

selectaglaze

Secondary Glazing

Plumstead Library



Benefit: Warmer and Quieter

Type: Refurbishment

Listing: Grade II

the late 20th century the museum closed. The building started to fall into a state of disrepair, losing its charm, appeal and comfort which it once had, with little public use.

Working with award winning architects Hawkins Brown Associates LLP and Main contractor Osborne Construction, 63 secondary glazed units have been installed during the remodelling and refurbishment of Plumstead Library, to make it more thermally efficient and to create quieter spaces for the local community user groups.

This Grade II Listed building in the Royal Borough of Greenwich is of great architectural and historic interest. It is one of the earliest funded libraries by Andrew Carnegie, a Scottish/American philanthropist in the US and British empire in the time of Queen Victoria and Edward VII. The building was constructed to the designs of Frank Sumner, Woolwich Borough council Engineer at the time and officially opened in 1904. The library formed part of community civic centre and social buildings – many of which are now demolished. A first floor museum was later added, opening in 1919. Over the ensuing years, areas of the library were closed to the public and used as offices and storage, and in

Following on from the Historic England listing in 2016, the Royal Borough of Greenwich decided to use



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the building as a champion for the Plumstead Urban Framework, making it one of the critical elements of the regeneration of the local High Street and surrounding area. As part of the first phase, the reworking and renewal of the Library started in 2018, enabled by a £16.6 million local authority backed scheme.

Occupying a corner plot on the busy A206, Plumstead High Street, with high volume traffic and London transport passing by, noise was of great concern. In addition, the single glazed metal framed original windows did little to prevent heat loss or draughts, which was going to hamper the sustainability of the building and add to the on-going running costs. Given the function of the internal spaces – quiet, reflective, cosy reading areas of the library for the local residents to use, a solution was needed to combat these issues. As the building is Grade II Listed, the original windows could not be changed, so a reversible adaptation had to be found. Hawkins Brown Associates decided that Selectaglaze secondary glazing would pose the most effective solution to improve the thermal efficiency as well as dramatically reduce the noise ingress.

On the north elevation, facing the high street, the library has two magnificent sweeping bow windows, which occupy the majority of the ground floor. On the

first floor and the return elevation facing east, where the offices and museum once were, there are a number of metal single glazed windows in various configurations. They allow light to flood the spaces, but did little to help the comfort levels of the spaces. Well sealed and tightly installed secondary glazing significantly improves the performance of original windows. If used in conjunction with metal framed openings, U-values of 1.9 and reductions of 45dB (if fitted with 150mm cavity) can be achieved.

A total of 63 Selectaglaze units across the 2 facades were installed, which including Series 10-3 pane horizontal sliders, Series 80 – 3 pane horizontal sliders and more. Each sweeping bay overlooking the high street were built up with seven Series 20 vertical sliders, transom coupled to seven Series 45 side hung casements. This configuration complimented the sightlines of the primary windows and allowed full access for cleaning, maintenance and natural ventilation if required. Expertly measured and prepared timbers were needed for these openings. The rear face was curved to match the line of the bow, with a square face to facet fix the secondary glazing too.

After months of highly skilled refurbishment works, the Library re opened in early 2020. It is set to become a sustainable and cultural destination in the Plumstead area and a great legacy for one of the remaining Carnegie libraries in the UK.

