

# CEMPOL ACRYLIC

## ACRYLIC LATEX BONDING ADMIXTURE

**CEMPOL ACRYLIC** is a water dispersion of an architectural grade acrylic latex specifically designed for modified portland cement compositions. Mortar modified with **CEMPOL ACRYLIC** has improved physical strength, and superior adhesion to old concrete, masonry, brick, and many other surfaces.

### PRIMARY APPLICATIONS

- Toppings, patches and leveling course
- Thin sets, terrazzo, stucco and bonding slurries.
- Repairs utilizing spray or fill coats.
- General reconstruction work.
- Repairs to precast structural members.
- Architectural panels, bridge decks and highway repairs

### FEATURES / BENEFITS

- Easy to use
- Improves bond strength.
- Increases durability under freeze/thaw cycling.
- Reduces cracking through increased mortar flexural strength.
- Increases mortar wear resistance under rubber wheeled traffic.
- Increases mortar tensile strength.
- More impermeable.

### SPECIFICATIONS / COMPLIANCES

- **CEMPOL ACRYLIC** meets ASTM C-1059-86, Standard Specification for latex agents for bonding fresh to hardened concrete, Type II.
- **CEMPOL ACRYLIC** is classified by The American Concrete Institute as a non-reemulsifiable bonding admixture.

### PACKAGING

**CEMPOL ACRYLIC** is packaged in 210 Liter drums or 20 Liter pails.

### TECHNICAL INFORMATION

#### Typical Engineering Data

#### Physical Properties of **CEMPOL ACRYLIC**

Weight per gallon :	3.8 kg
Shelf Life :	2 years

### Typical Results of **CEMPOL ACRYLIC**

Modified Portland Cement Mortar

Compressive Strength ASTM C109

50 mm cubes

3 days 3,000 psi (21 MPa)

7 days 4,000 psi (28 MPa)

28 days 5,000 psi (34 MPa)

**Flexural Strength** ASTM C-78

28 days 1,300 psi (9 MPa)

**Bond Strength** ASTM C-1042

14 days 1,200 psi (8 MPa)

### Material Requirements

Mix Type

Coverage*	Cement	Sand	<b>Cempol Acrylic</b>
Cement Slurry	---	---	---
56-74 m <sup>2</sup>	43 kg	---	26-30ltr
Repair Mortar	43 kg	136 kg	19-23ltr
10-11 m <sup>2</sup> at 10 mm			

\* Projected coverage is an estimate only, and is highly dependent upon sub-base texture.

### DIRECTIONS FOR USE

**Surface Preparation** - If using this product in a slurry bond coat, the base concrete must be a minimum of 3 days old .

The concrete must be clean and rough. All oil, dirt, debris, 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 large aggregate of the concrete.

**Note:** Acid etching is not acceptable. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing. Allow the concrete surface to begin drying. Do not place slurry coat on standing water.

All concrete must possess an open surface texture with all curing compounds and sealers removed.

All areas should be pre-wetted to reduce moisture loss. Do not place product on standing water.

**Bonding** - for bonding toppings with this product, The CMCi recommends using a slurry coat rather than using this product as a primer by itself. After the surface has been prepared, prime all areas with a slurry coat (see above

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mix design) before the topping is applied. Follow mixing and placing instructions listed below. Place the topping on the slurry coat before it dries out.

**Mixing** - Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. Add the appropriate amount of **CEMPOL ACRYLIC** for the batch size and then add the dry material. Mix a minimum of 3 minutes. The mixed product should be quickly transported to the repair area and placed immediately.

**Placement** - Discharge material from mixer and place onto floor.

**Slurry Application** - Spread the slurry with a stiff bristle broom until the suggested coverage rate has been achieved.

**Topping Application** - For patching, spread with a trowel or square tipped shovel to a thickness that matches the surrounding concrete. Finish by hand trowelling. On large floor areas, use screed strips as guides in combination with vibratory screeding to level. Compact and finish by hand or machine trowel.

**Finishing**- Finish the repair material to the desired texture. Typical texture is a broom or sponge float finish though mortars made with **CEMPOL ACRYLIC** can be steel trowelled. Do not add additional water to the surface during the finishing operation.

**Curing** - All cement products must be adequately cured. Proper curing procedures are important to ensure the durability and quality of the repair or overlayment. To prevent surface cracking, a moist cure should be maintained for 24 hours followed by use of curing compound such as **KURECOTE 75 VOX**.

NOTE: Do not use a solvent-based curing compound on latex modified mortars.

#### **CLEAN-UP**

Clean tools and equipment with water before the material hardens.

#### **PRECAUTIONS / LIMITATIONS**

- No heavy traffic until the repair has cured.
- Do not use in ready mix concrete.
- For thin topping mixes or large overlays, use CEMPOL SBR.
- May not be suitable for use on its own as a bonding agent, use in a slurry with portland cement or consult CMCI.
- Use of this product in conjunction with air entrained cement/concrete or with other admixtures may significantly increase total entrained air content. Testing is strongly advised.

#### **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.