



bergmann Solar basecoat render

Mineral ecological basecoat system

Product description

- Basecoat render especially designed for the bergmann Solar system
- Fibre-reinforced
- High yield
- Highly water vapour permeable
- Flexible basecoat render
- Also for highly thermally insulating masonry with $\lambda \geq 0.065 \text{ W/mK}$

bergmann Solar basecoat render is a water-repellent pre-mixed dry mortar based on lime, cement, sifted sand, mineral and organic lightweight aggregates with special fibres and admixtures to improve workability. Ultra-fine hollow glass microspheres (no nano-technology) guarantee a well-balanced temperature and moisture ratio. These system properties also help save energy. bergmann Solar basecoat render is classified in mortar group P II according to DIN V 18550 and strength class CS II DIN EN 998-I.

Field of application

bergmann Solar basecoat render is a lightweight, highly flexible basecoat render for indoor and outdoor use on all standard substrates, also suitable for modern, thermally insulating masonry with $\lambda \geq 0.065 \text{ W/mK}$. Suitable for application on all types of masonry, concrete and plaster.

Product properties

High yield, flexible basecoat render with excellent heat-insulating properties. Easy to apply and scrape and provides superior stability. bergmann Solar basecoat render thus meets all the basic requirements for a long-lasting proper functioning of the facade.

General information

Contact us for technical support if you have questions regarding the application or site specifics. Do not mix with any foreign substances. Observe the standard render application thicknesses. Pay special attention to the provisions stipulated in DIN V 18550 / DIN EN 998-I and DIN 18350 VOB (German construction contract procedures) Part C. bergmann Solar basecoat render is not suitable for use as plinth render. Mortar produces a strong alkaline reaction with water. Make sure eyes and skin are protected. In the event of eye contact, wash thoroughly with water and consult a doctor immediately. Please refer to the Material Safety Data Sheet for health and safety advice (latest version available at www.bergmann-solar.com). After hardening, the product presents no risk to health or environment.

SCHWENDER GMBH

Rehleite 2 · 95445 Bayreuth
Telefon (+49) 0921 / 16 86 71 41
Fax (+49) 0921 / 7 31 35 51
www.bergmann-solar.com
2017-11-2

Legal notices

The information provided in this document is based on our technical knowledge and experience at the present time. It must be regarded as a general guideline only. Owing to the large number of potential influences, it does not relieve anyone using or processing our products from the responsibility of carrying out their own tests and experiments, nor does it imply any legally binding assurance of certain properties or that our products are fit for a specific purpose. Responsibility for complying with any property rights, applicable laws or other requirements lies solely with the user. This datasheet invalidates any previous datasheets.

Substrate preparation

Ensure the background is dry, clean and free from dust. Remove any film-forming release agents. Cover dirt-sensitive building elements or seal them off with a water-proof cover. Protect weather-exposed faces from rain or direct sunlight.

Application

Apply two layers ("wet on wet") on substrates that vary in absorptivity or are highly absorbent. Use feather edge and lattice plane to float the smoothed render to an even finish. Approved for use on exterior walls as undercoat only. Apply in one layer of maximum 30 mm thickness. Apply reinforcing mesh with filler render on large highly-insulating substrate surfaces, e. g. rigid extruded polystyrene boards, 3-layer wood wool composite boards, etc. after the specified waiting time. We recommend reinforcing backgrounds that are subject to movements, e. g. corners of all openings or wherever different materials adjoin one another. Embed additional diagonal strips at all corners of facade apertures.

Subsequent treatment

Protect freshly applied render from rain and rapid drying caused by direct sunlight and/or wind.

Coating

Coat with any bergmann finish renders after curing. We recommend applying a reinforcement layer that covers the entire surface using bergmann Solar facade filler and bergmann reinforcement mesh MW for sides that are highly exposed to the weather

- thin layers of final coats < 2 mm grain size or colour/lime-washed and felted surfaces
- mixed masonry
- dark shade facade coatings
- roof overhang < 40 cm
- areas exposed to increased moisture-related stress (also from the ground)
- levelling substantial irregularities in the background
- at temperatures below 10 °C and a layer thickness above 30 mm, in longer periods of wet weather or if the ground is wet

In these cases, we recommend applying a reinforcement layer that covers the entire surface using bergmann Solar facade filler and bergmann reinforcement mesh MW on the solar basecoat render. This technique ensures that any substrate tension (occurring between wall material and undercoat) is decoupled from the finish render. Use solar facade filler as reinforcement render to ensure superior force transmission to the fully embedded glass mesh.

SCHWENDER GMBH

Rehleite 2 · 95445 Bayreuth
Telefon (+49) 0921 / 16 86 71 41
Fax (+49) 0921 / 7 31 35 51
www.bergmann-solar.com
2017-11-2

Further processing

bergmann Solar render (decorative render) or bergmann Solar facade filler up to a thickness of 20 mm can be applied over bergmann Solar basecoat render after appropriate preparation, i. e. 1 day/mm set time, and at a temperature of ≥ 10 °C. For render coats thicker than 20 mm and at temperatures below 10 °C, allow 0.5 day/mm extra to set.

Storage

Shelf life is at least 3 months when stored on pallets in a dry place. For date of manufacture, see information printed on bag.

Silo and machine technology

Can be manually applied or using any standard rendering machines or mixing pumps. In special silos of the maxit transport and feeder system, with SMP silo mixing pump or assembled SFA silo feeding system on request. In 20 kg paper bags on pallets with 42 bags each = 0.840 t.

Coverage rates

application	mm	10	15	20	25
consumption	kg/m ²	7,0	10,5	14,0	17,3
yield	m ² /t	145	96	72,5	58
	l/t	1450			
m ² /20kg/bag		2,9	1,9	1,4	1,2

(The data specified refers to a level substrate)

Disposal

Recommendation: Must not be disposed of as domestic refuse. Do not allow to enter drains or watercourses. Make sure to completely empty the bags and dispose according to official regulations.

Technical specifications

Exterior application	Yes
Interior application	yes
Water vapour permeability	$\mu < 20$
Compressive strength (28 days)	App. 4.0 N/mm ²
Compressive strength (class)	P II DIN V 18550 CS II EN 998-1
Elastic modulus	1400 N/mm ²
Fibres	Yes
Tensile bond strength	$\geq 0,08$ N/mm ²
Min. application: outdoor	20 mm
Min. application: indoor	10 mm
Dry bulk density	< 700 kg/m ³
Water absorption	W 1
Water ratio	ca. 8 l per 20 kg bag
Water vapour permeability	$\mu \leq 20$
Thermal conductivity	(tested according to DIN 52612) $\lambda 10 k 0,140$ W/mK
Temperature at application	+ 5 °C to + 30 °C.

The values specified are based on laboratory data

SCHWENDER GMBH

Rehleite 2 · 95445 Bayreuth

Telefon (+49) 0921 / 16 86 71 41

Fax (+49) 0921 / 7 31 35 51

www.bergmann-solar.com

2017-11-2