).

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NSW Heritage Office, 1998, *The Maintenance of Heritage Assets: A Practical Guide*, NSW Heritage Office, Sydney.

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'Publications', Australian ICOMOS website, <http://australia.icomos.org/publications/>

'The six step guide to painting your home', 4th edition, Department of Sustainability, Environment, Water, Population and Communities, Australian Government, Canberra.

'Working with lead-based paint', Queensland Government, [www.deir.qld.gov.au/workplace/subjects/hazardousmaterials/lead/paint/index.htm](http://www.deir.qld.gov.au/workplace/subjects/hazardousmaterials/lead/paint/index.htm).

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## Appendix 1—inspection schedules

Some of the following inspections may require equipment such as elevated work platforms. Apply safe methods and employ appropriately trained personnel when using such equipment.

### Inspections to be made at short intervals

Half-yearly inspection	
Item	Check
Gutters and downpipes	<ul style="list-style-type: none"> <li>• gutters and downpipes, including guards, sumps and rainwater heads are clear of leaves and other debris</li> <li>• gutters and downpipes for cracks, rust, drips on the outside, loose and missing brackets, moss and stains near downpipes</li> <li>• fall of gutter</li> <li>• discharge of downpipes adjacent to the building</li> <li>• stormwater drains—either when raining or by running a garden hose into the downpipe to check that the water flows away freely</li> <li>• vent pipes for missing or damaged covers or wire basket cowls</li> <li>• leaf guards to outlets, rainwater heads and sumps sit correctly and are clear of debris</li> <li>• whether birds are nesting on downpipe offsets and polluting the building, or whether bird-proofing, if installed, is adequate and sound</li> </ul>
Stormwater	<ul style="list-style-type: none"> <li>• dish drains and sumps for blockages</li> <li>• for water lying in sumps as this can indicate a total or partial blockage or inadequate fall in the drainage system</li> <li>• water from hose taps drains away from the building and that sump gratings are operable, undamaged, and sit square</li> <li>• stormwater drains into sewer system</li> </ul>
Roof	<ul style="list-style-type: none"> <li>• for loose sheets or missing fixings</li> <li>• metal sheets for rust (particularly at the laps),</li> <li>• for slipped or broken tiles and slates</li> <li>• for missing or loose flashings near chimneys or parapets</li> </ul>
Ceiling spaces	<ul style="list-style-type: none"> <li>• for light visible through holes or water staining on framing elements. Water often travels a tortuous path from where it enters a building to where it exits</li> <li>• for wildlife</li> <li>• signs of termite infestation (this may be reduced to an annual inspection if an effective termite management system is in place)<sup>3</sup></li> </ul>
Fabric (generally)	<ul style="list-style-type: none"> <li>• grime, growth in mortar joints, bird excretion, graffiti and signs of termite infestation (this may be reduced to an annual inspection if an effective termite management system is in place)<sup>1</sup></li> </ul>
Painting	<ul style="list-style-type: none"> <li>• for deterioration such as chalking, weathering, flaking, cracking, blistering or staining</li> </ul>
Internal timber cladding and joinery	<ul style="list-style-type: none"> <li>• timber cladding and joinery for splits, cracking joints or failed fixings</li> <li>• sills and bottom rails of windows and doors to ensure they are solid</li> </ul>

<sup>3</sup> Refer to the section on termite inspections in this technical note.

Half-yearly inspection	
Item	Check
Exterior	<ul style="list-style-type: none"> <li>external timber cladding for splits, cracking or failed fixings</li> <li>that paving and concrete paths drain away from the structure</li> <li>that garden watering systems do not spray onto walls</li> <li>for storm hazards, such as dead trees close to the building</li> <li>for fire hazards, such as rubbish, undergrowth, combustible materials</li> <li>that doors and windows are secure</li> <li>that water is not entering the building</li> <li>for cracks, leaning or subsidence in external walls</li> <li>overhanging tree branches, trim if necessary</li> </ul>
Under the floor	<ul style="list-style-type: none"> <li>for termite infestations (this may be reduced to an annual inspection if there is an effective termite management system).<sup>4</sup></li> <li>that sub-floor ventilation has not been blocked</li> <li>that ground levels (including paving and garden beds) adjacent to walls have not been built higher than vents or damp proof courses</li> </ul> <p><i>Note: Inspection should be conducted externally and internally beneath the floor, if it is elevated enough to permit access. A permanent access point may need to be established to under floor spaces to facilitate this. An exemption for this work may need to be obtained from the department.</i></p>

