



LANKO K11

MOSITURE BARRIER

WHERE TO USE

An alkali-reactive waterproofing product based on alkali resistant synthetically modified cement. The Davco Lanko K11 waterproofing concept is based on the crystallisation process. Davco Lanko K11 compounds combine with free water and other elements in the substrate to produce a waterproof membrane. The unique and highly effective components of the Davco Lanko K11 systems chemically react within the pores and capillaries upon exposure to the moisture and the elements. This chemical reaction initiates the formation of the crystalline structure within the pores and capillaries, to become an integral part of the structure and block the passage of water. Davco Lanko K11 is a brush or roller applied, Portland cement based system for waterproofing concrete and masonry through the crystallisation process. Davco Lanko K11 waterproofs the positive side or the negative side of the substrate. Following proper application, active water pressures force the crystal forming chemicals deeper into the sub-surface capillaries and pores to form a monolithic bond and become an integral part of the structure.

Uses

Davco Lanko K11 is applied to interior or exterior below grade surfaces and between horizontal structural slabs and toppings to protect against hydrostatic water pressure. These surfaces include concrete, concrete block, brick and shotcrete.

Davco Lanko K11 Can be used in a variety of installations, some examples being: subway Stations; swimming pools; mines; fish hatcheries; tunnels; solar water tanks; aquariums; cooling tower basins; elevator pits; basements; planters; floors; manholes; sewage treatment.

Davco Lanko K11 is approved as a mineral waterproofing layer for the protection of buildings against ground moisture, i.e. ground water under pressure (rising damp etc.) and against surface water, rainfall, seepage, and in general against water under a low hydrostatic pressure. It is also approved for the internal coating of potable water containers up to a height of 5m, on all sound mineral substrates.

PRODUCT INFORMATION

Coverage

Ground Moisture Approx 2kg/m² (2 coats of 1kg/ m² ea)
Hydrostatic Pressure on the negative side Approx 4kg/m²
cover approximately:
13m² at 1mm thickness
6.5m² at 2mm thickness
4.33m² at 3mm thickness

Drying Time

Foot trafficable in 1.5 hours - 2 hours

FEATURES & BENEFITS

- Used as part of the flooring system to prevent the transfer of moisture from the slab
- A cement-based moisture barrier for green concrete and screeds
- Can be used on a large variety of applications

PACKAGING

- Davco Lanko K11 Powder – 20kg bags
- Davco Lanko K11 Liquid – 7lt container.



MADE IN AUSTRALIA

TECHNICAL

TECHNICAL DATA	LANKO 134
Appearance	
Shelf life when stored unopened in elevated, cool, dry location	12 months

Values presented are typical and not necessarily referenced to create specifications. All measurements are taken at 20°C and 50% relative humidity. Specifications vary according to site conditions and should be taken as a guide only.



Davco products manufactured in Australia are produced in accordance with quality management systems certified as complying with AS/NZS ISO 9001:2008.

Quality
ISO 9001
SAI GLOBAL

TEST DATA	CRITERION	TYPICAL TEST RESULT
Test method: ASTM C191		
Initial set time		≥ 3 hours
Final set time		≥ 4 hours
Pot life		≥ 5 hours
Test method: ASTM C109 AS/NZS 2350.11-1997		
Compressive strength	1 day	≥ 7N/mm ²
	28 days	≥ 50N/mm ²
	μ-Value:	≥ 100

Consult your Sika Australia Pty Ltd state office for advice on the joint sealing method best suited to your application.

Crack Treatment

All shrinkage and non-moving structural cracks having a width equal to or less than 0.5 mm will be waterproofed by the application of Davco Lanko K11. Static cracks wider than 0.5 mm must be routed out to form a 'V' shaped groove with a hand or power chisel, to a depth and width of approximately 25 mm. These larger cracks must be repaired by priming the chiselled out crack with one coat of Davco Lanko K11. Whilst this primer coat of Davco Lanko K11 is still wet, it should be followed by the application of Davco Lanko 136 Repair Mortar to fill the rebate flush with the concrete surface. Live cracks cannot be waterproofed with Davco Lanko K11. Consult your local Sika Australia Pty Limited office for advice regarding the best method of waterproofing live cracks.

