### Historic Buildings Maintenance Guidance





Walsall Council has prepared this document to assist owners of old buildings to understand what factors result in decay, how undertaking regular visual inspections assists in recognising potential issues that can lead to deterioration of buildings and the importance of maintenance and repair works to keep the building weatherproof and in a good condition.

#### What is Maintenance?

Maintenance can be defined as "routine work necessary to keep the fabric of a place in good order."

(Historic England Conservation Principles, Policies and Guidance 2008).

The "main objective of maintenance is to limit deterioration"

(Historic England, 2021/2018).

#### The Importance of Maintenance



The key cause of deterioration in older buildings is the lack of routine maintenance and repair works having been undertaken. Visual inspections and routine maintenance every 6 to 12 months would assist you in identifying problem areas that require attention before problems identified become progressively worse.

Undertaking early maintenance and minor repair works is a cost effective way to keep a building weatherproof and in good condition. It also avoids extensive damage to the building fabric which could be more costly in the future.

You could draw up a maintenance plan listing all areas for visual inspection, which would assist you in getting to know your building better and identify what changes are happening to the building.

#### What is Repair?

Repair can be defined as "work beyond the scope of maintenance, to remedy defects caused by decay, damage or use, including minor adaptation to achieve a sustainable outcome, but not involving alteration or restoration"

(Historic England Conservation Principles, Policies and Guidance 2008).

A repair "is normally carried out to sustain the significance of the building or place" and the "objective of repair is to reduce the longterm deterioration of a building's fabric by remedying the cause of any defects"

(Historic England, 2021/2018).

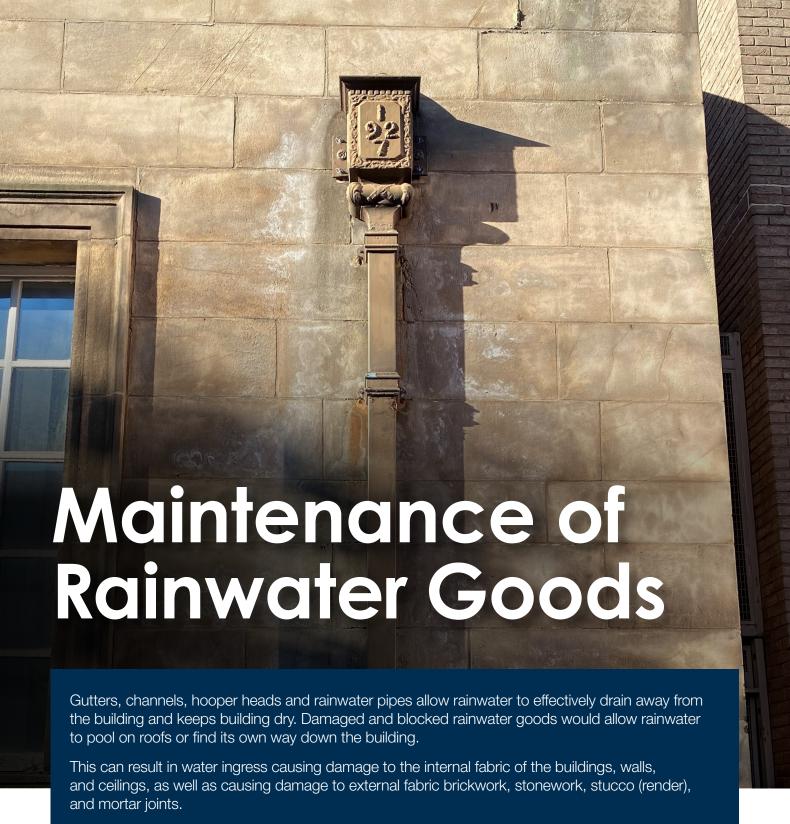
#### **Inappropriate Maintenance**

Inappropriate maintenance measures can have a harmful impact to the fabric of an older building.

