

# REPCON S

## TROWEL GRADE VERTICAL / OVERHEAD CONCRETE REPAIR MORTAR

**REPCON S** is a polymer modified cementitious repair mortar for vertical and overhead concrete and masonry repairs. It sets readily to allow quick, easy repairs for concrete surfaces both inside and outside. **REPCON S** is a two component mortar designed for trowel applied repairs.

### FEATURES & BENEFITS

- Fast setting for rapid repairs up to 100 mm in thickness
- Easy to use as a prepacked kit
- Excellent resistance to freeze/thaw cycling and de-icing salts
- Suitable for both interior and exterior applications
- Excellent bond to sound concrete
- High compressive strengths and bond

### BASIC USES

- Vertical and overhead patching of spalled concrete
- Resurfacing of damaged concrete
- Repair of honeycombed surfaces
- Parking structures & bridges
- Retaining walls
- Ceilings and sloped surfaces
- Large placements

### SPECIFICATIONS / COMPLIANCE

- **REPCON S** attains a bond strength in compliance with ASTM C 1059-86, Type II systems.

### TECHNICAL INFORMATION

#### Typical Engineering Data

The following results were developed under laboratory conditions.

#### Compressive Strength

ASTM C-109 50 mm cubes

Age	Strength
1 day	: 4,000 psi (29 MPa)
3 days	: 5,000 psi (35 MPa)
7 days	: 6,000 psi (41 MPa)
28 days	: 6,500 psi (45 MPa)

#### Bond Strength

##### ASTM C-1042, at 22°C

1 day	: 1,120 psi (8 MPa)
7 days	: 1,440 psi (9 MPa)
14 days	: 1,760 psi (12 MPa)

#### Flexural Strength

ASTM C-78 (modified)

7 days : 1,500 psi (10 MPa)

Working Time : 10 minutes

### DIRECTIONS FOR USE

minimum of 3 days old. The old 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, bush-hammer, shotblast or scarifier which will give a surface profile of a minimum 3 mm and expose the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing.

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

**Exposed Reinforcing Steel** - Exposed rebar may be treated with an anti-corrosion coating such as **ZINCRICH PRIMER**. Remove all loose rust and scaling, preferably by sandblasting to white metal prior to coating the rebar.

**Bonding** - After the surface has been prepared, all areas must be primed with a slurry coat of **REPCON S** or **EPOPRIME.LP**

**Slurry Coat** - Mix **REPCON S** as instructed but add an additional one pint (0.5 liter) of **CEMPOL ACRYLIC** per unit to the mix. Brush the slurry coat on to the prepared and pre-dampened concrete. Apply the **REPCON S** topping before the slurry coat has dried.

**Mixing** - Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs.

### NOTE :

**REPCON S HAS A WORKING TIME OF 10 MINUTES. DO NOT MIX MORE MATERIAL THAN CAN BE USED IN THAT TIME FRAME.** Add the appropriate amount

<b>COVERAGE</b>	One unit of REPCON S will cover approximately 2 m <sup>2</sup> when placed at an average depth of 6 mm <b>Note :</b> This product requires a curing compound which must be ordered separately. Refer to the curing information.
<b>PACKAGING/ YIELD</b>	REPCON S supplied as a 24 kg bag of dry powder and 1 gallon (3.8 liter) of REPCON S LIQUID in a matched bag and jug unit. Yield 0.014 m <sup>3</sup> per 28 kg unit.

of **REPCON S LIQUID** for the batch size and then add the dry product. Mix for 2-3 minutes. The mixed product should be quickly transported to the repair area and placed immediately.

**Placement** - Place **REPCON S** while the bond coat is still wet. Trowel **REPCON S** material on to the prepared surface being repaired. Trowel flush with surface and allow to stiffen. Finish to match the surrounding concrete surfaces. Clean tools immediately after use with water.

**Finishing** - Finish the repair material to the desired texture. Do not add water to the surface during the finishing operation.

**Curing and Sealing** - Proper curing procedures are important to ensure the durability and quality of the repair. To prevent surface cracking, cure the repair mortar with a high solids curing compound, such as **KUREKOTE 75 VOX** (NOTE : A SOLVENT BASED CURING COMPOUND SHOULD NOT BE USED ON THIS PRODUCT.) Apply two coats of curing compound. If a curing compound is not desired, wet cure for a minimum of three days.

#### **CLEAN-UP**

Clean tools and equipment with water before the material hardens.

#### **HEALTH & SAFETY**

- Do not use at temperatures below 7°C.
- Store material in a dry place, above freezing.
- Cool temperatures slow setting while warm temperatures speed up set times.
- Do not traffic until the product has cured.
- Keep repair from freezing until a minimum strength of 1000 psi (7 MPa) is reached.

#### **Quality Statement**

CMCI manufactures 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.

#### **"High Quality Construction Chemicals"**

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