

CIKOgrout GP

Non-shrink, high strength cementitious grout

Description

CIKOgrout GP is a ready to use general purpose non-shrink, cementitious grout for interior and exterior use for filling gaps between similar or dissimilar substrates. CIKOgrout GP is suitable for anchoring pre-cast columns, anchor bolts and fence posts, etc.

CIKOgrout GP is a balanced blend of select cement type, graded Silica aggregate, flow enhancing and shrinkage compensating additives resulting in a free-flow, high strength grout.

Properties

- Single component system and only addition of water required at site.
- Controlled expansion in plastic and in early and late hardened stage.
- High early and final strength.
- Low permeability.
- Chloride free and will not rust or harm metal on contact.
- Frost and salt resistant.

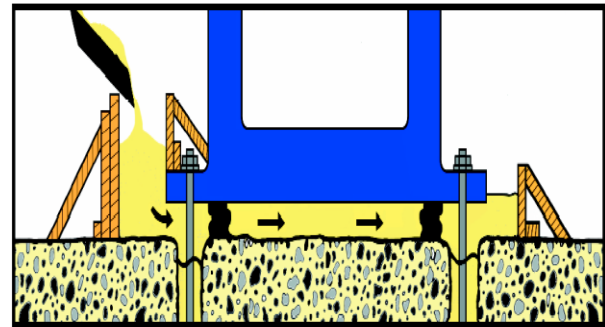
Application area

CIKOgrout GP can be used for the grouting of,

- Machinery base plate.
- Anchoring.
- Turbine base.
- Bridge bearing.
- Potable water equipment.
- Concrete structures.
- Storage rack base.
- Pre-cast concrete parts.
- Rails grouting.
- Industrial plants.

Applicable standards

- CIKOgrout GP complies with the Corps ASTM C1107 grade B & C.
- Complies with Qatar Construction Specifications QCS.



Physical properties

Form	Powder
Colour	Cement grey (standard)
W/P	0.14 to 0.16
Density	≈2140±50 kg/m ³ (Fresh)
Flow Proprietary ASTM C 1437 W/P=0.16	150%
Linear coefficient of thermal expansion ASTM C531	<0.1%
Early height change of grout ASTM C940	0 to 4 %
Height change of hardened cylinder grout ASTM C1090	0 to 0.3% (at 1,3,7,28 days)
Compressive strength ASTM C109 @ W/P=0.14	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 C348 @ W/P=0.14	3 day ≥4 N/mm ² 7 days ≥7 N/mm ² 28 days ≥9 N/mm ²
Application Thickness*	10 to 100mm

**Note: higher thickness may be achieved by adding 10mm aggregate with a ratio up to 40% by weight to the bag. Consult CIKO technical service department for further support.*

Coverage / Yield

25 kg bag of CIKOgrout GP mixed with 3.50 litres of water, yields 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 GP made to mortar consistency can be used to seal gaps between formwork and concrete face to made formwork watertight.

Soaking

Prior to grouting, fill water inside the formwork and soak the concrete surface for approximately 6 hours. Just before grouting, remove water completely from the formwork, anchor bolt pockets etc. by mechanical means or using sponge so that the surface should be free from standing water.

Mixing

CIKOGROUT GP is a ready to use material requiring only addition of 3.5 to 4.0 litres of water for mixing. Measure required amount water for each batch mix and dispense into concrete mixer. Slowly add CIKOGROUT GP 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: It is essential that a mechanically powered grout mixer in addition to chilled water to obtain the optimum properties and results.

Placing

Pour the mixed grout from one side or corner of the base plate to avoid air voids. Maintain a minimum of 15cm pouring head to achieve maximum flow property of grout. In case of machinery installation, anchor bolt pockets shall be grouted prior to base plate grouting.

Curing

The exposed area of grout shall be cured as per standard curing practices.

CIKO range of curing compounds shall be used in in cases of vertical surfaces or exposed and harsh conditions.

Precautions

- Ambient temperature shall be between 5^o-35^oC.
- The temperature of both the grout and elements coming into contact with the grout should be in the range of 10°C to 35°C.
- Do not overwork and avoid using mechanical vibration.
- Under no circumstances should CIKOGROUT GP be re-tempered by the later addition of water.

Packaging

CIKOGROUT GP is available in 25kg moisture resistant bags.

Shelf life

CIKOGROUT GP has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKOGROUT GP should be stored under enclosed shaded area.

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
- Adhesives and bonding agent
- Concrete repair materials
- Protective coating
- Joint Sealants
- Moulding compounds

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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

