

Short Guide

Information for Historic Building Owners

Maintaining your home

A short guide
for homeowners



Your home, being one of the most important things in your life, needs to be loved and cared for. In return it will give you and future generations great pleasure over the years of its occupation.

However, many homeowners pay more attention to the maintenance needs of their motorcars, meticulously ensuring that service records are kept up-to-date, than they do to the maintenance needs of their homes. This is possibly because a building, especially a traditional building, is a long-lived asset that tends to deteriorate at a very slow rate in comparison to a car. However, the slow rate of change over time to the physical features of a property may engender a false sense of security until an unexpected repair strains the household budget. At such a time there may be a natural tendency to select a firm at random to carry out the repair as quickly and cheaply as possible. Such an approach to the commissioning of repairs may not be in the best long-term interests of the house. Perhaps the firm employed might not be sufficiently knowledgeable, experienced or even interested to understand the most appropriate use of traditional materials and methods for repair, resulting in unsatisfactory work that may cause further distress to the building.



By planning the maintenance of your property you can save money and prolong the life of your home



By adopting a planned approach to maintenance the homeowner can avoid the need for unplanned emergency repairs and will also have a property that maintains its original character and retains or even enhances its value. Planned maintenance means a programme for maintenance that recognises the factors that can lead to the deterioration of materials and parts of the building and ensures that they are maintained to prevent premature failure. There is no reason, for example, why original softwood windows and doors cannot be maintained for hundreds of years through good painting regimes and timely repair rather than replacement with modern, unsympathetic components and materials. In most cases repairs to windows will cost less than replacement.

Good maintenance will require investment but this investment can be planned and the annual costs incurred will be quite modest. When whole-life costs are considered, the cost of a planned maintenance programme will be far less than the costs resulting from a series of unplanned emergency repairs.

Understanding Your Property

This Guide is intended for owners of dwellings that are of traditional construction. Owners need to be aware that such houses behave differently from those constructed using modern methods and materials. The table below explains why they are different.



Traditional house	Modern house
Permeable construction allows water within the construction to evaporate readily. Because the construction is permeable moisture enters the walls and is held within the pores of the materials. It can then evaporate off readily when drying conditions occur. A balance of conditions is maintained.	Sealed construction aims to prevent water ingress. Water finding its way into the construction does not readily evaporate.
Thick walls (0.6 metres or more), in Scotland usually stone, with large volumes of lime mortar and voids, absorb water, which then evaporates off during drying periods.	Relatively slender wall construction (typically 0.3 metres) with barriers and/or cavities to prevent water penetration.
Rarely has a damp proof course.	Damp proof course prevents moisture transfer from the ground.
Good ventilation within voids in walls, floors and roofs is essential to remove moisture from the construction.	Much reduced ventilation levels within voids is acceptable.
No artificial timber preservatives.	All constructional timber is pressure preserved.
Relatively low levels of insulation.	High levels of added insulation are incorporated into the design.

Inserting modern materials and components into your house, in an attempt to reduce or eliminate maintenance, may lead to accelerated decay in unexpected ways. For example, covering the external walls with a hard cement mortar harl or render will reduce the ability of the wall to 'breathe' and will raise moisture levels in adjacent construction, and may increase the risk of fungal decay in timber in contact with the wall. Likewise, using impervious paints internally or externally can change the moisture conditions within the construction.





Original softwood windows should be maintained through good painting regimes



Gutters should be cleared out annually



Check mortar pointing on chimneys especially around the pots and cans



Raised ground level around the base of your property can create problems

It is important to identify those parts of a building that have the potential to deteriorate and decay, and to plan a regular maintenance programme accordingly. Although such areas become self-evident over time, usually through failure of the element, it is best to prevent failures before they occur.

Unfortunately, many maintenance problems are associated with roofs and there may be parts of the roof that are hidden when viewed from ground level, especially where the roof is of complex design. It is, however, important that these less accessible areas are inspected regularly.

Where are the principal areas of your house requiring maintenance?



Identification of defects and their causes (Selected examples only)

A Table of Common Defects and Remedial Action is included as a pullout section. It is not intended to be a fully comprehensive list of possible defects and, where remedial action is indicated, it is advisable for all repair work on the exterior of a traditional building to be carried out by a tradesperson.

When you try to fully understand all the particular features of your house it should be obvious that the more complex the plan form and roof arrangements the greater the need for an awareness of a range of potential problems.

The focus of this Guide is on the external features of the house. If the exterior is maintained in a sound condition then, apart from damage through wear and tear, the interior of the property will remain in a sound condition.

