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# FICHA TÉCNICA DE PRODUTO

# SikaFill<sup>®</sup> Reflex Pro

Ecological waterproofing liquid Membrane with high solar reflectivity for roofs, based on Co-Elastic Technology

# DESCRIÇÃO DO PRODUTO

SikaFill® Reflex Pro is a highly elastic, UV-resistant, single-component, solvent-free, waterproof, cold applied waterproofing membrane.

#### USOS

- As a solution for waterproofing new roofs or restoring existing roofs;
- For waterproofing coverings with various details or interferences and with complex geometry and difficult access;
- As a reflective coating improving thermal insulation and reducing building cooling costs

### **CARACTERÍSTICAS / VANTAGENS**

- Resistant to UV rays in the weather;
- Highly elastic, acts as a bridge of cracks;
- Solvent free;
- Monocomponent ready for use;
- Excellent adhesion on porous and non-porous substrates;
- Continuous waterproofing membrane, seamless;
- Permeable to water vapor;
- High reflectivity of solar rays, increase in indoor thermal comfort.

# **CERTIFICADOS / NORMAS**

Meets the requirements of ETAG-005 Part 8. Meets NBR 15487 (Polyurethane membrane for waterproofing) and NBR13321 (Acrylic membrane for waterproofing).

Meets requirements for external fire behavior according to ENV 1187 BRoof (T1) (non-combustible supports).

Meets the requirements of solar reflectance according to Energy Star (0.863).

# Base químicaPolyurethane modified with acrylic dispersion.EmbalagemBucket of 20 kg.CorWhite (Energy Star).Prazo de validade12 months from the date of production.Condições de estocagemStore in original and unopened containers in a dry condition protected<br/>from direct sunlight at temperatures between +5° C and +30° C.Densidade1,40 kg/l (+23 °C) - (EN ISO 2811-1)Teor de sólidos~ 48% by volume / ~ 70% by weight

# DADOS DO PRODUTO

### **DADOS TÉCNICOS**

Resistência à tração	With non-woven polyester structurant 70 gr / m2: ~ 5 N / mm		
Alongamento de ruptura	Free film: With non-woven polyester structu- rant 70 gr / m2:	> 350% (DIN 53504) ~ 40-60%	
Temperatura de serviço	Min5°C / Max. +80°C		
INFORMAÇÃO DO SISTEMA			
Estrutura do sistema	<u>Coating for Roof:</u> Coating Coating UV stable coating for increased shelf-life or reflective coating for greater energy savings.		
	System:	SikaFill <sup>®</sup> Reflex Proapplied in one c two coats	
	Substrates:	Concrete, metal, wood, ceramics	
	Primer:	SikaFill <sup>®</sup> Reflex Prodiluted with 105 water	
	Total thickness:	<u>~ 0.5mm</u>	
	Total consumption:	~ 1.4 kg / m²	
	Roofing waterproofing: As an economical solution for water- proofing in new constructions or res- toration services.		
	System:	SikaFill <sup>®</sup> Reflex Pro applied in two coats, reinforced with Sika <sup>®</sup> Fleece 70 BR structurer, sealed with an ac ditional coat of SikaFill <sup>®</sup> Reflex Pro	
	Substrates:	Concrete, metal, wood, ceramics.	
	Primer:	SikaFill® Reflex Pro diluted with 10 water	
	Total thickness:	~ 0.8 - 1.0 mm	
	Total consumption:	~ 1.8 - 2.0 kg / m2	

gular substrates, as a bridge between cracks, joints and splices in the substrate, as well as in the execution of details. The structurant should be applied in areas with large movements, in irregular substrates, as a bridge between cracks, joints and splices in the substrate, as well as in the execution of details. The structurant should be applied in areas with large movements, in irregular substrates, as a bridge between cracks, joints and splices in the substrate, as well as in the execution of details.

