



BUILDING TRUST



PRODUCT DATA SHEET

LANKO 451 ROOF SEAL (SOVACRYL)

ACRYLIC FLEXIBLE WATERPROOFING LIQUID APPLY MEMBRANE

DESCRIPTION

LANKO 451 ROOF SEAL (SOVACRYL) is a ready-to-use acrylic waterproofing liquid apply membrane.

USES

- Interior/Exterior
- Area of uses: wall, balcony, rooftop and roof
- Rigid and flexible substrates : concrete, render, cement sheet.

CHARACTERISTICS / ADVANTAGES

- Elongation more than 380 %
- UV resistant
- Bridges cracks 0.75 mm
- Solvent free
- Easy to use
- Color available : Grey, white, green, red and blue

PRODUCT INFORMATION

Packaging	5 kg pail, 20 kg pail
Colour	Grey, white, green, red, and blue
Shelf life	12 months from date of production stored properly in undamaged, original, sealed packaging.
Storage conditions	Store in dry condition, protected from direct sunshine.
Density	~ 1.3 kg/L
Solid content by weight	~ 56%
Solid content by volume	~ 43%

TECHNICAL INFORMATION

Tensile strength	> 1 MPa at 7 days (ASTM D412)
Tensile strain at break	380% (ASTM D412)
Tensile adhesion strength	> 0.5 N/mm ² at 7 days (adhesion to concrete, EN 1542)

SYSTEMS

System structure

Roof Coating*

LANKO 451 ROOF SEAL (SOVACRYL) is applied in 2 or 3 coats

Total consumption $\geq 1.4 - 2.1 \text{ kg/m}^2$

Dry Film Thickness (DFT) $\geq 0.4 - 0.7 \text{ mm}$

*For partial reinforcement, LANKO GLASS FIBER MESH is applied at areas with high movement, irregular substrate or to bridge cracks, joints and seams on the substrate as well as for details.

*For primer, please refer to substrate.

Roof Reinforcement

LANKO 451 ROOF SEAL (SOVACRYL) is applied in a base coat layer, reinforced with LANKO GLASS FIBER MESH and sealed with 1 - 2 top coats of LANKO 451 ROOF SEAL (SOVACRYL).

Total Consumption $\geq 2.1 - 2.8 \text{ kg/m}^2$

Dry Film Thickness (DFT) $\geq 0.8 - 1.0 \text{ mm}$

Layer	Product	Consumption
1. Primer	please refer to substrate pre-treatment	please refer to substrate pre-treatment
2. Base coat	LANKO 451 ROOF SEAL (SOVACRYL)	$\geq 0.7 - 1.0 \text{ kg/m}^2$ per coat
3. Reinforcement	LANKO GLASS FIBER MESH	
4. Base coat	LANKO 451 ROOF SEAL (SOVACRYL)	$\geq 0.3 - 0.5 \text{ kg/m}^2$ per coat
5. Top coats	LANKO 451 ROOF SEAL (SOVACRYL) applied in 1-2 coats	$\geq 0.6 - 0.7 \text{ kg/m}^2$ per coat

Note:

1. Do not apply more than of 0.75 kg/m^2 of LANKO 451 ROOF SEAL (SOVACRYL) per coat for layer without reinforcement.

2. These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage.

APPLICATION INFORMATION

Product temperature $+5^\circ\text{C min.} / +60^\circ\text{C max.}$

Ambient air temperature $+5^\circ\text{C to } +35^\circ\text{C}$

Relative air humidity $5\% \text{ min.} / 80\% \text{ r.h. max.}$

Substrate temperature $+5^\circ\text{C min.} / +60^\circ\text{C max.}$
 $\geq 3^\circ\text{C above dew point}$

Substrate moisture content $\leq 6\% \text{ pbw}$
No rising moisture according to ASTM (Polyethylene-sheet).

Substrate pre-treatment

Substrate	Primer	Consumption (kg/m ²)
Cementitious substrate and render	LANKO 451 ROOF SEAL (SOVACRYL) diluted with 10 % water	~0.3 - 0.5
Cement sheet	LANKO 451 ROOF SEAL (SOVACRYL) diluted with 10 % water	~0.3

Note: These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage. For the Waiting Time / Overcoating, please refer to the PDS of the appropriate cleaner and primer. Other substrates must be tested for their compatibility. If in doubt, apply a test area first.

Waiting time to overcoating

Waiting time with Reinforcement	Waiting time without Reinforcement	Ambient condition
24 hours	6 hours	+20 °C / 50 % r.h.
12 hours	4 hours	+30 °C / 50 % r.h.

Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.

