

# CIKOgrout BB80

Smart Chemical Solutions



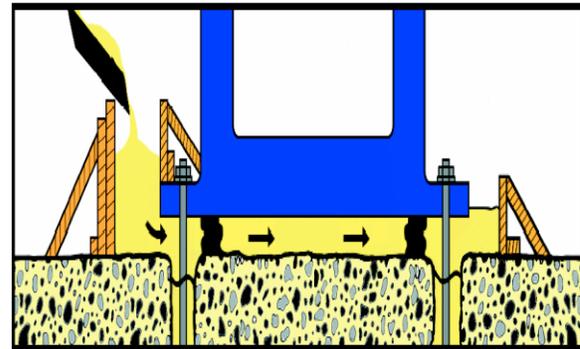
سيكو الشرق الأوسط  
MIDDLE EAST

## Non-shrink, high strength, high flow, cementitious grout

### Description

CIKOgrout BB80 is a ready to use non-shrink, high flow cementitious grout for filling gaps between similar or dissimilar substrates having larger area. Suitable for large size base plate grouting and rail grouting.

CIKOgrout BB80 is a balanced blend of selected cement type, graded silica sand, flow enhancing and shrinkage compensating additives resulting in as free-flow, high strength grout.



### Properties

- Single component system and only addition of water required at site.
- Controlled expansion in plastic and in early hardened stage.
- Provides high flow properties.
- 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 BB80 can be used for the grouting of,

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

### Applicable standards

- CIKOgrout BB80 complies with ASTM C1107 Grade B & C.
- Complies with Qatar Construction Specifications QCS.

### Physical properties

Form	Powder
Colour	Cement grey
w / p	0.14 – 0.15
Density	≈2250±50 kg/m <sup>3</sup> [fresh]
Flow Proprietary ASTM C 1437 W/P=0.15	>125%
Early height change of grout ASTM C940	0 to 4 %
Height change of hardened grout cylinder ASTM C1090	0 to 0.3% (at 1,3,7,28 days)
Compressive strength ASTM C109 W/P=0.14	1 day ≥40 N/mm <sup>2</sup> 3 days ≥60 N/mm <sup>2</sup> 7 days ≥70 N/mm <sup>2</sup> 28 days ≥85 N/mm <sup>2</sup>
Elastic Moduli @ 28 days ASTM C469 (Young's modulus)	>25 GPa
Flexural strength ASTM C348-08 W/P=0.14	1 day ≥7 N/mm <sup>2</sup> 3 days ≥10 N/mm <sup>2</sup> 28 days ≥15 N/mm <sup>2</sup>
Application Thickness*	Up to 120mm

\*Note: higher thickness may be achieved by adding 10mm aggregate with a ratio of 40% by weight to the bag. Ex: 25kg CIKOgrout BB80 will require 10kg aggregate.

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### Coverage / Yield

25 kg bag of CIKOgrout BB80 mixed with 3.5 to 3.75 litres of water, yields to 12.5 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 BB80 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 BB80 is a ready to use material requiring only addition of 3.5 to 3.75 litres of water for mixing. Measure required amount water for each batch mix and dispense into concrete mixer. Slowly add CIKOgrout BB80 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

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 cases of vertical surfaces or exposed and harsh conditions.

### Precautions

- Ambient temperature shall be between 5<sup>o</sup>-35<sup>o</sup>C.
- 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 BB80 be re-tempered by the later addition of water.

### Packaging

CIKOgrout BB80 is available in 25kg moisture resistant bags.

### Shelf life

CIKOgrout BB80 has a shelf life of 12 months if stored in accordance with CIKO instructions.

### Storage

CIKOgrout BB80 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
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries