

City of Fremantle Heritage Building Conservation Technical Advice Sheet 1

Introduction to good conservation practice



April 2015



This sheet provides an introduction to the fundamentals of good conservation practice and identifies a range of materials and repair and maintenance issues that you may face in looking after an older building. These sheets are regularly updated so make sure you have the current advice by checking the city's website www.fremantle.wa.gov.au

What do we mean by 'conservation'?

Conservation means all the ways of looking after or caring for a place so that its heritage value (or importance) is retained and not lost.

Conservation includes undertaking routine maintenance and making necessary repairs such as dealing with damp problems in masonry.

It includes good housekeeping measures designed to minimise the risk of termite attack, as well as repairs following termite damage, such as replacement of sections of timber.

Conservation has a broader meaning than restoration, and is the term commonly used in heritage work. The following sections explain some of the key principles of good conservation practice.

Know your building – understand how traditional materials and methods work

Buildings constructed in Fremantle prior to the Second World War were generally built with traditional construction materials and methods. These are often different to those used in modern construction and may require different approaches to their repair.

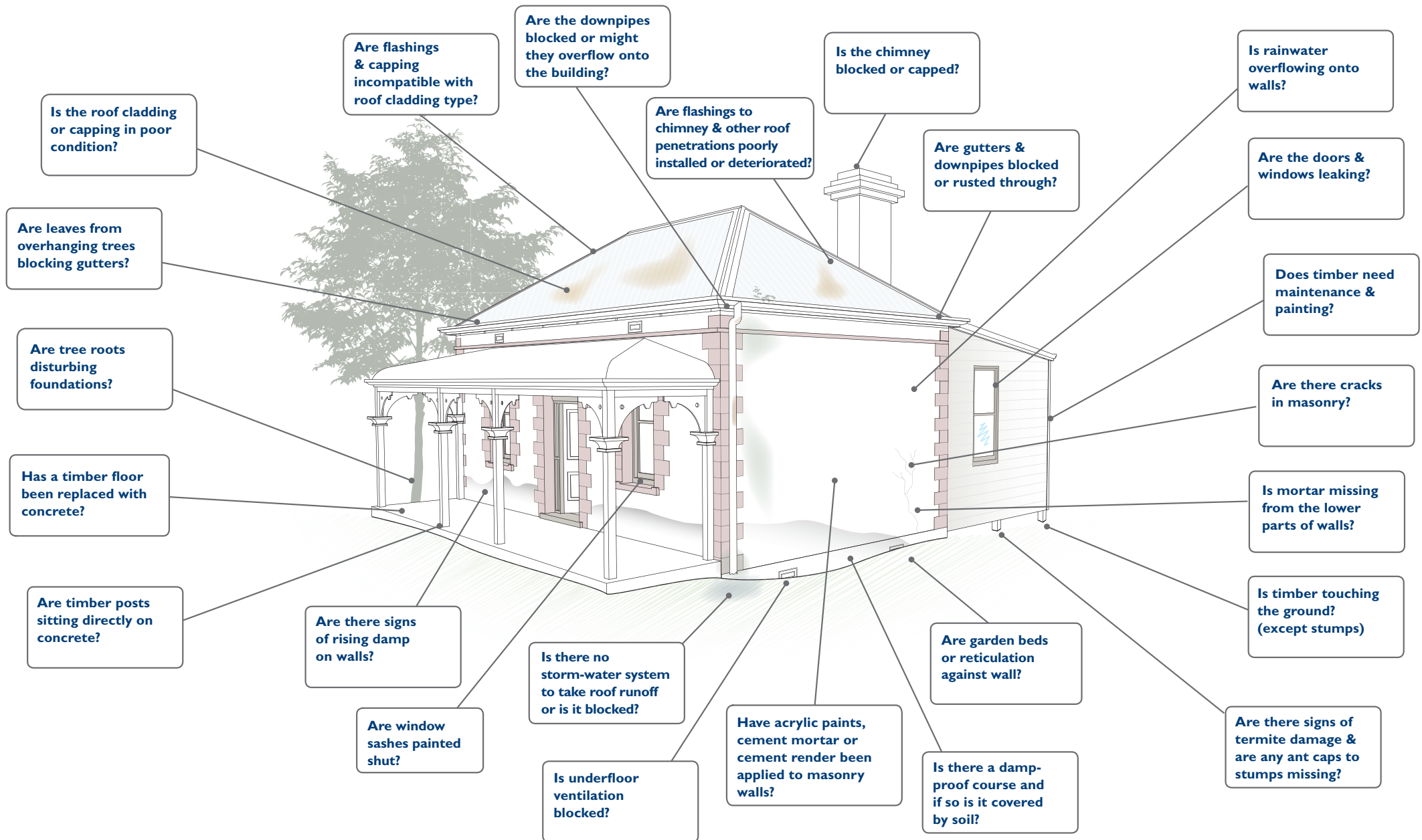
Unlike modern buildings, traditionally constructed stone and brick buildings have solid external walls without a cavity, and sometimes without a damp-proof course.

