

LANKO



CHARACTERISTICS

- **High compressive strength.**
- **Non-shrink.**
- **Good workability.**

DESCRIPTION

701 CLAVEX is a premixed cementitious non-shrink, high strength developing grout composed of special cement, sand and admixtures.

USES

- Bedding of industrial equipment, rebars, anchor bolts.
- Assembling of precast panels, grip-filling.
- Bearing casting of heavy machinery, column, crane rails.
- Repairing of concrete structure.

SPECIFICATIONS

- Appearance : Grey powder.
- Particle size : 0- 2 mm.
- Bulk density : 1.4
- pH : 12.5

Bond strength by slant shear test : ASTM C882*

1 days	6 MPa
3 days	7 MPa
7 days	8.5 MPa
28 days	9 MPa

Flexural strength : ASTM C348*

1 days	5 MPa
3 days	6.8 MPa
7 days	7.4 MPa
28 days	7.9 MPa

Compressive strength : ASTM C109* (Pouring consistency).

1 days	15 MPa
3 days	43 MPa
7 days	54 MPa
28 days	61 MPa

Compressive strength : ASTM C109* (Plastic consistency).

1 days	22 MPa
3 days	47 MPa
7 days	56 MPa
28 days	70 MPa

* Average laboratory values provided as a general guide

WORK INSTRUCTIONS

Substrate preparation

- Remove loose and damaged concrete and laitance using a point tool or chisel in order to obtain a clean surface.
- The boundaries of the surface must be clearly defined.
- The substrate must be clean, sound, dust-free and without any traces of oil, laitance or curing compound.
- Soak the substrate for several hours prior to application.

Mortar preparation

- The slurry or mortar is obtained by mixing 701 CLAVEX with clean water.
- The quantity of water used depends on the consistency required.
- Mixing should be carried out as follows :
 - By high-speed mixer for a fluid consistency.
 - By machine or hand-mix for a plastic consistency.
- Mixing time : 3 minutes minimum.
- Leave the mixture to stand for several minutes.



PACKAGING

- 25kg bag

STORAGE

1 year from date of manufacture if stored in unopened original packing in dry, frost-free conditions.

Micro-concrete preparation

- Micro-concrete is made up by adding 10 litres of clean 3/8" aggregate for each 25 kg bag of 701 CLAVEX.
- Machine mix until a plastic consistency is obtained.

Sealing

- The diameter of the holes must be equal to at least the diameter of the anchoring rebar +20 to 30 mm.
- Depth of holes : 10-20 times the diameter of the anchoring rebar, depending on the resistance of the concrete.
- Above a sealing thickness of 50 mm, a micro-concrete should be used.
- Clean out the area to be sealed, fill with water for several hours prior to sealing.
- Remove residual water just prior to sealing.
- Position the rebar in the hole and cast the mortar.

Grouting

- Formworks shall be sufficiently tight-fitting and sealed against leakages.
- On the placement side, the forms should be constructed above the bottom of the plate to form a headbox. The headbox should be positioned at a minimum of 50 mm from the plate and slope away at a 45° angle to assist grout placement as well as prevent air entrapment.
- The form should be minimum 50 mm away from the plate and extend at least 25 mm above the bottom of the plate.
- Non-absorbent formwork is preferred, otherwise, it should be properly oiled to prevent grout adhesion.
- Thoroughly wet all surfaces prior placement and remove any excess water just before introducing the grout.
- The mixed grout should be placed promptly before it stiffens. Higher temperature will accelerate setting time.
- Pour grout from one side only to avoid air entrapment.
- Adequate grout head must be maintained at all time to achieve a continuous flow.
- Use a rod or strap to assist in large/difficult placement as well as to facilitate maximum surface contact. Vibrator should not be used. Excessive vibration will cause separation of each ingredient.

Curing

- As soon as the mortar begins to set, the exposed surface should be treated with a protective coating (e.g. 361 LANCURE).

Dosage / Yield

Plastic consistency

701 CLAVEX	1 bag 25 kg
Water	3-3.5 litres
Workable mortar	12 litres

Pouring consistency

701 CLAVEX	1 bag 25 kg
Water	3.5-4.4 litres
Workable mortar	12.2 litres

Micro-concrete

701 CLAVEX	1 bag 25 kg
3/8 aggregate	10 litres
Water	3.3-4.4 litres
Workable mortar	20 litres

PRECAUTIONS

- Temperature range for use : 5°C to 35°C.
- Do not apply to a frozen or thawing substrate.
- Apply only to clean, sound resistant substrates, free of loose material.
- Substrate must be soaked for several hours prior to application.
- Residual water must be removed prior to application.
- Surfaces must be protected from air with 361 LANCURE once setting starts.
- Do not mix with other hydraulic binders.
- Sand and admixtures must not be added.
- Foresee the need for intermediate joints and respect the existing structural joints.