



By Appointment to
Her Majesty The Queen
Manufacturer and Supplier
of Secondary Glazing
Selectaglaze Ltd.

selectaglaze

Secondary Glazing

Braintree Town Hall



Benefit: Warmer and quieter

Type: Renovation

Listing: Grade II* Listed

Braintree Town Hall was faced with the challenge of making its building more energy efficient, which was no easy task seeing as it is Grade II* Listed.

Based on what was formerly a cattle market, William Julian Courtauld paid the princely sum of £50,000 to give Braintree its own Town Hall. The first stone was laid in 1926 and it has been in constant use since its construction.

Nowadays, there is an ever increasing requirement to reduce energy and make buildings more sustainable. One area in particular needed attention - the windows, which allowed cold air in and heat to escape. The original specification was to install timber secondary glazing to fit in with the wood panelled rooms. This was more challenging than initially realised but Selectaglaze secondary glazing specialists had an alternative solution to propose.

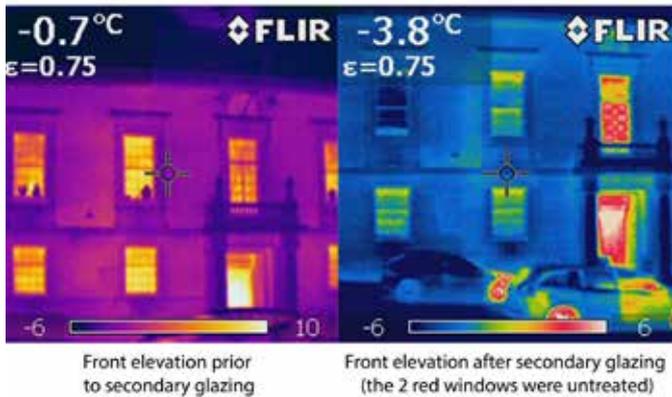
Selectaglaze produced a sample using aluminium secondary glazing with a timber grain finish. A meeting was arranged with Braintree Town Hall and the local Conservation Officer and on the day, the aluminium sample was set up next to one of the windows. Initially the Conservation Officer

was sceptical of using aluminium secondary glazing until attention was drawn to the sample placed next to the windows.



selectaglaze

Secondary Glazing



Those in attendance were surprised at how well the timber grain effect blended in with the wood panelling of the room.

After the successful demonstration, Selectaglaze went on to install a total of 20 vertical sliding units using a mixture of the Series 20, which is a slim frame ideal for heritage buildings and the mid-range Series 25 which is the perfect option for larger windows, as it can take heavier glass while still being an unobtrusive adaptation. All products were finished with a timber grain effect that harmonised perfectly with the interior.

The installation of secondary glazing dramatically reduces heat loss and all units were bespoke to achieve airtightness which virtually eradicates draughts. The use of low emissivity glass meant that a U-value of 1.9 was easily achieved.

Another added benefit of installing secondary glazing was the reduction of outside noise. The client said, "The Town Hall is a 'Grade 2*' Listed building of historic importance to the character of Braintree. As part of the energy efficiency improvement works at the Town Hall to reduce its operating costs, the Sustainability Team has installed high quality secondary glazing in the form of aluminium framed sash windows in time for winter. The Council researched and spent time identifying a modern secondary glazing system that would complement the oak panelled interior of the Town Hall. Following the procurement process to tender for the works the final design was approved by both ECC Historic

Building officers and Historic England. A colour matched oak print with raised wood grain has been applied to the visible parts of the aluminium frame achieving an exact match to the existing oak surround.

The windows contain modern thermally efficient low emissivity glass that retains heat and the frames have been measured and manufactured to achieve an airtight fitting. The building is heated by a combination of gas central heating and electric heaters. The estimated savings from installing secondary glazing in the Town Hall is at least 12% of the combined heating bill, over £400pa at current prices, which are predicted to increase annually.

A second benefit of the windows has become very apparent for occupants since installation, they also provide excellent sound proofing, blocking the noise of the regular traffic passing the building in its town centre location."

Councillor Robert Mitchell, Deputy Cabinet Member for Environment and Place.

When there is a gap of at least 100mm between the primary and secondary glazing 45db is possible, helping to create a peaceful environment. Furthermore, all units are fully reversible and are accepted by most heritage agencies.