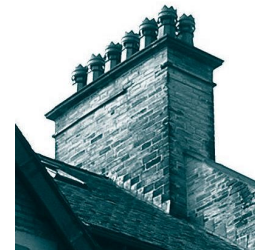


# 1a

## Maintenance, Repair and Restoration

# Chimneys



### The Conservation Value of Chimneys

As increasingly fewer houses are heated by open fires or solid fuel stoves, the majority of chimneystacks in historic buildings are seen as being redundant, and in some cases stacks are reduced in height or removed altogether to save on future maintenance, while others are simply ignored. Chimneystacks and pots are both important features of the skyline and roofscape of conservation areas and are important in terms of both the individual interest of a building, and the group value of a terrace or fold.



In historic houses the number of chimneys indicated the wealth and status of its occupant, compared to cottages and industrial housing where a single hearth would be used for heating and cooking. Chimneys are also key in providing ventilation, by helping to draw air through the house. The style of a chimney can reveal the age of a building, or when it was adapted or altered. In some cases chimneys have architectural details such as an entablature, ashlar stonework, panels or decorative pots which complement the architectural details of the main body of the house.



### The Maintenance and Repair of Chimneys: Best Practice

= The general condition of chimneys should be surveyed regularly every 6 months from the ground and up close every year if the chimney is accessible from roof level. Inspections should look for damaged pointing, cracked pots, leaning stacks, cracks, vegetation, decayed stone, damp and leaks.



= Cracked or leaning chimneystacks may not be dangerous. A structural engineer can find out if a leaning chimney is dangerous and what steps need to be undertaken, ranging from repointing and replacing decayed stone to the partial or full rebuilding and lining of the chimney.

= Loose, cracked or crumbling mortar should be repointed in accordance with Section 1e of this guide, but use sulphate-resisting cement in the mortar mix if possible. An appropriately pointed chimney will be more structurally stable and the stonework will stay dry.

= Decayed, cracked or damaged stone 'bricks' in the stack should be carefully removed and replaced with new or reclaimed stone 'bricks' with traditional mortar. If the wall of a stack is particularly slender or decayed remove no more than one 'brick' at a time and allow the mortar to properly set before removing the next.

= Damp can be a problem in chimneys due to condensation or the ingress of rain. Issues of condensation can be solved by ensuring that flues are not blocked at the top and bottom and are well ventilated. A well ventilated flue (whether in use or redundant) is kept dry by warm air rising through it. If condensation remains an issue, damp can be reduced by introducing a flue liner. The ingress of rain can be prevented by ensuring the stone, mortar and flashings are in good condition. If rain



falling down the flue itself is a problem, discrete capping is possible which allows adequate ventilation.

- = Replace any defective lead or zinc flashings (metal covers at the junction of the chimney stack and roof) and replace or repair any defective 'soakers' which tuck under the slates of the

roof. This will prevent rainwater soaking into the stack and roof structure around the join. Traditional flashing is visually discrete and should not be obvious when viewed from the ground.

- = Cracked pots can be replaced with new or reclaimed pots. Many of the traditional styles are still manufactured.

- = The flaunching (cement-rich mortar which holds pots in place and protects the top layer of the stack from the elements) decays quickly. If this is loose, cracked or crumbling, it should be carefully cleaned off and the pots re-set in new flaunching.

- = Any vegetation on the stack or pots should be carefully removed. Growing roots can damage mortar and stone and make the chimney or its pots unstable, while the vegetation itself can obstruct the flue.



Top: These well maintained chimneys enhance the appearance of this house.  
Above: The removal of posts and cornice detail and the shortening of the stacks has drastically altered this roofscape.

## The Restoration of Chimneys

- = A missing or drastically reduced chimney stack can be returned to its original height, provided the chimneybreasts remain in place to support the weight of the structure. The appropriate material, mortar and finish should be applied depending on the materials and finish of the original house. The original height and detailing of the chimney may be apparent if there are similar buildings elsewhere in the conservation area or if historic photos exist. In any case, the Conservation Team is happy to advise.

- = Many traditional styles of chimneypots are still being made and are readily available. The appropriate style of pot may be evident elsewhere in the conservation

area. The appropriate style of pot may be evident elsewhere in the conservation area, or the Conservation Team can advise. The new pots should be fixed to the chimney using flaunching (a traditional mortar with a slightly higher cement content).



- = The removal of inappropriate pointing, paint or render from a stack should be undertaken in accordance with Section 1e of this guide.

- = If a disused flue is to be used for open fires, solid fuel stoves, or by gas fires, central heating systems or boilers, you must test whether the flue is usable. Fallen debris in the fireplace, blockages, partial blockages or



Top: Only two of the nine houses in this terrace retain all their details giving a disjointed skyline.  
Above: The retention of full height chimneys and pots gives this terrace a uniform appearance.

smoke escaping into other flues are all signs that the parging (mortar or render lining of the flue) has deteriorated or is damaged. Cast or solid liners or flexible ducting can be introduced to re-line the flue and return it to use.