

EPOCHEM

EPOXY/PORTLAND CEMENT BONDING AGENT STEEL REINFORCEMENT PROTECTION

EPOCHEM is a 3 part bonding agent composed of a specialty water based epoxy and selected cementitious compounds.

EPOCHEM provides an extended open time allowing for placement of concrete toppings and repair mortars upto 8 hours later. The product also provides significant protection against steel reinforcement corrosion when applied to properly prepared rebar.

PRIMARY APPLICATIONS

- Bonding agent for floor toppings and concrete repair.
- Bond coat for concrete repair mortars.
- Corrosion protection for steel reinforcement
- Exterior and Interior concrete.
- Parking and bridge structures.
- Marine structures.
- Retaining walls
- Parapet walls

FEATURES / BENEFITS

- Excellent adhesion to concrete and steel
- Extended open time allows flexibility in topping placement.
- Bonding agent plus corrosion protection-one product does both
- Non-vapor barrier for slab on grade applications.
- Non-flammable and V.O.C. compliant for increased safety.

TECHNICAL INFORMATION

Typical Engineering Data

Consistency	: Wet Slurry
Pot Life	: 90 minutes
Application thickness	: 0.5 mm
Tensile bond strength	: greater than concrete tensile strength
Curing mechanism	: Cementitious hydration cross-linked epoxy
Shelf life	: 1 year

PACKAGING

EPOCHEM is available in 3.8 liter (1 gal.) kit. A kit consists of Part A (resin), Part B (hardener) and Part C (Powder).

COVERAGE

EPOCHEM cover 2.0 m²/liter at the recommended film thickness of 0.5 mm. For bonding concrete or

repair mortar apply one coat.

For corrosion protection, the product is placed in two coats with each coat placed at 4 m²/ltr. For both bonding and corrosion protection, the recommended film thickness is 0.5 mm.

DIRECTIONS FOR USE

Surface Preparation;

Bonding - New concrete must be clean and well textured prior to use of **EPOCHEM**. Remove all curing compounds and form release agents.

Old concrete must be clean and rough. All oil, dirt, dust, paint and unsound concrete must be removed. The surface must be prepared mechanically using a scabber, bushhammer, shotblast or scarifier which will give a surface profile of a minimum 3 mm and expose the larger aggregate of the concrete. The final step in cleaning should be the complete removal of all residue with a pressure washer.

The concrete substrate must be thoroughly prewetted prior to the application of **EPOCHEM**.

Corrosion Protection. - Steel reinforcement should be sand blasted to white metal.

Mixing - add the entire container of Part B to all of Part A. Mix with mechanical (drill) mixer for 2 - 3 minutes until uniform. Add Part C (Powder) and blend until the aggregate is completely coated. A mortar mixer may be used for large jobs. Place immediately.

Placement:

Bonding - concrete substrate must be thoroughly prewetted but free of standing water. **EPOCHEM** is applied by stiff bristle broom or "hopper gun" (pattern Pistol) at an even coverage rate of 1.7 m²/liter. Final film thickness will be 0.5 mm Fresh concrete or repair mortar may be placed on **EPOCHEM** while it is wet or after it dries, up to 8 hours after placement.

Corrosion Protection - for maximum protection of steel reinforcement, apply **EPOCHEM** in two coats, with each coat placed at 3.5 m²/liter. After the first coat is placed, allow to dry for 2 - 3 hours before the second coat is placed. Total film thickness will be 0.5 mm. Care should be taken to ensure the steel is completely coated. Fresh concrete or mortar may be placed while the **EPOCHEM** is still wet, or after it dries, up to 8 hours after placement.

Shotcrete - Wait a minimum of 8 hours after application of **EPOCHEM** before the shotcrete is applied.

CLEAN-UP

Clean tools and equipment with water before material dries.

PRECAUTION / LIMITATION

- Place at ambient and material temperature of 4 - 32°C.
- Maximum open time before topping placement is 8 hours.

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.