



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

selectaglaze

Secondary Glazing

Birmingham University



Benefit: Warmer and quieter

Type: Renovation

Listing: Grade II*

The Rt Hon Joseph Chamberlain was one of the main founding advocates of the University of Birmingham. It was awarded a Royal Charter in 1900, making it one of the first redbrick universities in England. It encouraged people from all backgrounds, religions and gender to attend on an equal basis - a radical concept for its time.

Aston Webb and Ingress Bell began work on a construct of buildings in 1901 to include; a great hall and a semi-circular block of buildings for the mechanical engineering department. Their previous designs included the main façade of Buckingham Palace and the main building of the V&A.

Aston Webb Great Hall and the Quadrant Range was granted Grade II* Listing in 1970, as a grand example of Victorian design and engineering with



its domed roofs and a sweeping curved façade. Associated Architects was commissioned to sensitively refurbish the exterior and to redesign





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

selectaglazeTM

Secondary Glazing



and renovate the interior of Block C, creating new space to accommodate a large lecture theatre, student services and support hub. Part of this refurbishment included the introduction of new mezzanine floors, which sit on par with the break lines of the large primary windows, increasing the number of floors from three to five.

To make the building a warmer and more comfortable learning space, replacing the draughty and unsecure primary windows with new double glazing was discussed. However, as the building is of architectural interest and has a Listed status, consent could not be obtained. Instead, all the original primary windows were removed, stripped, repainted and re-glazed like for like. Although restored, the single glazed units were still inefficient, so Selectaglaze was specified to provide a solution with its secondary glazing.

The design specification was very demanding, with the secondary glazing required to; provide noise reduction of 45 – 48 dB; seal the envelope of the building achieving air leakage of less than

5m³/m²/hr (half that of the current building regulations); provide protection from falling at the edge of the new floors and improve the thermal retention by lowering the U-value to 1.9w/m²K.

Over 200 units were installed with varying designs and styles, many of which were curved to suit the building. In the lecture theatre there is a series of large 2.3m wide 3.8m high openings which were treated with a combination of fixed lights from the Series 42 range and horizontal sliders from the Series 80 heavy duty range. In the office area there is a curved opening which stands at over 6m wide and 2.8m high which was treated from the Series 42 fixed light and Series 41 side hung casement ranges.

All of the secondary glazed units are bespoke to the window openings ensuring the tightest fit and match sight lines wherever possible to make them virtually unnoticeable from the exterior. All units are fully assembled in the factory allowing for rapid installation in order to minimise disruption.