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1 C	Produto monocomponente. Homogeneizar antes de usar
×	Resistente aos raios UV. Reduzido efeito de amarelamento
15.1	Altamente elástico e ponte de fissuras
	Permeável ao vapor
_/ <b>è</b>	Fácil aplicação com pincel, rolo ou por jateamento com airless inclusive em locais de difícil acesso.
++	Excelente aderência em diversos substratos evitando infiltrações de água.
	Membrana impermeabilizante contínua, sem emendas
$\otimes$	Resistente ao tráfego esporádico de pedestres
July 5	Resistente ao fogo
Bitumen	Compatível com membranas betuminosas
	Resistente a cargas geradas pelo vento
	Branco
L	

# INFORMAÇÃO SOBRE A APLICAÇÃO

Pré-tratamento do substrato	Substrate Quality
	<u>Cement substrates:</u>
	New concrete should cure for at least 28 days and have pull-off strength ≥ 1.5 N / mm2;
	Cementitious or mineral based substrates must be mechanically prepared abrasive cleaning or with scarification equipment with the purpose of eli- minating the surface cream and reaching a rough and open surface; Loose or friable particles as well as areas of low strength concrete should be completely removed. Surface defects such as bubbles and voids should be completely exposed;
	Repairs to be performed on the substrate such as filling joints, bubbles and as well as surface leveling should be performed using products of the Sika-floor <sup>®</sup> , SikaDur <sup>®</sup> and SikaGard <sup>®</sup> lines.
	Large imperfections or protrusions should be removed by, for example, sanding.
	Fluid evaporation is a natural phenomenon of concrete that can generate bubbles in subsequently applied layers. The moisture content, trapped air content and surface finish of the concrete must be carefully checked befo- re starting any application work. Application of the membrane at descen- ding or stable temperatures may decrease the evaporation of fluids. Thus, when possible, the application of the primer layer in the late afterno- on or evening may be beneficial. For waterproofing services print the substrate and always use a reinforced
	system. Bricks and stones:
	Mortar joints must be strong and must be clean carefully. Make localized ribs on joints and print before application of SikaFill <sup>®</sup> Reflex Pro.
	<u>Slate, ceramics, etc:</u> Ensure all slate / ceramic pieces are integral and firmly attached, replace
	any broken or missing parts. Ceramics vitrified must be sanded prior to pri- ming and subsequent application of the SikaFill® Reflex Pro.



	trate. Asphalt	<u>nkets:</u> sphalt blankets are firm : blankets should not sh y reinforced system.		-	
		<u>oatings:</u> oatings should not prese nastics, or areas with ta		table areas, areas	
		<u>Metals:</u> The metals must be strong. Exposed surfaces should be prepared up to a shiny metal surface. Use ribs located on gaskets and fixings. <u>Substrates of wood:</u> The substrates and panels of wood should be in good condition, firmly at- tached or mechanically fixed.			
	The substrate				
	oxidized layer <u>Existing Sika</u> F	ngs: ne existing material is st rs and use reinforcemer ill® Reflex Pro Systems ( ex Pro systems must be t	ts located on th Existing Liquid I	ne joints. <u>Membranes):</u> Existing	
Tempo de espera / Pintura		ng SikaFill <sup>®</sup> Reflex Pro o		oound by SikaFill <sup>®</sup> Re-	
		ed with 10% water, you npe- Relative humidity		Maximum*	
	+10°C	50%	~ 4 horas	*	
	+20°C	50%	~ 2 horas	*	
	+30°C	50%	~ 1 horas	*	
	<ul> <li>* After proper cleaning<sup>1</sup> the SikaFill<sup>®</sup> Reflex Pro can be repainted with itself at any time.</li> <li>Before applying SikaFill<sup>®</sup> Reflex Pro on SikaFill<sup>®</sup> Reflex Pro, wait until the drying of the 1st coat:</li> </ul>				
	Substrate Ter rature	npe- Relative humidity	Minimum	Maximum*	
	+10°C	50%	~ 8 horas	*	
	+10 C +20°C	<u> </u>	~ 6 horas	*	
	+ <u>20 C</u> +30°C	<u> </u>	~ 4 horas	*	
	* After prope at any time.	r cleaning <sup>1</sup> the SikaFill® the dirt has been remo	Reflex Pro can b		
	Note: The tim	nes given above are app c environmental condit			

