

CM (CONCRETE MIX)

5/21/2018

RAPID HARDENING CEMENT PRODUCTS

PROVEN TECHNOLOGY FOR OVER 25 YEARS

CMAX Cement® CONCRETE MIX (CMAX Cement® CM) is a high-performance blend of CMAX Cement®, portland cement and quality approved aggregates. CMAX CM is non-metallic, with no chlorides added.

CMAX Cement® CM is similar in appearance to portland cement repair materials and may be applied using similar methods.

Mixed with water CMAX Cement® CM produces a high-quality repair material that is ideal where rapid strength gain, highest durability and low shrinkage is required. Apply CMAX Cement CM in thicknesses from 2" to 24". Sets in 20 minutes and is ready for traffic in less than one hour

APPLICATION & INSTRUCTIONS

APPLICATION: CMAX Cement® CM is suitable for all concreting applications; highway and road replacement; repair and construction of pavements; formed work; footings; setting posts; industrial floors; machine bases; manholes; concrete repair.

SURFACE PREPARATION: The repair surface shall be clean, sound and free from any materials that may inhibit bond such as oil, asphalt, curing compounds, acids, dirt and loose debris. Roughen surfaces and remove all unsound concrete. Immediately prior to placement the repair surface shall be thoroughly saturated with no standing water.

MIXING: The use of a power driven mechanical mixer, such as a mortar mixer or a drill mounted mixer, is recommended. Make sure all forming, mixing, placing, and cleanup materials are on hand. CMAX Cement® CM may be mixed using 3 to 5 quarts of water per 60 lb. bag. Use less water to achieve higher strengths. Do not exceed 5 quarts of water per bag. For increased fluidity and workability use CMAX Cement® FLOW as a plasticizing admixture. Place the desired quantity of mix water into the mixing container. While the mixer is running add CMAX Cement® CM. Mix whole bags only. Mix for the minimum amount of time required to achieve a lump-free, uniform consistency (usually 1 to 3 minutes). Do not re-temper. Caution: Do not add Portland cement, Lime, Fly Ash or any other admixtures unless approved by CC Products

PLACEMENT: CMAX Cement® CM may be placed using traditional methods. Organize work so that all personnel and equipment are ready before placement.

Place, consolidate, and screed quickly to allow for maximum finishing time.

Do not wait for bleed water; apply final finish as soon as possible. CMAX Cement® CM may be troweled, floated or broom finished. On flat work do not install in layers, install full depth sections and progress horizontally.

Do not install on frozen surfaces. Use a method of consolidation that eliminates air voids. To extend working time use CMAX Cement® Delay® set retarding admixture.

CURING:

No curing membranes or compounds are required. However no negative affect occurs if placed per project specifications

APPROVALS: CMAX Cement® CM is used nationwide on highways and airports as an approved DOT repair product and is approved by U.S. Army Corps of Engineers. Specification designated under: ASTM C-219 (Rapid Strength Concrete, Blended Hydraulic Cement) ASTM C-595 (Modified Portland Cement Type – IP) ASTM C-928 (Packaged Dry, Rapid-Hardening Cementitious Materials for Concrete Repair)

MATERIAL PROPERTIES: Fast Setting, Non-Shrink, Concrete Mix that Complies with: ASTM C595, Grade B, ASTM C928, ASTM C219.

Minimum performance requirements

Curing Time	Compress Strength	Compressive Strength	
1 hour	3000 psi	(20.1 MPa)	
3 hours	4000 psi	(27.6 MPa)	
1 day	5500 psi	(37.9 MPa)	
7 days	8000 psi	(55.2 MPa)	
28 days	10,000 psi	(68.9 MPa)	
Set Time	20 minutes		

CURING:

Water cure all CMAX Cement® CM installations. Begin curing as soon as the surface has lost its moist sheen. Keep exposed surfaces wet for a minimum of 1 hour. When experiencing extended setting times due to cold temperature, or the use of retarder, longer cure times may be required. The objective of water curing shall be to maintain a continuously wet surface until the product has achieved sufficient strength.

Shelf Life: When stored in a dry location, In an undamaged package CMAX Cement has a shelf life of approximately 12 months.

Yield: One 60 lb. bag of CMAX Cement concrete mix will yield approximately 0.52 cubic feet.

SPILL/HANDLING AND STORAGE: Cured product can only be removed mechanically. In case of spillage, scoop or vacuum into an appropriate container, and dispose of in accordance with current applicable local, state, and federal regulations. Remove any contaminated clothing after use. Keep container tightly closed and in upright position to prevent spillage and leakage.

Chemical IngredientsCas No.Portland Cement65997-15-1Silica, Quartz14808-60-7

CAUTION:

CMAX Cement® CM contains cementitious materials and may cause irritation to lungs, eyes and skin. Avoid contact. Use only in adequate ventilation. Do not breath dust. Wet mixture may cause burns. Wear suitable gloves, eye protection and protective clothing. In case of skin contact, wash thoroughly with soap and water. In case of eye contact, flush immediately and repeatedly with large quantities of water and get prompt medical attention. In case of difficulty breathing, remove person to fresh air. If difficulty breathing persists, seek medical attention.

WARNING:

CMAX CEMENT® produces and blends cementitious materials that according to the State of California may cause health issues and in as much, we are required by California's Proposition 65 to warn that one or more of the components contained in this product could contain chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. The state of California Proposition

65 requires the above warning in the absence of definitive testing to prove that the defined risks do not exist. We believe this product complies with all other applicable state and laws and regulations governing manufacture, distribution and intended use.

LIMITED WARRANTY: CMAX Cement Manufacturing Corporation warrants its material to conform to CMAX's current published physical properties when applied in accordance with CMAX's directions and tested in accordance with ASTM and CMAX's standards for a period of oneyear form date of purchase. All users determine suitability of product for intended use and assumes all risk. Manufacturer's liability for damages shall be limited to the purchase price or replacement of purchase product only. This remedy is the exclusive remedy and excludes labor and cost of labor. Warranty is contingent upon use of product within shelf life. There are no other warranties, express or implied including merchantability and fitness for a purpose are excluded. CMAX shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the material.

