

**LANKO**



**CHARACTERISTICS**

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

**DESCRIPTION**

702 CALFARGE 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 - 1 mm.
- Bulk density : 1.4
- pH : 12.5

**Setting time\***

Initial setting	3 h 00
Final setting	7 h 00

**Bond strength by tensile test : ASTM C190\***

1 days	0.31 MPa
3 days	0.88 MPa
7 days	1.44 MPa
28 days	2.57 MPa

**Compressive strength : ASTM C109\* (Pouring consistency).**

1 days	29 MPa
3 days	62 MPa
7 days	73 MPa
28 days	94 MPa

**Compressive strength : ASTM C109\* (Plastic consistency).**

1 days	48 MPa
3 days	76 MPa
7 days	82 MPa
28 days	97 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 702 CALFARGE 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 : 5 minutes minimum.
- Leave the mixture to stand for several minutes.

**Micro-concrete preparation**

- Micro-concrete is made up by adding 10 litres of clean 3/8" or 1/2" aggregate for each 25 kg bag of 702 CALFARGE.
- Machine mix until a plastic consistency is obtained.



### PACKAGING

- 25kg bag

### STORAGE

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

### 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

702 CALFARGE	1 bag 25 kg
Water	3-3.5 litres
Workable mortar	12 litres

#### Pouring consistency

702 CALFARGE	1 bag 25 kg
Water	4-4.5 litres
Workable mortar	12.2 litres

#### Micro-concrete

702 CALFARGE	1 bag 25 kg
3/8" or 1/2" 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.