#### VALOR BASE DO PRODUTO

Todos os dados técnicos aqui contidos são baseados em testes de laboratórios. Medidas de valores em condições reais podem variar devido a condições fora de nosso controle.

# ECOLOGIA, SAÚDE E SEGURANÇA

# INSTRUÇÕES DE APLICAÇÃO

ally the temperature and relative humidity of the environment.

<u>Method of Application (Please refer to the latest edition of the Execution)</u>

Wait for the primer to dry before applying the SikaFill<sup>®</sup> Reflex Pro.

For more information about the standby time, refer to the waiting times in this document. Protect areas that

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may be damaged by with crepe tape (eg door frames).

**Coating**: SikaFill<sup>®</sup> Reflex Pro should be applied in two coats of approximately 0.7kg / m<sup>2</sup>.

Before applying the second coat, wait for the drying time indicated in table below the waiting times in this document.

**Waterproofing of Coverings**: SikaFill<sup>®</sup> Reflex Pro should be applied in set with a polyester non-woven fabric.

- 1. Apply a primer coat of approximately 1 kg / m2 Sikafill<sup>®</sup> Reflex Pro in a compliance of approximately 1m.
- 2. Place the structurant ensuring that there are no blisters or wrinkles. It should ensure a minimum overlap of 5 cm between the different portions of the structuring.
- structure.Pass the roller directly onto the structurer with the product still fresh to The entire application process should be done while the Sikafill<sup>®</sup> Reflex Pro still cool, damp on wet.
- 4. Reflex Pro, in order to leave the structurant completely embeddedIf necessary, apply one coat of approximately 0.1 kg / m2 Sikafill®
- 5. in this stage, in all places.
- 6. Repeat steps 1 through 3 to cover the entire area to be waterproofed.
- After the drying of the coat with the structurant, seal the area applying one more or two coats of Sikafill<sup>®</sup> Reflex Pro using a approximately 0.7 kg / m<sup>2</sup>.

Sika recommends performing the details before performing the waterproofing of the surfaces. For details follow the procedure indicated in steps 1 to 5

#### EQUIPAMENTO

#### <u>Tools</u>

**High Pressure Hydrojet** 

If there is dust, vegetation, mold / algae or any other contamination in the cover, it is necessary to clean the substrate with high pressure hydrojet prior to application of the system. Any gravel or dirt from should be removed manually or with a brush before use the high pressure hydro-jet.

#### Squeegee

For elimination of rainwater deposited on the roof

#### **Electric Mixer**

SikaFill® Reflex Pro should be homogenized with an rotation for 1 minute.

Solvent resistant short hair roll Used in SikaFill<sup>®</sup> Reflex Pro application to ensure a constant thickness. Thick Hair Roll: For the application of SikaFill<sup>®</sup> Reflex Pro in details and penetrations

Equipment for airless projection It should only be used to apply the layers without structuring and primer.

The pump must meet the following requirements:

- Min. Pressure:	220 bar
- Min. Flow:	5.1 l / min
- Nozzle diameter:	0 min. 0,83mm

