

# CEMTEC PCG

## NON-SHRINK, NON-STAIN, NON-METALLIC GROUT

**CEMTEC PCG** is designed for critical use where high strength, non-staining characteristics and positive expansion are required. It contains only natural aggregate and expansive cementitious binder.

### PRIMARY APPLICATIONS

- Pre-Cast Panels
- Structural Supports
- Honeycomb Detailing

### FEATURES / BENEFITS

- Non-staining natural aggregate for better performance
- Non-shrink providing full structural support
- Flowable and self leveling
- High strength and durability
- Appearance similar to concrete
- Does not contain any added chloride ions

### PACKAGING / YIELD

**CEMTEC PCG** is packaged in 25 kgs bags and yields 0.0124m<sup>3</sup> of flowable grout when mixed with 4.2 liters of water.

### SPECIFICATIONS / COMPLIANCES

- Meets the requirements of CRD C-621, Corps of Engineers Specification for Non-Shrink Grout, at a flowable consistency.
- Shows positive expansion when tested in accordance with ASTM Specification C-1090, Standard Test Method for Measuring Changes in Height of Cylindrical Specimens from Hydraulic-Cement Grout, at a flowable consistency.
- Meets the performance requirements of ASTM C-1107, Grades A & B as well as Grade C, combination volume adjusting grout standard specification for packed dry, hydraulic - cement grout (non-shrinkable), at a flowable consistency.

### TECHNICAL INFORMATION

Typical Engineering Data

The following results were developed under laboratory conditions at 70°F(21°C).

### FLOWABLE CONSISTENCY

4 liter / 25 kgs bag

Flow Rate :ASTM C-939 & CRD C-621 120%  
Flow (flow table)

Compressive Strength

2" (50mm) cubes (ASTM C-109)

Age	Strength
1 day	5,800 psi (40MPa)
3 days	8,000 psi (55MPa)
7 days	10,000 psi (69MPa)
28 days	11,890 psi (82MPa)

### Expansion

Tested in accordance with CRD – C621

3 days	0.01%
7 days	0.06%
14 days	0.06%
28 days	0.06%

### Setting Time (ASTM C-191)

Initial 3 hrs 10 min

Final 4 hrs 20 min

Shelf life in original unopened package is 1 year

### APPEARANCE

**CEMTEC PCG** is a free flowing powder designed to be mixed with water. After mixing and placing, the color may initially appear much darker than the surrounding concrete. While this color will lighten up substantially as the concrete cures and dries out, the grout may always appear somewhat darker than the surrounding concrete.

### DIRECTIONS FOR USE

If the contractor is not familiar with standard grout placement techniques, a pre-job meeting is suggested to review the project details unique to the particular job. Contact your local CMCI representative for additional information.

*“High Quality Construction Chemicals”*

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Careful preparation is a must for a successful grouting operation.

Grouts generally work best at 50-80°F (10-35°C). Cold weather retards strength gain and set time. Hot weather accelerate setting time and causes premature drying of the grout. Provide heating or cooling, as necessary, to compensate for extremes in ambient temperatures and resulting variations in cure time.

**Surface Preparation** - Surfaces to be grouted should be clean and free from dust, grease or oil. Determine work schedule and method of placing grout, then prepare strong, properly braced and oiled forms to retain the grout and provide relief holes, if needed. Saturate the area to be grouted with water until it is uniformly damp and remove excess water just before placing the grout.

**Mixing** - Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 50-80°F (10-27°C). Add the appropriate amount to clean, potable water for the batch size and then add the dry grout. Mix for minimum of 2-3 minutes. The mixed grout should be quickly transported to the grouting site and placed immediately.

**Consistency Estimated Water Content**  
**Flowable** 4 ltr / 25 kg bag

**Placing** - If placing this product in hot weather, use of cold water will increase the working time.

**Curing and Sealing** - Proper curing procedures are important to ensure the durability and quality of the grout. Cure the grout with a high solids curing compound, such as **CEMTEC KURE N SEAL, KUREKOTE 75 VOX**.

Curing compound must be ordered separately.

## **PRECAUTIONS / LIMITATIONS**

- Do not add any admixture or fluidifiers
- Proper curing is required.
- Employed cold weather or hot weather grouting practices as the temperatures dictates.
- Do not allow to freeze until 4,000 psi (27.6 MPa) attained.
- Do not use as a topping.
- Do not use material at temperatures that may cause premature freezing.
- Rate of strength gain is significantly affected at temperature extremes.
- Store product in a dry place.

TD/1107/C

### **QUALITY STATEMENT**

CMCI manufacture its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with Quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products. CMCI also offers full technical field support to consultants, Architects, Contractors, applicators and End Users

The Technical Specification information and recommendation given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product. CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.