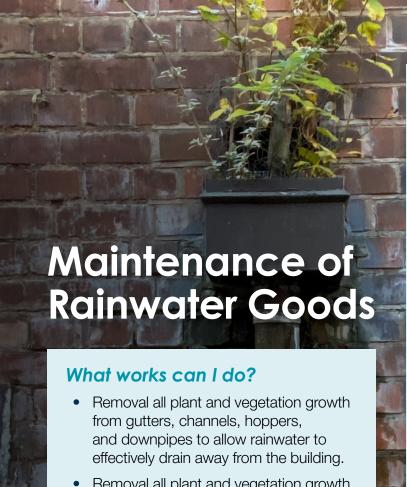
Modern cement mortars are harder than traditional soft lime mortars and affects a buildings ability to evaporate moisture effectively. Modern cement renders tend to trap moisture behind the render, eventually the render will fail and crack, potentially falling away from the building.

Vegetation and plants are another factor that damage older buildings. Plant seeds can be deposited on a building, on roofs and in gutters by wind or birds. They can also embed in small cracks and mortar joints, resulting in damage to mortar joints and result in water ingress into the building. Plants and vegetation growing in gutters, channels, hoppers, and downpipes stops rainwater effectively draining way from the building and results in water ingress.

Once moisture penetrates buildings other problems may surface, such as roof timbers getting wet, resulting in wet rot or dry rot, or moisture soaking into plasterwork and damp patches on ceilings.



Blocked rainwater goods can trap water and in colder conditions this water would freeze and expand causing cracks and tears in rainwater goods. We advise that historic fabric is retained and repaired. Any missing sections of rainwater goods that cannot be repaired, must be replaced with rainwater goods made of the same material to the original rainwater goods.



- Removal all plant and vegetation growth behind and around rainwater goods, to prevent water ingress into the building.
- Removal all foliage, silt and other debris from gutters and hoppers, which will prevent downpipes from getting blocked.
- Plants and vegetation growing close to the building should be removed if they are causing a harmful impact on the building and resulting in damage to the fabric of the building.
- Securely re-fix loose rainwater goods.
- Any rainwater goods sloping the wrong way should be re-positioned to allow for rainwater to effectively drain away from the building.
- Missing sections of rainwater goods including gutters, hoppers, downpipes should be replaced.
- Repaint cast iron rainwater goods to prevent rust and deterioration.
- Repair timber fascias, bargeboards, soffits, and timber brackets. These works will require the assistance of a roofing specialist/painter/decorator.

- During heavy rainfall does rainwater overflow the gutter from the roof?
- Does rainwater pool in one area on a flat roof?
- Are gutters positioned properly, so they slope towards outlets?
- Is vegetation/plants/leaves/silt causing blockages in gutters, hoppers, channels, downpipes?
- Are there any plants growing out of gutters, hoppers, downpipes?
- Are the downpipes properly connected to gutters?
- Are there any cracks in the gutter, hoppers, or downpipes?
- Are there missing sections of rainwater goods that need replacing?
- Are all downpipes fixed safely to a wall with a bracket?
- Can you see any green staining or algae growth on the brickwork/ stonework below the gutter and behind downpipes? Green staining and algae growth can be a sign of a leaking joint or that the gutter and downpipes are damaged.
- Can you see if mortar has been washed out of joints around downpipes? The missing mortar can indicate downpipes are damaged.
- With a mirror can you see if the back of the downpipes are in a good condition?
   Cracking and corrosion indicate the downpipes are damaged.
- Is paint peeling or flaking from cast iron rainwater goods?
- Are your gutters fixed to timber fascia's?
  What condition are the timber fascia's in, are there visible areas of rot, is paint peeling/flaking from the fascia?
- What condition are the bargeboards, soffits and any timber brackets in?

## Maintenance of Brickwork

Traditionally buildings were constructed from either brick or stone or a combination of the two materials with a lime-based mortar. Bricks and stone are natural materials that are both durable and breathable.

The brick and stone materials of traditional older buildings together with soft lime based mortar allow moisture to evaporate from the building. Lime mortar has the ability to repair small cracks in the mortar itself.

The elements will erode lime mortar and it will eventually fall out of brick and stone joints. Often, re-pointing is undertaken in a cement mortar, which is much harder and stronger than lime-based mortar, and traps water.

Trapped water in a cement joint will allow moisture to penetrate to the adjacent brick and stone and in colder winter weather this moisture will freeze and thaw resulting in spalling of the brick and stone.

This in turn exposes the soft underbody of the material to be exposed to the elements, allowing moisture to penetrate further into the material, resulting in internal damp issues and accelerated degradation of the material.

