



ENVIRONMENTAL COATINGS LLC

4702 E. Virginia Street • Mesa, Arizona 85215-9101

PHONE (480) 984-7608 • FAX (480) 380-4461

C-120 CEMENT UNDERLAYMENT and PATCHING MATERIAL

PRODUCT DESCRIPTION: C-120 Cement is a specially formulated, fast setting, volume stable, calcium aluminate cement based concrete and masonry patching material requiring only the addition of potable water for mixing. C-120 Cement may be used interior or exterior, above or below grade on vertical, horizontal and overhead surfaces without forms. After initial set, C-120 Cement may be shaved to the contours of the surrounding area. C-120 Cement is used to repair and protect against biogenic corrosion to manholes, wet wells, lift stations, concrete pipe, and waste water treatment plants. C-120 has high resistance to sewage, extraordinary abrasion resistance and strong resistance to biogenic corrosion by hydrogen sulfide (H₂S) and sulfuric acid (H₂SO₄) found in waste water environments. C-120 Cement incorporates proprietary fumed densifying agents enhancing the product's ability to resist moist acidic conditions allowing for prolonged life of finished surfaces. High alkalinity of C-120 mortars will provide good rust protection. Also, excellent for the repair and protection of sidewalks, driveways, expressways, ceilings, walls, curbs and panels. C-120 Cement may be used for applications under constant moisture contact.

BENEFITS: RAPID SETTING...NON-SHRINK...NO ADDED CHLORIDES...SHAPEABLE... SHAVEABLE... USE IN THIN TO THICK LAYERS...TENACIOUS BOND... RESISTANT TO FREEZE THAW...LIGHT COLOR.

COMPOSITION: Cement and selected aggregates

TECHNICAL DATA:

Setting Time: ASTM C-403	
Initial Set:	10 to 15 minutes
Final Set:	15 to 20 minutes
Yield Per 50#	0.50 cubic feet

	Compressive Strength: ASTM C-109	Split Tensile ASTM C-403	Shear Bond ATSM C-882
1 DAY	5200 psi		
3 DAYS	5950 psi		
7 DAYS	6100 psi	424 psi	4210 psi
28 DAYS	7850 psi	674 psi	6530 psi

Freeze-Thaw Durability Factor: ASTM C-666 @ 300 Cycles:	97.92
---	-------

DIRECTIONS FOR USE: All areas to be patched shall be clean and free of oil, grease, dirt, deteriorated concrete and all contaminants. Undercut the edges of the area to be patched to accommodate the repair. C-120 Cement used to repair vehicular traffic bearing areas should be placed a minimum of 1.5" in depth. Clean and prime any exposed steel and reinforcing. Abrade or acid etch slick surfaces to ensure proper bond. When the temperature is above 40° F, pre-wet the prepared area with potable water before applying C-120. Any excess water should be blown or swept away to prevent dilution of the material.

C-120 Cement will require 3.25 to 3.5 quarts of potable water per 50 pound bag to achieve the proper mix consistency. Add the measured amount of C-120 to the proper amount of clean water and mix to a stiff putty like consistency for no more than four minutes. Mix small quantities of C-120 in a clean container with a hand trowel or in a wheelbarrow with a mud hoe. Use a rotary mixer with rubber tip blades for mixing larger quantities, up to 90 lbs. In deep areas over 2", C-120 may be extended with up to 25 pounds of clean, washed gravel per 50 pound bag for filler. Do not mix more material than can be placed in five minutes. Do not re-temper with additional water.

Place C-120 Cement immediately after mixing. Force C-120 firmly into the area to be patched by hand or with a trowel and mold to the desired shape. Compact thoroughly to ensure bond. After initial set, finish C-120 with a steel trowel until smooth and level with the surrounding surface. Do not overwork the material. Cure C-120 Cement with damp cure method if any surface treatment will be used. Curing is mandatory especially in hot weather, direct sunlight and for thin patches.

CAUTIONS: Mix C-120 no more than four minutes. Do not mix more material than can be placed in five minutes. Use only potable water for mixing. Do not over water. Excess water does not improve workability. Do not re-temper. Clean mixing equipment between batches. Do not apply to frozen or frost filled surfaces. Do not apply during freezing weather. Contains cement, avoid inhalation of dust. Wear gloves during the mixing and placement of material.

PACKAGING: Fifty (50) pound (22.7 kg.) multiwall bleached paper bags. Fifty bags per pallet (2,500 pounds per pallet)

STORAGE: 40° to 90° F

SHELF LIFE: 1 year in original unopened package properly stored. Store in a dry location. Do not lay bags directly on cement surfaces.

FREIGHT CLASS: Class 50

LIMITED WARRANTY: This product is warranted to be of merchantable quality when used according to the instructions herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product.

Information presented herein has been compiled from sources considered dependable and is accurate and reliable to the best of our knowledge and belief, but it is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any law or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose and adopt necessary safety precautions. We make no warranty as to results to be obtained in using any material and, since conditions or use are not under our control, we must necessarily disclaim all liability with respect to use of any material supplied by us.

Revised July 2004