



The repair or replacement of timber sash and case windows



Enterprise, Planning and Infrastructure
Planning and Infrastructure
Aberdeen City Council
St Nicholas House
Broad Street
Aberdeen AB10 1GY
www.aberdeencity.gov.uk

Window Repair

Defective sash and case windows should be repaired where possible, and their complete replacement should only be contemplated where they have clearly deteriorated beyond practical repair. In many case windows are replaced where only a minor amount of timber is rotten or where paint is peeling or cracking. The beauty of sash windows is that they can be repaired to allow continued service into the future.

Most of the benefit which accrues from fitting new windows is that they are less draughty than older windows, the comfort value of the 'double glazing' itself being minimal by comparison. On the other hand, original windows can be fitted with modern draught stripping systems at a fraction of the cost of fitting new windows. Other benefits which result from this are a reduction in external noise passing through gaps around the window sashes, the ease of operation of the windows, and the elimination of rattles.

Window Replacement

Where an inappropriate modern window is to be removed and a sash and case window reinstated, or where it is agreed that replacement of a defective original sash and case window is the only feasible option, the replacement window should match the original in all respects, with particular attention being giving to the following:

Section Dimensions

The sizes of timber sections in the new window should closely match those of the original. This is particularly relevant to astragals and to the bottom rail of the lower sash, which is frequently too shallow on new windows. In this respect the bottom rail should be at least 75mm deep and 25mm deeper than the meeting rails, on elevation. No more than 20-25mm of the sash box should be visible in the window opening, the remainder being concealed behind the masonry window check. Generally, when the window is fully closed, the visible part of the sash stiles, top rail and meeting rails should be of a similar width/depth.

Sash operation

Sashes will slide vertically to open and may be operated by sash weights or spiral spring

balances. Additionally it will be acceptable for the lower sash to be fitted with 'simplex' hinges or similar, to allow the sash to open inwards for ease of cleaning, providing both sashes retain their vertical sliding operation. The relative proportions of the upper and lower sashes of the new windows must be the same as in the original windows.

Glazing retention

Glazing should preferably be retained in position with putty but where double glazing units are to be fitted it may be that glazing beads will be required. In these circumstances the glazing beads should be wedge shaped to match a putty fillet. Such a bead would taper from 10mm at the glass to less than 2mm at the outside. The edge of the bead should be flush with, or kept slightly back from the face of the sash. It must never project out from the face of the sash, or an unwelcome shadow line will be created around each pane of glass.

Astragals

Where astragals are required, they must be kept slender to match the thickness of the original astragals, particularly in multiple pane sashes. Typically these astragals may only be 17-19mm wide and it may not be possible to accommodate double glazing in these circumstances.

In listed buildings, where the interior of the building can often be as important as the exterior, the internal profile of the astragals must not be crudely over-simplified, but should reproduce traditional moulding appropriate to the period and detail of the building. In certain circumstances, only a faithful reproduction of the original moulded profile can be accepted.

Astragals must carry through the sash to completely separate each pane of glass. Dummy astragals stuck to the glass or hinged astragal "cassettes" are not acceptable.

Sashes with "horns"

It has become common practice for some manufacturers to extend the side stiles of upper sashes of their sash windows to form "horns" by the way of extra embellishment. Original Georgian and early Victorian windows never have horns, and neither should the windows which replace them. Horns do however appear on some later Victorian and Edwardian sashes.

Their use should be contemplated only where there is clear evidence that they existed on the original windows and the design of the horns should match the original.

Construction materials

Sash and case windows will normally be formed in red pine for painting. It is strongly recommended that the timber be double vacuum pressure impregnated with a suitable preservative, as this can greatly enhance the life of the window for a relatively small increase in cost. As this may not be included as standard by all window manufacturers, property owners should seek confirmation from their contractor that their windows have been so treated. A brush or spray applied preservative is not nearly as effective as one which is vacuum pressure impregnated.

Windows may also be formed in hardwood but in the interests of sustainability property owners may wish to check that the timber has come from an appropriately managed plantation and not a tropical rainforest. Window will, in most circumstances, be required to have a white finish.

External finishes

As white is the colour of most existing sash and case windows in conservation areas in Aberdeen, this is the colour which new sash and case windows are generally required to be, and other colours will be agreed to, only in exceptional circumstances. It is recommended that new windows be finished externally in white microporous paint applied in accordance with the manufacturers instructions, or white opaque stain, both of which allow the wood to breathe, rather than a polyurethane based gloss or varnish, which may retain moisture entering or already present in the wood, causing eventual failure of the paint finish and accelerated decay in the wood.