APPLICATION INSTRUCTIONS

EQUIPMENT

Select the most appropriate equipment require for the project.

- Brush : Soft bristle brush
- Roller : "non-fuzzy" roller
- Airless spray

SUBSTRATE PREPARATION

1. Surface must be clean and without any trace of oil.
2. Repair damaged concrete with LANKO 731 STRUCTURE REPAIR
3. Repair cracking that still spreading or experience movement with LANKO 603 POLYURETHANE.
4. The joint between wall and floor should be filled or protect by making a cornice.
5. Ensure that the substrate (tile, metal, cement sheet) is installed according to manufacturer standard before applying LANKO 451 ROOF SEAL (SOVACRYL)
6. Wall and Floor
 - New rendered surface must be at least 7 days.
 - New concrete surface must be at least 7 days.
 - Existing concrete surface must be clean without mould or algae. Then wait for the surface to dry at least 24 hours.

MIXING

Stir the product for 1 minute in bucket before applying. LANKO 451 ROOF SEAL (SOVACRYL) can be applied directly from the bucket with brush or roller.

APPLICATION

Prior the application of LANKO 451 ROOF SEAL (SOVACRYL), the priming coat must be cured (tack-free). For the Waiting Time / Overcoating, please refer to the PDS of the appropriate primer. Damageable areas (door frame) have to be protected with an adhesive tape.

Roof Coating : Apply the primer follow the substrate pre-treatment table.

1. Apply first coat of around 0.7 kg/m² of LANKO 451 ROOF SEAL (SOVACRYL).
2. Leave it dry follow the waiting time / overcoating table.
3. Apply the top coat with one or more additional coat of LANKO 451 ROOF SEAL (SOVACRYL) around 0.7 kg/m² per coat and leave it dry.

Roof Reinforcement : LANKO 451 ROOF SEAL (SOVACRYL) is applied in combination with LANKO GLASS FIBER MESH. Apply the primer follow the substrate pretreatment table.

1. Apply first base coat around 0.7-1.0 kg/m² of LANKO 451 ROOF SEAL (SOVACRYL).
 2. Roll in the LANKO GLASS FIBER MESH and ensure that there are no bubbles or creases. Overlapping of the reinforcement minimum 5 cm.
 3. Apply additional base coat of LANKO 451 ROOF SEAL (SOVACRYL) around 0.3-0.5 kg/m² per coat right into the wet fiber mesh to achieve the required film thickness. The entire application shall happen while LANKO 451 ROOF SEAL (SOVACRYL) is still liquid, wet in wet.
 4. Repeat step 1-3 until the roof area is waterproofed.
 5. After two coats are dry, apply the top coat with one or more additional coat of LANKO 451 ROOF SEAL (SOVACRYL) around 0.6-0.7 kg/m² per coat.
- Please note, always begin with details prior starting with waterproofing the horizontal surface.

CLEANING OF EQUIPMENT

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

IMPORTANT CONSIDERATIONS

- Not suitable for use in the area of water immersion.
- Do not apply LANKO 451 ROOF SEAL (SOVACRYL) on substrates with rising moisture.
- LANKO 451 ROOF SEAL (SOVACRYL) is not suitable for permanent water immersion.
- On substrates likely to exhibit outgassing, apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” or bubble may occur from rising air.
- Ensure that temperature does not drop below 8 °C and that relative humidity does not exceed 80 % until the membrane has fully cured.
- LANKO 451 ROOF SEAL (SOVACRYL) should not be applied on roofs subject to long-term ponding water.
- LANKO 451 ROOF SEAL (SOVACRYL) applied on roofs subject to long-term freezing at temperature around the minimum service temperature of -10 °C should always be reinforced with LANKO GLASS FIBER MESH in order to guarantee sufficient crack-bridging ability.
- Do not apply LANKO 451 ROOF SEAL (SOVACRYL) directly on insulation boards. Instead use a separation layer between insulation board and LANKO 451 ROOF SEAL (SOVACRYL)
- LANKO 451 ROOF SEAL (SOVACRYL) is not recommended for pedestrian traffic. In case pedestrian traffic is unavoidable, LANKO 451 ROOF SEAL (SOVACRYL) shall be covered with appropriate elements such as tiles, stone plates or wooden panels.
- Do not apply cementitious products (e.g. tile mortar) directly onto LANKO 451 ROOF SEAL (SOVACRYL). Use an alkaline barrier, for example kiln dried quartz sand.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets before using any products. 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.

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.

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October 2020, Version 01.01
020915109000000036

LANKO451ROOFSEALSOVACRYL-en-THLANKO-(10-2020)-1-1.pdf