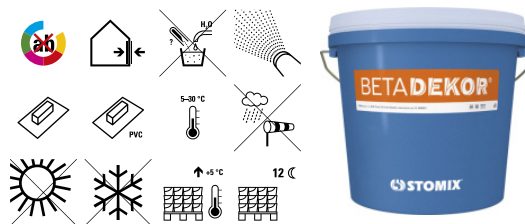


Technological instruction No. 02-003

BETADEKOR® SIF

Catalogue No.: 610600

BETADEKOR® SIF is water soluble silicon resin thinlayer rustic render.



CHARACTERISTICS

Application	It serves for final surface treatment of facades and walls in exterior and interior, of plaster boards and for final surface treatment of base layers of external thermal insulation composite systems (hereinafter ETICS) of STX.THERM® line.
Characteristics	The renders are delivered in reduced scale of tints (see the current colour card). The hardened layer is permanently flexible. The material contains additives limiting occurrence of algae, fungi and moulds. It provides the best values of permeability of vapour. Formed surface enables washing of polluted places by water stream, eventually with detergents, it has very low surface wettability with significant pearly effect and provides the highest resistance to deposition of dust.
Appearance	stippled structure
Specification	The used biocide product is made using a unique patented Advanced Micro Matrix Technology. It involves a physical bonding of active substances to inert polymer and subsequent slow release with respect to time for the period of several years. Through this action, the growth of algae and fungi (moulds) is prevented and slowed down. If biocide effects of the active substances are maintained, the negative effects on the human health and the environment are minimised.

TECHNICAL DATA

Criterion	Standard/test regulation	Value/Unit	Notes
Density	EN ISO 2811	1.7 - 2.0 g/cm ³	
Equivalent diffusion thickness S _d	EN ISO 7783-2	< 0.14 m	V1 high for grain size 2 mm
Water vapour diffusion resistance factor μ	EN ISO 7783-2	< 70	V1 high for grain size 2 mm
Water permeability rate w	EN 1062-3	< 0.08 kg/m ² .h ^{0.5}	W3 low
Cohesion	EN 15824	> 0.3 MPa	
Fire reaction	EN 15824	C	The consumption to 3.5 kg/m ²
Fire reaction of the system	EN 13501-1	A2-s1,d0	when built-in into selected ETICS from the STX.THERM® range
Thermal conductivity	EN 1745	0.7 W/(m.K)	

The specified characteristic parameters are average values. Due to the use of natural raw materials in our products, the specified values may insignificantly differ in individual deliveries. This, however, does not compromise suitability and reliability of our products.

SUBSTRATE

Requirements	The base must be firm and consistent, cleaned from dust, grease spots and all impurities that could reduce the render adhesive capacity to the base. As suitable are the quality, matured (at least 28 days) lime-cement, polymer-cement renders and sealants, concrete, seamless base layers of ETICS of STX.THERM® line (matured minimally 48 hours), plaster boards and treated surfaces of chipboards (interior only), cement-chipboards and cement-fibre boards. Volume unstable bases must firstly be equipped by a backfilling
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(ALFAFIX® S1, S11) and glass mesh layer. Bases with supposed increase of humidity in winter period must be frostproof. Instable, inconsistent and polluted places of bases must be mechanically removed, eventually repaired. Also previous lime or glue paints must be removed by regrating. Bases must be flat with even and natural surface structure with sunk edges. Bases with unsuitable flatness must be repaired, levelled eventually smoothed. Application on bases of cement-lime renders with prevalent lime or carbonate fillers is not recommended.

Flatness requirements - maximal grain size + 0,5 mm for 1 m of length.

Preparation of the material	<p>Before application of the final surface treatment the foundation shall be treated with water-soluble intermediate coat HC-4 in the corresponding colour shade. The foundations with a predominant silicate proportion, including a base coat of ETICS from the STX.THERM® range, shall be treated with water-soluble intermediate coat HC-5 in the corresponding colour shade.</p> <p>The render is possible to be applied after complete drying of penetration or base paint depending on the climatic conditions - 4 hours minimally, at temperatures lower than +10 °C and high relative humidity even 24 hours.</p>
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APPLICATION

