



SOLAR SOLUTIONS HIGH PERFORMANCE BONDING TECHNOLOGIES FOR CSP

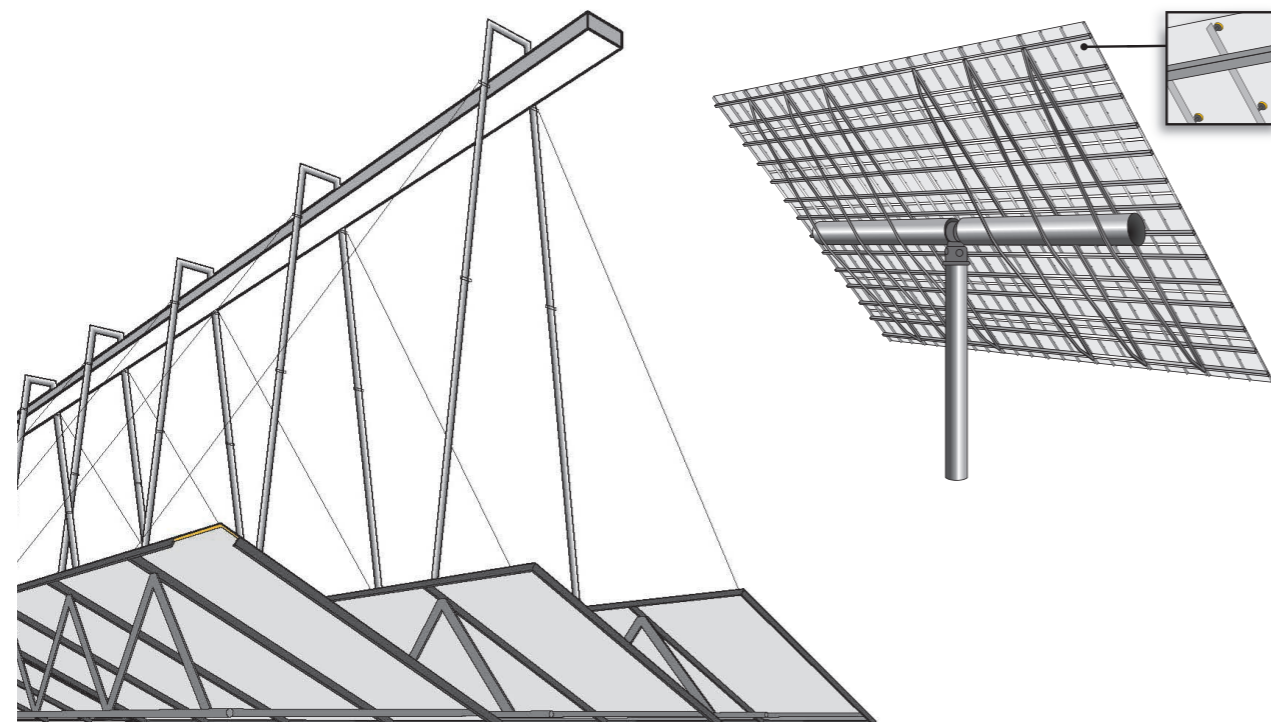
BUILDING TRUST



SECURED MIRROR SYSTEMS WITH HIGH PERFORMANCE ADHESIVES

IT SEEMS THAT ADHESIVES are a minor part in the overall CSP system but in reality play a major role for the performance and durability of the mirror and CSP solution. As the adhesive technology bonds the mirrors to the fixation elements they secure the mirrors in the right place for service life of the system. If the adhesive system fails the mirrors may fall, break or the focus is out of target. Therefore the right adhesive selection, joint dimension and application process is crucial to secure the long term performance of the mirror and overall CSP system.

Next to the secured durability Sika provides adhesive solutions to optimize the production processes of bonding the fixation devices to the mirror systems. With different curing speeds and thixotropic behaviors of the adhesive technology Sika is able to offer solutions for every existing production process and process improvements.



