LANKO 702 DURABED

HIGH PERFORMANCE NON SHRINK CEMENTITIOUS GROUT

STRUCTURAL GROUTING

WHERE TO USE

Davco Lanko 702 Durabed is a high strength, Class A structural grout.

Designed to undergo controlled expansion in the plastic state, it will ensure positive and load transfer in structural grouting application. Lanko 702 Durabed has been formulated to achieve high early strengths with low water addition levels.

Uses

- Under heavy machinery
- Anchor bolts
- Under column bases
- Under precast panels
- Conveyor support

PRODUCT INFORMATION

Application

10-100mm thickness

Set Time

Final set 4.5 hours

MADE IN AUSTRALIA

FEATURES & BENEFITS

- Expansive in plastic state
- High strength for precision grouting installations
- Versatile - can be used in dry pack, plastic and flowable consistencies
- Extended workable time

PACKAGING

Available in a 20kg (moisture resistant multiwall) bag

TECHNICAL

TECHNICAL DATA	LANKO 702
Appearance	Grey powder
Shelf life when stored unopened in elevated, cool, dry location and protected from high humidity	Up to 6 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: AS 2350.11					
Compressive Strength MPa	Consistency	Water Addition	1 Day	7 Days	28 Days
	Dry Pack	2.0L	40.7	61.2	70.1
	Plastic	3.0L	25.4	48.6	51.7
	Flowable	4.0L	16.4	36.8	39.8
Test method: EN 1015-17:2000					
Chloride ion content				0.004%	
Test method: EN 196.1 2016					
Flexural strength (modulus of rapture)	1 day		4.7 MPa		
	7 days		7.5 MPa		
	28 days		10.1 MPa		

Test method: AS 1012.18.1996		
Setting time	Initial Set	3.5 hours
	Final Set	4.5 hours
Fresh wet density	2200kg/m^3 - depending on consistency used	
Test method: AS 1478.2:2005		
Minimum thickness		10mm
Maximum thickness		100mm
Test method: RMS T363		
Alkali reactive particles		<0.1% (Non-reactive)

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

- For all surfaces, loose contaminants and unsound concrete must be chipped away so that a reasonably rough, but strong sound surface is provided
- All surfaces must be free from oil, grease and dust. This particularly applies to the underside of bedplates, bolts, pipes or other materials, which may have surface contact with the grout
- Holes and depressions may be cleaned with compressed air to remove loose particles
- The perimeter of any grouting area in a concrete substrate should be sawcut to provide a minimum of 10mm mechanical key for the grout

PRIMER PREPARATION

- After cleaning, saturate the concrete surface with clean water for approximately 2 hours prior to applying Lanko 702 Durabed
- For horizontal hole pours, fill the hole with a twisted rag, which can then be periodically wetted
- Ensure that no freestanding water is present on surfaces of foundations or in bolt holes. Remove any free water by use of compressed air or dry towels

MIX PREPARATION

Mix Ratio

Use as little water as is required in the mix for ease of placement. Water addition is recommended as set out below:

MIX CONSISTENCY	MIX REQUIREMENTS PER 20KG
Dry Pack	2.0L of clean, potable water
Plastic	3.0L of clean, potable water
Flowable	4.0L of clean, potable water

- Adjustments to the mixing ratio may be required depending upon site conditions. Ideally, mixing water and substrate should be above the lower application temperature limit of 5°C and below 30°C to avoid problems with the set time of the mix

Mix Process

1. Mix with an electric drill and paddle or in a pan or revolving barrel type mixer.
2. Do not mix by hand.
3. Allow approximately 5 minutes mixing to achieve maximum results.
4. Place 70% of the required amount of water into the mixing vessel and slowly add the powder while mixing. Gradually add the remainder of the water to achieve the desired consistency.

Yield

WATER ADDITION PER 20KG BAG	YIELD (L)	KG/M³ (WET)	BAGS PER M³
Dry Pack	10.40	1.87	85
Flowable	11.50	2.09	87

APPLICATION

Application Techniques

1. Lanko 702 Durabed should be placed within 20 minutes of mixing to gain the benefit of plastic expansion. During that time keep material in mixer well agitated. After this time discard any grout mix that shows signs of stiffening.
2. Flowable Lanko 702 Durabed may be placed with low-pressure cement grouting equipment or may be hand rodded into restrained sections. High points must be adequately vented to allow entrapped air to escape.
3. Plastic Lanko 702 Durabed mortar may be rodded into place or trowel handled where freedom of movement permits. Consistency can range from thick cream to smooth plastic.
4. Do not vibrate Lanko 702 Durabed into position as this may cause segregation of the mix.
5. Dry pack Lanko 702 Durabed mortar must be firmly pressed or rammed into place. Consistency should allow pressuring into a firm hard ball without cracking.
6. For sealing rebar or steel rods and bolts into bore holes, adhere to the following guidelines.
7. Lanko 702 Durabed may be pumped for large grouting installations.
8. All applications require curing. Cover the installed grout with wet hessian sheets or spray periodically with water.
9. Placing Lanko 702 Durabed in unrestrained environments will result in lower final compressive and flexural strength.

Aggregate Extension

- 10mm washed coarse aggregate may be added to Lanko 702 Durabed for pours over 100mm in depth
- Add no more than 10kg of aggregate to each 20kg bag of Lanko 702 Durabed
- After extending with gravel, do not place Lanko 702 Durabed in thicker sections than 200mm

Clean-up & Return to Service

- Lanko 702 Durabed should be removed from tools and equipment immediately after use with clean water. Any cured material may be removed by mechanical means
- The period of time required before bringing the grouted area into service depends upon the service load required. For high load installations, do not put the area into service for 3-7 days. The ambient temperature should be taken into account since cold weather delays hardening and hot weather accelerates hardening

PRECAUTIONS

Safety

- SDS is available from **www.davcoaustralia.com.au**
- Being cement-based, Lanko 702 Durabed is alkali in nature which can cause dermatitis. When using Lanko 702 Durabed it is recommended that applicators wear PVC or similar gloves and safety goggles while handling this product
- If dust is generated, wear a suitable dust mask

General

- Ensure all surface preparation and priming instructions are followed precisely

Specific

- Do not retemper Lanko 702 Durabed with additional water
- Like all cementitious mortars and concrete, Lanko 702 Durabed must be protected against rapid drying caused by high temperatures and / or strong winds.
- Lanko 702 Durabed is not defined as a dangerous good by Australian Code for the Transport of Dangerous Goods by Road and Rail
- For application thicknesses exceeding 200mm, please contact Sika Australia.
- For application procedures or surface conditions not specified above, please contact Sika Australia.

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.