



# SIKA AT WORK

## LONDON BRIDGE STATION

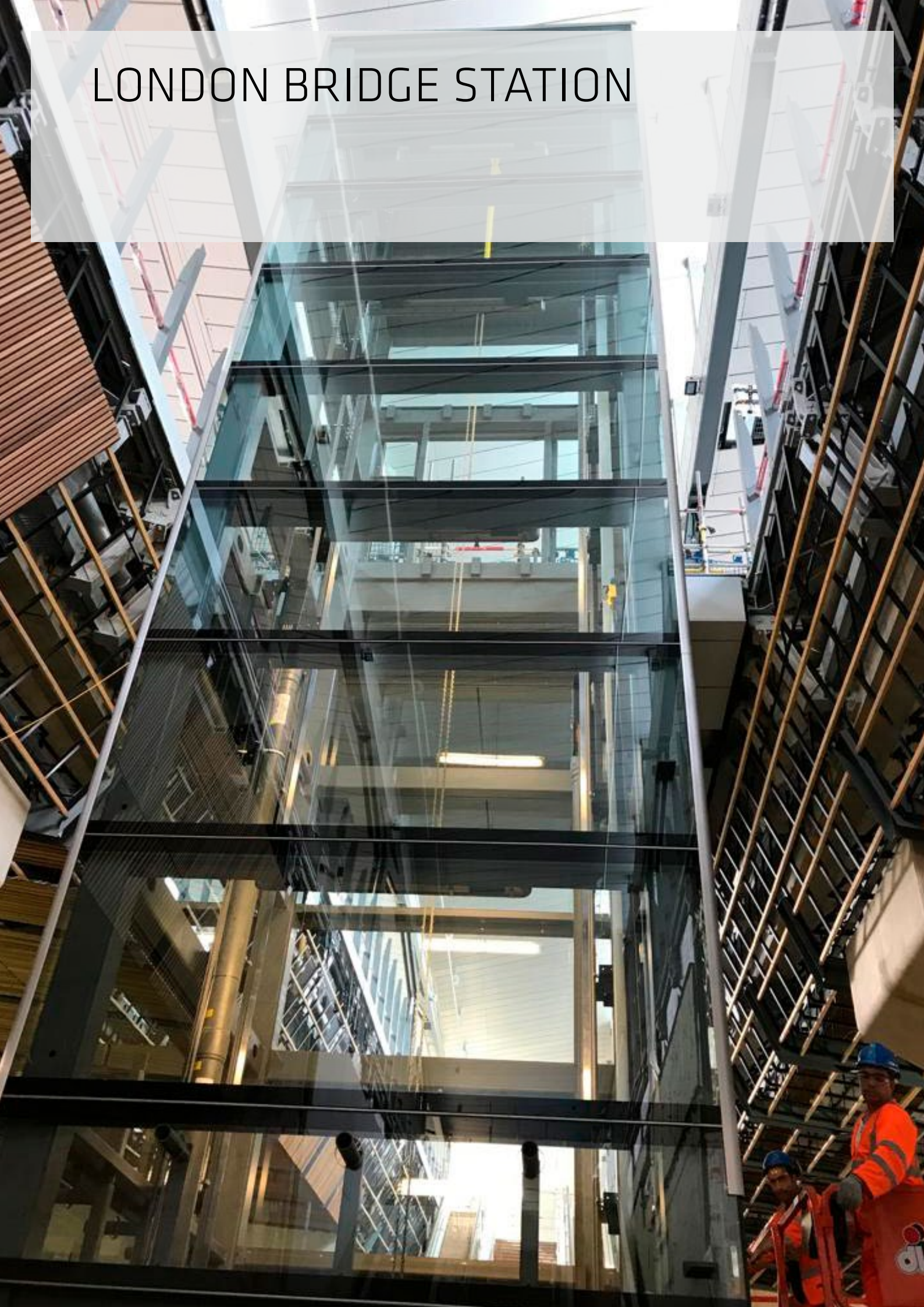
Sikasil® SG-500

BUILDING TRUST





# LONDON BRIDGE STATION

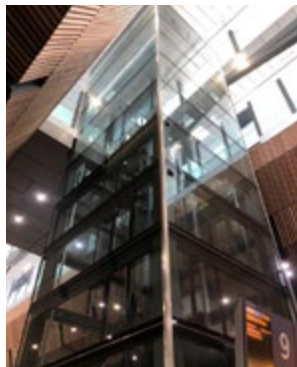




**LONDON BRIDGE STATION HELD TOGETHER BY SikaSil®  
STRUCTURAL SILICONE.**

London Bridge station was in need of refurbishment and expansion in order to provide commuters with a modern, spacious and fully accessible concourse, alongside new platforms to allow more trains. After seven years of planning and works, the £1 billion project was completed and the station was officially reopened by His Royal Highness, the Duke of Cambridge in May 2018.

As part of the large project, a curved 275m long two-phase façade on Tooley Street and a double height façade at the entrance to the station was required, in addition to 6 glass lift shafts inside the concourse. All needed a high-quality structural silicone adhesive in order to provide a strong and lasting bond.



# LONDON BRIDGE STATION



## Station façade by OAG and Structural Glazing Telford

Architectural glass specialists OAG specified Sikasil® SG-500 structural silicone adhesive for the station's façades. Sika and the 25 strong OAG design team had regular interface seminars in the lead up to the project, in which Sika provided OAG with detailed information and helped them to demonstrate the benefits of using Sikasil® to the client.

As well as being able to provide the strength of bond needed, the Sikasil® UV and weathering resistance meant it was the perfect product for long-term durability. Throughout the project OAG continued to work closely with Sika, who provided in-house testing at their specialist facility in Welwyn Garden City.

The project proved to be particularly challenging due to the large size of the glass panels and the fact that the façade had to be incredibly robust, able to resist strong pressure up to the level of a bomb blast. However, with the help of Sika's expert technical team, they were able to identify the structural sealant bite requirements to meet their needs. Plus, vital in-house adhesion testing ensured the use of Sikasil® would result in excellent adhesion between the sealant and the relevant substrates. This thorough testing meant the bonded structural glazing met ETAG 002 European Guidelines, providing a safe and long-term solution.

