

SEALING & BONDING SIKA SOLUTIONS FOR MORE VALUE LESS IMPACT



BUILDING TRUST

SIKA CONTRIBUTION TO SUSTAINABLE CONSTRUCTION

More Value - Less Impact

Providing high-performance solutions - to the benefit of our customers and sustainable development

Sika is dedicated to sustainable development. We take responsibility to provide sustainable solutions in order to improve material, water and energy efficiency in construction and industry. Sika strives to create value for all its stakeholders with its products, systems and solutions along the whole value chain and throughout the entire life span of its products. The value created by far outweighs the impacts associated with production, distribution and use. Sika is committed to measure, improve and communicate sustainable value creation. "More value, less impact" refers to the company's life cycle approach and commitment to maximize the value of its solutions to all stakeholders while reducing resource consumption and impacts on the environment.

MORE VALUE - ENERGY SAVING

Tight building envelope saves resources and increases the quality of living

At first glance, Sealing and Bonding solutions contribute little to the environmental impacts caused by the construction of a building but are actually essential for air- and watertight building envelopes. Their proper use, performance, quality and longevity are of great importance to the total environmental performance of a building during its whole lifetime. A professional window installation with high performance sealants and membranes reduces the energy loss by up to 80% compared to a leaking window installation. Reducing air leakage and preventing wet insulation consequently reduces the energy demand for heating and cooling. This was quantified by a study performed by the University of Applied Science for Architecture, Wood and Construction in Biel, Switzerland.

MORE VALUE - GREEN BUILDING CONTRIBUTION

For specific information regarding Green Building Programs, please contact your local Sika organization. Relevant contributions can be as follows:

Green Building Programs	Contribution		
	Low emissions	Tight Building Envelope	Environment and Resources
LEED [®] (Leadership in Energy and Environmental Design)	 LEED v2009: IEQc 4.2: Low emitting materials LEED v4: EQc 2: Low emitting materials MRc 2: Building product disclosure & optimization (EPD) MRc 5: Building product disclosure & optimization (material ingredients) 	LEED v4: • LEED [©] v4: EAc Credit 7 - LEED Homes	 LEED v4: MRc 2: Building product disclosure & optimization (EPD) MRc 5: Building product disclosure & optimization (material ingredients)
BREEAM [©] (Building Research Establishment Environmental Assessment Method)	BREEAM UK: • Hea 02: Indoor air quality	 BREEAM UK: Ene 01 Reduction of energy use and carbon emissions cycle impacts 	BREEAM UK: • Mat 01: Life cycle impacts
DGNB (Deutsches Gütesiegel für Nachhaltiges Bauen)	DGNB 2015: • SOC 1.2: Indoor air quality	DGNB 2015: • TEC 1.3: Building Envelope Quality – Protection against Interstitial Condensation	DGNB 2015: • ENV 1.2: Low environmental impact



LESS IMPACT - INDOOR AIR QUALITY

Sika Sealing and Bonding products fulfill high standards

People spend more than 80% of their time in indoor environments: home, office, retail, leisure, education and transportation. There are various governmental and industry initiatives around the globe to reduce VOC (Volatile Organic Compounds) emissions from building materials and improve the indoor air quality. VOCs have been identified as having potential long term health impact and an adverse effect on the environment. Sika provides sealants with very low emissions, which ensure a good indoor air quality. All new Sika sealants are developed in order to comply or even to exceed the different local requirements.

SikaHyflex®, Sikaflex® and SikaBond® sealants and adhesives comply with the most stringent standards with regard to controlling the emission of VOCs like:

- Germany: EMICODE EC 1 PLUS
- France: AFFSET A+
- Finland: M1
- USA: SCAQMD Rule #1168

A complete list of the tested sealants and adhesives and their approvals are available from your Sika local organization.



LESS IMPACT - LOW IMPACT PRODUCTS

Sika Sealing and Bonding technologies evaluated with LCA and EPD

Sika offers sealing and adhesive products based on all major technologies, such as polyurethane (PU), silicones, silanemodified-polymers (SMP) and water based acrylates. Cradle-to-gate Life Cycle Assessment (LCA) and Environmental Product Declaration (EPD) are powerful tools to measure, rate, improve and disclose the environmental performance across the value chain. Therefore, Sika systematically carries out comprehensive LCAs for all major technologies and products in accordance with ISO 14040 series and EN 15804 standards.

LCAs show no major difference between the technologies. The three main sealant technologies (PU, Silicones, SMP), which are generally used for weather sealing, show – depending on the quality of the product – similar results. Each technology has its "preferred" substrate. Non-reactive water based systems like acrylics have lower environmental impacts but are mainly used for indoor applications due to lower performance in movement, adhesion and weatherability. Hence, no technology can be determined as most sustainable.

Choose the best technology for your application and seal your building well.

For further information on Sealing and Bonding LCAs and EPDs, please contact your local Sika organization.











ALSO AVAILABLE FROM SIKA



FOR MORE SEALING & BONDING **INFORMATION:**



WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, flooring as well as roofing and waterproofing systems.

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



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