



BUILDING TRUST



# PRODUCT DATA SHEET

## LANKO 701 CLAVEX

### NON-SHRINK GROUT WITH HIGH PERFORMANCE

#### DESCRIPTION

Lanko 701 Clavex is a ready-to-mix, self-levelling, shrinkage-compensating, fluid or semi-paste mortar intended for sealing and bedding purposes with high mechanical strength.

#### USES

- Bedding of elements ranging in thickness from 25 mm. to 50 mm.
- Suitable for the bedding of heavy machinery based, rail posts, structural column.
- Sealing of steel rebar, tie rods, connectors (diaphragm walls) and anchoring bars.
- Wedged keying of prefabricated elements.
- Underpinning.
- Grouting and filling gaps.

#### FEATURES

- High Mechanical Strength (compressive strength can reach to 750 ksc at 28 days).
- No Bleeding.
- Very Good Flow.
- Good dimensional stability.
- Non toxic, non corrosive.
- Ready and easy to use.
- Impact resistant.

#### PRODUCT INFORMATION

<b>Packaging</b>	25 kg bag. Pallet containing 56 x 25 kg bags (1,400 kg)
<b>Shelf life</b>	12 months from date of production stored properly in undamaged, original, sealed packaging.
<b>Storage conditions</b>	Store in dry condition, protected from direct sunshine.

#### TECHNICAL INFORMATION

Compressive strength	Consistency	1 day	7 days	28 days
	Pouring @15% water	≥ 25 MPa	≥ 55 MPa	≥ 75 MPa
Plastic @13% water	≥ 30 MPa	≥ 60 MPa	≥ 80 MPa	

**Flexural-strength**

<b>Consistency</b>	<b>1 day</b>	<b>7 days</b>	<b>28 days</b>
Pouring @15% water	≥ 5 MPa	≥ 7 MPa	≥ 8 MPa
Plastic @13% water	≥ 6 MPa	≥ 8 MPa	≥ 9 MPa

**APPLICATION INFORMATION**

<b>Mixing ratio</b>	<b>Consistency</b>	<b>Aggregate 3/8"</b>	<b>Water (Litres)</b>
	Pouring	-	3.75 - 4 (15-16% water)
	Plastic	-	3.25 (13% water)
	Micro Concrete	10 Litres	3.75 - 4 (15-16% water)
<b>Consumption</b>	For 1 m <sup>3</sup> of mortar approx. 75 x 25 kg bags.		
<b>Ambient air temperature</b>	10°C to 35°C		
<b>Setting time</b>	<b>Pouring Consistency</b>	<b>25°C</b>	
	Initial Setting	~ 5 h	
	Final Setting	~ 8 h	
	<b>Plastic Consistency</b>	<b>25°C</b>	
	Initial Setting	~ 4 h	
	Final Setting	~ 7 h	

**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.

**IMPORTANT CONSIDERATIONS**

- Make sure, that necessary formwork is firmly in place and watertight.
- Surfaces must be protected. As soon as the mortar surface begins to set, the exposed surface have to be treated with a curing compound or normal curing practice should be observed for at least 3 days.
- Do not mix with other hydraulic binders, sand, admixtures or other aggregate which does not recommend.
- Remove formwork after grout material achieves maturity age or it is not less than designed strength.
- In case of leaving the mixed material in mixing container for more than 30 minutes, it is recommended to use a mixer to remix again for 1 minute before use.

**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 QUALITY / PRE-TREATMENT

### Bedding

1. The substrate must be clean, no dust and without any traces of oil, laitance or curing compound.
2. The steel rebar must be clean, no rust and oil.
3. Remove loose and damaged concrete and laitance using a point tool or chisel in order to obtain a clean surface.
4. Soak the substrate with water for 2 - 3 hours or several prior to application (high absorbent substrate).

### Anchoring

1. The diameter of the holes must be equal to at least the diameter of the anchoring rebar 20 to 30 mm.
2. Depth of holes: 10 times the diameter of the anchoring rebar. Consideration must be given to the load that will be applied to and the mechanical strength of the concrete substrate.
3. Above an anchoring thickness of 50 mm, a micro-concrete should be used. Always check the design of sealing to determine the workability. Use a rod or strap to assist if needed.

## MIXING

1. Mix LANKO 701 CLAVEX with clean water. The quantity of water used depends on the consistency required.
2. Mixing should be carried out as follows: By machine mix with recommended speed at 500 rpm.
3. Mixing time: at least 3 minutes and required consistency is obtained.
4. Leave the mixture to stand for 1 - 3 minutes.
5. Do not add water after mixing.

### Micro concrete Preparation

1. Micro-concrete is made up by adding 10 litres (16 kg) of clean 3/8" aggregate for each 25 kg bag of LANKO 701 CLAVEX as mentioned in the above table.
2. Machine mix at least 3 minutes or until a plastic consistency is obtained.

## APPLICATION

### Bedding

1. The mixed grout should be placed promptly before it stiffens. Higher temperature will accelerate setting time.
2. Pour grout from one side only to avoid air entrapment.
3. Use a rod or strap to assist in large/difficult placement as well as to facilitate maximum surface contact. Concrete vibrator should not be used. Excessive vibration will cause separation of each ingredient.

### Anchoring

1. Damp the area with water and clean out the area to be sealed.
2. Remove residual water just prior to sealing.
3. Fill the hole with mortar and insert anchoring bar into the hole and cast the mortar.

## CLEANING OF EQUIPMENT

Clean all tools and equipment with water immediately after use. Hardened mortar can only be removed mechanically.

## 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.

## 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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