

# **JCC EXTRA-GP**

# Early Strength, Non-shrink, Non-oxidized, Free- flowing Cementitious Grout.

#### **Product Description**

JCC EXTRA-GP is ready-to-use high strength, non-oxidized cementitious grout which requires only the addition of water to produce non-shrink &waterproofing flowable mortar. JCC EXTRA-GP contains selected Portland cements, special aggregates, shrinkage compensating materials, fibers, and modifiers that permit to be applied in an ordinary and high thickness by pouring or pumping without any problems.

#### Uses

JCC EXTRA-GP is formulated to be used as non-shrink, high strength cementitious grout for fluid to flowable consistency in:

- Grouting under machinery & equipments.
- Grouting under general structural support.
- Anchor bolts, Crain rails and milling machine.
- Concrete repairs & floor patching where a highly flowable replacement material is recommended.
- Filling of voids & holes between new and old concrete.
- All similar works.

# **Advantages**

- Easy to mix and to apply.
- Non-oxidized.
- Non-shrink.
- Adjustable consistency.
- High mechanical properties.
- It contains micro silica enhanced for strength and durability.
- Low permeability ensuring durability.
- Non-toxic and does not contain any harmful ingredients.
- High early and ultimate strengths.
- Chloride and nitrate free.
- High bond strength to concrete and steel.
- Heat resistance properties.
- Can be applied by pouring or pumping.
- Formulated for the Middle East Climates.

#### **Standards**

JCCEXTRA-GP is formulated to comply with all requirements of ASTM C-1107: "Packaged Dry, Hydraulic – Cement Grout (Non-shrink)" Grade B as well as CRD C- 621.

# **Technical Properties**

Appearance	Grey free flowing powder	
Mixing Water / 25-Kg	<u>Fluid</u>	Flowable
	4.00 Liters	3.750-Liters
Yield (Liters)	13.2	13
Specific Gravity @20 °C (wet)	2.1 - 2.2.	
Setting Times @ 20 °C	Initial: 4-hours and final is 5-6 hours	
Compressive Strength (N / mm²)	It will influenced with the consistency:	
	<u>Fluid</u>	<u>Flowable</u>
After 24-hours	30	40
After 7-days	65	70
After 28-days	75	80



#### Flexural Strength (N/mm<sup>2</sup>)

After 24-hours 8 10 After 28-days 13 14

Flow properties: CRD C-Cone 19 – 25 seconds for the flowable consistency. Expansion Behavior It will start after the addition of water and mixing

and will continue for 2-hours @ 20 °C.

Expansion after 28-days 0.02 % Modulus of Elasticity > 3300 MPa

Coefficient of Thermal expansion 11.5 x 10<sup>-6</sup> mm / mm per °C.

# **Guide for Applications**

#### **Surface Preparation**

All surfaces shall be sound, clean and free from dust, oil & grease or any contaminants that may affect the bond between the product and substrate. Metal surfaces shall be free from rust & scale and other contaminants. Absorbent surfaces shall be saturated thoroughly but no standing water.

#### Mixing

The exact amount of water shall be put in a clean vessel (or mixer) and gradually add the powder while mixing. Continue mixing till homogenous consistency free from lumps is achieved. It is recommended to use an electric drill of maximum 400 – 500 rpm. It is not recommended to mix more than that you can place within 60 minutes. DO NOT RETEPMER to restore workability.

#### **Placement**

Pour the mixed materials onto the prepared substrate continuously from one side avoiding air pocket entrapment (allow the air to escape). If base plate grouting is carrying out, ensure adequate head pressure is maintained. Voids should be removed by removed rodding, strapping.

### Curing

JCC EXTRA-GP is cementitious grout, ACI recommendations should be followed during mixing, placement or curing. After placement, the grout shall be cured properly for 3-days at least. Our curing range can be used. Protect the placed from extreme temperatures.

#### Cleaning

Clean all tolls & equipment with water after finishing the work immediately.

#### **Packaging**

JCC EXTRA-GP is supplied in well sealed 25-Kg packs.

### Storage & Shelf-life

JCC EXTRA-GP shall be stored in normal conditions away from any extreme temperatures, and any source of moisture. Shelf – life is 12-months.

#### **Health & Safety**

- JCC EXTRA-GP is non-toxic, non-hazardous during handling, storage and use.
- For Ecology: Do not dispose directly to water or soil, re-use it if possible or mix with water and wait till hardening, then burry it in landfill in accordance with the National regulations.
- Splashes on skin will be washed with water and soap.

# JCC CONSTRUCTION CHEMICALS

The information herein is general information to assist our customers in determining whether our products are suitable for their specific applications. Our products are intended for sale to commercial and industrial customers. We require that customers should inspect and test our products before use to satisfy themselves as to the content and suitability for the application they intend to use our products for.

JCC endeavors to ensure that any advice, recommendation, specification of information in accurate and correct manner.