

## **TECHNICAL DATA**

# **CEMENT-MEND**

## SUPER RAPID POLYUREA CONCRETE REPAIR MATERIAL

## **DESCRIPTION:**

**CEMENT-MEND** is an ultra-fast curing, 100% solids, 2-component high-strength polyurea patching material. **CEMENT-MEND** is formulated to allow for heavy vehicular traffic within 10 minutes of application. **CEMENT-MEND** is an extremely low viscosity product that allows for deep penetration into the concrete substrate for superior adhesion. **CEMENT-MEND** has good resistance to most common chemicals and meets USDA/FDA guidelines for use in federally inspected facilities and all VOC/HAPS regulations for use throughout the United States.

## USES:

**CEMENT-MEND** is excellent for interior applications up to 130° F and will cure down to 0° F. **CEMENT-MEND** is designed for repairing concrete spalls and rebuilding non-moving joints and cracks either as a finished product or prior to applying a Superior flooring system.

## ADVANTAGES:

- Cures down to 0° F
- Quickly achieves high compressive strength
- Cure naturally to a GRAY color, but can be field pigmented in limited Superior Standard Colors
- Low viscosity for deep penetration and best adhesion
- Easy mix ratio
- Heavy traffic in 10 minutes @ 75°F
- User friendly product

## **TYPICAL PROPERTIES:**

APPLICATION PROPERTIES			
Volume mix ratio	1 to 1 Part A to Part B		
Viscosity (mixed)	<150 CPS Typical		
Solids Content (%)	100% (ASTM D-2697)		
Hardness (ASTM D-2240)	75 (Shore D)		
VOC	Compliant with all US Regulations		
Application Temps.	0° – 130° F		
Compressive Strength	8,000 psi (ASTM D-695)		
Tensile Strength	3,444 psi (ASTM D-412)		
Working time	90 seconds @ 75° F		
Recoat time	10 minutes @ 75° F		
'Open' to foot traffic	10 minutes @ 75° F		
'Open' to vehicle traffic	10 minutes @ 75°F		
Shelf Life	6 months in unopened containers		

## **PACKAGING:**

- 300x300 ML Dual Cartridge Tube Sets
  - Available in single units or cases of 12 units
- 2 Gallon Unit packaged in two 1 gal cans
- 10 Gallon Unit packaged in two 5 gallon pails

## **CEMENT-MEND**

#### LIMITATIONS & FOR BEST RESULTS:

- Do not thin this product.
- Deeper repairs require multiple lifts at ¼" thickness or less.
- Do not apply to damp concrete.
- Product sets VERY RAPIDLY only mix enough material as can be applied within 90 seconds!
- When re-coating or over coating always apply the next coat within 24 hours of completing the previous coat and sprinkle the surface with aggregate to promote adhesion of subsequent coats. If not sprinkling sand the cured CEMENT-MEND should be quickly sanded or diamond ground prior to over coating. Coating over with waterborne products is not recommended.
- When applying this product in low temperature environments it is best to "condition" the liquids and aggregate at the application temperature for some time prior to application.
- When applying using the dual cartridge tube set ALWAYS keep the static mixing wand POINTING DOWNWARD or product may flow backwards into tube set and catalyze.

#### PRODUCT MIXING AND APPLICATION:

Pour Part A into mixing vessel. Pour equal amount of Part B into mixing vessel and mix on low speed with a spiral mixing blade (300 RPM) or by hand with a stir stick for 30 seconds until a homogenous blend is achieved.

- Joint/Crack Repair: Apply a thin layer of CEMENT-MEND liquids directly to the crack or joint to be repaired via brush. Immediately fill the joint or crack nearly to level with PCA322 aggregate. Pour CEMENT-MEND liquids over sand to fill the repair to flush. The low viscosity liquids will seep into the aggregate quickly. Finish the wet aggregate quickly with a trowel to smooth the surface of the repair.
- 2. Deep Fill or Overlay Repair: After mixing liquids per above instructions add PCA322 aggregate into the mixed CEMENT-MEND liquids at a ratio of 10 pounds aggregate per mixed gallon of liquids. Blend quickly with a stir stick or spiral blade just until aggregate is fully wet out. Pour into area to repair and finish with a trowel. More PCA322 aggregate may be broadcast into the wet liquids once they are placed to bulk up the repair as needed. Apply in maximum ¼" lifts. Do not overwork the material once placed or the finish will not be smooth.