The Guide does not deal with the maintenance of the services in the house (i.e. water supply, gas, electricity, waste and soil drainage, heating and mechanical ventilation systems). However, you need to be aware that some changes to the interior, particularly the installation of central heating, the reduction in natural ventilation (to reduce draughts) and increased water vapour production can upset the moisture balance in an older property and may encourage wood rot in concealed timbers. Raising the moisture content (vapour pressure) can cause water vapour to disperse into colder, unheated parts of the building, including behind plasterwork, and raise the moisture content of timber in these spaces. Timber floor joists in contact with cold or damp masonry are particularly at risk from fungal attack. Indications of possible wood rot are a musty smell, distorted paint finishes and sometimes rusty-red spores (dry rot). This is a specialist field and you should seek professional advice.



Some features that may contribute to increased maintenance are:

- ☐ non-rectangular plan forms,
- ☐ storeys of differing heights,
- ☐ later extensions or additions,
- ☐ basements,
- ☐ bay/oriel windows,
- ☐ balconies,
- ☐ parapets,
- ☐ roofs with hips and valleys,
- ☐ flat roofs,
- ☐ dormer windows,
- ☐ cupolas and other elements that project beyond the roof surface,
- ☐ tall chimneys,
- ☐ skews and crowsteps.

Cracks and fissures

The presence of cracks and fissures in walls concerns many homeowners, who worry about their significance. However, the vast majority of cracks that occur in masonry walls are the result of moisture movement in porous materials. In the case of a stone-built house, most movement occurs in the mortar (especially cement mortar) rather than the stone. Fine cracks between the mortar and the stone are quite normal and are probably of long standing and not significant. Such cracks are of narrow width and can extend for a considerable length. If you become aware of cracks or fissures that conform to the points below you should seek professional advice.

Further advice on cracks is required when they:

- ☐ have recently formed,
- ☐ have started to increase in width,
- ☐ are more than 2mm wide,
- ☐ become wider at the top of the crack/fissure,
- ☐ extend through both the stone and mortar.



Planning Your Maintenance Programme

Whilst the main structural elements of your house will have a long life, other components may be less durable if not properly maintained. Also, the detail and assembly of the components may produce conditions which can reduce their life, such as increased moisture levels in timber and excessive expansion in metals. What this means is that you must plan your maintenance in a way that recognises the different performance characteristics of the components and materials in your house.



Keeping records is a key part of a house maintenance programme. Records allow you to keep track of all inspections carried out, when they were carried out, the results of inspections, defects noted and maintenance or remedial action implemented. A checklist is an important part of the exercise. It ensures that there is a structured approach and that all the important elements, components and features are inspected and assessed, whether or not a defect has been identified. It is also useful in alerting you to incipient decay or deterioration that needs to be monitored. The size and complexity of your property will influence the length and content of a checklist.



The steps in your maintenance plan.

- ☐ carefully appraise your property and draw up an inspection checklist,
- ☐ decide on the frequency of inspection for each item,
- ☐ identify those items that you can inspect yourself and where you feel competent to judge their condition,
- ☐ identify elements where you require professional help to gain access (e.g. to roofs) or to make an assessment of condition,
- ☐ keep a list of recommended tradespeople and professional advisors (if appropriate) for both inspection and repair work,
- ☐ on the basis of your inspection, draw up a plan for the maintenance of the property, which identifies the maintenance and repair that will be required over the planned timescale,
- ☐ agree the plan with your selected tradespeople so that they can make advance preparations for any work and build this into their forward work plan.

Frequency of inspections

Regular inspections are essential. You should develop the habit of looking critically at your property on a continuous basis. This helps to build up a picture of the property and how it is performing. In addition, it is always advisable after a storm, whether wind, rain or snow, to carry out an inspection of vulnerable areas. Look particularly for damage to roof coverings, chimneys and metal flashings that may provide a route for water penetration into the house. An inspection of attics and roof voids for any sign of water should also be done at this time.

Planned maintenance inspections need to be carried out in a meticulous and ordered way and thus require time. A casual and superficial approach should be avoided. However, not every element needs to be examined in detail on every occasion as elements like stone walls, for example, will not change significantly within a period of a few years.



Typical maintenance inspection cycles

Element	Frequency (months)			Possible action during inspection and other comments
	6	12	12-60	
Roof coverings		✓		Remove any debris and plant growths
Flat roofs		✓		Remove debris and plant growths, clear any rainwater outlets.
Gutters (parapet, valley, box)		✓		Remove debris, leaves, plant growth and clear outlets
Eaves gutters & downpipes	✓			Remove debris, leaves, plant growth and clear outlets
Flashings, secret gutters etc.		✓		Temporarily replace slipped metal elements
Rooflights, cupolas		✓		Remove debris and plant growths
Parapets		✓		
Chimneys (viewed from ground)	✓			
Chimneys (close inspection)		✓	✓	Every year if accessible from roof level, longer where access scaffolding required. Remove plant growth.
Projecting stone features		✓		Remove woody plants e.g. stone brackets, skew putts
Main stonework, including pointing			✓	
Harl/render		✓	✓	Visual inspection from ground level every year. Check for delamination and/or crazing by surface tapping every 5 years
Limewash/painted masonry surfaces		✓		
Windows and doors, including frames, fixtures and fittings		✓		
External paintwork	✓			Particularly important for window cills on south-facing elevations.
Vents	✓			Clear any blocked vents