The application was carried out by Structural Glazing Telford in their specialist factory. As a Sika Approved Applicator, Structural Glazing Telford's expertly trained team, having used Sikasil® on a number of projects, were able to complete the application without any problems.

OAG carried out a vast range of installations at London Bridge, which proved to be a complex task. On the Tooley Street lower façade, 5.6-metre-high bomb blast panes of glass weighing 350kg were installed, and for the 250m long upper curved façade, suction cranes were used to lift the large panes of glass 18 metres from the ground. However, due to the tireless efforts on the onsite teams, alongside technical support from Sika, the project was completed on time and to the client's specifications.

## Scenic lift shafts by Vision Design Projects

Sikasil® SG-500 was also specified for use on glass lift shafts inside the station by Vision Design Projects. Initially commissioned to design and evaluate the glazing for 9 Scenic Lift Shafts, Vision Design Projects developed a fixing-free glass alternative from what was originally a fully framed architectural design with aluminium extrusions. Utilising the properties of the Sikasil® product meant this design came to life inside the London Bridge station.

The application and bonding of the Sikasil® SG-500 for the lift shafts was carried out by Vision Design Projects in-house. As a Sika structural silicone specialist, their expert knowledge and experience meant the application went smoothly.

With the lift shafts needing to be assembled inside the concourse, the installation was required to take place at night in order to avoid major disruption to commuters. However, despite the challenging access conditions, the Sikasil® ease of use allowed for a stunning, seamless arrangement, impressing the client with the high-quality finish.

**For further information visit: [www.sika.co.uk/facades](http://www.sika.co.uk/facades) or call 01707 363893, email: [sikasil@uk.sika.com](mailto:sikasil@uk.sika.com)**