



SANDWICH PANEL BONDING BUILDING FOR THE FUTURE

BUILDING TRUST



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Designers, specifiers, manufacturers and users of adhesively bonded building components are continually improving product performances, such as fire protection, noise, energy efficiency and sustainability. At the same time, building component manufacturers require increasingly efficient and cost effective production.

Sika is committed to supporting you in achieving these objectives by offering a variety of bonding solutions that can meet the demands of building for the future.

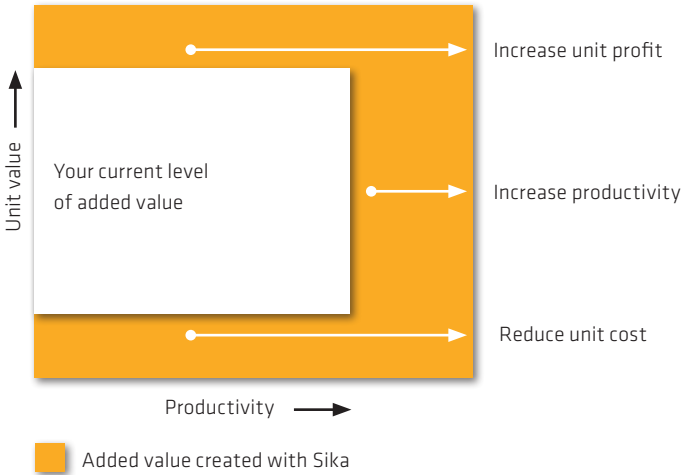
ADDING VALUE

BONDING EFFICIENCY

At Sika, we are your comprehensive partner, supporting you in all facets of multilayer bonding. Our objective is to add sustainable value to all key areas of your production bonding process and your finished products.

We strive to help you achieve the most efficient and cost effective production bonding process. Our experts are available worldwide to discuss your needs and wishes. Whether it is to improve certain aspects of your existing process, to set up a new production, develop new products, or to make a bonding process review, Sika can help.

Together we can measure and analyse your production and product parameters to identify areas for improvement, such as reducing unit cost per panel, increasing production speed and ultimately increasing your profitability.



A RANGE OF PRODUCT SOLUTIONS

- **SikaForce**® one, two and three - component polyurethane adhesives for sandwich panel bonding.
- **SikaMelt**® reactive polyurethane and non-reactive hot melt adhesives for fast process lamination bonding.

At Sika, we can supply you with these high quality solutions for a wide range of applications in building component production. Bonding and laminating operations can be carried out using Sika products through the various stages of your production.

Having a range of adhesive solutions to select from and the know-how to help you implement them means that you can be confident to achieve the highest bonding process efficiency with Sika.

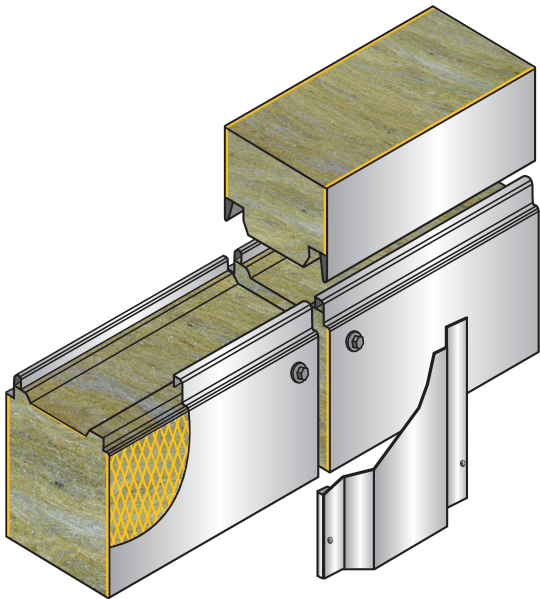


METAL FACED INSULATED BUILDING PANEL SOLUTIONS



INCREASING DEMANDS

The market is seeing increasing demand for metal faced insulated building panels with high strength, superior acoustic and fire performances that are used in the construction of energy efficient buildings, temperature controlled environments, cold storage facilities, warehouses, public buildings and more.



Metal faced panels with foam or mineral wool core are widely used in insulated building panels.

With years of experience, Sika has developed tailored solutions for these applications. Leveraging our expert knowledge in the sandwich panel business, we are well-equipped to assist and advise you regarding product selection and production bonding technology.

