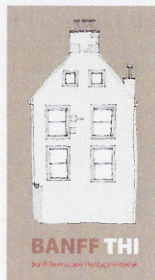




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Peterhead
Conservation Area
Regeneration
Scheme



Advice for Sustainable Maintenance of Traditional Buildings

Introduction

Scotland has a rich and varied built environment, which reflects the character of its people and development of the nation over the centuries. Aberdeenshire is home to a diverse array of historical buildings, ranging from Medieval castles to Victorian villas to 20th century industrial buildings. These historic buildings enrich the landscape, and help create the distinctive character of Aberdeenshire.



While great emphasis is put on important buildings such as castles and manor houses, the everyday buildings, like houses and shops, are often overlooked. As more and more buildings are lost, it becomes increasingly important to maintain our traditional buildings and traditional building techniques.

A priority for our future well-being is to reduce our carbon footprint by looking at more sustainable building options. Retaining and repairing traditional buildings instead of demolishing older building stock is a more effective use of our finite natural resources.

Buildings deteriorate over time, but with regular inspection and maintenance minor defects can be prevented from developing into major problems thus extending the lifetime of the building. This booklet contains advice for the sustainable maintenance of traditional buildings, including guidance on how to identify problems and simple steps which can be taken to prevent the deterioration of your property.

Advice for Sustainable Maintenance of Traditional Buildings

- ◆ In the first instance, always focus on what can be repaired before considering replacement. Locate and examine the cause of any problems before attempting to fix them, and don't allow serious problems to remain untreated.
- ◆ Make sure you obtain any necessary planning and legal consents before undertaking any work to your building. If you are unsure, contact your local planning office who can advise if your building is Listed or within a Conservation Area, and if your proposed work requires consent.



- ◆ Think about the history of your building, and how it has changed over the years, before making potentially unsuitable alterations which will detract from the character of the building. Respect the building's character and history and make sure the work is sympathetic to it rather than attempting to 'improve' by altering the original appearance.

- ◆ Use traditional materials and techniques to successfully maintain a traditional building and prevent future deterioration. Traditional materials tend to be natural and sustainable, and allow greater movement and breathability. Modern, man-made materials are likely to stimulate deterioration of existing traditional materials.

For example, using modern synthetic materials such as artificial stone to clad external walls can lead to problems of damp and decay as it inhibits the building's ability to 'breathe'.

- ◆ Keep your gutters, drains and rainwater pipes free from blockages to help avoid damp, decay and deterioration of your building. This basic task is often overlooked, but can have devastating consequences if ignored.



- ◆ Cast iron rainwater goods should be properly maintained to prolong their life. If replacement is necessary, this should be in cast iron.

Although plastic rainwater goods may seem like a cheap alternative, they are not robust and frequently buckle, for instance by snow sliding off a roof. They can be damaged by ladders, are easy targets for vandals, and will become brittle due to exposure to the sun's UV rays.

It is also worth noting that unlike plastic, cast iron is a sustainable material which, being a naturally derived product, is 100% recyclable.



- ◆ Replacing missing roof slates or pantiles can stop water penetrating your roof and causing damp leading to decay of timbers and roof trusses. It is important to match replacement slates with the existing roof covering, using reclaimed slates where possible or sourcing appropriate new slate from UK quarries in order to retain the character of your building.

- ◆ Damp in buildings can be caused by a wide variety of problems, from poor ventilation to lack of maintenance or inappropriate repairs. If a damp problem appears, do not leave it to get worse!

Look into what might be causing the problem and take action. It should also be noted that a damp wall allows greater heat loss than a dry wall, so in the long run fixing the problem will save money.

- ◆ Mortar and render repairs should be carried out using lime products. Natural lime-based mortars and renders have three main advantages over cement-rich mortars. Firstly they allow moisture to evaporate, enabling buildings to 'breathe'. Second, they are flexible, meaning the building can move slightly without cracking.

Thirdly, they are natural, sustainable products, and their production has a 20% lower CO² output than cement.

Cement mortars and renders are rigid and prevent moisture escaping, forcing it to escape through stones or bricks. This frequently leads to cracks in harling and acceleration in the decay of existing stonework.



