

LONG-TERM RESISTANCE OF Sikaflex® ADHESIVES AND SEALANTS EXPERIENCE PROOFS RELIABILITY

Sikaflex polyurethane-based adhesives and sealants have been manufactured for more than four decades.

The longest empirical observations of jointing materials with surfaces exposed to direct sunshine relate to wall joints in buildings sealed in accordance with DIN 18540. Even after more than 20 years' service, these materials still exhibit impeccable elastic behavior.

Given the stronger cross-linking of industrial adhesives, their aging resistance is likely to be higher still. Indeed, Sika has also been observing the long-term performance of adhesives and sealants in industrial applications for around 30 years. At BMW, for example, over 15 million vehicles have been glazed with Sikaflex adhesives since 1987. Periodic field studies have confirmed the durability of the adhesive bond on these applications.



Sikaflex adhesives have been used in buses and commercial vehicles to install windshields, side walls, roofs, and floors (in passenger and luggage compartments) since the mid-1980s. Similarly, for bonding in rail vehicles (e.g. windshields, end walls, and floors), the use of Sika adhesives and sealants now represents

the state of the art. When tested, individual adhesive specimens extracted after over 20 years' service in vehicles exhibited mechanical properties largely equivalent to the starting properties at installation.



Old City Bus in Zürich



Good adhesion on unprimed ceramic

The long-term reliability of our systems is further illustrated by sealing applications for gas meter housings. These seals serve to prevent the escape of gas into basement and living spaces. Here, the suitability of our materials has been tested and certified by the DVGW (German Technical and Scientific Association for Gas and Water), and our products have proved themselves in practice for over 30 years.

Over the last ten or so years, adhesives have also been used to fix counterweights in washing machines and have been shown to withstand the continuous vibrations caused by spin drying.

The above examples, of course, represent only a small selection of the wide-ranging adhesive solutions successfully designed by Sika for long-term performance.

CONCLUSION

Subject to use for the intended purpose and good-practice application, Sikaflex adhesives and sealants will retain their elastic properties. Results are available from investigations spanning periods of over 20 years.

This and numerous practical applications demonstrating trouble-free performance have made bonding with Sikaflex products

the standard solution, also for users with products that typically have a long service life (e.g. freely suspended cladding panels, rail vehicles etc.).

Bonding performance is not subject to any inherent time limit and routine replacement is not necessary without a specific reason.



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For more details on Sika solutions for Transportation contact us or visit our website www.sika.com/transportation.

LEGAL NOTE

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