LANKO 173

FLOOR LEVELLER

SELF LEVELLING UNDERLAYMENT
FOR INTERNAL AND EXTERNAL APPLICATIONS

WHERE TO USE

Davco Lanko 173 Internal / External Floor Leveller is a cement based levelling compound for use over concrete sub-floors prior to the application of floor coverings. Davco Lanko 173 Floor Leveller is ideal for repairing small holes, static cracks and depressions. It requires the addition of only potable water to achieve a highly fluid consistency producing a smooth, level, and hard surface. Davco Lanko 173 Floor Leveller can be applied in multiple layers with each layer being no more than 25mm thick or can be economically extended with a graded aggregate to fill greater depths.

Uses

Davco Lanko 173 Floor Leveller is used to repair dry areas of structurally sound concrete subfloors. Davco Lanko 173 Floor Leveller is used as a subfloor underlayment prior to installation of carpet, tiles or other floor covering systems. It is compatible with commonly used adhesives and normally can receive floor coverings within hours of installation – please see Test Data below. Davco Lanko 173 Floor Leveller is not a wearing surface and must be protected with a compatible topping, floor covering or coating. Davco Lanko 173 is not suitable for use in permanently wet areas of immersion.

PRODUCT INFORMATION

Coverage

One 20kg bag of Lanko 173 Floor Leveller will cover approximately 12m^2 at 1mm thickness.

Curing Time

At least 4 hours before tiling; at least 16-24 hours before carpenting and at least 24-36 hours before laying vinyl.

FEATURES & BENEFITS

- Used as subfloor underlayment
- Compatible with many common used adhesives
- Useful for repair in dry areas of structurally sound concrete subfloors
- Ideal for repairing mall holes, static cracks and depression

PACKAGING

20kg polylined bags

MADE IN AUSTRALIA

TECHNICAL

TECHNICAL DATA	LANKO 173
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 20ºC and 50% relative humidity. Specifications vary according to site conditions and should be taken as a guide only.

TEST DATA	CRITERION	TYPICAL TEST RESULT
Test method: ASTM C191		
Pot life		~ 10 mins
Initial set time		~ 1.5 hrs
Final set time		~ 2.0 hrs
Foot trafficable		2 – 3 hrs
Ready to receive tiles		~ 4 hrs
Ready to receive carpet		~ 16 – 24 hrs
Ready to receive vinyl		~ 24 – 36 hrs

Certified System™
Quality
ISO 9001
SAI GLOBAL

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

DIRECTIONS FOR USE

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

SURFACE PREPARATION

- Surfaces, must be dry, structurally sound, clean, free of dust,dirt, wax, oil, grease, asphalt, mastic, latex compounds, adhesives, paint, gypsum-based products and other contaminants
- All concrete sub-floors must be fully cured and dry, in accordance with AS1884-1985 (maximum moisture content 5.5% or 70% humidity). They must be free of laitance, loose or deteriorated concrete, curing or form release agents, other contaminants and have a wood float finish. For sub-floors with a high moisture content or subject to rising damp, apply Davco Lanko 531 Epoxy Moisture Barrier. Refer to datasheet for specific instructions
- Non-porous surfaces, such as power trowelled or steel floated concrete, must be primed with Davco Lanko 531 Epoxy Moisture Barrier or Davco Ultrabond. Alternatively, they can be acid etched or mechanically abraded
- Deeply contaminated substrates must be abraded to a clean, sound surface or prepared with the use of Davco Ultrabond. Contact Sika Australia for further details
- Patch large cracks and holes with a suitable concrete repair mortar.
- Any construction joints in the underlying sub-floor should be carried through the Davco Lanko 173 Floor Leveller, to avoid cracking

PRIMER PREPARATION

- Priming is crucial prior to the application of Davco Lanko 173 Floor Leveller. It is designed to improve adhesion and greatly reduce pinholing in the finished floor.
- Porous concrete surfaces must be primed with Davco Lanko 124 Ultraprime. Use Davco Lanko 124 Ultraprime directly from the container - do not dilute
- Under hot, windy conditions (Temperatures above 30ºC), it is essential to wet down any concrete slabs with clean water prior to priming, so that the primer does not flash dry. After wetting down the floor, do not allow the water to pool or pond on the surface. The substrate should appear matt, with no signs of glistening water evident prior to application of the primer
- Test areas should be performed in all cases, to assure the suitability of the product for the intended use. This should include the floor finishing / covering

MIX PREPARATION

Mix Ratio

SITUATION / REQUIREMENT	MIX REQUIREMENTS PER 20KG
General applications	4 - 4.5L clean, potable water

