

# FLOWCAST 80

## High Strength Non-Shrink Cementitious Grout

### Description

**FLOWCAST 80** is a high strength shrinkage compensate cementitious grout. It is a blend of Portland cement modified with graded aggregates and chemical additives to control expansion in the plastic state and minimize segregation and bleeding. It is designed to require the minimum water content to ensure high early strength and long-term durability. When **FLOWCAST 80** mixed with water it becomes self leveling non shrinking and flowable mortar, with high mechanical and compressive strength property when dry.

**FLOWCAST 80** has excellent characteristics of adhesion to the substrate, impermeability and flowable consistency.

### Features & Benefits

- Pre-packed, easy to mix and apply.
- Shrinkage compensated.
- Adjustable consistency
- High early strength and impact resistance
- Excellent bonding properties
- Excellent flow characteristics and self-compacting.
- Impermeable and durable.
- Chloride and sulphate free.

### Uses

**FLOWCAST 80** is designed for heavy machinery anchoring, anchoring of steel bars, footings, rigid filling of prefabricated elements, precast elements erections, underpinnings, pile head treatment, keying bridges, vertical shoring, void filling operations. It is also used in heavy duty support beneath machine base plates, tie bar hole filling, crane rails, precast elements... etc. It is formulated for use at plastic or flowable consistency for filling gaps up to 200mm width.

### Technical Properties

|                      |                                 |
|----------------------|---------------------------------|
| Appearance           | Grey Powder                     |
| Wet Density          | 2,250 Kg/m <sup>3</sup> approx. |
| Initial setting time | 1.5-2 hours                     |

|                      |                       |
|----------------------|-----------------------|
| Final setting time   | 3-3.5 hours           |
| Expansion at 24hrs   | Max. 2%               |
| Water penetration    | <10mm                 |
| Compressive strength |                       |
| After 1 day          | ≥35 N/mm <sup>2</sup> |
| After 7 days         | ≥62 N/mm <sup>2</sup> |
| After 28 days        | ≥80 N/mm <sup>2</sup> |
| Flexural Strength    | 10 N/mm <sup>2</sup>  |
| VOC                  | <3.5 g/L              |

All values are subject to 5-10% tolerance

### Standard Compliance

- ASTM C109/ C580
- ASTM C827, C1107M & C940
- BS 1881, BS 4551 & BS 6319 Pt. 3
- UNI 8147

### Application Procedures

#### Surface preparation:

The concrete surface and base plates must be stable as well as free from dust, oil, and grease. Substances reducing the adhesion strength must be removed. Saturate the concrete substrate with plenty of water prior to grouting, it should be dumped with no free water. Use compact and inflexible formwork, avoid any dehydration by presoaking or by applying an appropriate release agent. It should also include outlets for the free soaking water and excess grout.

#### Mixing Instructions:

Pour in to concrete mixer or into container about 3.2-3.5 Ltr of clean water. Add slowly with mixing the 25kg bag of **FLOWCAST 80** and mix for 3 to 5 minutes until a smooth, uniform homogeneous flowable mix is achieved. For mixing use a suitable mixing paddle with a low speed mixer (200-300 rpm).

## Application Instructions:

Place the grout immediately after mixing into the prepared area in such a manner that the grout has the shortest distance to flow. Pour **FLOWCAST 80** continuously maintaining a constant hydrostatic head wherever possible. **FLOWCAST 80** is suitable to use with most types of pumping equipment.

Grout should be poured only from one side of the formwork to eliminate possible entrapment of air.

Immediately after grout placing, curing should be done with one of SBI curing compounds (contact SBI Technical team for advice) or cover all exposed grout with clean wet hessian and keep moist.

## Yield / Consumption

12.5 Ltr/ 25Kg bag at flowable consistency.

## Packaging

**FLOWCAST 80** is available in 25 Kg bags.

## Storage

Keep the product in dry and sheltered place at temperature between +5°C to +35°C. In these conditions and in closed original containers, the product will have a shelf life of at least 12 months.

## Health and Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor.

For further information or particular use, contact SBI Technical Department.

## Quality & Care

All products produced in SBI facilities are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001 & ISO 14001.

SBI products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. All SBI datasheets are updated on a regular basis. It is the user's responsibility to obtain the recent version.

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**SALES OFFICE** : Jebel Ali, Industrial 1  
**FACTORY** : RAK, Jazerat Al Hamra

Tel.+971 4 880 2131  
Tel. +971 7 2210066  
[www.sbi-me.com](http://www.sbi-me.com) , [info@sbi-me.com](mailto:info@sbi-me.com)