As necessary or when noticed	
Item	Inspection notes
Emergencies	Keep a supply of essential tools, maintenance materials and safety equipment on site for minor or urgent repairs (including masks, gloves and torches).
Broken glass in windows and doors	Remove non-significant broken glass in windows and doors and cover openings temporarily with hardboard or stout card.  If glass with heritage significance, such as a stained glass window, is broken, it should be secured in situ pending advice from an appropriately qualified specialist. The broken glass should be retained to guide repair work.
Locks, handles, hooks, etc.	Tighten loose screws. Repair or refix simple items such as coat pegs, broken handles, locks and bolts as necessary. Clean and lubricate locks and other door furniture with dry lubricants such as graphite powder.
Taps	Check taps and plumbing fixtures for drips. Keep a supply of washers of the correct size and type. Repair dripping taps as soon as dripping is noticed.
Walls and structure	Record and monitor all cracks. Seek advice from a structural engineer for large cracks.
Services	Check fire extinguishers and other fire services are operational.  Check batteries in smoke alarms and security systems.

<sup>4</sup> Refer to the section on termite inspections in this technical note.

## Inspections to be made at longer intervals (L = 5 years; S = 1 to 2 years)

Roof covering		
Building material/ element	Check for	Inspection interval
Slate, terracotta, concrete	<ul style="list-style-type: none"> <li>• slipped, cracked or broken tiles, especially after hail               <ul style="list-style-type: none"> <li>o storm prone areas</li> <li>o non-storm prone areas</li> </ul> </li> <li>• tiles that have become porous</li> </ul>	S L L
Asbestos and fibrous cement	<ul style="list-style-type: none"> <li>• cracked or broken sheets or tiles</li> </ul>	L
Copper, zinc	<ul style="list-style-type: none"> <li>• loose or raised fixings and sheet edges</li> <li>• cracked soldered joints</li> <li>• dented areas</li> </ul>	L
Steel	<ul style="list-style-type: none"> <li>• loose or raised fixings—loose fixings can indicate batten failure</li> <li>• sheet edges and surfaces that are deformed from being walked on</li> <li>• rust stains around fixings, where sheets are lapped around flashings</li> </ul>	L
Membrane	<ul style="list-style-type: none"> <li>• lifting joints</li> <li>• surface blisters</li> <li>• physical damage and cracks—check on hot days and after rain as surfaces dry, cracks can then be seen wet as the heat draws up moisture</li> </ul>	L
Timber shingles	<ul style="list-style-type: none"> <li>• slipped, split, decayed or badly deformed shingles</li> <li>• mould growth on shingles</li> </ul>	L
Flashings, cappings	<ul style="list-style-type: none"> <li>• loose or raised fixings to metal cappings</li> <li>• cappings that have lifted, slipped or are deformed from wind damage</li> <li>• cracked capping tiles or broken mortar bedding</li> <li>• slipped or missing tiles</li> </ul>	S
Avoid	<p>Walking on brittle slate, terracotta or asbestos roof tiles.</p> <p>Testing membranes with sharp objects that can puncture them.</p> <p>Using membranes to support your weight.</p>	

Roof drainage		
Building material	Check for	Inspection interval
Stainless steel	<ul style="list-style-type: none"> <li>• bent or squashed gutters</li> </ul>	L
Cast iron	<ul style="list-style-type: none"> <li>• cracked or broken pipes and defective joints—retain broken sections for repair</li> </ul>	L
Copper	<ul style="list-style-type: none"> <li>• deformed, bent or squashed gutters</li> </ul>	L
Steel	<ul style="list-style-type: none"> <li>• rust stains around downpipe outlets, internal/external corners, beneath tree overhangs and downpipe offsets</li> </ul>	S
Generally	<ul style="list-style-type: none"> <li>• cracks in gutter and downpipe joints</li> <li>• loose or missing brackets to gutters and downpipes</li> <li>• organic growth, moss or stains surrounding downpipes—this can indicate blockages</li> <li>• downpipes that are squashed or damaged and restrict water flow</li> <li>• soundness of connection between downpipes and the stormwater system</li> <li>• blockages of stormwater drains</li> </ul>	S
Avoid	<p>Hosing leaves and debris into downpipe outlets.</p> <p>Placing ladders or leaning objects against gutters, particularly if made of soft copper or stainless steel.</p>	