## **COLOR AND TEXTURES:**

**CEMENT-MEND** will naturally cure to a gray color. <u>Select</u> Superior Universal Colorants may be added to the resin at time of mixing per the following chart, but the resulting colors will not perfectly match the Superior Standard Color chart upon cure.

Fluid OZ of Universal Colorant per Mixed Gallon CEMENT-MEND

Bla ck	18	Tile Red	10
Gun Powder Grey	12	Toffee	12
Dark Grey	11	Antler Brown	13
Light Grey	11	Fawn Beige	9
Russet	11		

Colors not listed on the previous chart are not recommended for use with CEMENT-MEND.

Various textures can be achieved by broadcasting different aggregates into the finish before cure.

#### CHEMICAL RESISTANCE:

Always refer to Superior's chemical resistant chart for specific information or contact Superior directly.

#### PRODUCT STORAGE:

**DO NOT** allow Superior products to freeze. All Superior products should be properly stored above the floor on pallets or shelves, and in an area that has a constant minimum temperature of 50°F.

SURFACE PREPARTION: Always apply Superior products to a clean / sound substrate that is free of laitance, grease, oils, debris, and curing compounds. Concrete substrates should be cured for a minimum of 28 days prior to application of product (except as otherwise noted on the individual Product Data Sheet). Concrete substrates should be treated with the Rock-Block System when moisture testing per ASTM F2170 shows results over 80% RH. Whenever possible, remove existing coatings and/or flooring systems completely; if complete removal is not possible always perform tests to determine adhesion and compatibility to the existing flooring. Mechanical surface preparation to a CSP-2 minimum profile by means of a shot-blasting or rotary diamond grinding machine is the best and recommended preparation method for CEMENT-MEND. If the substrate is not properly prepared and the appropriate profile is not achieved, failure of the product to adhere to the substrate may occur.

#### **CLEAN-UP:**

Application tools and equipment can be cleaned with xylene or toluene.

## DISPOSAL:

Product containers will contain product residue and must be disposed of properly. Label warnings must be observed at all times. All containers must be disposed in accordance with federal, state, and local regulations.

### **IMPORTANT NOTICE:**

Always read and acquaint yourself with Superior's Product Data Sheet, SDS [safety data sheet], and product labels for each individual product prior to mixing and prior to use.

For further assistance, product questions, additional information and/or unexpected or unusual installation conditions – contact your local representative or Superior directly for recommendations. Catalyzation errors due to incorrect mixing in the field voids product warranty.

WARRANTY: Information about Superior products is given, to the best of our knowledge, based on tests and experience. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you make your own tests to determine suitability of the product for the particular purpose. As products are often applied or used under conditions beyond our control, Superior cannot guarantee anything except the quality of its products. Superior warrants that the products meet the specifications set forth by Superior, but we reserve the right to change any given specification prior to notice. SUPERIOR DISCLAIMS ALL WARRANTIES RELATING TO THE PRODUCTS AND THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Receipt of a Superior product constitutes acceptance of the terms of this limited warranty and the terms and conditions set out in our invoice, contrary provisions of buyer's purchase documents notwithstanding. Upon receipt of the merchandise, purchaser has 30 days to notify Superior, in writing, that materials are defective. In the event Superior finds that the product delivered is off specification, Superior will, at its sole discretion, either replace the product(s) or refund the purchase price thereof, and Superior's choice of one of these remedies is the buyer's sole remedy. In no event shall the liability of Superior exceed the purchase price of shipped merchandise. Claims must be in writing. Claims after 30 days are void. Superior will, under no circumstances, be liable for special, incidental, or consequential damages. This warranty supersedes all other guaranties, whether oral or written, and whether expressed, implied, or statutory. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Certain products may contain chemicals that may cause serious physical injury. Before using, plea