BEST RECOMMENDED SIKA PRODUCTS

SikaForce®-100	1-component moisture curing polyurethane adhesives in a range of curing speeds
SikaForce®-110	Low viscosity 1-component PUR sandwich panel lamination adhesive, highly foaming for superior anchoring to porous material even at low coat weights
SikaForce®-600	2-component polyurethane adhesives, in a range of speeds to suit short continuous production lines
SikaForce®-641	2-component polyurethane adhesive with optimal performance/cost ratio used for continuous production lines
SikaForce®-642 and SikaForce®-094 catalyst	3-component polyurethane adhesive used on long continuous production lines
SikaForce®-646	Low viscosity, more foaming 2-component PUR adhesive for bonding steel faced sandwich panels
SikaForce®-648	2-component polyurethane adhesive with low calorific value for long continuous production lines

FIRE PERFORMANCE

SIKA CAN HELP YOU ACHIEVE YOUR DESIRED PERFORMANCE

Fire performance has become an increasingly crucial requirement for building components. Building regulations and building component certifications may place various demands on the adhesive. In Europe, these regulations are harmonized within the 'Euroclass' classification system, part of which includes reaction to fire for construction products. Within this framework, all building materials have to be classified within the categories A1 to F for reaction to fire. The European classification system comprises seven main classes and two sub classes. The main classes include A1, A2, B, C, D, E, and F, with A1 representing the highest classification. The sub classes are smoke production and flaming droplets.

A1	A2	B	C	D	E	F
very limited	limited					

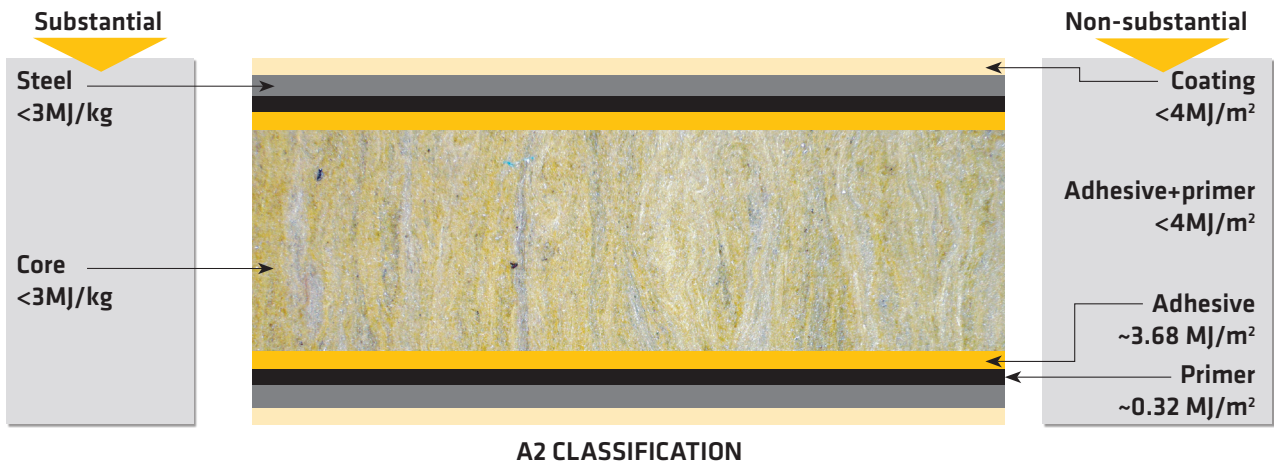
s1	s2	s3

d0	d1	d2
no droplets created		

BEST RECOMMENDED SIKA PRODUCTS (THE CALORIFIC VALUE LIMITS THE MAXIMUM ALLOWABLE COAT WEIGHT)	CALORIFIC VALUE (ISO1716)	MAX. COAT WEIGHT*
SikaForce®-600 Series	31.5 MJ/kg	127 g/m²
SikaForce®-641 L3F BL	17.2 MJ/kg	233 g/m²
SikaForce®-642 L20F	15.6 MJ/kg	256 g/m²
SikaForce®-648 L10F	11.8 MJ/kg	339 g/m²