Eaves		
Building element	Check for	Inspection interval
Generally	<ul style="list-style-type: none"> <li>• holes from old service pipes where birds can nest</li> </ul>	S
	<ul style="list-style-type: none"> <li>• surface stains to fascia and soffit that indicate roof or valley and gutter failure</li> </ul>	S
	<ul style="list-style-type: none"> <li>• blocked ventilation holes and clear</li> </ul>	S
	<ul style="list-style-type: none"> <li>• paint failure and/or decay to linings—this can indicate roof covering failure</li> </ul>	L
	<ul style="list-style-type: none"> <li>• cobwebs and wasp or hornet nests and remove</li> </ul>	S



Fabric		
Building material	Check for	Inspection interval
Stone	<ul style="list-style-type: none"> <li>• loose, fretted, broken or missing mortar joints to stones around windows, doors, along flashings and on cornices and other projections</li> <li>• crumbling stone or surface salts—this can indicate a moisture problem</li> <li>• signs of delamination that can affect the soundness of stone</li> <li>• rising or falling damp</li> <li>• appropriateness of joint mortar—check for incompatible mortars where lime was originally used</li> <li>• cracking and spalling around metal fixtures</li> <li>• loose stones at cornices and mouldings</li> </ul>	L  L
Brickwork	<ul style="list-style-type: none"> <li>• loose, fretted, broken or missing mortar joints and bricks</li> <li>• crumbling brickwork or surface salts—this can indicate a moisture problem</li> <li>• air vents that are blocked or covered over with soil</li> <li>• cracked or drummy render</li> <li>• appropriateness of joint mortar</li> </ul>	L
Timber	<ul style="list-style-type: none"> <li>• loose or missing cladding, corner stops, mouldings, soffits and fascias</li> <li>• for weathering and potential decay around window sills</li> <li>• boarding in contact with the ground or plants</li> <li>• termite activity.</li> </ul>	S
Asbestos/ fibre cement	<ul style="list-style-type: none"> <li>• broken or damaged sheets</li> <li>• loose or missing trim and cover strips</li> <li>• obtain specialist advice if the above applies</li> </ul>	S
Avoid	Covering wall vents and damp-proof courses with soil or rubbish. Building up garden beds over damp-proof courses, planting close to walls or continual watering of walls.	

Structure		
Building material	Check	Inspection interval
Timber	<ul style="list-style-type: none"> <li>• that members are secure and true</li> <li>• for movement of vertical beams and posts</li> <li>• that members are not in direct contact with the ground</li> <li>• for termite activity<sup>5</sup></li> </ul>	L
Masonry	<ul style="list-style-type: none"> <li>• for cracks</li> <li>• that walls straight and true</li> </ul>	L
Steel	<ul style="list-style-type: none"> <li>• for signs of rust</li> <li>• that fixings are secure</li> </ul>	L
Generally	<ul style="list-style-type: none"> <li>• that verandah posts are stable and sound</li> <li>• for signs of structural distress (such as movement and cracking)</li> </ul>	L

<sup>5</sup> Refer to the section on termite inspections in the technical note.

<b>Joinery</b>		
<b>Building element</b>	<b>Check for</b>	<b>Inspection interval</b>
Windows	<ul style="list-style-type: none"> <li>• loose or damaged mouldings and architraves</li> <li>• decayed stiles at sill level</li> <li>• weathered sills</li> <li>• sashes that bind</li> <li>• noisy pulley wheels</li> <li>• sash cords that are decayed or broken</li> <li>• loose or decayed joints</li> <li>• broken or cracked glass or putty</li> <li>• stains on internal faces around windows that can indicate failed flashings</li> <li>• damage from locks being forced</li> </ul>	S
Doors	<ul style="list-style-type: none"> <li>• satisfactory operation of the door</li> <li>• loose or missing furniture</li> <li>• loose or damaged mouldings and architraves</li> <li>• loose jambs</li> <li>• decayed, excessively worn or broken door sill</li> <li>• damage from locks being forced</li> <li>• firmness of joints</li> <li>• condition of any glass</li> <li>• the need for stops to prevent damage to doors or walls when doors are opened</li> <li>• doors that are sagging or binding</li> </ul>	S
Generally	<ul style="list-style-type: none"> <li>• operation of hardware including catches and locks</li> <li>• loose, inadequate or damaged hardware</li> </ul>	S
Avoid	Restricting fire exits with storage items.	

