

EPO CEMENT 030

Cementitious Coarse Concrete Structural Repair Mortar



DESCRIPTION

EPO CEMENT 030 is supplied as a ready to use dry powder requiring only the addition of water to produce cohesive easily applied mortar. The product is a careful blend of Portland cements, graded silica sands, shrinkage compensating agents silica fume, water reducing agents and compatible water resistant polymers. The product is designed to give good adhesion and cohesion in, the plastic state and low water requirement resulting in a non-shrink low porosity mortar with high compressive strength and durability.

TYPICAL APPLICATIONS

EPO CEMENT 030 is recommended for structural reinstatement of damaged concrete for beams and columns in inland and marine environments, and as a general purpose repair mortar for concrete floors and highly trafficked areas. Suitable for application in the range of 5 mm to 30 mm in one step, can be go up to 60 mm thickness or more in multi steps.

ADVANTAGES

- Easily trowel applied. Workability retained for approximately 30-45 minutes.
- Recommended for both vertical and horizontal application.
- Shrinkage compensated, suitable for internal and external application.
- One component, pre-bagged factory controlled material eliminates site batching variations.
- Polymer modification provides extremely low permeability to water. Good resistance to carbonation and chloride penetration.
- Excellent to sound concrete substrates and steel.
- No metallic iron to cause staining or deterioration to rust expansion.
- Good strength development without the use of chlorides.

PRODUCT DATA

Form	Powder
Color	Grey
Packing	25 Kg Kraft Bag
Layer Thickness	5mm to 30mm in one layer 60mm or more in multiple layer
Consumption	2.0 Kg/M ² for 1mm thickness
Shelf life	12 months in dry/enclosed medium

TECHNICAL SPECIFICATION

Test Name	Standard	Average Result
Density @25°C	ASTM C 138	2.20 ± 0.10 Kg/Ltr
Grout Consistency (water liter/Grout Kg)	---	3 Ltr /25 Kg
Air Content	ASTM C 138	2.9 %
Compressive Strength 28 days	ASTM C 109	> 40 MPa
Mean Flow of Hydraulic Cement (%)	ASTM C 1437	40.94
Flexural Strength	ASTM C 348	> 6 MPa
Abrasion Resistance	BS EN 12808 – 2:2008	91 mm ³
Setting Time (min) Initial Setting Time Final Setting Time	ASTM C403	90 min 250 min
Coefficient of Linear Thermal Expansion	ASTM C596	0.744 mm/m
Workability Time	DIN 18555 PART-8	150 ± 15 min
Linear Shrinkage	ASTM C 531	-0.029 %
Water Absorption	ASTM C 413	1.2 %
Water Vapour Transmission	ASTM E 96	0.18 g/m ² /24hours
Chloride content	ASTM C 1218	< 0.0001



EPO GULF SPECIALITIES CO.

Kuwait, Amghara Industrial area
Block 4 Building 95 – 97 – 99
P.O box 12017 – Tel: +965 22272590
info@epogulf.com

WWW.EPOGULF.COM



EPO YAPI KIMYA CO.

Cement – Concrete Technology
Turkey, Istanbul, Tuzla, Orhanlı
Tel: +90 2165932294
info@epo.com.tr

EPO CEMENT 030

Cementitious Coarse Concrete Structural Repair Mortar



APPLICATION PROCEDURE

CONCRETE PREPARATION

Cut back concrete at edge of repair to minimum depth of 10mm. Do not feather edge. Use mechanical hand tools, grit blasting or water jetting.

STEELWORK

Corrosion products should be removed from all exposed steel using mechanical means, grit or water blasting.

STEEL PRIMER

Steelwork should be primed before new corrosion products form with a slurry coat of **EPO LATEX SBR** with neat cement or a zinc rich primer.

CONCRETE PRIMER

The concrete should be first soaked with water to reduce the absorbency. A slurry priming coat of **EPO LATEX SBR** with neat cement should then be applied to the concrete.

MIXING

Place 3.0±0.5 liters water in mixer to give mortar consistency. Add 25 Kg bag and stir with slow speed drill and paddle or preferably with a mechanical mixer. Mix for 3 to 5 minutes after all powder has been added to obtain a smooth cohesive mortar.

For additional anti-dusting, or enhanced performance properties, add 1Kg of **EPO LATEX SBR** to the gauging water until the desired consistency is achieved.

Note: In all cases **EPO CEMENT 030** must be added to the water and when using SBR water/powder ratio to be adjusted.

PLACING

Place the mortar whilst the primer is tacky by trowel or preferably by hand ensuring that it is well consolidated behind any reinforcing steel. The minimum application thickness should be 5mm. The maximum practical application thickness vertically is 30mm and can go up to 60mm or more thickness in multistep with formwork.

CURING

Curing is not generally required. However, under extreme conditions-high temperature and drying winds-it may be prudent to use **EPO CURE** range of product as a curing agent.

PRECAUTIONS

Cleaning: All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage systems.

Protection: All works must be protected from rain and frost until fully hardened.

Fire resistance: **EPO CEMENT 030** is not flammable.

HEALTH AND SAFETY

EPO CEMENT 030 is non-toxic but is mildly alkaline. Gloves should be worn during application. Splashes to the skin or eyes should be removed with clean water. In the event of prolonged irritation, seek medical advice.

EPO CEMENT 030

Ver 01/22

EPO GULF SPECIALITIES CO.

Kuwait, Amghara Industrial area
Block 4 Building 95 – 97 – 99
P.O box 12017 – Tel: +965 22272590
info@epogulf.com

WWW.EPOGULF.COM



EPO YAPI KIMYA CO.

Cement – Concrete Technology
Turkey, Istanbul, Tuzla, Orhanlı
Tel: +90 2165932294
info@epo.com.tr