

(Template for local translation, only for internal use)

Sikaflex®-T6

System Datasheet for the caulking of wooden floors with Sikaflex®-T6 in the construction industry

Product Description

Sikaflex®-T6 is a one component polyurethane based sealant used for the internal and external caulking of wooden floors.

This System Data sheet is only for the use of Sikaflex®-T6 in the construction industry and not for its use on teak or other decks on ships, boats and yachts etc. For the use of the product in the Marine industry please refer to the special documentation specifically for these applications and the current technical data sheet of Sikaflex®-290 DC Marine.

Uses

Sikaflex®-T6 is a sealant designed for the sealing of wooden floors and it can be used with a wide range of different woods. It is used primarily as a secondary sealant and can be used for interior and exterior applications. For example in wooden floors around residential and commercial developments and in saunas, health clubs etc.

Characteristics / Advantages

- 1-part, ready to use
- Fast curing
- Excellent adhesion to many different types of wood
- High resistance to UV light and weathering
- Adds anti-slip properties to a wet deck
- High resistance to seawater
- Can be sanded
- Excellent sealing performance

Product Data

Sikaflex®-T6

Form

Colour

Black

Packaging

300 ml Cartridge
600 ml Unipac

Storage

Storage Conditions / Shelf-Life

12 months from date of production if stored properly in undamaged original sealed containers in dry conditions and protected from direct sunlight at temperatures between +10°C and +25°C.

Construction



Technical Data

Chemical Base	1-part Polyurethane, moisture curing	
Density	~ 1.3 kg/l	(DIN 53 479)
Tack Free Time	~ 75 minutes (+23°C / 50% r. h.)	(CQP 019-1)
Curing Rate	~ 3.5 mm/24h (+23°C / 50% r. h.)	
Movement Accommodation Factor	± 10%	

Joint Dimensions

For teak:

Wood plank width (mm)	Joint width (mm)	Joint depth (mm)
35	4	4 - 5
45	4-5	6
50	5-6	6
75	8	7
100	10	8
125	12	10

For other timber species please refer to the current method statement.

Sag Flow	Thixotropic, non-sag	
Change of Volume	Shrinkage:~ 3%	(CQP 014-1)
Service Temperature	-40°C to +90°C	

Mechanical / Physical Properties

Tensile Strength	~ 3.0 N/mm ²	(CQP 036-1 / ISO 37)
Shore A Hardness	~ 40	(CQP 023-1 / ISO 868)
Elongation at Break	~ 600%	(CQP 036-1 / ISO 37)
Tear Propagation Resistance	~ 10 N/mm ²	

Resistance**Chemical Resistance***Long term resistance to:*
Fresh water, seawater, aqueous cleaning agents.*Not resistant to:*
Solvents, strong acids, caustic solutions and chlorine containing cleaners. However brief contact only, with fuels or lubricants, has no significant effect on the durability of the sealant.

System Information

System Structure	The system design and details as described must be fully complied with and may not be changed. For more detailed information please refer to the current method statement.
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Application Details

Consumption / Dosage	<p><i>Interior applications:</i></p> <p>Sikaflex®-T6 for wood floor caulking: The consumption varies according to the wooden planks thickness and the width of the joint between them (see joint dimensions).</p> <p><i>Exterior applications:</i></p> <p>Sikaflex®-T6 for wood floor caulking: The consumption varies according to the wooden planks thickness and the width of the joint between them (see joint dimensions).</p>
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Substrate Quality	Clean and dry, homogeneous, even, free from oils and grease, dust and loose or friable particles. Paint, cement laitance and any other contaminants must be removed.
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Substrate Preparation / Priming	<p><i>Preparation of wooden substrate joint edges and the wooden planks undersides:</i></p> <p>For exterior application a bond breaking tape must be applied in order to achieve the higher movement requirements of the joint (e.g. with Tesafilm 4104 AF40):</p> <p>Apply a thin, continuous coat of Sika® Primer-3 N to the joint edges. For exterior use the planks have to be primed on their undersides as well. Sika® Primer-3 N is film forming: The coating should therefore look glossy, having a 'wet look' even when dry. Before sealant application allow the appropriate flash off time.</p> <p>For more detailed information see the current method statement or contact our Technical Service Department for specific advice and assistance.</p>
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Application Conditions / Limitations

Substrate Temperature	<p>Caulking: During caulking / sealing and until Sikaflex®-T6 has fully cured the temperature should be constant or falling and ideally within the range of +5°C and +35°C. The temperature of the wooden planks must not exceed +25°C during application.</p> <p>Sika® Primer-3 N: +5°C - +35°C Sikaflex®-T6 : +15°C - +25°C</p> <p>Please refer to the corresponding Product Data Sheet.</p>
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Ambient Temperature	Sika® Primer-3N: +5°C - +35°C Sikaflex®-290 DC: +15°C - +25°C
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Substrate Moisture Content	Between 30% and max. 90%
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Dew Point	The substrate must be at least 3°C above dew point to reduce the risk of condensation.
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Application Instructions

Application Method / Tools

Sikaflex®-T6 for wood floor caulking:

The consumption varies according to the wooden planks thickness and the width of the joint between them (see joint dimensions).