- ◆ Blocked drains and gullies at ground level can lead to subsidence. Always ensure there is a free flow of water by clearing out any debris.
- ◆ Cut back vegetation such as ivy or other climbing plants on the exterior of your property. Along with hiding problems, such vegetation can lead to structural damage.
- ◆ Look after the existing building. Simple tasks like painting exterior wood and metalwork every three to five years will preserve the fabric and extends its life.

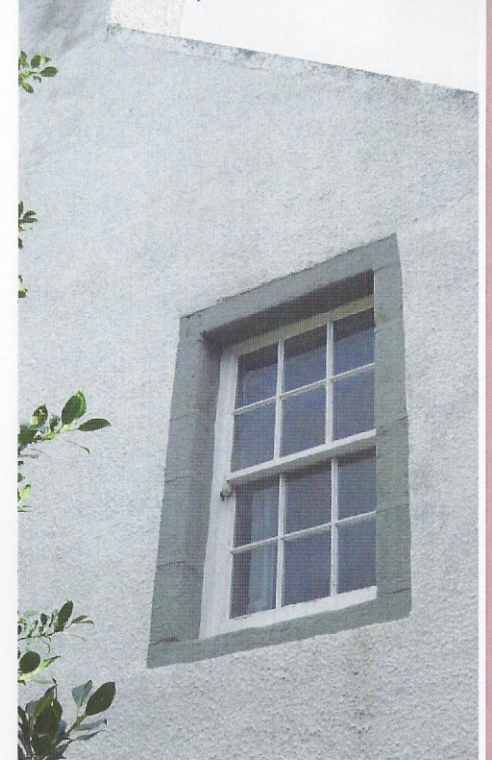


- ◆ Preserve your timber windows through maintenance and repair. In the long run, timber framed windows have a much longer life-span than uPVC, if they are looked after properly.

While uPVC can appear to be maintenance free, over a comparable life span of many existing 18th and 19th Century timber windows (i.e. 150 – 200 years) uPVC would be expected to discolour and for seals to break.

Typically, uPVC windows and doors can last around 30 years before they need to be completely replaced. In contrast, skilled joiners can repair original wooden windows, sorting out problems such as sticking or rattling.

With basic maintenance, windows that are already a century or more old may go on for another hundred years. On top of this, timber is a natural, renewable, low energy resource while the production and disposal of uPVC windows requires considerably more energy and involves a number of highly polluting, hazardous chemicals.



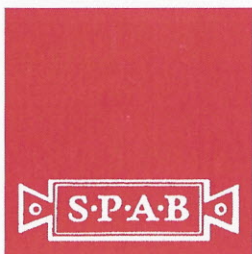
- ◆ Re-use existing materials or use reclaimed materials. The use of reclaimed or salvaged materials will result in a significant reduction in the embodied energy of a project. It will also help to retain the traditional character of the building.
- ◆ Repairs to, and replacement of, stonework should where possible use matching stone. New natural stone should be selected to match existing stone in colour and geology. A well matched stone will weather in the same way as existing stones, and blend in.

Artificial stones and concrete blocks do not weather in the same way as natural stone, and can have the effect of increasing the deterioration of surrounding stonework. Where natural stone cannot be used, approved stone repair substances can be used to artificially re-build the stone.



- ◆ Minimise damage caused by birds by taking preventative action. A chimney pot guard will prevent birds from nesting there and depositing nest material in the flue, while netting and spikes will protect ornate stonework and ledges. For large flat areas, anti-perch devices can be installed consisting of vertical metal posts through which wire is passed. Always seek advice from a specialist before installing pest-prevention equipment.
- ◆ **Lastly, if you can't do the work yourself, employ a specialist - this will save money in the long run.** Use reliable contractors or craftspeople familiar with traditional building techniques. Confirm their suitability by checking references or inspecting examples of their work.





The Society for the Protection of Ancient Buildings

Ten Minute Home MOT

NB: Using binoculars can be helpful!

1 Check your roof covering

- If it is covered with slates or pantiles, are any slipped or missing?

Look out for pieces of slate lying on the ground - these can be tell-tale signs of problem areas allowing rain to enter and cause rot very quickly.

- Has the leadwork lifted or distorted in places, or are there any signs of corrosion?



2 Look at the ridge tiles along the top of your roof

- Are they all there?
- Are there gaps where they join each other - i.e. can you see daylight through the joints?

