Bereco explain retaining traditional design in conservation areas with the use of solid vs stick on bars.

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In 2009, the Heritage at Risk campaign on conservation areas raised the loss of traditional windows as a cause for concern, stating that unsympathetic replacement of windows and doors represented the number one threat to our heritage and affected no less than 83% of conservation areas.

Careful consideration should be given to the replacement of any windows in a conservation area. One such consideration and area of debate amongst conservation departments is the glazing bars or astragals as they are sometimes known and if a ‘stick on’ replica glazing bar should be accepted.

The History of the Glazing Bar

From the 16th century glazing was most commonly divided by lead in the form of diamond shaped leaded lights. From the 17th century onwards rebated timber glazing bars began to be used with the developments in the manufacture of glazing and as larger and clearer sheet glass became available. Glass was fitted into a bed of putty and pinned into place using glazing ‘sprigs’, more putty was applied to weatherproof the joint between the glass and the bars before it was painted.

Glazing bars reached their greatest elegance and refinement between 1785 and 1825 where glazing patterns in sash windows began to take the design of six over six but always in proportion with the building façade.

Early glazing bars were often around 40mm thick to support the fragile glazing of the time and were ovolo moulded in shape, as glazing improved and became lighter thinner glazing bars were introduced some as thin as 12mm and lambs tongue and gothic designs were founded.

Examples of glazing bars: 1: Late 17th - 18th Century  2-5: Early 18th - Early 19th Century. 6: Late 19th Century Type
Modern Day Glazing Bars

In the late 20th century double glazed units were introduced to improve the thermal performance of windows. These units can now range in thickness anywhere from 14mm (narrow cavity) up to 35mm (acoustic & triple glazed units) and as a result glazing rebates within windows have had to be increased to accommodate such thicknesses and weights of glass.

The direct glazing of a sealed unit into a rebate led to issues with condensation of sealed units; water ingress around individual panes of glass and early deterioration of timber sections.

To avoid these issues, a more robust method of glazing was required and the drained and vented method was introduced. In use for the past 25 years, the glazing rebate incorporates weep holes which allow water to drain away and keep a flow of air circulating around the glazing rebate.

Following the drained and vented method of glazing providing individual panes of glass within a window, glazing bars have to now be a minimum of 45mm to 50mm in thickness to accommodate double glazed units.

The 21st Century Bars

In order to overcome these challenges and offer a glazing bar more sympathetic to the ovolo and lambs tongue slim designs of the 18th and 19th centuries, a plant on or stick on bar was introduced.

This plant on or stick on method of glazing allows slim glazing bars to be used as thin as 16mm and allows water runoff without the need for a drained and vented glazing system.

Manufacturers of windows and doors with traditional aesthetics high on their priority list will also incorporate dummy spacer bars within the sealed unit to further imitate the appearance of a traditional solid through glass bar.

Wood Window Alliance (WWA) members working in conjunction with Historic England strongly endorse sensitive design to retain the traditional features and heritage of our older buildings whilst offering high performance and building regulation compliance and many offer a range of windows and doors with these values at their core.

So what’s the answer? Should stick on bars be accepted in conversation areas?

Members of the WWA supply “Wood windows without the worries”. The greenest; longest lasting; low maintenance timber windows with the best warranties available today.

In order to achieve such high performance standards a compromise must be reached when replacement windows are needed in a property of historic importance if the windows are to last. Stick on or imitation bars offer that compromise between the traditional aesthetics of glazing bars and today’s high performance requirements.

Accreditations

Sources
Wood Window Alliance
British Woodworking Federation
Brooking Collection

Further Advice
The Brooking Collection
Historic England Traditional Windows.
The Bereco Heritage Range of products including; Flush Casement Windows; Vertical Sliding Sash Windows and Flush French Doors are available both Single glazed and with SlimLine (Narrow Cavity Double Glazing).

Our sympathetic slim featured ovolo and lambs tongue glazing bar designs have been used on numerous projects including the Grade II listed Thrum Mill as featured on Channel 4's Restoration Man and in the renovation and restoration of the Grade B listed Glentrium Castle in the Cairngorms.

Bereco continue to champion the restoration and preservation of our country's heritage currently being involved in the redevelopment of the landmark Birmingham address 55 Colmore Row. Where the Grade II Listed 19th Century banking hall is being transformed into highly sought after retail, leisure and office space.

These and many more projects can be seen on the case study section of our website.

www.bereco.co.uk/case-studies/