

Windows

Windows are the eyes of a building. Ill proportioned and poorly detailed replacements in unsympathetic materials are disfiguring. Windows and doors in masonry walls such as brick or flint should reflect the solidity of the wall by being inset at least 100mm. In timber framing they should be level with the outside face of the wall to reflect the thinness of the construction and should have a painted timber pentice board at the head for weathering and sometimes also an architrave to add interest.

Openings in rendered blockwork can be detailed as either masonry or timber-framed and the solidity of the wall can be emphasised using ashlar markings in the render.

Traditional windows are in timber and can be either vertical sliding sash, horizontal sliding sash (sometimes known as Yorkshire sash) or outward opening side hung, top hung or fixed casement windows. They should be symmetrical and balanced, usually with a vertical emphasis of casements and glazing panes. Fixed lights should match opening lights in appearance. Window cills should be substantial with an outer face of at least 40mm.

The earliest casements were metal frames with leaded lights. Georgian vertical sliding sashes became more fashionable from the 18th century and were used regularly until the late 19th and early 20th century.

Sash windows originally did not have horns (the projections at the bottom of the upper sash). From about 1875, horns became more common as they provided a stronger timber joint. The horn looks more prominent if the window has a large section frame, and therefore if the frame is large to accommodate double glazing, windows should avoid having horns.

The casement window regained popularity from the late 18th century onwards. Side opening casements were sometimes used on

less important elevations in combination with sashes on more important elevations.

Opening lights should finish flush with the casement, although sometimes the mullions are larger and project further outwards giving a more pronounced shadow line. 'Stormproof' casements (where the casements project in front of the frame) are modern and appear more bulky than a traditional window.

Timber windows may be subdivided with glazing bars and the size and design varies according to the style and date of the window. The earliest sash windows of circa 1700 had very thick glazing bars about 40mm (1 5/8") wide and ovolo in section. Glazing bars then became narrower until circa 1800 when they were very fine and sometimes as little as 16mm (5/8"). They had a variety of fine mouldings of which ovolo, lambs-tongue and astragal were the most common. Generally glazing bars for single glazing are 18mm (3/4") wide and of ovolo section, and the glass is putty fixed.

Existing windows should be retained and repaired *in-situ* if at all possible and any original glass should be retained. The texture and play of light in original crown and cylinder glass windows cannot be reproduced with new. It is often very thin so should be treated carefully. Double glazed windows are not normally acceptable in listed buildings but may be used in most conservation area and conservatory situations.

The reflection and glazing edge detail distinguish double glazing from single. Tinted or non-reflective glass has a very different reflection to ordinary float glass or old glass and is not normally acceptable. Secondary glazing can be used to improve resistance to noise and thermal loss but should be able to be opened for cleaning and to provide air movement around the window frame.

These can be timber or proprietary secondary glazing units. The frame should line up with the frame and glazing bars of the window.

Trickle vents spoil the appearance of windows but there are alternatives like well designed pentice board vents, wall vents or eaves vents. If they cannot be avoided, it is possible to conceal them behind a batten fitted to the top of the frame.

20th-century historic buildings are a special case and any alteration will need to be informed by an appreciation of the original construction and architectural style, which may involve the retention or reinstatement of aluminium or steel windows. Crittalls, an Essex firm based originally in Braintree, were market leaders in the design and production of metal windows.