Gaps may indicate a need to re-point the ridge tiles.



3 Do you have a chimney?

- Is it leaning or twisted?
- Is there any plant growth coming from the top or sides?
- Can you see if there is any mortar missing from the joints?

All of these can lead to potential problems.



4 Take a close look at the stonework, pointing, lime render

- Is the lime render swollen or bulging away from the wall?

If there is any obvious swelling of the lime render, try tapping with a coin - if there is a hollow sound the render might be loose, that is to say the render layer has pulled away from the stone wall surface.



- Are there any plants growing on the stonework or in the pointing?
- Can you see any cracks or fractures in the stonework or render?
- Are any stones splitting or crumbling?

If there is obvious damage to stonework, it is advisable to seek specialist help from a stone mason or conservator.



- Is there any staining or discolouration of the stonework or render?

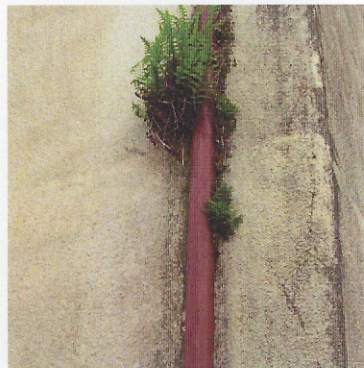
Staining indicates a persistent flow of water over a particular area which will penetrate and damage render and stonework and can lead to further problems of damp internally. It should also be noted that saturated stonework or render is more susceptible to frost damage.



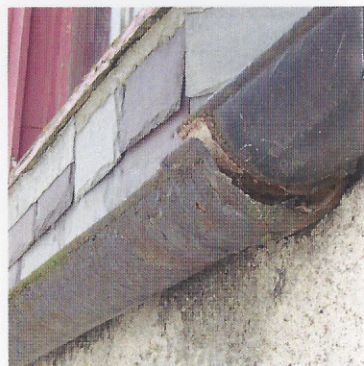
5 Check your gutters and down pipes

- Are they leaking at the joints?
- Do they overflow?
- Are they blocked? Vegetation, nesting material, even dead birds can block the flow of water.

Ideally, gutters should be cleaned twice a year to maintain a free flow of water.



- Are they catching water from the roof or is it running down the wall? Staining on the wall face may indicate a problem with your gutters.
- Are they fixed securely?
- Are they split or cracked?
- Are there signs of rusting and corrosion?



Re-checking your gutters and down pipes on a rainy day is advisable, as this is the best way to see any leaks.

6 If your windows and doors are made of timber they should be painted every three to five years

- Is there any bare wood visible, especially on the cills and the lower parts of the opening sashes?
- Are there any splits or cracking of the paint finish?

Regular painting provides protection. If timber windows and doors do not undergo regular maintenance, the timber can become damaged and require partial repair or total replacement.



7 Check all plant growth against the building, especially trees, bushes and ivy

- Are there any signs of plant growth on the walls, roof, chimneys or gutters?
- Where accessible, have you removed, cut back and pruned plant growth?

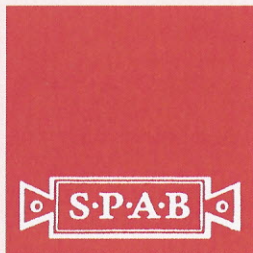
Vegetation growing on a wall or roof can cause many problems including dampness and structural damage.



8 If your 10-Minute Home MOT has identified problems consult a local builder for specialist advice

- Have you checked out your advisor or builder and asked for references?

An inspection checklist, which can be used a guide, has been included at the end of this booklet.



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www.maintainyourbuilding.org.uk

**SPAB National Maintenance Week
19th - 26th November 2010**



Contact details:

For information on Listed Buildings contact Historic Scotland:

<http://www.historic-scotland.gov.uk>

Historic Scotland Inspectorate
Historic Scotland
Longmore house
Salisbury Place
Edinburgh
EH9 1SH



Telephone: 0131 668 8600

Email: hs.listingsandconsents@scotland.gsi.gov.uk

For more advice on maintaining traditional buildings see:

Historic Scotland Conservation Advice:

<http://www.historic-scotland.gov.uk/index/heritage/conservation/conservation-advice-and-services.htm>

SPAB Maintain Your Building:

<http://www.maintainyourbuilding.org.uk>

Find out if you live in a conservation area by contacting Aberdeenshire Council's Planning Service on 08456 08 12 07 or viewing the Aberdeenshire Local Development Plan online or in your local library:

<http://www.aberdeenshire.gov.uk/planning>

The Aberdeenshire Council Environment Team website has further information and advice on Listed Buildings, Conservation Areas, and Building Repair Grant Schemes:

https://www.aberdeenshire.gov.uk/built_heritage/index.asp

For more information on Conservation Areas, a guide can be downloaded from the Scottish Government's website:

A Guide to Conservation Areas in Scotland

<http://www.scotland.gov.uk/Publications/2005/03/29141519/15200>

For details on training courses in traditional building skills, including lime work and dry-stone walling see:

Scottish Traditional Skills Training Centre

<http://www.rgutraditionalskills.co.uk/Fyvie.htm>

Scottish Lime Centre

<http://www.scotlime.org/index.asp>

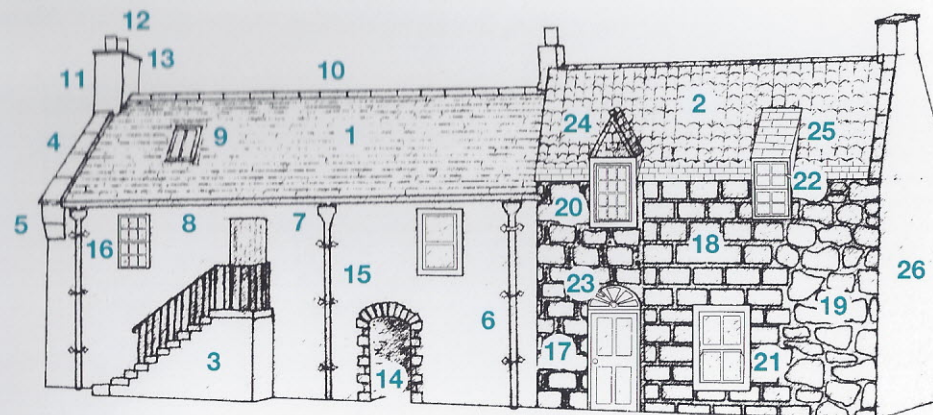
The Society for the Protection of Ancient Buildings

<http://www.spab.org.uk>



Glossary

- | | | | |
|----|---------------|----|--|
| 1 | Slate Roof | 14 | Piend / Pend |
| 2 | Pantile Roof | 15 | Harling |
| 3 | Forestair | 16 | 6-over-6 Sliding Sash & Case Window |
| 4 | Skew | 17 | Cherry Cocking (small stones set between larger blocks of masonry) |
| 5 | Skewputt | 18 | Ashlar (dressed) Masonry |
| 6 | Down Pipe | 19 | Coursed Rubble Construction |
| 7 | Hopper Head | 20 | Multipane Casement Window |
| 8 | Gutter | 21 | 2-over-2 Sliding Sash & Case Window with Horns |
| 9 | Rooflight | 22 | Astragal (glazing) Bar |
| 10 | Ridge | 23 | Fanlight |
| 11 | Chimney Stack | 24 | Dormer – Pedimented |
| 12 | Chimney Can | 25 | Dormer – Catslide / Swept Wallhead |
| 13 | Chimney Cope | 26 | Gable |



Historic Building Intervention Programme - Building Checklist

External Survey	Problem	Priority	Notes
Roof			
Slates / Pantiles			
Ridge			
Flashings			
Skews			
Other			
Cast-Iron Rainwater Goods			
Downpipes			
Gutters			
Hopper Heads			
Fixings			
Chimney			
Stacks			
Pots			
Walls			
Stone / Brickwork			
Harling / Render			
Pointing			
Other			
Timber-Framed Windows			
Glazing			
Cills			
Joints			
Paintwork			

Timber Doors			
Glazing			
Joints			
Paintwork			
Door furniture / hinges			

Internal Survey	Problem	Priority	Notes
Internal Roof Space			
Sarking			
Joists			
Insulation			
Other			
Rooms			
Ground Floor			
First Floor			
Second Floor			
Other			
Grounds			
Boundary Walls			
Railings			
Gates			
Drains			

Building Name / Number: _____

_____ Date: _____