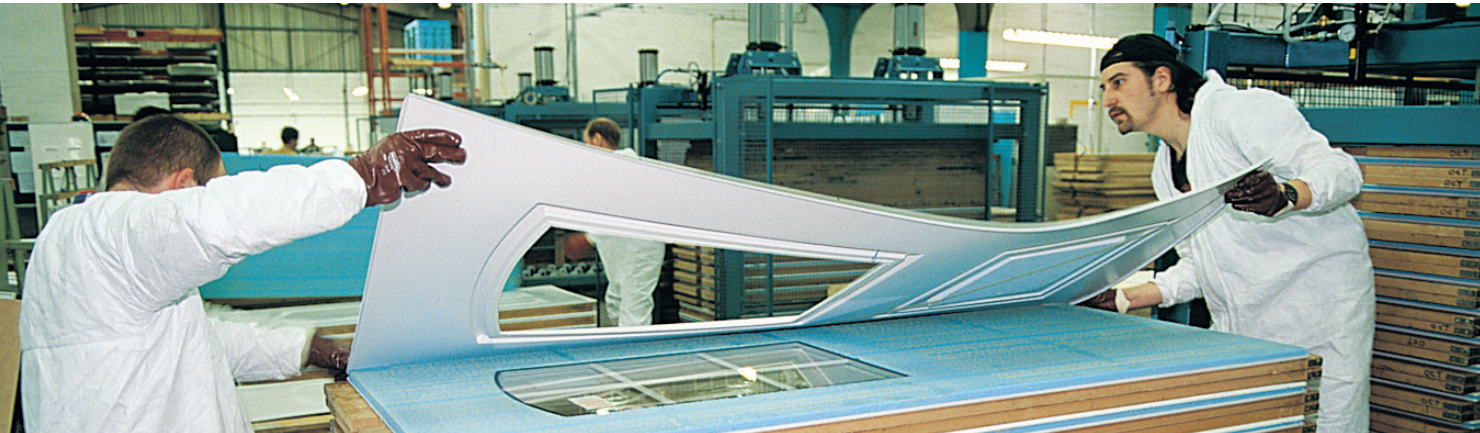
Data shown are typical values for Euro-classification A2. Users must consult with Sika Technical Department prior to any product selection or use.

* Calculation of max coat weight without primer, based on factor of 4 MJ/m2.



Classification A2 is one of the highest achievable ratings for an insulated bonded panel and Sika has solutions that customers use to achieve A2, s1, d0 classification on their panels.

FLOOR TO ROOF BUILDING PANEL SOLUTIONS



FROM FLOOR TO THE ROOF, WE AT SIKA SUPPORT YOU

Building components combine high strength, low weight, along with engineered properties such as insulation and fire performance, while having durable and aesthetically pleasing surfaces. Roofing panels, entry doors, partitions, facades, honeycomb, flooring, decorative panels and ancillary components are bonded constructions using adhesives. Sika's wide product range ensures the right solution for you.

ROOFING ELEMENTS

Bonded insulation foams, intermediate and exterior substrates combine to reduce heat loss and create moisture resistance.

DOORS

Composite constructions combining insulating cores to give thermal insulation and structural reinforcements. Durable skin materials such as uPVC or Aluminium are bonded. Foils are bonded to create aesthetically pleasing and durable laminates.

PARTITIONS

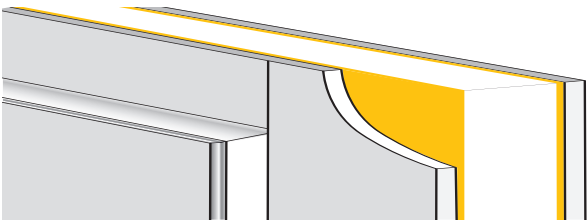
Infill and structural panels are made from laminates to meet various performance demands such as acoustic insulation, clean & durable surfaces and attractive designs.

HONEYCOMB

Bonded panels using honeycomb core provides high strength combined with low weight.

FLOORING

Various substrate materials are utilized in the construction of multilayer flooring types to ensure a superior final product. Additionally, underlays can be incorporated to augment the floors with improved soundproofing and thermal insulation capabilities.



Our extensive product range, coupled with decades of experiences, enables us to provide you tailored solutions that perfectly match your specific requirements.

BEST RECOMMENDED SIKA PRODUCTS

SikaForce®-100	1-component moisture curing polyurethane adhesives with low viscosity in a range of curing speeds
SikaForce®-110	1-component polyurethane adhesives for general use, in a range of curing speeds
SikaForce®-611	2-component polyurethane adhesive for aluminium honeycomb bonding
SikaMelt®-674 LV	Polyurethane reactive hot melt with low viscosity for foil lamination
SikaMelt®-676	Polyurethane reactive hot melt with high green strength
SikaMelt®-677	Polyurethane reactive hot melt multi-purpose

SERVICES

OUR PERFORMANCE, YOUR BENEFITS

PERFORMANCE	BENEFIT
Wide product portfolio and product adaptations	■ Proven solutions for a wide range of applications ■ Modified or new solutions to suit your specific needs
Expert Technical Services and System Engineering	■ Support in product selection and implementation ■ Advise on production bonding technology
Technology Centres equipped with application and test equipment	■ Bonding tests, evaluation trials and reports ■ Access to adhesive performance testing facilities
Best practice global solutions and the services of local operations	■ Access to global and regional expertise ■ Fast local service and support