Wood flooring process: (Interior and exterior applications)

Joint edges are primed with Sika® Primer-3 N. Sika® Primer-3 N can be applied with a brush or primer dispenser. Allow a flash off time min. 30 min to max. 8 hours before caulking starts. For exterior use and in areas with temperature extremes, or where widely varying or rapidly changing climates are expected, always apply the bond breaker tape.

Wood floor caulking: Joints with a 'matt' finish (wood floor still to be sanded):

Apply Sikaflex®-T6 ensuring air is prevented from entering the joint by placing the tip of the nozzle against the bottom and keeping the gun at an angle of 60° - 90°.

Always use a hand gun or a piston-driven airgun. Continue to pull the nozzle along so that the joint is filled fully and evenly, always ensuring that a constant motion is maintained. After application of Sikaflex®-T6 and before skinning occurs, tool the excess material from the surface using a slightly flexible spatula at 45°.

This ensures complete filling of the joints.

Joints with a 'gloss' finish (wood floor surfaces already finished not to be sanded):

Masking tape is used to protect the wood surfaces. The application of Sikaflex®-T6 is the same as with the matt finish. Before skinning remove the excess material and the masking tape.

Important:

Protect the joints prior, during and after caulking from rain and direct sunlight for a period of at least eight hours. Do not use excess material from the cleaning spatula for filling joints.

Sikaflex®-T6 is ready for sanding after seven days (at +20°C). Before sanding remove any excess material with a chisel or knife, in order to avoid undue stress on the edges during sanding. Sanding should begin with a medium (80) progressing to a 120 grit or finer. Sanding should only be carried out in the same direction as the joints.

Cleaning of Tools

Clean all tools and application equipment with Sika® Remover-208 / Sika® TopClean-T immediately after use. Hardened/cured material can only be removed mechanically.

Notes on Application / Limitations

General:

This product should only be used by suitably trained and experienced contractors. For optimum workability the adhesive must be at least +15°C. Best results are obtained under constant or falling temperature conditions between +5°C and +25°C. Before caulking commences ensure the temperature of the wood does not exceed +25°C. For the correct curing of the adhesive sufficient ambient moisture is necessary.

Important for Exterior applications:

Exposure to sunlight and rain during the operation and especially during the actual caulking, needs to be avoided under all circumstances. Exposure to the elements during the application procedure needs to be prevented for at least eight hours following the last step in the process. Wooden planks should show vertical, growth rings. Timber should be radial / quarter sawn to minimize warping and shrinkage cupping etc. Minimum thickness of the boards is 6 mm.

Complete and correct bedding of the wood is very important.

The residual moisture content of the wood should not exceed 12%. In service an uncoated timber floor can vary in moisture content between 5% and 20%. Design the width of the joints accordingly. Sikaflex®-T6 can become slippery, when in contact with chlorinated water (pool water).

Good ventilation and a well organized tidy working area are also important factors for successful caulking.

Tangential shrinking/ swelling in % per 1% change in moisture content		Radial shrinking/ swelling in % per 1% change in moisture content
Douglas Fir	0.27	0.15
Merbau	0.26	0.13
Robinia	0.35	0.24
Teak	0.26	0.16
Larch	0.30	0.14

Finishing:

A finishing lacquer or varnish for external timber decks is not recommended. Varnishes contain solvent or plasticizers that can adversely affect the cured Sikaflex®-T6 or the drying lacquer itself. However, if varnish is to be applied then the following should be observed: Never apply the varnish to uncured Sikaflex®-T6. A waiting time of at least one month is recommended. The compatibility of the varnish should be fully evaluated on a sample area before application. Rigid varnishes have a negative effect on the elasticity of the joint and therefore might cause a loss of adhesion of the Sikaflex®-T6 from the wood in the event of high movement.

Maintenance for exterior decks:

The timber deck should be wetted regularly with fresh water in order that it does not dry out. The use of any detergents (only natural liquid soap) diluted in water must be kept to an absolute minimum. Bleach and other aggressive chemical cleaners or detergents must not be used.

Interior applications:

For interior applications Sika® Primer-3 N should only be applied in well ventilated rooms. During application smoking is prohibited. Do not apply Sika® Primer-3 N close to ignition sources.

Wooden floors in basements, or other such below ground areas without a damp proof membrane, must only be installed after the application of Sikafloor® EpoCem® sealed with Sika® Primer MB to control the moisture. For detailed instructions refer to the relevant Product Data Sheets or contact our Technical Service Department.

Do not mix with or expose uncured Sikaflex®-T6 to substances that may react with isocyanates, especially alcohols which are often components within e. g. thinners, solvents, cleaning agents and formwork releasing components. Such contact could interfere or prevent the cross linking reaction of the material.

With chemically pre-treated types of wood floors (e.g. those treated with ammonia, wood stains, timber preservatives) and woods with a high oil content, Sikaflex®-T6 should only be used with the specific written agreement of our Technical Service Department. Do not use on PE, PP, TEFLON, or plasticized synthetic materials (carry out pre-trials or contact our Technical Service Department).

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.

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.

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.

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.

It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.



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