<b>Painting</b>		
<b>Building element</b>	<b>Check for</b>	<b>Inspection interval</b>
Generally	<ul style="list-style-type: none"> <li>• splitting timber cladding, cracking joints, loose putty, and cracking blistering and fading paint</li> <li>• stains—these can indicate a moisture problem</li> </ul>	L
Window sills	<ul style="list-style-type: none"> <li>• paint deterioration and weathering</li> </ul>	S
Doors/frames	<ul style="list-style-type: none"> <li>• paint deterioration, failure or damage and grime generally</li> </ul>	S

Services		
Building element	Check for	Inspection interval
Stormwater	<ul style="list-style-type: none"> <li>damaged grates in sumps</li> </ul>	S
Water	<ul style="list-style-type: none"> <li>dripping taps</li> <li>ease of operation of taps</li> <li>fastening of taps and surface-run pipes to walls or supports</li> <li>wet areas in the grounds and gardens during dry periods, indicating broken pipes</li> </ul>	S
Electricity	<ul style="list-style-type: none"> <li>blown light bulbs</li> <li>damaged fittings</li> <li>security of fittings to walls or standards</li> <li>stability and damage to light standards or poles in outdoor areas such as car parks</li> <li>repair work should be carried out by a licensed electrician</li> </ul>	S

External works		
Element	Check for	Inspection interval
Paving /bitumen/ concrete	<ul style="list-style-type: none"> <li>broken, lifting or undulating bitumen</li> <li>areas where water is ponding</li> <li>loose or lifting paving blocks or bricks that could be hazardous to pedestrians</li> <li>growth from paving joints</li> <li>kerb damage from vehicles</li> </ul>	S
Bollards	<ul style="list-style-type: none"> <li>damaged or missing bollards and chains</li> <li>unstable bollards</li> <li>decayed timber bollards</li> </ul>	S
Fences/timber/ steel	<ul style="list-style-type: none"> <li>damaged, decayed, loose or missing pickets, posts and rails</li> <li>alignment of fences</li> <li>damaged, rusted or missing panels on steel fences</li> </ul>	L L S
Gates	<ul style="list-style-type: none"> <li>soundness and damage</li> <li>dropping and whether they require squaring and bracing</li> <li>operation and whether hardware is working and sound</li> <li>operation of catches and hinges</li> <li>effectiveness of gate stops and catches</li> <li>lubrication of hinges</li> </ul>	L  S
Generally	<ul style="list-style-type: none"> <li>for wear and damage caused by use and operation</li> </ul>	S

## Appendix 2—recommended cleaning guide and schedules

### Recommended cleaning guide

As a general principle, avoid using strong alkalis or acids or any abrasive methods. Obtain specialist advice before attempting to clean early or fragile fabrics and finishes. If the methods described in the cleaning notes (below) do not work, leave ‘as is’ and seek further advice from the department.

Item	Cleaning notes
<b>Windows and doors</b>	
Anodised aluminium	Clean with warm soapy water applied with a cloth or chamois. Dry and polish with a soft dry cloth.
Bronze	Apply a thin coating of paraffin oil, allow to dry thoroughly, and polish with a soft cloth.
Ordinary glass	Wash with dilute alkaline solution (such as a proprietary window cleaner) or clean water and wipe with damp chamois.
Leadlight or historic glass	Wash with softly sprayed, distilled or de-ionized water and a soft cloth or soft brush.
Lacquered metal	Clean with warm soapy water applied with a cloth or chamois. Dry and polish with a soft dry cloth.
Painted timber	Wash with warm water and weak detergent using a soft brush. Rinse with clean water.
Stainless steel and painted steel	Clean with warm soapy water, dry with a chamois and polish with a soft cloth.
<b>Hardware (such as nails, screws, bolts, fasteners, locks, latches, hinges, door and window fittings)</b>	
Anodised aluminium	Clean with warm soapy water applied with a cloth or chamois. Dry and polish with a soft dry cloth.
Brass	Apply a thin coating of metal polish. Allow to dry and polish with a soft cloth or leave to dull naturally.
Bronze	Apply a thin coating of paraffin oil. Allow to dry and polish with a soft cloth.
Ceramic	Clean with warm soapy water applied with a cloth. Dry with a soft dry cloth.
Chromium plate	Clean with warm soapy water applied with a cloth or chamois. Dry and polish with a soft dry cloth.
Lacquered metal	Clean with warm soapy water applied with a cloth or chamois. Dry and polish with a soft dry cloth.
Stainless steel	Clean with warm soapy water, dry with a chamois and polish with a soft cloth.
<b>Walls</b>	
Cement glaze	Wash down with warm water and weak detergent. Rinse with clean water and wipe with a chamois.
Face brick	Brush down with a stiff dry brush.
Glazed brickwork	Wash with warm water and weak detergent. Rinse with clean water.
Glazed wall tiles	Wash with warm water and weak detergent. Rinse with clean water and dry with a soft cloth. Do not apply water to cracked or damaged tiles.
Granite	Wash with warm water and weak detergent. Rinse with clean water and dry with a soft cloth.
Marble	Wash with warm soapy water. Rinse with clean water and dry with a soft cloth. Apply a thin coating of wax furniture cream and polish with a soft cloth.
Painted timber (external)	Wash with warm water and weak detergent using a soft brush. Rinse with clean water.