BEST RECOMMENDED SIKA PRODUCTS FOR BONDING FIXATION SYSTEMS TO MIRRORS

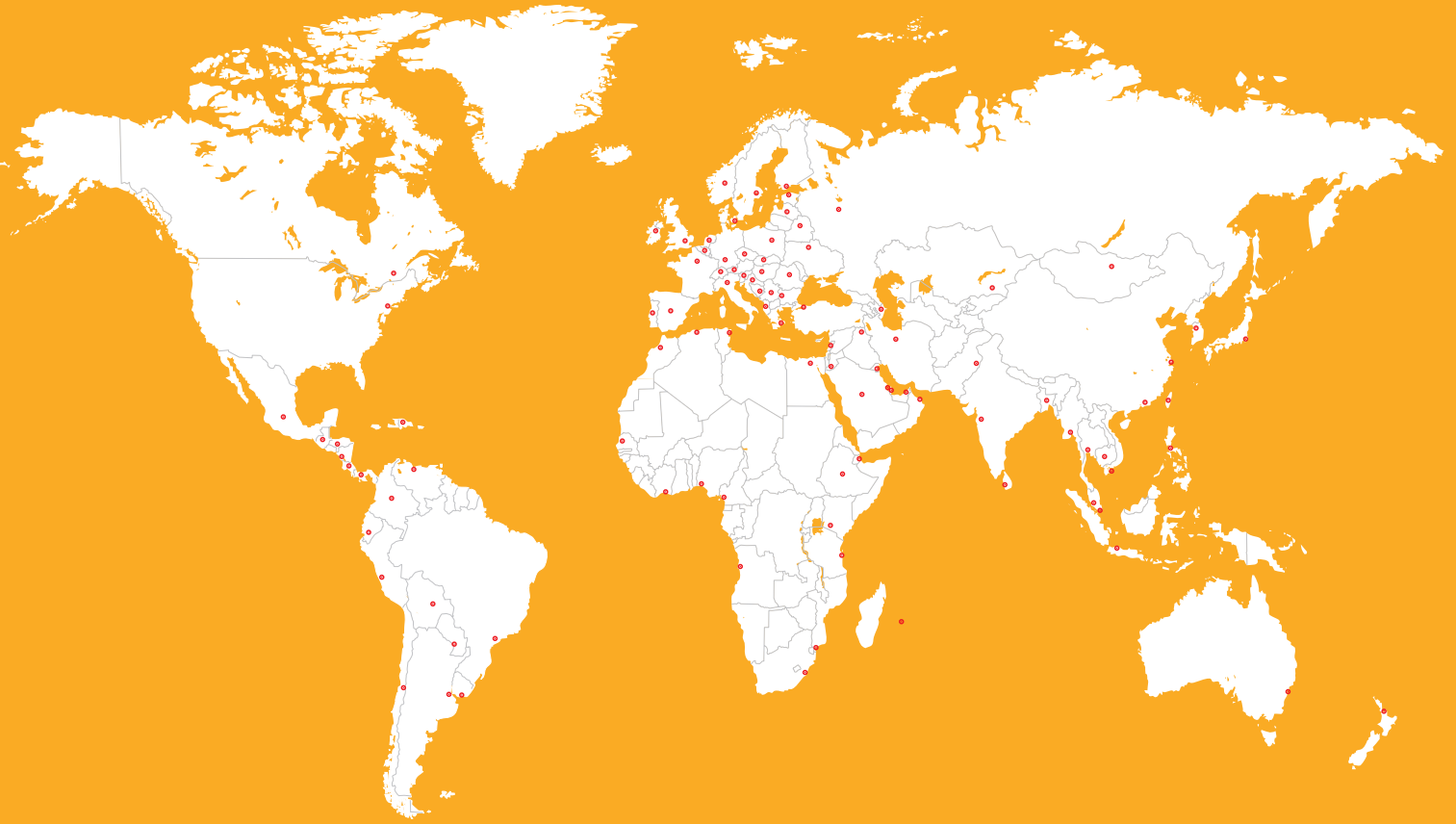
Sikasil® AS-790	2-component ultra-fast curing Silicone adhesive
Sikasil® AS-785	2-component fast curing structural Silicone adhesive, meets EOTA ETAG 002
Sikaflex®-552	1-component Polyurethane Hybrid with high initial strength

CHOOSING THE RIGHT TECHNOLOGY

THE OUTSTANDING PERFORMANCE of Silicone adhesive technologies in regard to long term durability has proven itself over decades in the facade, insulating glass and other highly demanding industries.

Parameter	Tapes	Organic adhesives (e.g. PU or MS)
Surface tolerances	Limited tolerance compensation. Completely leveled, parallel and smooth surface necessary ✗	Good tolerance compensation ✓
Pretreatment of surface	Cleaning and often priming needed ✗	Cleaning, possibly grinding and priming necessary —
Automated application	Comparatively difficult and high investment costs —	Easily possible ✓
Contact pressure	Defined high and well distributed joining pressure necessary ✗	Low demand on joining pressure and pressure distribution ✓
Correction on positioning	Not possible ✗	Possible during processing time. Except when pre-fixation tapes are used ✓
UV resistance	Limited - good —	Limited - moderate —
Temperature influence on properties	High influence. Decrease in mechanical properties under high temperatures ✗	High influence. Decrease in mechanical properties under high temperatures ✗
Weathering resistance	Limited ✗	Limited ✗

GLOBAL BUT LOCAL PARTNERSHIP



FOR MORE SOLAR SOLUTION INFORMATION:



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WHO WE ARE

Sika AG, Switzerland, is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar, wind power plants and facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature highquality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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