Works to be undertaken to bricks and stone is specialist skill, and you are strongly advised to seek professional advice and not carry out any works that may be harmful to or cause further harm/deterioration/degradation of the fabric of the building.

#### What works can I do?

- Only re-point open or eroded joints in a soft traditional lime based mortar.
- Remove any plant or vegetation growth from mortar joints and from brickwork and stonework.

#### What should I look for?

Identify what is causing the deterioration of the brick and stone, is it the rainwater goods or a hard cement mortar?

The cause of deterioration needs to be established prior to any works to the brick or stone being undertaken, as otherwise the same problems will remain.

- Have the mortar joints decayed?
- Can you see if the mortar is missing or loose within the joint?
- Can you identify any bricks that have lost their faces?
- Can you identify any brickwork or stonework which has spalled or crumbled away?
- Are there any visible signs of cracks in the brickwork or stonework?
- Is there any green staining or algae growth on brickwork or stonework?



**Please note:** Cement mortars should be avoided for re-pointing works, as they accelerate degradation of brickwork and stonework. Further advice should be sought from a brick specialist or stonemason.

## Maintenance of Roofs

It is essential to keep the roof of a building in good repair. Regular visual inspections of roofs, where possible can identify potential problems with a roof. Routine roof maintenance can keep a building weatherproof. Missing/loose or cracked slates and roof tiles will allow water to penetrate the roof structure and leak on and soak into roofing timbers, resulting in damage to the timbers, which are expensive to repair and replace.

External visual inspections from the ground will allow you to identify if any slates, tiles, or ridge tiles are missing. You may wish to undertake external visual inspections with the use of binoculars, the use of a drone or seek professional assistance for a close-up survey of the roof.

External visual inspection of valleys and abutments should be undertaken to ensure these are in a good condition. Internal inspections of the roof will identify any problems areas and areas where damage has occurred, which require attention.

Neglecting a roof that requires maintenance and repair can in the long-term lead to further damage to the building and costly repairs.

#### What works can I do?

- Replace missing slates and tiles to prevent water ingress and damage to the roof structure.
- Replace missing ridge and hip tiles.
- Remove moss and vegetation from roofs.
- Repoint mortar joints in a traditional lime based mortar.
- Repair flat roofs including the roof covering.
- Repair flashing where required.
- Repair or replace leadwork.
- Allow the internal roof space and ceilings to completely dry out before undertaking repairs and redecoration works.

**Please note:** Replacement materials including slates, tiles and ridge tiles should match the colour, size, and thickness of the original materials. Artificial roofing materials are not natural products and should not be used on historic older buildings. Spanish slates are manufactured for hotter climates and not for wetter climates experienced in the UK and should not be used on historic older buildings.

A specialist local roofing contractor is essential to assist with the roof repairs referenced below.





- Are there any missing/loose/cracked slates and tiles?
- Are there any missing ridge tiles?
- Are there any broken slates or tiles on the ground or in the gutters?
- Is the roof covered in large areas of moss or vegetation? Moss & vegetation can block gutters and downpipes.
- Can you see, maybe with the use of binoculars, any missing mortar joints between ridge and hip tiles?
- Flat roofs: is the roof covering material in a good condition? Can you identify any tears, splits, or holes in the roofing material? Tears, splits, and holes in the roof material will allow water to penetrate the building causing damage.

- Flashing: are you able to check flashing joints that are fixed into walls are in good condition? Can you see if flashings are dressed down and not blown or moved away from the surface of walls? Can you see if the joints where flashings are fixed into a wall are in a good condition? Can you see if there are any holes or splits in the flashing?
- Can you see the leadwork? Is it a good condition? What colour is the leadwork? Leadwork should be dark grey colour and lighter streaks can indicate areas of erosion.
- Internal roof inspection: are the purlins and beams in the loft dry or are there visible signs of water ingress?
   Do the purlins and beams feel dry or wet? If the purlins and beams are wet, it indicates water is penetrating the roof space. Are there visible signs of damp patches on the ceiling?

# Maintenance of Chimney Stacks

Chimneys allow for ventilation in older buildings. They are located on the highest part of a roof and can be architecturally intricate in their design and shape.

