BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic®-110

High elasticity, one part polyurethane bituminous waterproofing coating

DESCRIPTION

Sikalastic®-110 is a water based one part modified polyurethane/bituminous coating, formulated to form a highly elastic, seamless and crack bridging membrane.

USES

Due to its high elasticity, Sikalastic®-110 can be applied on different structures including those subject to thermal movement and vibration such as:

- Concealed RC flat roof
- External walls to be buried below ground
- Waterproofing coating under tiles areas like podium, balconies and etc.

CHARACTERISTICS / ADVANTAGES

- Easy application by roller, brush or sprayed, even onto vertical walls and ceiling
- High elasticity
- High crack bridging capability
- Optimum adhesion onto concrete
- Can be applied directly on damp surface
- Non-toxic
- Low VOC and eco-friendly

ENVIRONMENTAL INFORMATION

Singapore Green Label: 032-118-1857 "Environmentally Preferred Coating"

PRODUCT INFORMATION

Composition	Polyurethane bituminous hybrid
Packaging	20 kg pail
Colour	Black
Shelf Life	12 months from date of production
Storage Conditions	Store properly in original, unopened, undamaged sealed packaging in dry condition at temperature between +5 °C and +30 °C. Protect from direct sunlight.
Density	1.08 kg/L

TECHNICAL INFORMATION

Tensile Strength	~1.5 N/mm² (without reinforcement)	(ASTM D412)
Elongation at break	~1000 % (Without reinforcement)	(ASTM D412)

APPLICATION INFORMATION

Ambient Air Temperature	+5 °C min. / +40 °C max.
Relative Air Humidity	Max. 80 % r.h.
Dew Point	Beware of condensation! The substrate and uncured membrane temperature must be at least 3 °C above the dew point to reduce the risk of condensation or blooming on the membrane finish.
Substrate Temperature	+5 °C min. / +40 °C max.
Substrate Moisture Content	< 6 % pbw Test method: Sika®-Tramex meter, CM - measurement or oven-dry-method. No rising moisture according to ASTM D4263 (Polyethylene-sheet)
Curing Time	48 hours min. to full cure (at +25 °C)
Waiting Time / Overcoating	**Waiting time after primer** Minimum: 30–60 min at +30 °C Maximum: 2 days at +30 °C **Waiting time between coats (Standard Coating System)** Minimum: 4–5 hours at +30 °C Maximum: 2 days at +30 °C **Waiting time between coats (Standard Coating System)** Minimum: 5–8 hours at +30 °C Maximum: 2 days at +30 °C
Applied Product Ready for Use	Sikalastic®-110 should be allowed to cure for min. 48 hours prior to overlaying with screed.

SYSTEM INFORMATION

System Structure

Standard Coating System

Layer	Product	Consumption
Primer	Sikalastic®-110 diluted with 1 part clean water	~0.2 kg/m²
First coat	Sikalastic®-110	~0.65 kg/m²
Second coat	Sikalastic®-110	~0.65 kg/m²

Reinforced Coating System

Layer	Product	Consumption
Primer	Sikalastic®-110 diluted with 1 part clean water	~0.2 kg/m²
First coat	Sikalastic®-110	~0.8 kg/m²
Reinforcement	Sika® Reemat Premium-120	1 layer
Second coat	Sikalastic®-110	~0.5 kg/m²
Third coat	Sikalastic®-110	~0.5 kg/m²

Note: These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.

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.

IMPORTANT CONSIDERATIONS

- Protect the applied material from rain before the material fully cured.
- Do not apply Sikalastic®-110 in water-retaining structures such as RC tanks, swimming pools, water features etc.
- Sikalastic®-110 is not recommended in areas with constant or permanent water immersion.
- Do not allow temporary ponding to remain between coats on any horizontal surfaces or until the final coating has totally cured. Sweep or mop away the surface water and leave to dry before applying the subsequent coat of Sikalastic®-110.
- Do not allow permanent exposure to UV light. Sikalastic®-110 is concealed system.
- Do not add extra water or other ingredients (except for priming layer, where only clean water is added)
- Cementitious substrates shall be > 28 days old prior to application of Sikalastic®-110. The substrate moisture shall be ≤ 6 %, Sika®-Tramex Meter, CM-Measurement or oven dry method.
- Do not apply Sikalastic®-110 on substrates with rising moisture.
- Sikalastic®-110 may cure slower when the relative humidity is high, i.e. in closed or inadequately ventilated rooms and basements.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

- New concrete should be cured for at least 28 days and should have a pull off strength ≥ 1.5 N/mm².
- Substrate must be dry with < 6 % moisture and prepared mechanically to achieve an open textured surface.
- Substrates must be free of standing water (no puddles) clean and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
- All existing coating / membrane, dust, loose and friable material must be completely removed from all surfaces before application of Sikalastic®-110, and associated system products, by industrial vacuuming equipment.
- The substrate must be sound and of sufficient strength. Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.
- To confirm adequate surface preparation and product adhesion, carry out a trial before full application together with adhesion tests.

MIXING

Mix Sikalastic®-110 manually or use a low speed mixer until it is completely homogeneous prior to application.

APPLICATION

Sikalastic®-110 is applied using brush, roller or by airless spray.

Standard Coating System

Dilute Sikalastic®-110 with 1 part of clean water. Stir gently until the mix is homogenous and uniform colour is achieved. Using a short hair wool roller, brush or by airless spray, apply a layer of the diluted Sikalastic®-110 onto the substrate and leave the primer to dry before applying the first coat. After the primer has dried, apply another two layers of Sikalastic®-110 to the desired film thickness. Ensure the previous layer is completely dry before applying the next layer. Leave the whole system to cure for around 48 hours prior to overlaying with cementitious screed.

Reinforced Coating System

Dilute Sikalastic®-110 with 1 part of clean water. Stir gently until the mix is homogenous and uniform colour is achieved. Using a short hair wool roller, brush or by airless spray, apply a layer of the diluted Sikalastic®-110 onto the substrate and leave the primer to dry before applying the first coat. Apply first coat of Sikalastic®-110 and embed Sika® Reemat® Premium-120 onto the wet coating, roll to ensure there are no bubbles or creases. The overlap between the edges shall be minimum 50mm and borders overlap by minimum of 100 mm. Subsequently, apply an additianal 2 coats of Sikalastic®-110 at desired film thicnkess. Ensure the previous layer is completely dry before applying the next layer. Leave the whole system to cure for around 48 hours prior to overlaying with cementitious screed.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened and/or cured material can only be mechanically removed.

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 recommenda-

tions. 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.

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