When they were built it was accepted that a certain amount of dampness would penetrate the solid (but porous) walls and that this moisture would then evaporate naturally, mostly from the external face of the walls.

To allow the natural evaporation process to occur, traditional mortars, plasters, renders and decorative finishes were permeable to water vapour. The exchange of water vapour and air between porous masonry materials and the atmosphere is often described as 'breathing'. In contrast, modern construction practice aims to keep all water out, often by applying relatively impermeable surface coatings.

Introduction to good conservation practice in Fremantle

This is the first in a series of advice sheets on the conservation of heritage buildings in Fremantle.





Check it out for any problems — use the checklist and diagram

Use the separate checklist to make a list of things that you think may need attention. Walk around your building with the diagram and see if you can find any of the potential problems it identifies. You may not be able to answer all the questions – don't worry – but do consider getting help from an architect or builder experienced with work on heritage buildings. It's really important to correctly identify any problems, as a wrong diagnosis can lead to unnecessary work and damage to the building, and may not even solve the problem.

Work out what needs to be done — develop a plan of action

- Develop a written plan for making the necessary changes and repairs — putting the most urgent things first.
- Start with basic maintenance, such as cleaning roof gutters and making sure underfloor air vents are not blocked, and that storm water does not lie against walls after rain.
- Use the following points as a guide to the works. More information about particular topics can be found in the other sheets in this series and in the references they contain.

Match like with like — use traditional materials and techniques

Traditional materials and construction techniques are preferred for use on heritage buildings. This is not just about a desire to make it authentic and have it look right; it's also because (when properly used and applied) most traditional materials work well with the existing building.

- Lime (and not lime with added cement) should be used to repair mortar joints that were originally made with lime.
- Galvanised steel should be used to repair a galvanised roof.
- Traditional joinery techniques (and not epoxy resins) should be used to repair existing joins in timber sections.

The preference for traditional materials does not prevent the use of modern materials where this is appropriate.

Replacing corroded iron in masonry with new items made of marine-grade stainless steel is good practice; whereas leaving original, but rusting, iron to cause further damage to the masonry would not be.

Hasten slowly – use a cautious approach

- Only make changes to the existing building where they're absolutely needed. Good practice is based on a cautious approach of doing as much as necessary to make the building work, but otherwise minimising changes to it so that its heritage value is not diminished.
- Aim to keep as much original material as possible. If the roof is leaking then of course you need to stop it, but do so by patching it temporarily, rather than rushing in and replacing the whole roof. This will buy time to carefully consider the alternatives, and it may save money if unnecessary repairs can be avoided.

Be honest – repairs should be identifiable on close inspection

Skilfully executed repairs can often be difficult to spot, particularly if salvaged material is used for the replacements. This is a good result because an onlooker can see the whole as was intended, without being distracted by the repairs. But we should be honest about the changes we have made, so that when looked at closely, it is possible to identify what's been done.

This can be achieved by:

- Incorporating the date or other marking devices in inconspicuous locations; or
- By subtly modifying materials or details.

Don't mess it up for the next owner – changes should be reversible

Sometimes changes need to be made to suit a particular occupier or use of the building. Ideally, these should be reversible so that the next owner has the opportunity to return the place to its previous form. This might apply to a window opening that is enlarged to make a doorway to allow for a different pattern of movement through the building.

A different case occurs with chemical treatments to consolidate or stabilise weak masonry or timber. In most cases it will be impossible to fully remove the chemical. So instead the approach should be to always allow for future treatments, and do nothing that would prevent them.



Get help if you need it – talk to the City's heritage officers

You may need professional assistance to help you answer some of the questions in the checklist and diagram, and to work out how any problems are to be fixed.

Make sure that your advisor is experienced with traditional materials:

1. Ask them for evidence of their previous work.
2. Have they done work on heritage buildings in Fremantle?

If you're looking for advice and are not sure where to start, the State Heritage Office maintains a list of experienced consultants and contractors at: www.heritage.wa.gov.au

Advice can also be obtained by speaking to the City's heritage officers **08 9432 9999**.

Where do these guidelines come from?

These guidelines for good practice are drawn from the *Australia ICOMOS Burra Charter, 2013*, which is the key guiding document for the care of heritage places in Australia. The *Burra Charter* and a series of Practice Notes that explain its application are available as PDF downloads from: <http://australia.icomos.org>

For requirements for planning and building permit approvals refer to City of Fremantle Planning and Development Services.

Further reading

Other technical advice sheets in this series

City of Fremantle Technical Advice Sheet 2
Checklist for inspections.

City of Fremantle Technical Advice Sheet 3
Looking after limestone walls.

City of Fremantle Technical Advice Sheet 4
Limestone walls need lime mortars.

Coming in 2016

City of Fremantle Technical Advice Sheet 5
Dealing with dampness in old walls.

City of Fremantle Technical Advice Sheet 6
Repointing lime mortar joints.

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These sheets can be downloaded from the City of Fremantle website:

www.fremantle.wa.gov.au/cityservices/planning/conservationandcareofheritagebuilding



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