Material falling from a chimney at a great height is dangerous and can cause injury and damage. Any damage to the brickwork and stonework of a chimney, degraded or missing flaunching, or missing mortar from joints can lead to internal damp issues.

You may wish to use binoculars or a drone to undertake a visual inspection of the chimney or seek professional assistance to undertake a close-up survey of the chimney.

#### What works can I do?

- Re-bed loose brickwork and stonework in the chimney stack.
- Only re-point open or eroded joints in a traditional lime based mortar to prevent water ingress and damp issues.
- Chimney pots should be seated into a straight position and secured to the chimney stack.
- Replace broken chimney pots and undertake repairs to cracked chimney pots. The design of the original chimneypot should be matched.

**Please note:** A specialist local roofing contractor is essential to assist with chimney repairs referenced below.



Further advice should be sought from a brick specialist or stonemason.

- Can you see if the chimney sits straight?
- Can you see if the brickwork or stonework forming the chimney stack is cracked, spalled, eroded, or missing?
- Are you able to identify if any of the stonework or brickwork in the chimney stack is loose or bulging?
- Can you see if the chimney pots are missing, leaning, or cracked?
- Can you see if the mortar is missing between the brickwork or stonework?
- Are any visible cracks along the chimney stack, or at the very top of the chimney?
- Can you see any plant or vegetation growth either growing in mortar joints, brickwork, stonework or at the very top of the chimney?

# Maintenance of Windows and Doors

Windows and doors keep all buildings weatherproof, they keep the wind and rain out and keep the building dry. Timber windows and doors are vulnerable to the elements, being exposed to rain and wind. It is essential to maintain timber windows and doors to ensure they function to keep the building weatherproof and dry.

Timber windows and doors can be maintained easily, areas of rot can be cut out with new timber sections spliced in and redecoration works, painting can be undertaken to protect the surface of the windows and doors from water ingress and deterioration.

Undertaking repairs to historic windows is cost effective and cheaper than outright replacement of windows. Windows and doors can stick in damp weather, especially in winter months and if they have been over painted with several layers of paint.

It is therefore essential to undertake repair and maintenance of timber windows and doors in warmer seasons when windows and doors can be sanded down and repainted. Care should be taken when sanding down historic windows and doors they have previously been painted with a lead base paint, and it is advisable to seek further professional advice prior to undertaking any such works. Draught proofing windows and doors allows heat to be retained in the building.

- Can you see if the paintwork on timber windows and doors is splitting, flaking, or peeling away from the window or door?
- Can you open timber sash windows? Do they open easily? Do they stick? Are all parts of the sash window operating and functioning as they should? Can you see if any part of the window or window sill is rotten?
- What condition are the glazing bars in?
- Is the putty holding the panes of glazing in a sound condition? Has the putty failed/eroded or is missing?
- Are the light panes (glazing) intact?
  Are any of the light panes broken or cracked?
- Can you see if any part of the door is rotten?
- When you close the timber door does it stick?
- Is the timber door distorted?
- Is any part of the window or door rotten?
- Are there any draughts coming in from the windows or doors?
- What condition is window and door furniture in?

## Maintenance of Windows and Doors

#### What works can I do?

- Sand down, prepare windows and doors and redecorate/re-paint to protect the windows and doors and to free sticking windows and doors from over painted layers of paint. Please adhere to the advice on sanding above.
- Lubricate hinges and pulleys to ensure windows function and open as they should and to prevent jamming.
- Replace missing putty with new putty to keep window lights safely and securely in place. Old putty should be raked out by hand and the area cleaned prior to applying new putty to ensure the putty adheres to the surface.
- Replace any broken or missing glazing within the windows with glazing of the same thickness, dimension, and colour.
- If broken glazing cannot be immediately replaced, the window should be boarded over to keep the building weatherproof and to prevent birds from flying into the building.
- Consider secondary glazing to windows to prevent draughts.
- Consider draught proofing measures around windows and doors to retain heat in the building.
- Clean, repair or replace window and door furniture and ironmongery.
   Replacement furniture and ironmongery should match the existing furniture/ ironmongery in design, colour, and finish. Replace missing ironmongery and furniture.
- Clean windows and doors with a soft cloth and warm water to remove dust and dirt.