Required drawings

As misunderstandings frequently arise as to what constitutes a "like for like" replacement, drawings will be normally be required showing full details of the sash and case windows to be fitted. To avoid unnecessary duplication of effort, contractors who fit sash and case windows on a regular basis are advised to deposit with Planning &

Infrastructure, a set of drawings showing details of their windows, at a scale of 1:1 or 1:2. Such details would include sections through window head, meeting rails, bottom rail and cill, window jambs and astragals. In addition, an elevation of the window should be provided in every case, showing the position of the meeting rails and the arrangement of any astragals.

Grants

Grants may be available from the Aberdeen City Heritage Trust for the repair, replacement or reinstatement of timber sash and case windows in certain situations. The grants will be directed mainly at the repair of existing sash and case windows, rather than their replacement. For information about grants, please contact:

Project Officer
Aberdeen City Heritage Trust
PO Box 10450
Aberdeen AB10 1WS

Telephone: 01224 522755
E-mail: info@aberdeenheritage.org.uk
Web: www.aberdeenheritage.org.uk

In addition, within the area in and around the Green in the city centre grants are available for a range of restoration and repair works as part of the Green Townscape Heritage Initiative. This includes the repair and reinstatement of sash and case windows. For further information please contact:

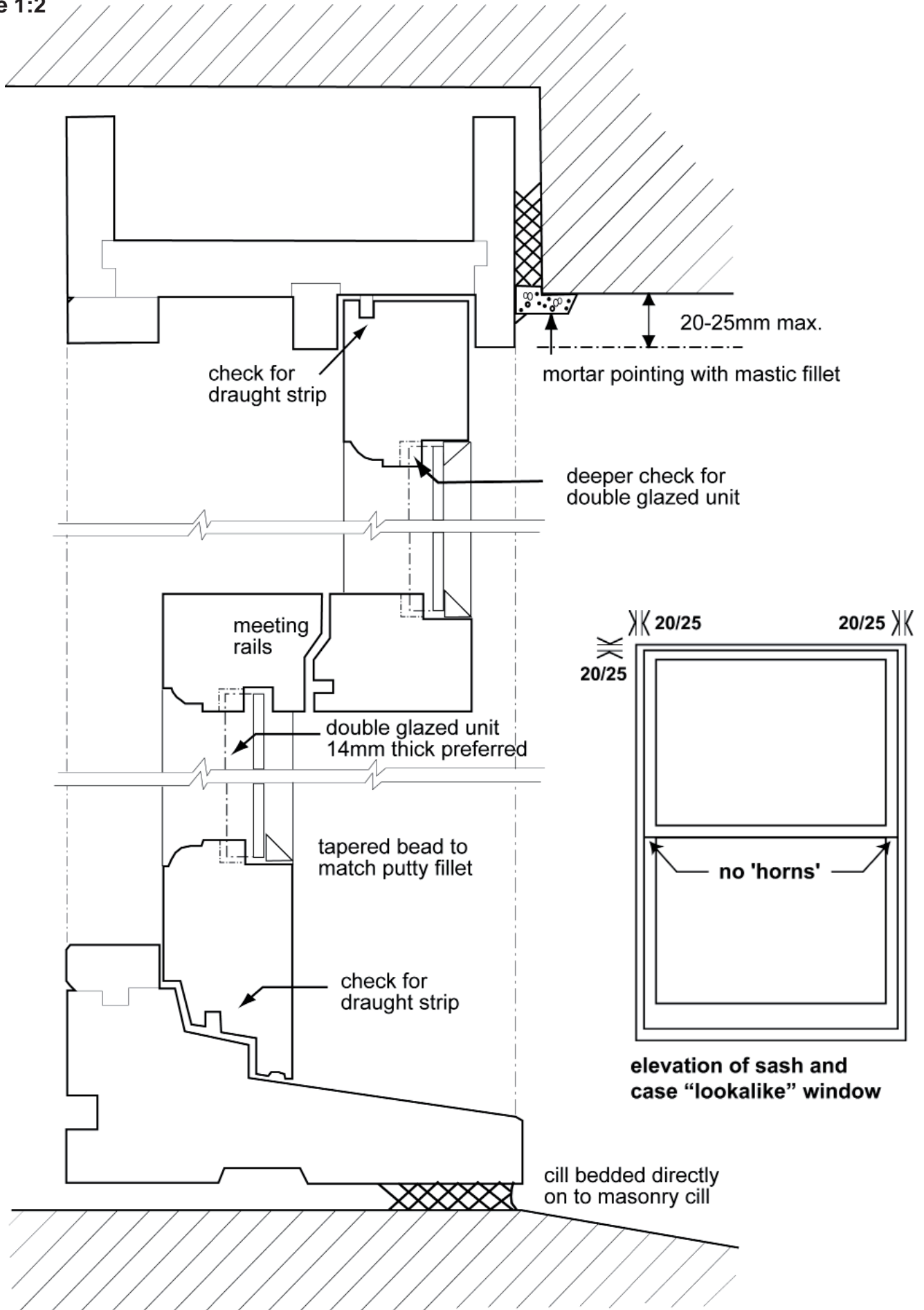
Project Manager
The Green Townscape Heritage Initiative
9th Floor
St Nicholas House
Aberdeen AB10 1GY

Telephone 01224 223318
E-mail: GrYoung@aberdeencity.gov.uk
Web; www.aberdeencity.gov.uk/greenthi

PLEASE NOTE THAT THESE GRANTS ARE DISCRETIONARY AND THE CRITERIA FOR ELIGIBLE WORK MAY DIFFER FROM THOSE REQUIRED TO OBTAIN STATUTORY CONSENTS.

