SIKA AT WORK
SENATE HOUSE, UNIVERSITY OF LONDON

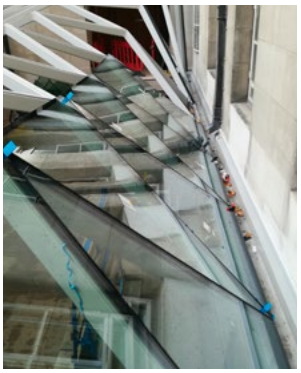
Sikasil® SG-500

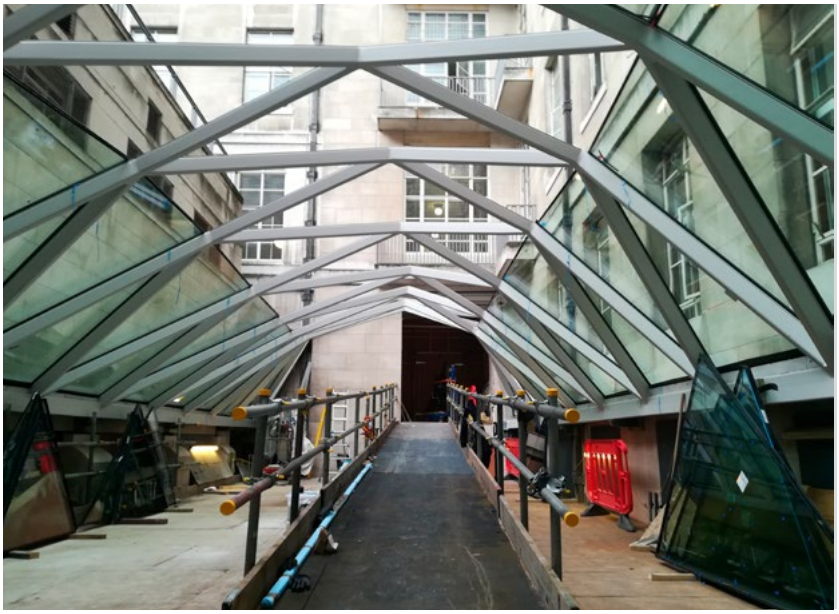
BUILDING TRUST

SENATE HOUSE, UNIVERSITY OF LONDON

SIKA STRUCTURAL ADHESIVES FOR FAÇADES BRING STABILITY TO SPECTACULAR SENATE HOUSE ROOF. The University of London's Senate House, a historic grade II listed building, was in need of refurbishment to bring life into an old storage space and create a new academic hub.

A structurally glazed roof was required to help bring a light and modern feel to the room with an added organic aesthetic, appearing as though the glass had grown from one side of the building to another. To ensure the design was completed to the architect's vision, a product was needed to bond multiple glass panels to a steel frame, allowing for the unusual shape without the need for mechanical fixing – all while still providing a strong and lasting bond.