Works to cut out rotten timber and splicing in of new timber will need to be undertaken by a joiner/timber specialist, you are advised to seek professional advice from a joiner or a timber specialist.

### Condensation

Condensation is "water which collects as droplets on a cold surface when humid air is in contact with it" (Oxford Dictionary, 2023). Visible signs of condensation are visible water droplets on walls (normally seen in bathrooms), black mould growth and peeling wallpaper.

Everyday living including taking showers, baths, cooking and using a kettle has resulted in increased moisture in our homes. Modern living requirements has resulted in air bricks being blocked up and other interventions in our homes being undertaken which has resulted in lack of and limited ventilation in the home.

Simple measures such as opening a bathroom window after showering and bathing, opening kitchen doors when cooking or using kitchen extraction hoods allow moisture to escape into, the environment, which in turn reduces condensation in the home.

#### What should I look for?

- Visible signs of water droplets on walls mainly in bathrooms and kitchens.
- Water collected on windows when you wake up from sleeping.
- Black mould growth on walls and ceilings.
- Wallpaper that is peeling away from walls.

#### What works can I do?

- Open bathroom windows after showering and bathing.
- Open kitchen doors or use extraction hood when cooking.
- Ensure air vents are not blocked.
- Increase ventilation in the home.



# Do I need listed building consent or planning permission?

Listed Building is one which has been placed on the National Heritage List for England, and there are currently over 500,000 across England. There are over 160 listed buildings in Walsall borough. Most of them are Grade II listed. There are also five Grade II\* listed buildings. You can find out more on the Historic England website.

You may require Listed Building Consent to undertake works to a Listed Building. If you are the owner of a traditional building, you are advised to contact Walsall Planning Department to establish if your building is Listed, whether the works you wish to undertake require Listed Building Consent and/or Planning Permission. It a criminal offence to carry out any works to Listed Buildings which affects its 'special character' as buildings of special architectural and historic interest and can be punishable by an unlimited fine and imprisonment.

The Borough of Walsall has 18 Conservation Areas, you are advised to contact Walsall Planning Department to establish if your building is within a Conservation Area and whether the works you wish to undertake require Planning Permission.

Some conservation areas in the Borough of Walsall are subject to greater controls, called Article 4 direction orders, which seek to preserve and enhance the character and appearance of Conservation Areas. Some individual buildings in the Borough are also subject to Article 4 direction orders which seek to protect their character. Article 4 direction orders restricts certain works that would not normally require planning permission, for example replacing windows and doors with new windows and doors. You are advised to contact Walsall Planning Department to ascertain whether your property sits within a Conservation Area that is covered by an Article 4 direction or whether your property is covered by an Article 4 direction order.

### When undertaking visual external and internal inspections of your building, it is important that you are safe.

It is advisable that you undertake an initial visual assessment and then decide whether you need to employ the services of a professional to undertake more detailed visual inspection/survey work for you.

You may wish to seek the assistance of a professional especially for works that involve working at heights.

You may wish to have a contingency plan and inform others if you are undertaking visual inspections alone.

You may wish to use binoculars, cameras, notebooks, extending light weight ladder, face mask, safety glasses, heavy duty gloves, drones, and other simple tools to avoid high level work and to protect yourself from debris and dusty material including pigeon droppings.



Works to old buildings may disrupt important protected habitats. If you are planning works to a roof, you are advised to consult with the Council's Ecology Officer for further advice on protected species, in particular bats and nesting birds.

Trees within a conservation area are protected. Trees can also be protected by either individual or group tree preservation orders. You are advised to contact the Council's Arboricultural Officer for further advice to establish if trees are within a conservation area or subject to a tree preservation order and whether any tree works require consent from the Council.

Email: planningservices@walsall.gov.uk







The Society for the Protection of Ancient Buildings

Advice Page

#### The Institute of Historic **Building Conservation**

Advice Page

#### Historic England Guidance

- Essential Tips for Maintaining and Repairing Older Homes
- Principles of Repair for Historic Buildings
- How to Find the Right Professional Help
- What Permission Might I Need to Make Changes to My Older Home?
- Using the Right Materials to Repair Your Older Home
- Traditional Windows: Their Care, Repair and Upgrading
- Maintenance Checklist
- Understanding Decay in an Older Home

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