

Some people ignore good advice.

We know the doos and don'ts.

Coo coo.

# Take a bird's eye view of your property

A house or tenement will have a good, long life but only if it is properly maintained.

Many homeowners put their property investments at risk by not carrying out simple, routine maintenance and repairs.

Glasgow City Heritage Trust can help people with grants for repairs but routine maintenance will prevent the need for such costly action.

**As a general guide about 1% of a property's value should be invested each year on its maintenance.**

Paintwork, roof slates and masonry all need to be kept in good condition to keep your home watertight.

Dealing with minor defects when they appear can prevent dampness, decay and expensive emergency repairs once things get out of hand.

## Every six months, check:

- > Roofs and chimneys
- > Air vents
- > Paintwork

## Every year, check:

- > Gutters and downpipes
- > Stone walls
- > Drains
- > Stairwells and closes
- > Roof spaces



## Professional advice

A suitable professional with conservation accreditation should be engaged to advise on repairs to historic properties. Glasgow City Heritage Trust can point you in the right direction.

There are several bodies that can advise on selecting contractors with traditional skills such as **The National Federation of Roofing Contractors** and **Stone Federation Great Britain**.

As a rule of thumb you should obtain two or three quotes from contractors. Check that they:

- > Have indemnity insurance
- > Can provide references
- > Are VAT-registered
- > Offer guarantees or a complaints service via a trades association

## Useful Organisations





## Stonework

The Romans brought the technique of building with squared stone blocks - ashlar - to Scotland. From the mid-19th century, stone quarrying became mechanised and ashlar facades became commonplace. Much of Glasgow is built from ashlar masonry taken from local quarries.

Stones are laid down according to their bedding plane - the way in which the sand grains were laid down during its formation. It can therefore withstand a considerable degree of erosion.

