

BUILDING TRUST

PRODUCT DATA SHEET Sika[®] Hibond

STRUCTURAL BONDING AGENT BETWEEN OLD AND NEW CONCRETE

DESCRIPTION

Epoxy based, two component structural bonding agent. Sika® Hibond compiles with ASTM 881 – 87 Type II Grade 2 Class B and C.

USES

Sika[®] Hibond is a construction products which only should be applied by trained applicators.

Sika[®] Hibond is a structural bonding agent applied between old and new concrete surfaces during casting of roof slabs, retaining walls, water tanks, columns, extension of balconies, etc. It is also suitable for use as a structural bonding agent for steel and iron.

CHARACTERISTICS / ADVANTAGES

- Long pot life and open time allows sufficient time for placement of new concrete
- Excellent adhesion to most structural materials
- Can be applied on moist surface also
- Unaffected by moisture
- Highly effective even on damp surface
- Solvent free
- Workable at low temperatures
- High tensile strength
- Once the two components of the material is mixed the material must be used within approx 4 hours

APPROVALS / CERTIFICATES

ASTM 881 – 87 Type II Grade 2 Class B and C

Composition	Chemical Base : Epoxy	
Packaging	600g System Part A: 400g	
	Part B: 200g	
	1.2kg System	
	Part A: 800g	
	Part B: 400g	
Colour	Part A: White liquid	
	Part B: Blackish brown liquid	
	Part A+B mixed: light grey liquid	
Shelf life	12 months from date of production	
Storage conditions	Store properly in original unopened, sealed and undamaged packaging, in dry conditions at temperatures between +5°C and +40°C. Protect from direct sunshine.	
Density	Mixed Density 1.68 kg/l at 30°C	

PRODUCT INFORMATION

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TECHNICAL INFORMATION

Compressive Strength	> 55 MPa	7 days @ +30°C	(ASTM C881)
Tensile Strength	~18-20 MPa	14 days @ +30°C	(ISO 527)
Shear Strength	≥ 10 MPa	14 days @ +30°C	(ASTM C882)

APPLICATION INFORMATION

Consumption	approximately 12-30 sqft depend rate	ding on roughness		
	and porosity of substrate 1pack of 1.2kg covers approximately 24-60 sqft depending on roughness and porosity of substrate (0.200, 0.500 kg (com depending on roughness and porosity of substrate)			
Product Temperature	(0.200- 0.500 kg/sqm depending on roughness and porosity of substrate) Sika® Hibond must be at a temperature of between +10°C and +40°C for			
	application.			
Ambient Air Temperature	+25°C min. / +40°C max.			
Substrate Temperature	+25°C min. / +40°C max.			
Pot Life	Temperature	Sika [®] Hibond	(FIP 5.1)	
	30°C	4-5 hours		
	The pot life begins when the resin and hardener are mixed. It is shorter at high temperatures and longer at low temperatures. The greater the quantity mixed, the shorter the pot life. To obtain longer workability at high temperatures, the mixed adhesive may be divided into portions. Another method is to chill parts A+B before mixing them (not below +5°C).			
Open Time	Temperature	Sika [®] Hibond		
	<u>30°C</u>	7 hrs		

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Mortar and concrete must be older than 28 days (dependent on environment and strength). Verify the substrate strength (concrete, mortar). The substrate surface (concrete, mortar) must be clean and free from frost standing water. Concrete substrate must be sound and all loose particles must be removed.

SUBSTRATE PREPARATION

Concrete, mortar:

Substrates must be sound, dry, clean and free from laitance, ice, standing water, grease, oils, old surface treatments or coatings and all loosely adhering particles to achieve a laitance and contaminant free, open textured surface. Cement laitance must be removed and the surface to be treated must be mechanically roughened

Steel:

Must be cleaned and prepared thoroughly to an acceptable quality i.e. by wire brushing, blast cleaning or vacuum.

MIXING

Part A : Part B = 2 : 1 (by weight) Pre-batched Mixing Time

Pre-batched units

Mix parts A+B together for at least 3 minutes with the provided spatula until the material becomes smooth in consistency and a uniform grey colour. Avoid aeration while mixing. Then, pour the whole mix into a clean container and stir again for approx. 1 more minute at low speed to keep air entrapment at a minimum. Mix only that quantity which can be used within its pot life.

APPLICATION METHOD / TOOLS

Application Conditions / Limitations After mixing, apply directly to the prepared substrate by brush, roller. On damp surfaces, ensure that it is well brushed in. Pour new concrete within 4-5 hours, as long as material is still tacky.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika[®] Colma Cleaner immediately after use. Hardened / cured material can only be mechanically removed.

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FURTHER INFORMATION

Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

BASIS OF PRODUCT DATA

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LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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