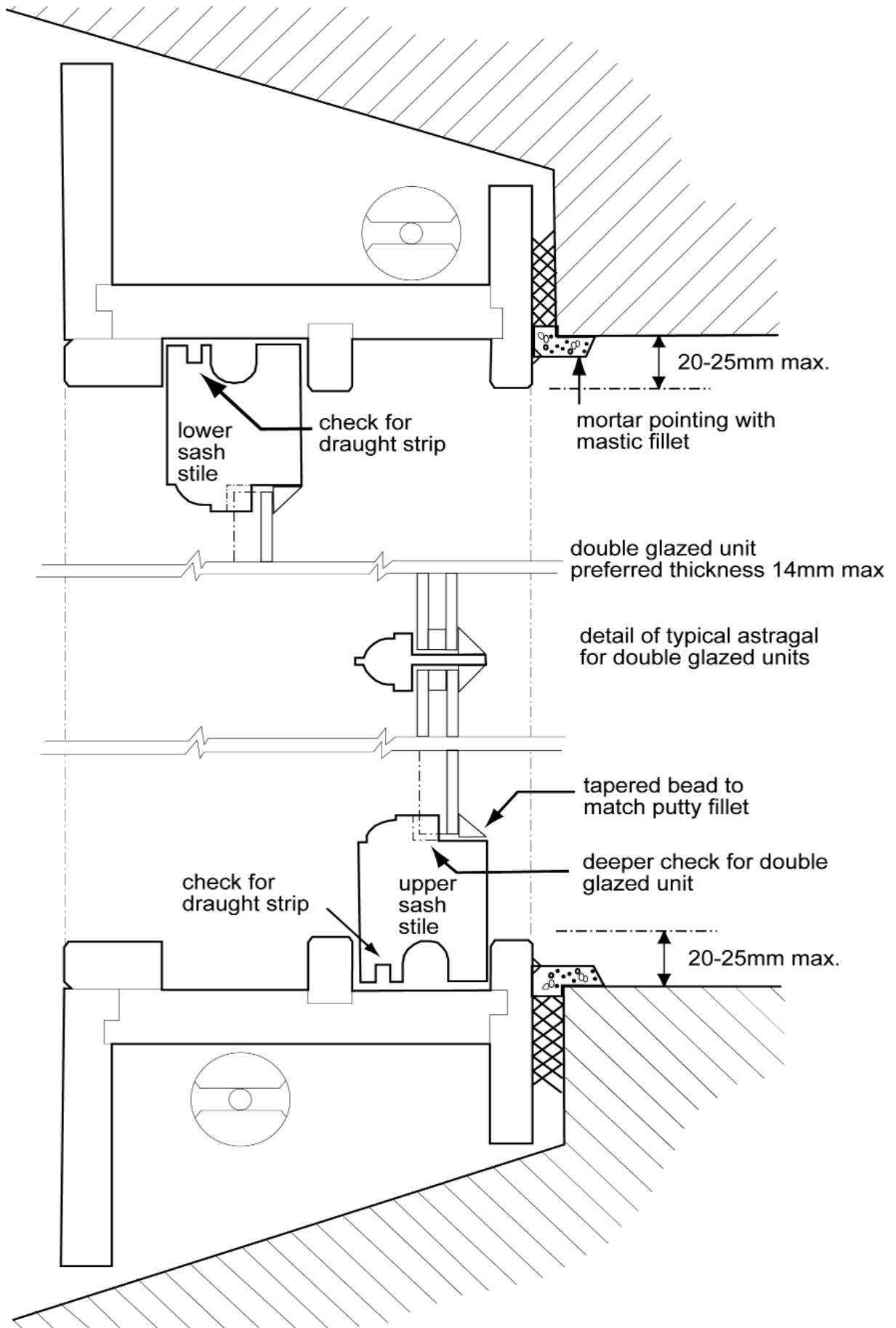
Vertical section through typical sash and case window

Scale 1:2



Horizontal section through typical sash and case window

Scale 1:2





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Further information

If you require any further information other than on grants please contact us:

Conservation Team

Enterprise, Planning and Infrastructure

Aberdeen City Council

St Nicholas House

Broad Street

Aberdeen AB10 1GY

Telephone: 01224 523470

Fax: 01224 636181

E-Mail: pi@aberdeencity.gov.uk