Mix Process

1. Electric stirring is required as it produces a much smoother mix. The most efficient method of mixing Davco Lanko 73 Floor Leveller is by using a 1/2 inch or 12 mm heavy-duty electric drill (maximum 650 rpm). Concrete mixers or hand mixing are not suitable methods.
2. Add approximately 4 – 4.5L of potable water to a clean bucket, and then slowly add the 20kg bag of Davco Lanko 173 Floor Leveller. Mix for no less than 2 minutes, and long enough to provide a smooth, lump free, flowable blend. If foaming and streakiness appear on top of the mixture, Davco Lanko 173 Floor Leveller is over-watered, and should not be placed on the substrate.
3. For large areas requiring fills between 25 and 100mm, add washed, surface dry, graded gravel to the mix. If the gravel is 3 to 8mm, add 10kg of gravel per bag of Davco Lanko 173 Floor Leveller. If the gravel is 8 to 12mm, add 20kg of gravel per bag of Lanko 173 Floor Leveller. Mix the Lanko 173 first, and then add the dry aggregate to the mixed material. Reduce the water required if the aggregate is damp. The addition of aggregate will severely reduce material flowability. It is very important not to add more than the quantities of aggregate specified above. A subsequent smoothing layer may be required, if aggregate is added to the mix.
4. If pumping, mix in an appropriate pre-pump mixer. Do not mix more material than can be used in 10 minutes. Mix speeds must not be too high; otherwise they will cause aeration.
5. Clean mixers and pumps thoroughly after each batch to avoid material build up.

For any additional mixing instructions, not covered above, contact Sika Australia for further details.

APPLICATION

1. Pump or hand pour Lanko 173 Floor Leveller on to the primed surface. Move it into approximate position with an underlayment spreader, and allow the material to seek its own level.
2. Place Davco Lanko 173 Floor Leveller soon after mixing. It will achieve initial set in approximately 2 hours, and may be walked on in approximately 2 - 3 hours.
3. Davco Lanko 173 Floor Leveller must cure at least 4 hours before tiling; at least 16 – 24 hours before carpeting and at least 24 – 36 hours before laying vinyl. Although Davco Lanko 173 Floor Leveller can be used externally, it is important to protect the product during placement and whilst curing from direct sunlight and winds. This is to prevent flash set /cure and desiccation (excessive moisture loss). This is particularly important when laying thicknesses in excess of 10mm.
4. When additional thickness is required, Davco Lanko 173 Floor Leveller may be layered up to 15mm without aggregate to provide additional depth. The additional layer may be applied directly over the surface as soon as it will support foot traffic. Davco Lanko 124 Ultraprime must be used if more than 24 hours passes before the new material is applied.

For information about pumping equipment, contact Sika Australia.

High Stress Areas

Davco Lanko 173 Floor Leveller is not recommended for use in areas of high stress or under exacting conditions eg. installation over timber flooring, fibre cement sheeting, metal decks, over existing floor coverings, such as ceramic tiles and quarry tiles, any sub-floors subject to movement, vibration, high loads or over heated sub-floors. Instead, we recommend the use of Davco Lanko 133 Pro Level for these applications. Refer to the Davco Lanko 133 Pro Level datasheet for specific instructions.

Floor Coverings

As a general guide, the surface finish of Davco Lanko 173 Floor Leveller is not dissimilar to concrete. Any adhesives used to bond subsequent floor coverings that are compatible with concrete will be compatible with Davco Lanko 173 Floor Leveller. Strictly follow the floor covering adhesive manufacturer's instructions.

Clean-up & Return to Service

- Clean mixing and application equipment with water immediately following use
- Remove splatter or spills with water before material sets
- Davco Lanko 173 Floor Leveller contains cementitious materials and if allowed to dry, removal becomes extremely difficult

PRECAUTIONS

Safety

- SDS is available from www.davcoaustralia.com.au
- It is recommended that applicators wear PVC or similar gloves and safty 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

- Ensure all surface preparation, testing and mixing instructions are followed precisely
- Do not add cement, lime, gypsum, plaster, bonding agents, aggregates or other materials except where specified on the Technical Data Sheet
- Do not apply Davco Lanko 173 Floor Leveller over frozen or frost filled surfaces
- Do not mix or apply Lanko 173 Floor Leveller when temperatures are below 5°C or above 35°C. Also, do not apply if temperatures are expected to reach these levels within 24 hours after application.
- Wherever possible, test areas are recommended, to ensure the suitability of the product for the intended use. This should include the floor finishing/covering.

Specific

- Do not use Davco Lanko 173 Floor Leveller over a slab with a high moisture content or that is subject to rising damp, unless Davco Lanko 531 Epoxy Moisture Barrier is used prior. If there is any possibility the sub-floor will be subject to rising damp at a later date, then Davco Lanko 531 Epoxy Moisture Barrier must be used prior.
- Construction joints in the sub-floor must be detailed through Davco Lanko 173 Floor Leveller to prevent cracking.
- Davco Lanko 173 Floor Leveller should not be over-watered, over mixed, or re mixed with additional water. Any material over 10 minutes old should be discarded and not used.
- If Lanko 173 Floor Leveller is to be left exposed for longer than 48 hours before covering, particularly in outdoor and / or warm conditions, it must be sealed with Lanko 742.

LEGAL NOTES