



CEM140

Super Concrete Mortar - for Application Thickness Less Than 1 inch

PRODUCT DESCRIPTION

CEM140 Super Concrete Mortar is a one component rapid concrete repair mortar which requires only the addition of water to produce a durable, very rapid strength-gaining material for permanent repair of concrete. CEM140 Super concrete mortar is a special blend of Portland cement, graded silica sands and a proprietary admixture developed by International Chem-Crete.

FIELDS OF APPLICATION

CEM140 Super Concrete Mortar is designed for the durable repair of poured in place concrete and pre-cast concrete substrates which require a very rapid strength gain and high strength characteristics where thicknesses of less than ¾ inch (1.94 cm) are required.

- Factory Floors
- Warehouse Floors
- Hangar Floors
- Loading Bays
- Cold Storage and Dairy Plants.
- Highway Repairs.

CEM140 is suitable where high impact resistance, compressive strength, good abrasion resistance, durable, and early strength gaining repairs are requirements.

PRODUCT FEATURES

- One component requires only the addition of water.
- Excellent workability
- Excellent Adhesion to most Substrates.
- High Compressive Strength
- Freeze /Thaw Resistant
- Does not contain any additive, which may cause corrosion of steel reinforcement
- Non-shrink

PACKAGING

Product	Packaging
CEM140 *	50 Lb (22.7 Kg) Bag

* Grey color cement powder with selected silica aggregate

TECHNICAL DATA

Property		Value *	Standard
Compressive Strength, psi (MPa)	1 day	3000 (20.20)	ASTM C109
	7 days	4000 (30.40)	
	28 days	8000 (60.80)	
Flexural Strength, psi (MPa)	1day	325 (2.30)	ASTM C293
	7 days	400 (3.40)	
	28 days	500 (4.60)	
Setting Time**, minute	Initial	150	ASTM C-191
	Final	200	
Pot Life**, minute		50	-
Density - set mortar, Lb/Gal (Kg/Liter)		15.5 (1.86)	-

* Average

** Test at 75°F (25°C)

APPLICATION DATA

Limitations: CEM140 Super Concrete Mortar is a water sensitive material, maintain recommended water volume criteria.

- Do not apply greater than 1 inch (2.54 cm) in depth.
- Do not add additional water to CEM140 once mixed to extend workability.

Mixing Ratio: 0.78 gallon (2.95 L) of water for the 50 Lb Bag of CEM140. Accurate measurement of water is very essential.

Coverage:

Thickness	Coverage of 50 Lb (22.7 Kg) Bag	
¼" (0.64 cm)	24 ft ²	1.58 m ²
½" (1.28 cm)	12 ft ²	0.79 m ²
¾" (1.92 cm)	8 ft ²	0.53 m ²
1" (2.54 cm)	6 ft ²	0.37 m ²

Note: The above coverage is for estimation purposes only. Slight variations in quantities may occur depending on thickness, site conditions, substrate conditions, etc.

Surface Preparation: When using a spalled or deteriorated area of concrete chip or saw cut the spalled area to a depth sufficient to remove all deleterious concrete. It is recommended that edges be squared and depth be a minimum of ¼ inch (6.4 mm). Clean and remove all oil, grease, dirt and loose debris from the area to be repaired.

Optional Vapor Barrier: Prime all areas with CHEM-CRETE SOFIX CCC100 or CHEM-CRETE SOFIX CCC700 depending on site vapor conditions to serve as a percolation vapor barrier to the existing pre-treated concrete.

Optional Priming: Apply one coat of CHEM-BOND CCC550 to the area to be patched immediately prior to placing the CEM140 Mortar if required. Contact International Chem-Crete for details.

Mixing:

- Use a high intensity mixer with at least twice the volume of the amount to be mixed. Locate the mixer close to the area to be repaired. Ensure that the mixer is clean of any foreign material including water.
- Measure the total mixing water required for each batch. Use clean water for mixing. Accurate measure of water is very important.
- Fill the mixer with half of the quantity of CEM140 to be mixed, and then add all the water. Mix for 90 seconds, then add the second half of CEM140 material and mix for 3-6 additional minutes until a uniform homogenous and smooth mixture is achieved.
- Do not add any other materials to the mix.

Application: Place the mixed mortar in the area to be patched. Place from one side to the other and work the material into side and bottom of the repaired area to aid in satisfactory bonding.

Screed and level to maintain elevation of existing concrete. Finish by trowel to seal edges, surface, and 3/4 inch (1.90 cm) minimum keyed saw-cuts. Featheredging is not recommended.

Do not re-temper the mix by adding water.

Curing: Protect exposed areas from excessive heat or cold until setting is complete.

CLEANING

Clean all mixing and application equipment with water immediately following use. Remove all splatter of spills with water before material sets.

STORAGE

Store CEM140 in cool dry storage facilities. Do not expose to direct sunlight. The shelf life of CEM140 is minimum 1 year if stored in a cool dry place in its original unopened container.

SAFETY PRECAUTIONS

CEM140 is a non-flammable and non-toxic in nature. Avoid contact with eyes and skin as it may cause irritation due to its alkaline nature. Splashes of CEM140 should be washed off immediately with clean water. Wear necessary gloves and dust mask.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

DISCLAIMER: The information contained herein is included for illustrative purposes only and, to the best of our knowledge, is accurate and reliable. International Chem-Crete Inc. is not under any circumstances liable to connection with the use of information. As International Chem-Crete Inc. has no control over the use to which others may put its products, it is recommended that the products be tested to determine the suitability for specific applications and/or our information is valid in particular circumstances. Responsibility remains with the architect or engineer, contractor and owner of the design, application and proper installation of each product. Specifier and user shall determine the suitability of the product for specific application and assume all responsibility in connection therewith. AM160419.

Manufactured By:



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