#### PREPARAÇÃO DA BASE

Substrate primer

Substrate	Primer	Consumption [kg / m2]
Cement Substra-	SikaFill <sup>®</sup> Reflex	≈ 0,3
tes	Prodiluted with	
	10% water	·
Brick and stone	SikaFill <sup>®</sup> Reflex	≈ 0,3
	Prodiluted with	
	10% water	
Slate, ceramics	SikaFill <sup>®</sup> Reflex	≈ 0,3
	Prodiluted with	
	10% water	
Asphalt Blankets	SikaFill <sup>®</sup> Reflex	
	Prodiluted with	≈ 0,2
	10% water	
Floor coverings	SikaFill <sup>®</sup> Reflex	≈ 0,2
	Prodiluted with	
	10% water	
Metals	SikaFill <sup>®</sup> Reflex	≈ 0,2
	Prodiluted with	
	10% water	
Substrates of wo-	SikaFill <sup>®</sup> Reflex	≈ 0,3
od	Prodiluted with	
	10% water	
Paintings	SikaFill <sup>®</sup> Reflex	≈ 0,2
-	Prodiluted with	
	10% water	
·		

The above indicated intakes are theoretical and do not take into account losses of material during the application or as a consequence of the porosity or irregularities present in the substrate, surface level variations, etc.

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#### **APLICAÇÃO**

Before applying SikaFill® Reflex Pro, homogenize the product for 1 minute until a homogeneous mixture is obtained Avoid mixing excessively in order to avoid the incorporation of air into the product.

Application Notes / Limitations

Do not apply SikaFill® Reflex Pro on substrates with rising humidity;

Always apply the system at ambient temperatures and the descending substrate. If the system is applied in rising temperatures bubbles may appear as a consequence of the rising air coming from the substrate. Make sure SikaFill<sup>®</sup> Reflex Pro is completely dry and presents bubbles before the application of the sealing layer.

Do not allow the formation of puddles of water during the application of the various coats nor before complete cure of the product. Eliminate any accumulation of water during these periods.

SikaFill® Reflex Pro should not be applied to roofs where they can form points of water accumulation, especially in places where it may occur subsequent freezing of the accumulated water. In regions with a cold applications in roofs with slopes less than 2nd special.

A non-woven polyester structurant may be used as the reinforcing system total or partial over joints and cracks with movement.

The SikaFill® Reflex Pro is not suitable for constant pedestrian traffic. In situations where pedestrian traffic can not be avoided, SikaFill® Reflex Pro should receive a layer of mechanical protection with ceramic, stone or wood.

Do not apply cementitious products (such as mortar) directly on SikaFill® Reflex Pro. Use a separating layer as for example oven-dried guartz sand.

#### LIMPEZA DE FERRAMENTAS

Clean all tools and application equipment with water immediately after use.

The hardened product may only be mechanically removed

### **RESTRIÇÕES LOCAIS**

Para maiores informações sobre manuseio, estocagem e disposição dos resíduos consulte a versão mais recente de nossa Ficha de Seguranca do Material que contém os dados disponíveis, das propriedades físicas, de ecologia, de toxidade, e outros dados de seguranca pertinentes.

#### NOTA LEGAL

As informações e, em particular, as recomendações relacionadas à aplicação e à utilização final dos produtos Sika®são fornecidas de boa-fé e baseadas no conhecimento e na experiência de uso desses produtos, desde que devidamente armazenados, manuseados e aplicados em condições normais. Na prática, as variações no estado do material, nas superfícies e nas condições de aplicação em campo são de tal forma imprevisíveis que nenhuma garantia a respeito da comercialização ou aptidão de um determinado produto para um determinado fim, nem quaisquer responsabilidades decorrentes de qualquer relacionamento legal entre as partes poderão ser inferidas dessas informações ou de quaisquer recomendações dadas por escrito ou por qualquer outro meio. Os direitos de propriedade de terceiros deverão ser observados. Todas as encomendas aceitas estão sujeitas às condições de venda e de entrega vigentes. Os usuários deverão sempre consultar as versões mais recentes das fichas técnicas de cada produto (disponíveis mediante solicitação).

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Ficha Técnica de Produto SikaFill® Reflex Pro Outubro 2020. Versão 01.05 02091510100000048

SikaFillReflexPro-pt-BR-(10-2020)-1-5.pdf

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