Item	Cleaning notes
<b>Walls</b>	
Plaster	Wash with neutral pH soap in water using dampened soft cotton cloth. Rinse with clean water. Do not saturate.
Plastics laminates	Remove dirty marks with polish. Wipe over with a damp cloth and dry with a soft cloth.
Sandstone	Seek advice from a stone conservator before cleaning sandstone.
Timber (varnished or stained)	Wipe with a damp cloth.
Vitreous enamel	Wash with warm water and weak detergent. Rinse with clean water and polish with a soft cloth.
Wallpaper	Wallpapers have a range of finishes. Seek advice before cleaning.
<b>Floors</b>	
Carpets, rugs	Vacuum in the direction of the pile with low-level suction. Periodically vacuum the back of the rug. If liquids are spilt on the fabric, clean the area immediately by soaking up as much liquid as possible with clean absorbent towel or cloth. Blot gently with soda water or a mix of half white vinegar and cold water to neutralize the spot. Repeat if necessary. Do not rub. Place clean absorbent material over the area, weight down until dry. Do not use commercial carpet cleaners. For stubborn stains consult a carpet cleaning specialist experienced in older carpets.
Hardwood (waxed)	Sweep and occasionally mop.  To polish, apply paste or liquid wax polish, rub into the surface with a dry cloth and when dry buff with a polishing machine. Remove accumulations of polish by dry rubbing with a medium steel wool pad or wet rub with a medium steel wool pad, dipped in liquid polish. When dry, buff with a polishing machine.
Linoleum	Sweep. Remove dirty marks with a damp cloth or mop. Scuff marks which cannot be removed by this method may be removed by light rubbing with a fine steel wool pad dipped in liquid polish. Apply paste or liquid wax polish, rub into surface with a dry cloth and when dry buff with a polishing machine. A water/wax emulsion polish gives greater non-slip properties; apply with a damp cloth or mop and when dry buff with a polishing machine. Remove accumulations of polish with detergent in hot water, rinse with clean water and when dry re-apply polish or dry rub with a fine steel wool pad and re-apply polish. Do not use alkaline cleaners.
Oilcloths	Clean by hand with a warm, soapy sponge. Dry with a soft cloth.
Polished softwood	Sweep. Wash or mop with a solution of water and vinegar or methylated spirits.
Rubber	Apply a water/wax emulsion polish with a damp cloth or mop and when dry lightly buff with a polishing machine. Remove accumulations of polish with paste cleaner using warm water, rinse with clean water and when dry re-apply polish.
Tessellated tiles	Sweep. Damp mop or wipe with damp cloth.
Terrazzo	Sweep. Lightly scrub with warm water using a gritty cleansing powder, rinse with clean water and squeegee to remove surplus water.
Tiles	Sweep. Wash with warm water and detergent and rinse with clean water. Squeegee to remove surplus water. Do not apply water to cracked or damaged tiles.
Verandah floors	Sweep. Damp mop for grime. Take care with washing shot edge boards to avoid water dripping through to spaces below.
Vinyl	Sweep or vacuum to remove dust. Wipe over with a damp mop using warm water.

