

Sika® Bituseal BD

Double Reinforcement with Fibreglass Fleece and Polyester Mat. APP Modified Bituminous Membrane

Description

Sika® Bituseal BD is an APP modified waterproofing membrane with double reinforcements. Incorporated in Sika® Bituseal BD are a non woven polyester carrier and a fibreglass mat.

The fibreglass mat is situated just below the top surface of the membrane. This help maintain shape stability.

The additional stability afforded by the fibreglass mat allows the membrane to resist themal shock and gives protection against UV radiation, as well as excellent resistance to ageing. The non woven polyester carrier used in Sika® Bituseal BD has excellent mechanical characteristics.

Primarily it absorbs all abnormal stresses transfered by the structure to the membrane. It also helps against transportation/ bad handling shock.

The excellent mechanical properties of Sika® Bituseal BD make it comprehensively versatile.

The polymeric compound and the individual properties of the reinforcements are carefully and correctly balanced to obtain excellent tensile strength, tear resistance, elongation and resistance to puncture. All these properties make the membrane exceptionally strong, enabling it to resist accidental site abuse as well as withstand asphalt laying equipment traffice, during installation and periodic maintenance.

Uses

Sika® Bituseal BD is specially formulated for the waterproofing of bridge decks, viaducts, aquaducts and also for new roofing and re-roofing.

It is also recommended for elevates road-ways, bridge ramps etc.

Advantages

Specially designed for bridge deck waterproofing and does not require any protection system when applied under asphalt wearing course.

- Positive barrier to water and vapor.
- Excellent resistance to atmospheric agents.
- High flexibility at low temperatures.
- Maintains shape stability at high temperatures.
- Resistant to water-borne chemical attack.
- Resistant to acids, sulphates and chlorides.
- Accommodates structural movements.
- High resistance to traffice and site abuse.
- Ideal bridge-deck waterproofing.



Product Data

Packaging

Sika® Bituseal BD: 4mm 23 Rolls per pallet

Sika® Bituseal BD: 5mm 18 Rolls per pallet

Technical Data

PROPERTIES		TYPICAL VALUES	TEST METHOD
Membrane Thickness ± 5%		4mm, 5mm	ASTM D751
Reinforcement Base		Fibreglass 50 gm/m ² Polyester Mat 180 gm/m ²	
Softening point (R+B) of coating mixture		150 ⁰ C – 155 ⁰ C	ASTM D36
Penetration (DOW) of coating mixture		10 – 25 dmm	ASTM D5
Tensile strength	Longitudinal	800 N/5cm, ± 20%	UEAtc
	Transverse	600 N/5cm, ± 20%	
Elongation	Longitudinal	40%, ± 15%	UEAtc
	Transverse	40%, ± 15%	
Tear Resistance	Longitudinal	195 N	UEAtc
	Transverse	205 N	
Load Strain Product	Longitudinal	32,000	CGSB-37-GP-56M
	Transverse	24,000	
Lap Joint Strength	Longitudinal	800 N/5cm	UEAtc
	Transverse	600 N/5cm	
Puncture Resistance	Static	L4	UEAtc
	Dynamic	I4	UEAtc
Water Vapour Permeability		Absolutely Impermeable	ASTM E96
Water Absorption- PBS		Less than 0.15%	ASTM D570
Creeping of the membrane applied on a 60 ⁰ sloped surface at a test temperature of 100 ⁰ C during 120 hours		No Creeping	UEAtc
Flexibility at low temperature (-10 ⁰ C)		No Cracking	UEAtc
Impermeability of the membrane of water		Absolutely Impermeable	UEAtc
Resistance to Thermal Ageing		No signs of deterioration after the test	UEAtc
Resistance to Ageing due to UV-Radiation		No signs of deterioration after the test	ASTM G53

Application

The application of Sika® Bituseal BD is both easy and quick. Where it is to be laid directly in a one layer system on concrete, tiles or an existing roofing system, a coat of Primer BC Bitumen Coating at the rate of 200-300 grms/m² should first be applied. Allow this coating to dry thoroughly. In areas of high humidity we recommend it should be left overnight.

As in all other applications, the membrane should first be unrolled and positioned correctly on the surface to be treated. Each roll should overlap the adjacent roll by 10 cms. Once the roll has been positioned correctly, the membrane should be rolled up again, taking care not to change its orientation (you should read our brochure “ Application Procedures” for a more detailed explanation). Using left to right movements, heat the lower surface of the membrane with a propane gas torch. This will cause slight surface melting and adhesion to the substrate. Continue the above method for consecutive rolls remembering overlaps must be 10cms and endlaps 15cms.

Inspection of Lap Joints must be carried out to ensure total adhesion.

Health and Safety information

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.

Disclaimer

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.



Sika Limited (Vietnam)
Nhon Trach 1 Industrial Zone,
Nhon Trach Dist., Dong Nai Province
Tel: (84-61) 3560 700 Fax: (84-61) 3560 699
www.sika.com.vn, sikavietnam@vn.sika.com