Ensure that external vents do not become blocked by rising ground levels around your property



Damage to lead flashing and blocked rainwater goods can cause extensive damage



Due to their exposed location, chimneys should be inspected annually for signs of damage or deterioration

How to Inspect your Property



The inspection

- ☐ start with a preliminary inspection from ground level, using binoculars for areas above first floor level,
- ☐ use the previously prepared checklist,
- ☐ adopt a systematic approach,
- ☐ inspect each elevation in turn starting at roof level and working downwards (the checklist should have a page or pages for each elevation),
- ☐ carry out a detailed check of all timber components, testing for soundness (access upper floor windows from inside),
- ☐ check condition of all paintwork,
- ☐ record your observations on the checklist.



If you are unable to gain access to inspect the roof elements it is recommended that you employ the services of a professional building surveyor, architect or tradesperson, who has experience of traditional buildings to carry out this part of the work. You may of course wish to employ a professional to conduct the entire inspection.

When carrying out the inspection it is important to avoid damage to vulnerable features. It is easy to cause damage to elements such as eaves gutters and down pipes, projecting stone features, projecting timber cills and lime mortar harl by careless use and propping of ladders. You need to exercise care when working on the roof to avoid damage to metal gutters and flat roofs. It is best to try to avoid accidental penetration of these sometimes-fragile surfaces and use of a timber board to spread your weight is recommended. Also, avoid walking directly on slated or tiled roof surfaces.



Tools and equipment

- ☐ Extending lightweight ladder.
- ☐ Binoculars.
- ☐ Notebook.
- ☐ Maintenance inspection checklist.
- ☐ Heavy-duty gloves and trowel for removing plants and silt from gutters.
- ☐ Sharp metal probe/knife for checking soundness of timber and joints.
- ☐ Wood chisel for loosening seized window sashes.
- ☐ Waist bag for holding equipment when on a ladder.
- ☐ Safety glasses for use when working above head height clearing debris.

Safety considerations

Before undertaking an inspection you must assess any risks involved e.g. difficulty of access, slippery surfaces (on roofs or for supporting ladders at ground level), loose or broken glass. It is advisable to wear heavy-duty gloves and to wear eye protection when clearing gutters of accumulated debris. A facemask is also recommended when clearing pigeon droppings.

Always engage a fully qualified electrician and gas fitter to carry out inspections of the relevant services and appliances. The National Inspection Council for Electrical Installation Contracting (NICEIC) recommends that electrical systems be checked every ten years.

The major issue with respect to safety is working from ladders. Falls from ladders by house owners working on or inspecting their property are a frequent occurrence. As a rule, a tradesperson should do all inspections from ladders above one storey height. When using a ladder you should take the following precautions:

Working with ladders

- ☐ use a ladder that is long enough for the task to avoid excessive reaching,
- ☐ has an offset attached to keep the top of the ladder clear of overhanging eaves,
- ☐ do not rely on the strength of an eaves gutter to provide support for the top of the ladder,
- ☐ make sure the ladder is properly secured at top and bottom and is placed on a sound, hard, level base and not on soft soil or gravel,
- ☐ always have a competent person at ground level to keep the ladder steady,
- ☐ do not lean away from the ladder or stretch in such a way that your centre of gravity is outside the line of the ladder,
- ☐ always use at least one hand for support,
- ☐ do not climb the ladder in strong wind conditions.



Some roof structures can be difficult to access safely





While the main focus of this Guide is on the house, it is necessary to consider also features and elements that are external to the house, such as garden walls, gates, fences and paths. These features help to create the character of the house and their poor maintenance will impact on the overall impression of your home. The following points may be of assistance:

- ❑ Walls fronting the house are often of high quality and match the stone façade of the house – they need the same care and attention as the house.
- ❑ Stone gateposts set into the wall are important features and can be elaborate with carved ornamentation.
- ❑ Cast or wrought iron railings and gates should be preserved – they should be inspected for corrosion, stability, missing elements and fractures. Replacement parts should be in matching iron. Modern steel should not be used as an economy measure. A planned programme of maintenance painting should be established for all iron elements and features.
- ❑ Paths, steps and other forms of access should be retained and maintained in their original materials. Stone flagstones, for example, should not be replaced with concrete paving slabs or inappropriate brick paviors. Should individual stones require replacement, matching natural stone should be used.