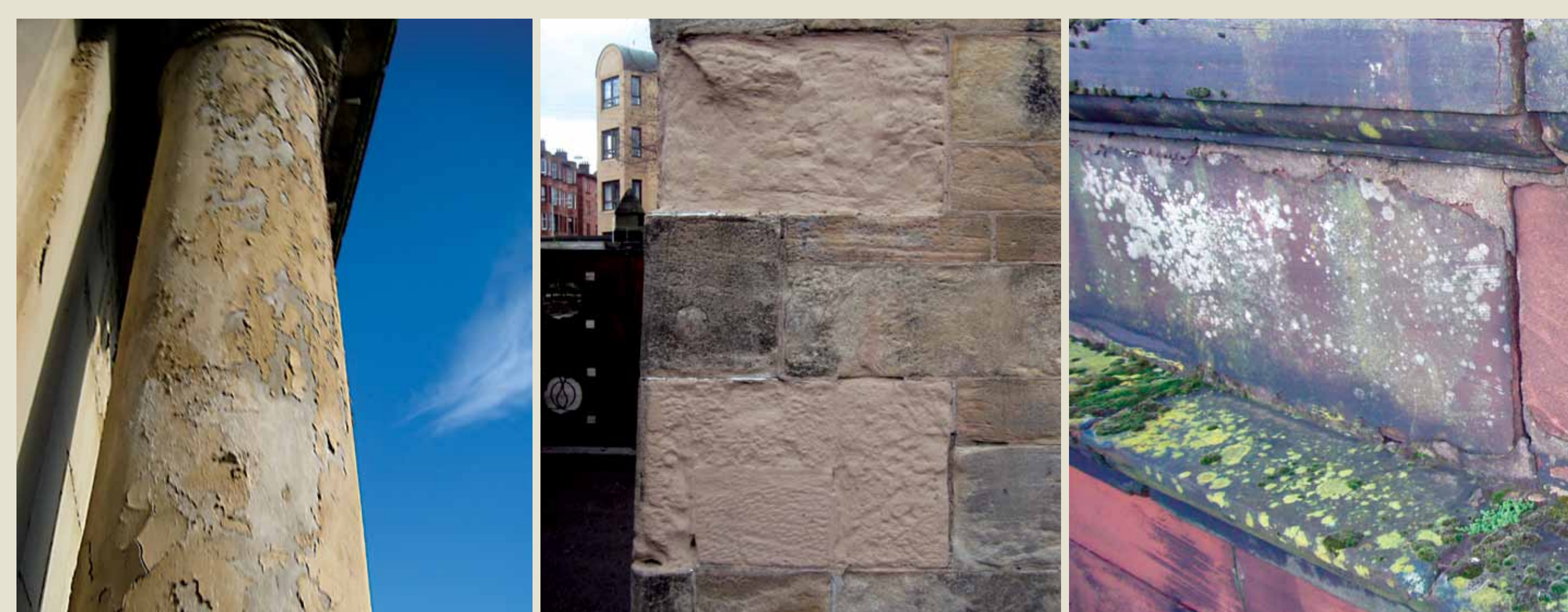


### Problems

- > Stone is a porous material so it is vulnerable to the effects of water. Problems are indicated by loose grains, a separating skin, mortar jutting out and stains.
- > Stone cleaning has made things worse by removing the protective outer surface.
- > Cement patches and synthetic coatings over damaged stones causes decay at the joint.

### Repair and Maintenance

- > Open joints between blocks should be re-pointed with an appropriate lime-based mortar. If they are left open for long periods they will encourage plant growth and further decay.
- > Any cleaning should be done by dry brushing or with a stiff natural bristle brush and water.
- > Much stone decay begins with problems elsewhere such as splits in lead-lined gutters, missing flashings, fractures in gutters and downpipes, and failed underground drainage. All flashings and rainwater goods should be regularly checked and maintained.
- > An ashlar wall can withstand a considerable degree of erosion and distress before any indenting work is required. Always consult a reputable masonry contractor first.



An outer skin peeling away is an indication that the stone is deteriorating but sandstone laid down in the correct way is very strong and can withstand a good deal of decay before repairs are needed. Always use a reputable masonry contractor.



## Slate roofs

Many traditional Scottish buildings have slate roofs. The relatively small and thick Scottish slates were laid with the largest slates at the base of the roof and the smaller ones at the top giving the characteristic look to a lot of Glasgow buildings. Scottish slate has a good reputation as a long-lasting material and some roofs have already lasted more than 150 years.

## Gutters and downpipes

Stone buildings need to have rainwater removed from them so gutters and downpipes form an essential part of the building's architecture. Until the end of the 18th century they were only found on high-status buildings but mass production during the 19th century saw them become widespread. Scottish cast iron manufacturers were world-leaders, famous for their decorative designs.

### Problems

- > High winds can lift slates from their position.
- > Nails not being driven in far enough damaging slates in the courses above.
- > Nail sickness: Occasionally all the nails can become corroded and fail at the same time. If this happens stripping and replacement is required.



A suitable professional should inspect the roof once a year and replace any missing slates. Victorian slaters were able to create distinctive, flamboyant finishes. Damp on inside walls is often an indication of problems on the roof.

### Repair and Maintenance

- > Roofs should be inspected after storms from ground level using binoculars and annually by a professional.
- > Check the number of damaged, missing or slipped slates by looking along the bottom of a single course. Any slates out of alignment require attention.
- > If more than a quarter of the slates are cracked, broken, dislodged or missing, it may be more practicable to strip and re-roof the building.
- > Check the internal roof space for evidence of leaks to reveal other external problems.
- > Check for many chinks of light through slates, indicating horsehair felt has perished. The roof should be stripped and reslated.



Balloon coverings will keep leaves and debris from blocking downpipes. Gutters should be cleared regularly to prevent plant growth and any damaged sections replaced. Victorian cast iron manufacturers in Glasgow were famous for their decorative embellishments.

