

Product Data Sheet
 Edition 04, 2009.
 Identification no. 7.4.003
 Version No. 00
 Sika® BituSeal T-140 SG (0°C) (SA)

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4 mm thick, torch-on sheet waterproofing membrane based on APP modified, reinforced bitumen, with sand broadcast surface – Flexible to 0°C

Description

Sika® BituSeal T – 140 SG (0°C) (SA) is a torch-on sheet waterproofing membrane that is flexible to 0°C. It is based on APP (atactic poly-propylene) modified bitumen, reinforced with polyester non woven fabric. It has a sand broadcast surface and the reverse is faced with a polyethylene film to ease installation works.

Uses

- Waterproofing and damp-proofing of the exterior walls of basements against percolating water and damp soil
- Waterproofing of retaining walls
- Waterproofing on flat roofs under protective layers or ballast
- Waterproofing on flat and exposed roofs and under tiles
- Waterproofing on balconies/terraces under tiles

Advantages

- Resistant to ageing
- Resistant to weathering
- Good tensile strength and elongation
- High resistance to water vapour (non-vapour permeable)
- Good dimensional stability
- Flexible at low temperatures
- Easy to install with the torch-on method
- Not resistant to root penetration
- Suitable as top layer for multi layer installations
- Good resistance to mechanical impact
- Must be installed on suitable primed, uniform and smooth substrates such as concrete and brickwork

Tests

Approval / Standards

Product may not be sold in EC-countries
 Installation on roofs according to EN 13707 and basements acc. to EN 13969



Product Data

Appearance/Colours	Rolled sheet membrane, reinforced with polyester non woven fabric Surface: sand broadcast, Reverse: polyethylene film to ease installation Membrane thickness: 4.00 mm Colour: black
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Packaging	Roll size: 1.00 m (roll width) x 10.00 m (roll length). Unit weight: approx. 4.8 kg/m ²
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Storage

Shelf life	4 years from date of production. Store in dry conditions between +5°C to +35°C. Rolls must be stored in their original package, in vertical position and under cool and dry conditions. They must be protected from direct sunlight, rain, snow and ice.
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Technical Data

Product Declaration	not available	
Length	10.00 m (-1%)	(EN 1848 - 1)
Width	1.00 m (-1%)	(EN 1848 - 1)
Effective Thickness	4.00 mm (± 5%)	(EN 1849 - 1)
Mass per Unit Area	-	(EN 1849 -1)
Water Tightness	≥ 60 kPa	(EN 1928 – B)
Flexibility at low Temperature	0 °C	(EN 1109)
Flow Resistance at elevated Temperature	≥120°C	(EN 1110)
Max. Tensile Strength	700 N / 50mm (± 20%) 600 N / 50mm (± 20%)	(EN 12311 - 1)
Elongation	45% (± 15%) 45% (± 15%)	(EN 12311 - 1)
Dimensional Stability longitudinal transversal	<= 0.25%	(EN 1107-1)
Resistance to Impact	≥ 600 mm	(EN 12691)
Tear strength (nail shank)	160 N (± 30%) (nail shank)	(EN 12310 -1)
Shear Resistance of Jiont	≥ 400N / 50 mm	(EN 12317 -1)
Accelerated Ageing Test	<i>No defects</i> <i>Long term exposure to UV radiation according to EN 1297:</i> Pass <i>Long term exposure to elevated temperatures according to EN 1296 flexibility at elevated temperatures</i> >+120°C (from -10°C) <i>By long term exposure to UV radiation and elevated temperatures according to EN 1296 / EN 1297:</i> Max. tensile strength: 600 N / 50 mm, 600 N / 50 mm Max. elongation: 40%, 40% Water tightness: ≥ 60 kPa	(EN 1296) (EN 1850 -1) (EN 1110) (EN 12311 - 1) (EN 12311 - 1) (EN 1928)

Water Vapour Transmission	$\leq 0.2 \text{ g} / 24 \text{ hours} / \text{m}^2$	(ASTM E96)
Property		
External Fire Exposure	Class F roof (t1-4)	(ENV 1187)
Reaction to Fire	Class F	(EN 13501 - 1)

System Information

System Structure	Ancillary Product: Suitable cold applied bitumen primer - supplied locally.
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Application Details

Substrate Quality	<i>Concrete / brickwork / mortar screeds:</i> Clean, sound and dry, homogeneous, free from oils and grease, dust and loose or friable particles. Horizontal surfaces must be sloped > 1.5%.
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Application Conditions / Limitations

Substrate Temperature	+5°C min. / +65°C max.
Ambient Temperature	+5°C min. / +50°C max.
Substrate Moisture Content	$\leq 25 \%$
Relative Air Humidity	$\leq 85 \%$

Application Instructions

Application Method / Tools	<p>The cold applied bituminous primer shall be applied on the substrate for the first membrane layer as followings:</p> <p>Application by brush, roller, or airless spray. Waiting time is dependent on the temperature, for the primer to complete evaporation. (Note: Priming is not required for the second and further membrane layers).</p> <p>The membrane is fully bonded to the substrate by the torch-on method using a gas torch. Unroll and position the membrane roll with the polyethylene film surface on the substrate. Roll out half a roll length, heating the membrane reverse with the gas flame until it melts the polyethylene film and bitumen mass, and allowing continuous unrolling. A bead of liquid bitumen must be visible on the underside of the roll. The torch-on membrane must be firmly pressed onto the substrate in order to avoid air entrapment using a special roller or heavy brush. Repeat this procedure with the second half of the roll.</p> <p>All membranes must be overlapped by a min. 100 mm. The seams must be finished with a roller to prevent the formation of any gaps or voids.</p>
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Notes on Application / Limitations

Read the Sika bituminous membranes installation manual before installing the bituminous membranes.

This product shall only be used by installers, skilled and experienced in the installation of torch-on bituminous membranes.

Avoid damage to previously installed membranes during the torch-on of further layers of sheet membrane.

The watertightness of the structure must be tested and approved after completion of the membrane installation works according to the requirements of the client's specifications.

Value Base	<p>All technical data stated in this Product Data Sheet are based on laboratory tests.</p> <p>Actual measured data may vary due to circumstances beyond our control.</p>
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Local Restrictions	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.
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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.

Protective Measures

Wear protective clothing, gloves and goggles.

Do not smoke next to the gas flame.

Caution:

Too extensive heat on bitumen material by torching with gas flame can ignite bitumen and cause dangerous fire. Local security regulations must be observed.

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.

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