



CHEM-SHOTCRETE[®] CEM296

One Component High-density Shotcrete Mortar

PRODUCT DESCRIPTION

CHEM-SHOTCRETE CEM296 is a one component, prepackaged, cementitious, microsilica enhanced, high-density shotcrete mortar containing a dust inhibitor. CHEM-SHOTCRETE CEM296 is designed for dry shotcrete applications to repair deteriorated concrete, where a high density overlay is required.

FIELDS OF APPLICATION

CHEM-SHOTCRETE CEM296 is used to repair deteriorated concrete in overhead, vertical and horizontal applications. CHEM-SHOTCRETE CEM296 can be used above or below grade.

PRODUCT FEATURES

- Superior adhesion.
- High compressive strength.
- Low shrinkage.
- Vapor permeable.
- 100 % solid and fast cure.
- Ready to use and no field batching is required.
- Very low porosity.
- Excellent resistance to freeze-thaw cycling.
- Excellent resistance to chemical attack.
- High structural properties.
- Low rebound formulation.
- High abrasion resistance.

PACKAGING

Product	Packaging
CHEM-SHOTCRETE CEM296	55 LB (25 KG) BAG

TECHNICAL DATA

Property	Test Method	Test Criteria	Value
Compressive Strength	ASTM C-109	1 Day	2,200 psi (15.17 MPa)
		7 Days	4,500 psi (31.03 MPa)
		28 Days	7,700 psi (53.09 MPa)
Flexural Strength	ASTM C-78	7 Days	950 psi (6.55 MPa)
		28 Days	1,000 psi (6.90 MPa)
Tensile Strength	ASTM C-946	7 Days	530 psi (3.65 MPa)
		28 Days	760 psi (5.24 MPa)
Bond Strength	ASTM C-882	1 Day	910 psi (6.27 MPa)
		7 Days	1,980 psi (13.65 MPa)
		28 Days	2,300 psi (15.86 MPa)
Water Absorption	ASTM C-642	28 Days	1.0%
Abrasion Resistance	ASTM D-4060		0.3% Loss

APPLICATION DATA

Limitations: Do not apply CHEM-SHOTCRETE CEM296 if ambient and surface temperature is less than 38°F (3°C). Do not commence fogging until initial set has been reached; typically 1 – 2 hours depending on the ambient conditions. The

product should be conditioned to between 40°F (4°C) and 95°F (35°C) before use.

Surface Preparation: all surfaces must be clean and free of dirt, dust, paint, sealers, coatings, loose material, adhesives, curing compounds, or any material that inhibit CHEM-SHOTCRETE CEM296 from coming in contact with the concrete pores. Removal of any anti-adherents or loose materials must be accomplished mechanically. For proper adhesion, the concrete must have fractured aggregate profile.

Dampen the surface thoroughly with clean water. Avoid standing water.

Application Equipment: CHEM-SHOTCRETE CEM296 must be applied with dry shotcrete equipment only. No water is to be added unless in the nozzle of the shotcrete application machine. Contact our company for more information on application equipment.

Coverage: a 55 Lb (25 Kg) Bag of CHEM-SHOTCRETE CEM296 will yield approximately 1/2 cubic foot (14.16 Liters).

Curing: the formulation of CHEM-SHOTCRETE CEM296 minimizes the need for curing. However, application in direct sunlight or windy conditions may lead to rapid surface drying. The use of light water fogging for 48 hours or a water-based curing compound that complies with C-309 is recommended.

CLEANING

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

STORAGE

CHEM-SHOTCRETE CEM296 should be stored in dry area away from direct sunlight. When properly stored, CHEM-SHOTCRETE CEM296 has a shelf life of 24 months in its original unopened bag.

SAFETY PRECAUTIONS

CHEM-SHOTCRETE CEM296 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 CHEM-SHOTCRETE CEM296 should be washed off immediately with clean water. Wear necessary safety goggles, gloves and dust mask. Keep container closed when not in use. Keep out of reach of children. This product is for industrial use only by qualified technician. Consult the material safety data sheet for further health and safety information.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Assistance.

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. AM22319.

Manufactured By:



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