Climatic conditions during application	The work may not be done under rain, fog, strong wind nor to directly sunlit surfaces. Range of working temperatures is from +5 °C to +30 °C (air and base) and the applied material must be secured against frost and rain up to complete drying.
Preparation of the material	Before application the material must be mixed by a quick stirrer (drill adapter) or by a mixer with forced mixing. The material is delivered in paste consistency and does not require any improvements. Consistency can eventually be adapted by adding of max. 2 % of drinking water. Mixing of any other additives is prohibited.
Consumption	(kg/m ²) BETADEKOR® SIF class 15: 2.4-2.8; class 20: 2.8-3.6; class 30: 3.3-4.0
Spreading capacity	7.8 m ² / bucket (25 kg) according to the thickness of grain
Composition of surface treatment	<p>Penetration varnish: Depending on the kind and condition of the foundation</p> <p>Intermediate coat: HC-4, HC-5 in the corresponding colour shade</p> <p>Final surface treatment: BETADEKOR® SID</p>
Application	<p>The render is applied by a stainless steel smoother. The structure is consequently formed by smoothing or designing by means of a stainless or plastic smoother.</p> <p>For complete areas material of the same batch should be used. If more batches are to be processed they must be mixed together and uniformly thinned. To observe permanent consistency of the material for adjacent surfaces is essential. Complete areas must done at once with sufficient and trained staff. If it is not possible, the area should be conveniently divided with taking into account possible deviations.</p> <p>Adjacent surfaces (windows, doors, banisters, switchgear boxes etc) must be protected against pollution by a suitable foil, tapes etc. Any polluted area must be cleaned in time because removal of dried material is difficult.</p>
Drying, curing, revision time	The material hardens physically though water vaporisation. The material dries up after 14 days. Adverse conditions slow the drying process down. On principle, protective measures must be taken (e.g. protection against rain, protection against sun by shading) on the worked or just finished surface under adverse conditions. At an air temperature of +20 °C and relative air humidity of 65 % re-work is possible not earlier than after 24 hours.
Cleaning tools	Immediately after use clean with water.

DELIVERY

Colour hue	<p>white, tintable</p> <p>Stability of the colour tone: The surface may change over time when exposed to natural weather conditions, humidity, UV light, or deposits. This may result in a colour change. In fact, it is a dynamic process that is influenced by the weather conditions and exposure of the surface. For intensive and/or very dark shades, it is suggested to improve colour stability by applying an additional coat.</p>
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Black grain:

Fillings used in the plasters of STOMIX, spol. s r. o. are natural products that may individually give impression of dark or structural grains. This does not mean that the quality is deteriorating, but it is a minimum optical deviation. This is due to the natural character of the product and proves natural characteristics of the used materials.

Breakage of the filling:

When a coat surface is exposed to mechanical stress, there may be changes to a colour shade on the affected areas, particularly with dark, intensive colour shades. Such areas become slightly lighter, due to damage of the filling or pigment abrasion. This, however, does not affect quality and functionality of the product.

Colour shade accuracy:

On the basis of chemical and/or physical binding processes and in varying climatic and exposure conditions, no guarantee of accuracy and evenness of colour shade can be given, particularly with:

- irregular absorption of the foundation
- irregular humidity of the foundation
- partially considerably different alkalinity of the substances contained in the foundation
- direct exposure to sunlight with strongly limited shade formation on a freshly applied area

Emulsifier washout:

Based on the conditions slowing down the drying process, surface phenomena (leaches) may appear in the initial phase in not dried coats due to the effect of condensation, vapour, splashing water or rain, because of the auxiliary, water-soluble substances contained in them. Depending on the colour shade intensity, the described effect may differ, which, however, is not material quality deterioration. Such effects usually spontaneously disappear with further exposure to weather conditions.

Tintable	full colour scale except tint of groups a,b
Potential special setting	Adding other substances into the mixture is forbidden. A preserving agent and agent protecting against fungi and algae are added already during production. A preventive and prolonged effect is achieved. A permanent protection against algae and fungi can't be guaranteed.
Packing	The product is packed in 25 kg plastic portable buckets.
STORAGE	
Storage	When storing in the tightly closed original packaging, the warranty period is 12 months since the production date. Protect the product against frost and do not store it at sunlit places.
Storage period	12 months since the production date.
Ecology	Liquidation of not used remains is done by watering and depositing of the hardened inert substance as a building waste. Used packaging is liquidated as composite waste according to the valid legislation.

IDENTIFICATION

Product group	facade render
Composition	polymer binding substances, silicone resins, pigments, reinforcing fibers, fillers, modifying additives, biocide agents in the form of capsules (long term protection against moulds, fungi and algae)
Safety	H412 Harmful to aquatic life with long lasting effects. P273 Avoid release to the environment. Hazard determining components: Contains Terbutryne. Additional information: Not stated. VOC: Product category A, product subcategories I. The maximum permissible limit VOC content in the product ready to use is 200 g/l mass. Maximum VOC content in the product ready to use is 0.75 g/l mass.

SPECIAL INFORMATION

Regarding orders, transport, handling and storing, general sales conditions are applicable. Usage of the product is described in relevant technological sheet. Respect safety sheet instructions. The prescription is available at authorized dealers and on the address **www.stomix.com**.

The information provided takes in account the current status of the technology. We give general instructions based on our

experience with application and results of the material tests. However, the information provided can't take into account the local conditions during the application, therefore, it can't be legally binding. In case of doubts or need to solve specific technical problems, please contact us.

	STOMIX, spol. s r. o. 790 65 Skorošice 197 Czech Republic ID: 48400874	
	11	02-003-03
EN 15824:2009 Specifications for external renders and internal plasters based on organic binders		
Water vapor permeability: V_1 Water absorption: W_3 Adhesion to concrete: 0.3 MPa Durability: NPD Thermal conductivity: $\lambda = 0.8 \text{ W/(m.K)}$ Reaction to fire: Euroclass C (consumption to 3.5 kg/m ²) Euroclass F (consumption to 3.5 kg/m ²)		



WWW link