

CIKOgrout PC

High strength cementitious pile-cap grout

Description

CIKOgrout PC is a ready to use cementitious pile-cap structural grout for resurfacing pile top and to fill voids.

CIKOgrout PC is a balance blend of cement binder, graded silica sand, aggregate, rheology modifier and shrinkage compensating additive resulting in a free-flow, high strength pile-cap grout.

Properties

- Single component system and only addition of water required at site.
- Shrinkage compensated.
- High early and final strength.
- Low permeability.
- Chloride free and will not rust or harm metal on contact.
- Frost and salt resistant.

Application area

- Re-surfacing pile caps.
- Filling gaps to bring structural stability.
- Filling voids.
- Structural repairs.
- Pre-cast concrete elements.

Physical properties

Form	Powder
Colour	Cement grey
w / p	0.14 to 0.16
Setting time ASTM C 109	Initial 3 hrs 30 min Final 5 hrs 0
Density	≈2150 kg / m ³ (Fresh)
Compressive strength ASTM C 109	1 day ≥25 N/mm ²
	3 days ≥35 N/mm ²
	7 days ≥50 N/mm ²
	28 days ≥60 N/mm ²
Flexural strength ASTM C78	≥11 N/mm ² [28 days]

Coverage / Yield

25 kg bag of CIKOgrout PC mixed with 3.50 litres of water, yields to 13.0 litres of grout.

Application instructions

Surface preparation

Clean the concrete surface to remove loose and unsound material by means of water blasting or any suitable means to attain a sound concrete surface. The acceptable surface should be free from traces of oil, grease, curing compounds or any other contaminations.

Formwork

Watertight formwork should be made around grouting area to the required height. It is recommended to restrict width of the shoulders around base plate to maximum 50mm from the face of the base plate to avoid generation of expansion cracks under un-restrained conditions. CIKOgrout PC made to mortar consistency can be used to seal gaps between formwork and concrete face to made formwork watertight.

Soaking

Fill water inside formwork for approximately 6 hours prior to grouting in order to soak concrete surface. Just before application of grout, remove water completely from the formwork by mechanical means or using sponge to attain a dampened concrete surface.

Mixing

CIKOgrout PC is a ready to use material requiring only addition of 3.25 to 4.0 litres of water for mixing. Measure required amount water for each batch mix and dispense into concrete mixer. Slowly add CIKOgrout PC powder into concrete mixer keeping the mixer in running mode. Mix the grout for 5 minutes to get a homogenous and lump free grout.

Note: Chilled water must be used to attain optimum results.

Placing

Place the mixed grout into the formwork immediately and allow the grout to level to the required thickness.

Curing

The grouted area shall be cured as per the standard curing practices.

Packaging

CIKOgrout PC is available in 25kg moisture resistant bags.

Shelf life

CIKOgrout PC has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKOgrout PC should be stored under enclosed shaded area.

Precaution:

- Application temperature must be between 5⁰ C - 40⁰ C.
- Do not re-temper grout after initial mix.

Health & safety

Use standard dust mask to avoid inhalation of dust. Powder when wet or moist can cause burns to skin and eyes which should be protected during use. If comes in contact with skin/eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

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Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control

