

Technical Datasheet

PrimeCem CAM



Calcium Aluminate Mortar

Description

PrimeCem CAM (Calcium Aluminate Mortar) is a blend of quartz silica, fibers and pure fused calcium aluminate cement. The mortar shall be hand or spray-applied. A nominal thickness of ½” up to 2” . Thicker applications can be achieved by applying successive lifts. PrimeCem CAM can be especially useful when coatings are required at early ages. CAM may be coated in as little as 12 hours. (Always consult with coating manufacturer).

Primary Uses

- Repairing concrete walls and ceilings
- Lining brick or concrete manholes and lift stations
- Horizontal pipe repair

Surface Preparation

Remove all loose concrete, brick or mortar from affected area by mechanical means. Surfaces shall be free of paints, oils, dirt, dust, curing compounds, sealers, form release agents or any material that would prevent mortar from coming into contact with the open pores of the concrete. Create a minimum surface profile for the system specified in accordance with the methods described in ICRI No. 03732 to achieve profile CSP-3 to CSP-9. Shot blasting, sandblasting, chipping and high pressure water blasting are all excellent surface preparation methods. Dampen area to achieve a saturated, surface dry condition (SSD). Leaving no puddles.

Mixing & Application

NOTE: [The material will flash set if contaminated with Portland cement.]

Make sure all equipment for mixing, pumping, etc. are free from any Portland cement or products that contain Portland cement. Begin by adding 1 gallon clean water to mixing vessel and then add 1 bag (50#) PrimeCem CAM. Adjust water as needed (up to 1.25 gallons) to provide proper consistency for placing by hand or pump sprayer. Apply in successive lifts to desired thickness. Use brush, float or trowel to achieve desired texture.

Curing

Damp curing or use of a curing compound, that complies with ASTM C-309, may be necessary to prevent rapid drying of mortar. Curing compounds may need to be removed prior to coating. Replace manhole cover as soon as troweling is finished.

Technical Information

Typical Engineering Data

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

COMPRESSIVE STRENGTH ASTM C-109 (modified)		
	Air Cure	Moist Cure
12 Hour	4,500 psi	3,600 psi
24 Hour	5,500 psi	5,150 psi
7 Day	7,400 psi	7,250 psi
28 Day	9,600 psi	9,000 psi

FLEXURAL STRENGTH ASTM C-293	
24 Hour	655 psi
7 Day	820 psi
28 Day	1,900 psi

SHRINKAGE (%) ASTM C-596	
7 Day	(0.0100)
14 Day	(0.0165)
28 Day	1,900 psi

SPLITTING TENSILE ASTM C-496	
28 Days	800 psi

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Bond Strength (ASTM C882 (modified)) - 28 Day:	3300 psi
Freeze / Thaw (ASTM C-666) - 300 cycles:	No Damage
Unit Weight:	127.2 lb/cf

Packaging

50 lb. / 27 kg multiwall bags

Precautions

Contains Portland cement-avoid eye contact or prolonged contact with skin, Wash thoroughly after handling. In case of eye contact, flush with water for at least 15 minutes. Consult a physician immediately. Keep out of reach of children. Contains free silica- DO NOT breathe dust. May cause delayed lung injury. Follow OSHA safety and health standards for crystalline silica (quartz). See material safety data sheet for detailed information.

Spills

Collect in appropriate container. Uncured material may be removed with water.

Disposal

Dispose of in accordance with local, state or federal regulations.

Limitations

Ambient and surface temperatures must be 38°F (3.33°C) and rising during application. Protect from rain until initial set has been achieved. To avoid flash setting, Do Not contaminate PrimeCem MSM with Hydraulic cement or PrimeCem CAM.

Minimum thickness: ¼ inch

Maximum thickness: 4 inches in successive applications

Storage and Handling

Shelf life: 12 months in the original unopened container.

Storage: Store in a dry area away from direct sunlight. The product should be conditioned to between 40 and 95°F (4.44 to 35°C) before use.

Clean-up

Tools and equipment

Health & Safety

Safety: See SDS for safety precautions. Use approved personal protective equipment (PPE), incl. safety glasses, gloves and confined space equipment/ procedures if applicable. Avoid skin contact; do not ingest. For professional use only.

First Aid:

Eye Contact: Immediately flush with large amounts of water. Seek medical attention.

Inhalation: Move to fresh air if symptoms occur. If breathing is difficult, seek medical attention.

Ingestion: Seek medical attention immediately.

Skin Contact: Wipe off contaminated area. Wash with soap & water.

Warranty & Disclaimer

Prime Resins Inc. warrants their products to be free from manufacturing defects and that products meet the published characteristics when tested in accordance with ASTM and Prime Resins standards.

No other warranties are expressed or implied, including no warranty of merchantability or fitness for a particular purpose.

The Manufacturer will not be liable for damages of any sort resulting from any claimed breach of warranty since it has no control over how the products are used and applied.

The Manufacturer's liability under this warranty is limited to replacement of material or refund of sales price of the material. There are no warranties on any product that has exceeded the "shelf life" or "expiration date" printed on the package label.

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