DIRECTIONS FOR USE

- A test should be undertaken in all cases to ensure suitability

SURFACE PREPARATION

- The surface prior to treatment must be solid, even, porous and free of dust pockets, laitance, moving joints or cracks. Should any cracks or movement joints be present, please refer to information below on methods of treatment. Sharp edges must be removed, and all wall/floor and wall/wall angles rounded by putting in place a fillet of sand/cement (3 sand: 1 cement) mixed with diluted Davco Lanko 751 Lankolatex SBR (mixed 1 part Davco Lanko 751 Lankolatex SBR: 4 parts water)
- The surface must be free of bitumen, oil, grease, curing compounds, release agents, mould, paints and any other contaminating materials

Movement joints

All expansion and movement joints should be sealed with a suitable joint sealant after application of the Davco Lanko K11.

SUITABLE SUBSTRATES

Davco Lanko K11 may be applied to:

- Sound concrete (strength B 15 in accordance with DIN 1045)
- Brickwork (DIN 105/106/398); hollow concrete blocks (DIN 18 153); all pointing must be flush and pre-wetted
- Render at least 10mm thick (DIN 18550 Mortar Group III) applied with a smooth trowel and with a sound and permanent bond to the substrate

Foundations and Footings

- Davco Lanko K11 should only applied to structures which are not subject to conditions that could result in warping or movement
- Settlement should have finished, and the structure should not be subject to any further movement
- The structure should be free of live cracks

Measures Against External Hydrostatic Pressure

- In order to prevent an increase in the level of water pressure, the land around the building must be adequately provided with a drainage system - e.g. to cope with changes in groundwater levels

MIX PREPARATION

Mix Process

- **IMPORTANT** - Ensure any lumps in the Davco Lanko K11 powder are broken up prior to mixing with Davco Lanko K11 Liquid
- Mix 20kg of Lanko K11 powder into 7L of Davco Lanko K11 Liquid. Always add Davco Lanko K11 powder to the liquid. Using a mechanical mixer mixed until a smooth creamy consistency is achieved
- For any additional mixing instructions not covered above, contact Sika Australia

APPLICATION

- The surface must be pre-wetted to saturation and be thoroughly damp, but have no free water on it. On applying the Davco Lanko K11, the substrate should appear matt, and there should be no signs of glistening water on the surface.
- The slurry is applied using a brush, broom or roller. Ensure the material is thoroughly mixed before applying.
- The coating should be applied to the whole surface in at least two coats. Apply the second coat at 90° to the first coat when the first coat has become trafficable. In no instance should the total thickness exceed 5mm.
- The slurry must not be applied at temperatures below 50C or on frozen surfaces.
- Before applying further coatings, e.g. renders, tile adhesives, floor levellers onto the Davco Lanko K11, allow the K11 to fully cure.

Checking the Coating

- The surface must be checked for faults before applying the next coat (e.g., before application of screed).

After Treatment

- For at least 24 hours after application the Davco Lanko K11 must be protected from rain, harsh sunlight and particularly from frost.

Protection of the Coating / Overcoating

- Subsequent layers (e.g. renders, tiles, screeds, floor levellers, etc.) may be applied only when the Davco Lanko K11 has fully hardened, generally 24 hours. The Davco Lanko K11 must be primed with Davco Lanko 124 prior to laying any floor levellers. Plasters containing lime must not be applied to Davco Lanko K11.

- A key coat, comprising 1 part Davco Lanko 751 Lankolatex SBR: 1 part water: 1 part cement should be brushed onto the surface prior to any application of subsequent products.

If unsure about suitability in certain installations, contact Sika Australia for guidance.

Clean-up & Return to Service

- Clean mixing and application equipment with water immediately following use

PRECAUTIONS

Safety

- SDS is available from www.davcoaustralia.com.au
- It is recommended that applicators wear PVC or similar gloves and safety goggles while handling this product
- Keep out of reach of children. If eye contact occurs, rinse with cool water
- If ingested get immediate medical assistance

General

- For the uses of Lanko K11 not mentioned in these instructions, contact your local Sika Australia Pty Ltd state office.
- For applications not mentioned on the data sheet, contact Sika Australia

Sika Australia Pty Ltd

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The use of this product is beyond the manufacturer's control, and liability is restricted to the replacement of material proven faulty. The manufacturer is not responsible for any loss or damage arising from incorrect usage. All workmanship must be carried out in accordance with AS 3958.1 - 1991. The information contained herein is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of the product for a particular application. Users are asked to check that the literature in their possession is the latest issue.