YOUR KEYS TO SUCCESS

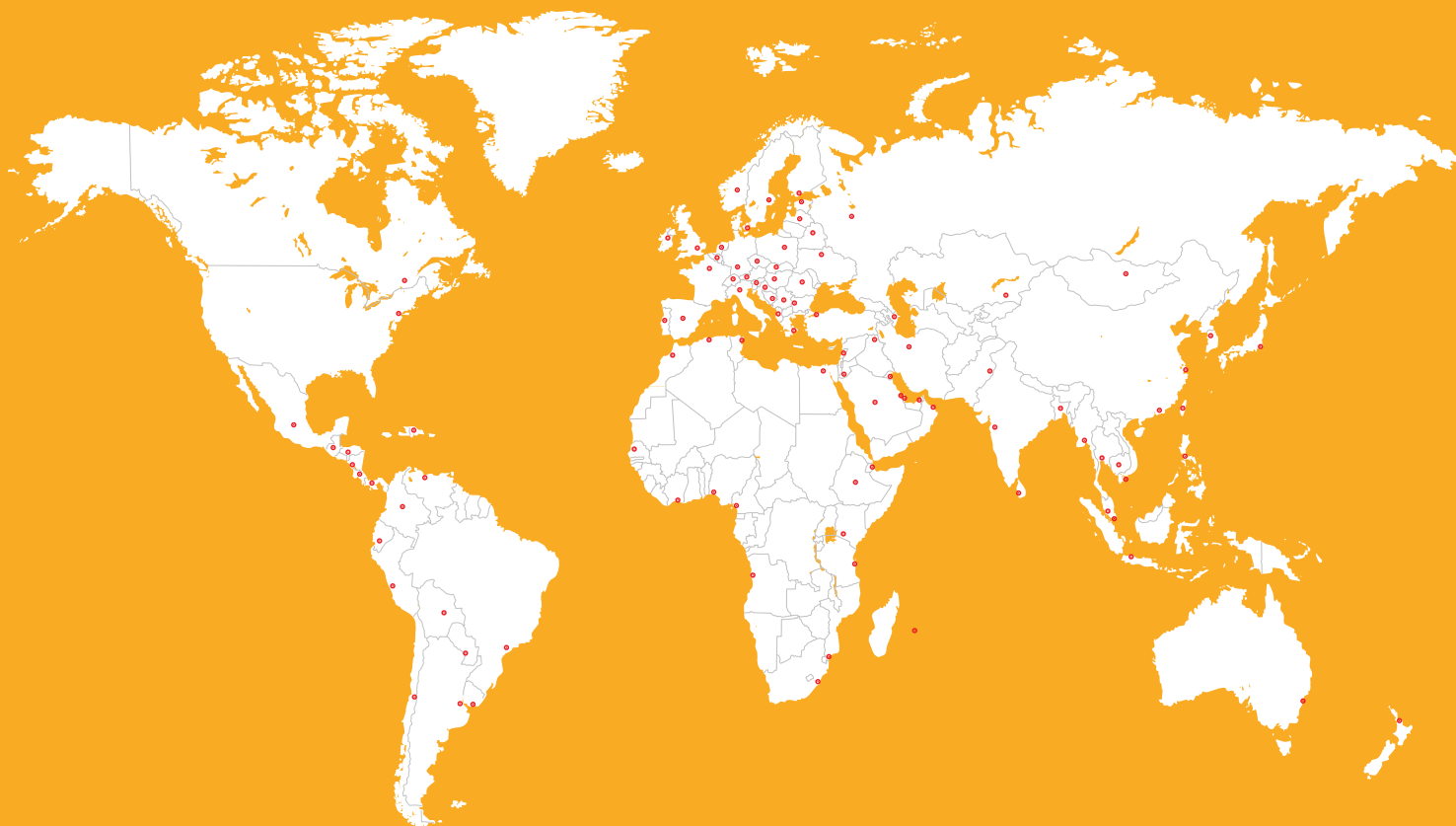
For over two decades, customers worldwide have relied on Sika products to perform bonding and laminating operations throughout the different stages of building panel production. Trust in Sika's expertise and reliability.

Developing new solutions and adapting existing solutions to your specific requirements is done in Sika's Research & Development facilities located at centres around the world. Having an extensive product range and a wide knowledge of bonding processes is one key to successful and efficient production bonding.

Having support teams around the world is another. To Sika, this means providing you with Technical Service and System Engineering located both in regional expert centres and in your country. Experts and facilities ready to provide you with support in product selection, testing and evaluation of adhesive solutions and production engineering. Sika is able to supply you with high quality, reliable solutions for your applications in building component production.



GLOBAL BUT LOCAL PARTNERSHIP



CONTACT US FOR MORE INFORMATION



www.sika.com

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 and wind power plants, facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature high-quality 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 Data Sheet prior to any use and processing.



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