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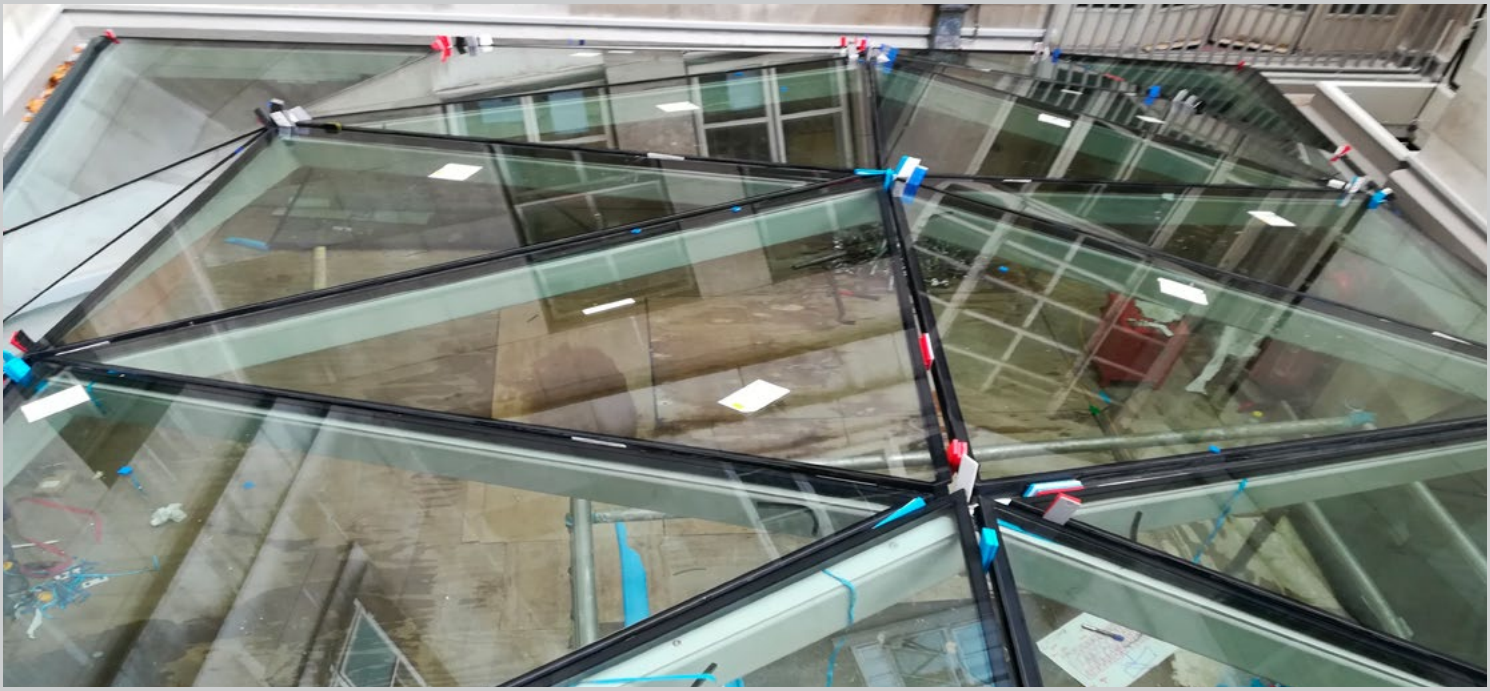

Created using 105 completely unique bespoke glass panels, the resulting multi-faceted glass roof has seen the stunning project receive a nomination for an FX Design Award.

Cantifix, a Sikasil® Registered Contractor and specialist in architectural and structural glazing, was tasked by the architect to help with the design and installation of the complex roof. Having worked with Sika products for 15 years, Cantifix was confident Sika would provide the best products and service for the installation.

The products of choice were Sikasil® SG-500 structural silicone adhesive and Sikasil® WS-605 S silicone sealant, both UV and weather resistant to ensure long-term durability. Prior to the installation, vital in-house adhesion testing and structural calculations were provided by Sika Façades' technical team at Welwyn Garden City, to guarantee the strength of bond was more than adequate for the construction.

Samples of the substrates used in the project underwent thorough in-house testing by Sika, ensuring that they offered a safe and long-term solution and that the project would meet ETAG 002 European Guidelines.

As a large and complex roof, the project provided many challenges. Most notably, the organic shaped design meant the bonding was unable to take place offsite. Instead, Cantifix worked to a 3D-model when designing and manufacturing the glass and once onsite, individually lifted the glass panes into the partial steel frame before fixing them with the Sikasil® SG-500 adhesive. However, Cantifix's expert knowledge and experience meant installation went smoothly and ran to schedule, with all necessary health and safety measures put in place. The excellent training provided by Sika to Cantifix meant their highly skilled team was able to complete the installation onsite, while continually testing the Sikasil® SG-500 and Sikasil® WS-605 S to ensure current conditions would have no effect on the bonding and sealing process.

The successful installation of the roof meant the project was finished to a high quality and to the requirements of the client, who was impressed with the credibility both Cantifix and Sika Façades brought to the stunning refurbishment.

Charlie Sharman, CEO and founder of Cantifix, said: "The structurally glazed roof at Senate House is a perfect demonstration of the benefits of this type of construction. If this shape had been attempted in a framed system, the potential for compromising the weather and air tightness would be unacceptably high. With glass and Sika silicone both being stable materials, the roof becomes an impervious membrane to the external conditions for a very long time – it also looks incredible."

For further information visit: www.sika.co.uk/facades or call 01707 363893, email: sikasil@uk.sika.com

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