Maintenance of External Features



When repairs are needed

From time to time it will be necessary to carry out repairs to your house to make good any defects, decay or deterioration due to wear and tear or weathering. However, because of the historic nature of your house, you will almost certainly have to engage the services of a specialist tradesperson to carry out the repair work. Unfortunately, traditional craft skills are in short supply and it is important that you fully explore the expertise of the persons you propose to employ. They should be completely familiar with the needs of a traditional building and are experienced in the use of traditional materials. It is thus advantageous to carry out research into the capabilities of the tradesperson before the need for repair arises. Repairs that are unsympathetic to the original construction will affect the character of the property and may result in expensive remedial work to restore the building to a satisfactory condition.

Materials for repair

To maintain the character of your house it is essential to ensure that the materials and components used in repair match as closely as possible, and are compatible with, the original materials and components. Often your contractor will have to source these materials from specialist suppliers rather than the local builders' merchant, e.g. lime and aggregates for lime mortar pointing, second-hand roof slates, decorative cast or wrought iron, replacement glass. These materials and components can be more expensive than those obtained from the local builders' merchant.

The appropriate, matching, materials for repair may not always be available and therefore regular inspection and maintenance, often referred to as "good housekeeping", will help to avoid further deterioration and consequent higher repair costs.

Selecting Specialist Companies and Tradespeople

Historic Scotland's Scottish Conservation Bureau maintains a list of suitable, qualified and experienced contractors. You will find contact details at the end of this Guide.

- ☐ Arrange to meet with selected companies/tradespeople before repairs become necessary.
- ☐ Discuss your anticipated maintenance and repair needs and assess the attitude, experience and knowledge of the company with respect to traditional buildings.
- ☐ Seek information on past repair work they have carried out on traditional buildings and ask them to give you references for some of their recent projects.
- ☐ Contact previous customers to check their satisfaction with work carried out and, if possible, visit the site to see for yourself.
- ☐ Do not select on the basis of cost alone as this may result in an unsatisfactory repair.
- ☐ Build up a good relationship with your selected tradespeople so that they become familiar with your property and understand its needs.
- ☐ When engaging a company rather than individual trades, make sure that the people who will actually work on your property have the necessary experience and skills.

Keeping records

Retaining the maintenance inspection checklists, together with records of repair work carried out, the contractors or trades involved, dates when work was done and the costs will offer a valuable historical record for you and future owners of the house. The presence of such a record will provide evidence of the care you have taken of the property whilst in your ownership and will be reassurance to potential purchasers of the house. In addition, along with the other documentation, it is useful to keep a photographic record of the repairs.



Listed Buildings And Repair Grants

What does listing mean?

Your Local Authority Planning Department will be able to tell you if your house is a Listed Building or is within a Conservation Area. Another easy way to find out is from Historic Scotland's website www.historic-scotland.gov.uk, then go to 'What we do' and 'Listed Buildings'. There are three categories of listing and the listing will describe some of the special features of your house and give some history and background to the property. In addition, your Local Authority may employ a conservation officer who can give advice on appropriate materials and methods of repair.

If you propose to undertake any work, which may change the appearance of the building you should always check with the planning authority to find out whether listed building consent is required. Changes that may seem minor to you – such as cleaning or painting all or part of the house, replacement of timber doors and windows with those of more modern materials – may have a major impact on the building's character and be subject to listed building consent. Contact your Local Authority Planning Department to discuss any proposed work that may affect the appearance of the house and they will be able to tell you if any consents are required.

Repair grants

In some cases a grant may be available to help with repairs and maintenance. Guidance can be obtained from your Local Authority Planning Department in the first instance.



Useful Addresses

Edinburgh World Heritage Trust

5 Charlotte square
Edinburgh EH2 4DR
Tel: 0131 220 7720
Fax: 0131 220 7730
Email: info@ewht.org.uk
Web: www.ewht.org.uk

Glasgow City Heritage Trust

22a George Street
Glasgow, G1 1QU
Web: www.glasgowheritage.org.uk

Historic Scotland Conservation Bureau

TCRE, Historic Scotland
Longmore House
Salisbury Place
Edinburgh, EH9 1SH
Tel: 0131 668 8668
Email: hs.conservationbureau@scotland.gsi.gov.uk
Web: www.historic-scotland.gov.uk

The Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS)

John Sinclair House
16 Bernard Terrace
Edinburgh EH8 9NX
Tel: 0131 662 1456
Web: www.rcahms.gov.uk

Scottish Lime Centre Trust

The Schoolhouse
Rocks Road
Charlestown
Fife KY11 3EN
Tel: 01383 872722
Fax: 01383 872744
Email: slct@scotlime.org
Web: www.scotlime.org

The Georgian Group

6 Fitzroy Square
London W1T 5DX
Tel: 087 1750 2936
Email: info@georgiangroup.org.uk
Web: www.georgiangroup.org.uk

The Victorian Society

Web: www.victoriansociety.org.uk

Further Reading

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