### Problems

Blocked or broken rainwater goods are often responsible for deterioration and costly repairs. Signs to note include:

- > Eroded mortar or masonry
- > Plant or algae growth
- > Wet rot in external or internal joinery
- > The build up of water in drains
- > Internal damp patches
- > Staining

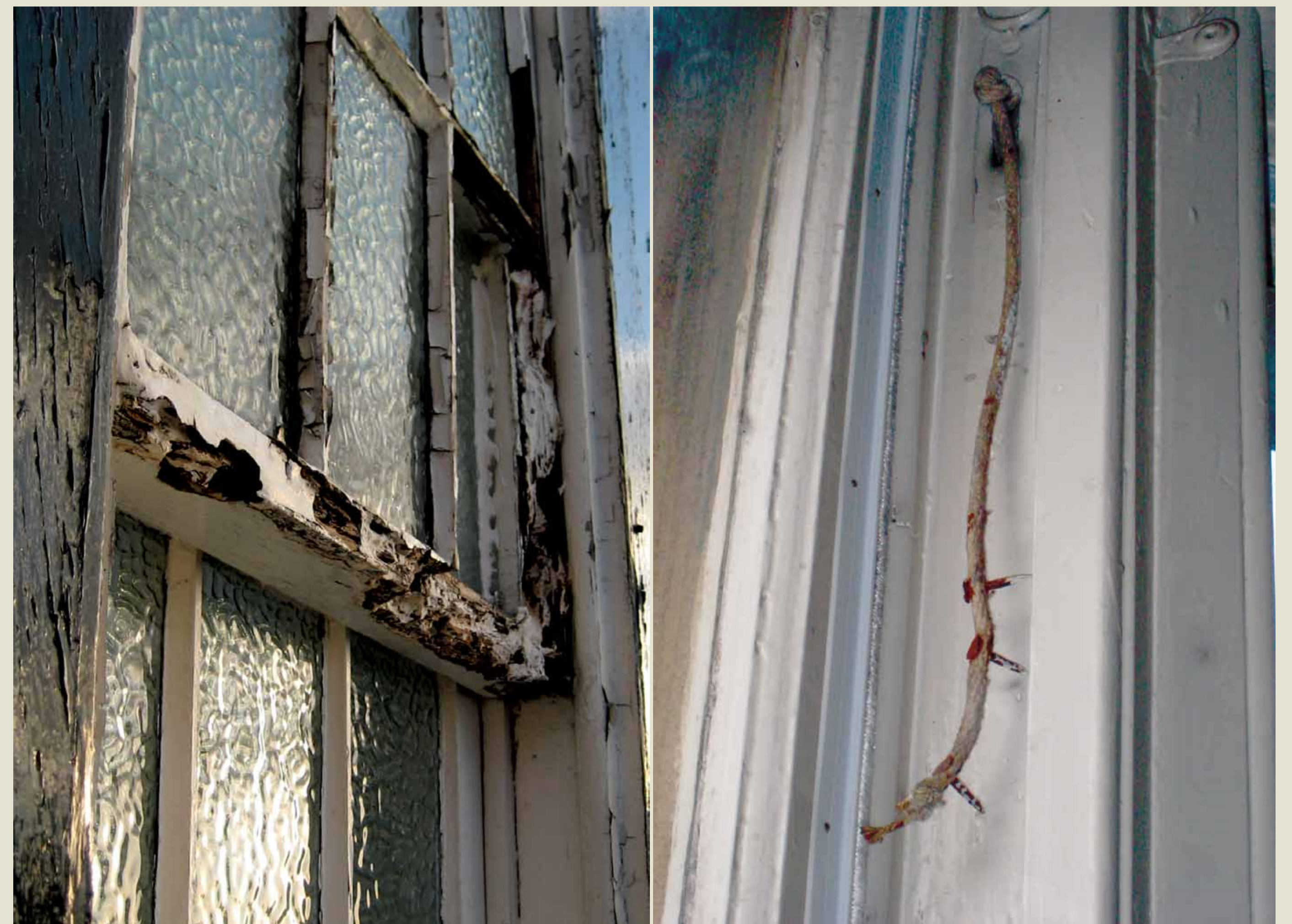
### Repair and Maintenance

- > With appropriate care and attention cast iron rainwater goods will perform well.
- > Rainwater goods should be inspected and cleaned annually.
- > Leaks and overflows are often visible during heavy rainfall.
- > Vegetation, leaves and debris should be regularly cleared out from gulleys and drains.
- > Leaf guards can be fitted to gutters, and wire balloons placed over the tops of downpipes, to help reduce blockages. These should be cleared regularly.
- > Cast iron should be repainted. Remove any rust with a wire brush or sandpaper beforehand.
- > Any defective joints should be re-sealed with an oil putty.