Item	Cleaning notes
<b>Paintwork (internal)</b>	
Gloss, semi-gloss, flat or emulsion paint	Obtain specialist advice before cleaning significant or fragile early finishes. Brush and wipe down surfaces with damp rags or sponges using warm water and household detergent or sugar soap. Do not use soap powders. Change water and rinse rags and sponges regularly. Rinse thoroughly with clean water and wipe down with chamois.
Limewash/washable distemper	Brush lightly with a dry fine-hair broom.
<b>Furnishings</b>	
Fabric upholstery	Vacuum clean and brush with a stiff upholstery brush.
Painted timber	Wash with warm water and weak detergent. Rinse with clean water and polish with a soft cloth.
Painted metal	Wash with warm water and weak detergent. Rinse with clean water and polish with a soft cloth.
Polished timber	Apply wax furniture cream and polish with a soft dry cloth.
PVC upholstery	Clean with warm soapy water, applied with soft brush. Rinse with clean water. Dry with soft cloth.
<b>Bathrooms</b>	
Chromium plate	Clean with warm soapy water applied with a cloth or chamois. Dry and polish with soft dry cloth.
Copper	Apply thin coating of metal polish. Allow to dry and polish with a soft cloth.
Mirrors	Wash with clean water and wipe with a damp chamois.
Sanitary fittings	Clean with porcelain cleaning powder and warm water. Rinse with clean water and polish with a soft cloth.
Stainless steel	Clean with warm soapy water, dry with a chamois and polish with soft cloth.

## Graffiti

Consider obtaining specialist advice before attempting to clean graffiti to ensure that cleaning methods will not damage the fabric of the building.

Begin cleaning as soon as possible after the graffiti appears. Work on a test section first.

For masonry, it is usually best to remove graffiti by treating the whole of the affected area to the margins of the individual blocks. On a painted surface, if the remover works by softening the paint film, it is better to restrict the treatment to the actual paint surface.

If a graffiti inhibitor has been applied to the surface follow the manufacturer's instructions to avoid damage to significant fabric.

For acrylic, epoxy or alkyd paint graffiti:

- On painted surfaces, paint over the graffiti with paint that matches the existing.
- On non-porous surfaces, use a paint remover with a bristle brush or medium-pressure water jet.

- On porous surfaces, obtain specialist advice as soon as possible.
- Remove spirit pen and aerosol paint graffiti by scrubbing with a solution of detergent and warm water.

Poulticing may be the best method of removing some graffiti. A poultice consisting of absorbent material or clay powder (shredded paper, paper towel, kaolin or fuller's earth) mixed with a liquid (solvent or other remover) to form a paste is applied to the graffiti. The poultice should be kept moist and left on as long as necessary to drain the graffiti stain out. As the paste dries it absorbs the graffiti stain. Pre-mixed poultices are available in a paste or powder form. The masonry must be pre-wet before applying an alkaline cleaning agent, but not when applying a solvent. Rinse thoroughly after the graffiti stain has been removed.

## Recommended frequency for regular cleaning

The recommended frequency set out in the table below is provided as a guide only. The frequency may need to be varied depending on the nature of the fabric and the amount of traffic or use. Care should be taken not to damage significant, fragile fabric by cleaning too frequently. Seek advice from a specialist to determine cleaning methods and frequency in such cases.

Furniture		
Fabric upholstery	Vacuum clean	Monthly
Mirrors and glass	Dust	Daily
	Wash	Monthly
Painted wood and metal	Dust	Daily
	Wash	Monthly
Plastic	Dust	Daily
Polished wood and metal	Dust	Daily
	Polish	Fortnightly
PVC-covered upholstery	Dust	Daily
	Wash	Monthly
Floors		
Carpets and rugs	Vacuum clean	Weekly
Concrete	Sweep	Daily
Hardwood	Sweep	Daily
	Polish	Monthly
Linoleum	Sweep and lightly buff	Daily
Rubber	Sweep	Daily
	Wash	Weekly
Terrazzo	Sweep	Daily
	Wash	Weekly
Tiles	Sweep	Daily
	Mop	Weekly
Verandah floors	Sweep	Weekly
	Mop	As needed

Walls		
Face brickwork	Brush down	Annually
Glazed tile	Dust	Weekly
	Wash	Monthly
Glazed brickwork	Dust	Weekly
	Wash	Six-monthly
Paint (gloss, emulsion, semi-gloss, flat oil)	Dust	Weekly
Polished hardwood	Dust	Weekly
	Polish	Annually
Ceilings		
Washable distemper	Dust	Monthly
Paint (gloss, semi-gloss, flat, emulsion)	Dust	Monthly
	Wash	Annually
Door furniture		
Metal finishes, anodised aluminium, chromium, bronze, brass, lacquered metal	Dust	Daily
	Clean	Weekly
Sanitary fittings		
Ceramic, enamel, stainless steel	Clean	Daily
Windows		
Window Glass	Clean	Monthly