

PRODUCT DATA SHEET

Sikatherm[®]-611 Render

LIGHTWEIGHT INSULATION PLASTER

DESCRIPTION

Sikatherm[®]-611 Render is an insulating system designed for external facades of houses, buildings, or other structures as well as internal partitions or ceilings. It is applied in the same way as a wall plaster onto exterior and interior surfaces manually with hand trowelling tools and/or machine.

USES

- Suitable for both internal and external wall application.
- Compatible with commonly used tile adhesives and waterproof membranes.

CHARACTERISTICS / ADVANTAGES

- Lightweight, density approx. 200 kg/m³
- Excellent thermal insulation
- Good acoustic insulation
- Fire-resistant
- Water repellent to avoid loss of insulation properties after rain

PRODUCT INFORMATION

| | |
|---------------------------|---|
| Chemical Base | 1 bag of 15 kg Sikatherm [®] -611 Render, 100 litre of Crushed EPS Beads (0 - 4mm) density of 1.2 kg/100 litre |
| Packaging | 15 Kg |
| Shelf Life | 12 months from manufacture date |
| Storage Conditions | Store properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight. |
| Density | 170 kg/m ³ ~ 200 kg/m ³ (Dry) |

TECHNICAL INFORMATION

Thermal Conductivity $\leq 0.065 \text{ W/(m.K)}$

APPLICATION INFORMATION

Ambient Air Temperature $+6 \text{ }^\circ\text{C min} / +40 \text{ }^\circ\text{C max.}$

Mixing Ratio

| Material | Weight |
|---------------------------|---------------------|
| Sikatherm®-611 Render | 15 kg |
| Crushed EPS Beads (0-4mm) | 100 ltr |
| Water | 15 - 17 ltr |
| Total Yield | Approx. 100 ltr |
| | 100mm thick per sqm |

Substrate Temperature $+6 \text{ }^\circ\text{C min} / +40 \text{ }^\circ\text{C max.}$

Pot Life 60 - 120 min (depending on ambient conditions)

BASIS OF PRODUCT DATA

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.

LIMITATIONS

- Insulation properties are directly dependent on the thickness and density of the insulated render.
- Trial mixes are mandatory before any application.
- Density might vary due to variations in the light-weight aggregate.
- Apply only to sound and well-prepared substrate.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The substrate must be clean, sound, dust free without any traces of oil, laitance, curing compound and other contaminants. The substrate must be fully cured and is sound enough to receive the weight of Sikatherm®-611 Render. This is important especially for renovation works or refurbishments as old plasters might debond from the wall or ceiling surface which will cause debonding of Sikatherm®-611 Render as well.

Deeply contaminated substrate must be abraded to clean and sound surface.

MIXING

- Drum mixer with a minimum capacity of 150ltr is required for mixing.
- Pour the required amount of clean water into the mixing drum.
- Pour in the required Sikatherm®-611 Render into the drum while mixing.
- Mix for 2-3 minutes, until a homogenous slurry is obtained.
- Lastly, add in the required crushed EPS Beads and continue mixing for 5-15 minutes until clumps are eliminated and a smooth consistency of mortar is achieved.

APPLICATION

Primer

Prime with a slurry scratch coat/key coat by mixing Davco 751 with cement and fine sand at 1:1:1 ratio. Apply a thin coat to form key coat and leave it to dry before applying subsequent layers of plaster.

By hand

The material from the bucket or wheelbarrow is applied with a masonry spatula/trowel directly to the wall surface by throwing and not pressing too hard like conventional plaster. The applied material is smoothed with a long aluminium slat. Leave the prepared surface to dry.

First, spread a thin (approximately 3-4 mm) contact layer to serve as an adhesive bridge. In this way, the surface will be cleaned of dust. Leave this thin layer to dry before applying next layer. Continue to apply Sikatherm®-611 Render in maximum layers of 4-5cm until the desired thickness is reached. Necessary hardening time between layer applications must be observed. Depending on weather conditions, setting may take 6 to 24 hours.

By plastering machine

The pre-mixed material is poured into the tank of the plastering machine. First, spread a thin (approximately 3-4 mm) contact layer. Additional layers are sprayed after drying, typically the next day or 6-24 hours depending on weather conditions, whereby maximum layer of 4-5 cm is advised per one layer. The last layer is finished with a foam smoothener in crinkle direction. This process provides a hard and completely smooth surface. Leave the prepared surface to dry.

Smoothing of the Surface and Final layers

The final stage is to level and smooth the surface, but this can only be done when the material has hardened. Hardening time may take approx. 24 to 72 hours, depending on weather conditions. For any surface unevenness, sandpaper can be used to level the surface if necessary.

For protective or final layer: Apply a layer of SikaWall®-178 if necessary. Sika/ Davco Waterproofing products can be added if needed. Such additional layers can be applied after the final layers have been cured for 7 days.

CLEANING OF TOOLS

- Clean mixing and application equipment with water immediately following use.
- Remove splatter or spills with water before material sets.

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.

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.

Sika (Singapore) Pte Ltd.

28 Tuas South Ave 8

Singapore 637648

Phone: +65 6861 0632

Fax: +65 6862 3915

Email: sales@sg.sika.com

www.sika.com.sg



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April 2024, Version 02.03

02183030000000013