## Sash and case windows

In the late 17th century, pulleys and weights were first applied to timber-framed windows to balance the weight of the individual frames, creating the sliding sash and case window. This new style of window soon became popular throughout Scotland and is now a recognised traditional feature. As glass-making techniques improved, the size of panes increased, and the glazing bars became more slender.



Routine painting every three to five years will protect wooden frames. Rotten sections can often be removed and replaced without the need for a new window. Broken cords can be replaced.

### Problems

- > Where paint breaks down, the timber is exposed and becomes vulnerable to decay.
- > Windows are often painted shut, or are hard to open because of broken sash cords.
- > Putty and mastic is lost or deteriorates.

### Repair and Maintenance

- > Regular cleaning removes corrosive grit.
- > Rot is often localised and straightforward to repair. Modern timber is rarely as robust as the original so it is best to retain as much as possible.
- > Repaint every three to five years to protect from effects of the weather on the outside and condensation on the inside.
- > Putty should be completely covered by paint which should also slightly overlap onto the glass to seal the joint.
- > Traditional mastic made of a mix of burnt sand and linseed oil is a long-lasting, durable material and is still readily available. Cut out defective mastic and replace.
- > Replace broken cords.



Sash and case windows are distinctive features on many Glasgow buildings and with care they can last as long as the rest of the building.



## Lead

Lead is one of the most durable metals used in building, often performing well for hundreds of years. It is extremely resilient and malleable and is therefore ideal for keeping out rainwater at the complex junctions and architectural features such as: bay windows, chimney flashings, dormer flashings, flat roofs, gable flashings, parapet and valley gutters, rainwater outlets, roof hips and ridges.

### Problems

- > Lead can become torn or dislodged during storms.
- > It can be damaged by objects falling onto it.
- > Gulleys can become blocked by debris.

### Repair and Maintenance

- > Lead should be inspected annually and after any severe storm to determine whether or not strong winds may have lifted or distorted the lead work from its original position.
- > Installing leadwork requires a high level of skill. New lead can fail within a few years if incorrectly installed.
- > Valley gutters and rainwater outlets should be cleared once a year to ensure that water is free to flow away.



Lead is ideal for roofs as it is light and malleable but waterproof. Gulleys can become blocked and should be cleared regularly and ridges should be checked after storms in case lead sections have started lifting away.

## Chimneys

Chimneys and flues first appeared in the Middle Ages and since then they have conveyed the householder's status. They are integral parts of the structure, function and aesthetic composition of a traditional building and the surrounding streetscape.

The chimney also plays a vital role in drying and ventilating a room as the rising air draws new air in from under the floor.

### Problems

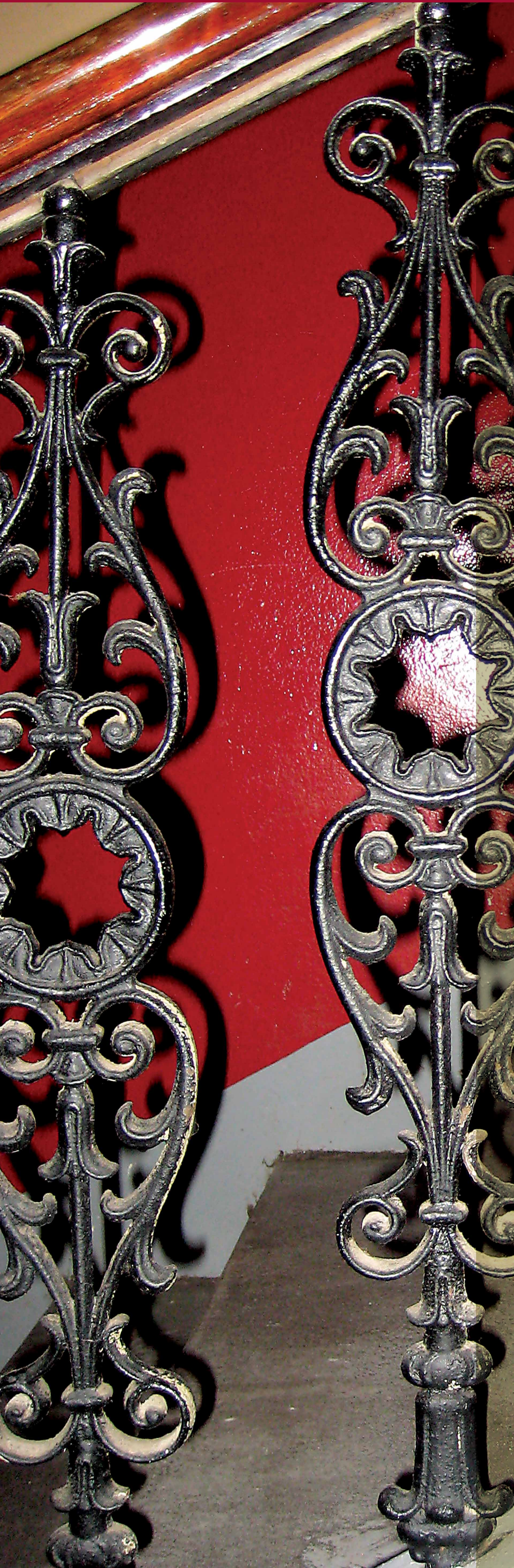
- > Washed out or cracked mortar joints can let water in.
- > Plants will take root and damage chimneys.
- > Smoke in an upstairs room, fragments of mortar falling down the chimney and the fire not drawing well are signs of problems.
- > Chimneys in tenements should be checked thoroughly as one damaged flue can cause problems in several houses.
- > Excessive soot holds moisture which leads to further damage in frosts.



Remove plant growth as this will attack the masonry, breaking it and leading to leaks or further structural problems. Any redundant aerials should be removed as the fixings will loosen and cause damage. Redundant flues should always be vented.

### Repair and Maintenance

- > A building professional should check closely before any action is taken.
- > Chimneys should be checked once a year and any cracks repaired. Repointing and sometimes re-rendering is required.
- > Any visible vegetation should be removed and the roots poisoned to prevent further damage.
- > Where original fireplaces are still in active use flues should be swept annually to avoid the possibility of a chimney fire.
- > Remove redundant aerials and refit poorly attached satellite dishes as these loosen the stonework.
- > A chimney will probably last no more than 100 years so should eventually be rebuilt.



## Gates and Railings

With mass production in the 18th and 19th centuries cast iron manufacture became a significant industry in Scotland. Much of the architecture of this period incorporates railings, gates and balconies and detailed ornamentation such as finials and ridge cresting. In many cases, it is possible to identify the original makers and foundries through their marks on surviving cast work.



### Problems

Warning signs of corrosion include:

- > Uneven surface known as 'pitting' or blistering paint
- > Rust-coloured staining washed onto supporting masonry
- > An oily residue on the surface of paint
- > Plant growth in water and dirt traps
- > Damaged or flaking paint
- > Distortion as iron expands when corroding

### Repair and Maintenance

- > Regular maintenance will prolong the life of ironwork. Annual inspections should be conducted and areas of rust or corrosion on the ironwork should be removed with a wire brush, chisel or sandpaper.
- > Never paint over rust. When painting, several thin coats are more effective than fewer thick coats. Allow each coat to dry as the upper coats will be damaged by the evaporation of solvents from the undercoats.
- > Painting should not be done from November to February as paint will not cure properly. Avoid breezy conditions that will cause dust damage.
- > For all other repairs an expert should be sought.



Glasgow was one of the world's leading manufacturers of cast and architectural iron, much of which is still visible in our streets. When paint bubbles up it is an indication that the iron beneath is corroding.