

ULTRA CRETE

Premium Latex Portland Cement Mortar



MANUFACTURER:

SGM, Inc.

1502 SW 2nd Place

Pompano Beach, FL 33069-3220

(800) 641-9247

(954) 943-2288

Fax: (954) 943-2402

www.sgm.cc

sales@sgm.cc

TECHNICAL DATA

APPLICABLE STANDARDS

ANSI American National Standard Institute. Conforms to requirements for dry set mortars found in ANSI A118.4, A118.11 and ANSI A108.5 specifications.

Open Time:	>50 min. @ 70F (21C)
Adjustability:	>30 min. @ 70F (21C)
Pot Life:	3 hours
Set Time:	9 hours
Shear Bond Mosaic	>222 psi (7 day)
Shear Bond Quarry	>396 psi (7 day)

Our material is tested and certified by independent laboratories. All data is given in good faith, however, we reserve the right to change products and specifications without notice. SGM advises interested parties to satisfy themselves as to the accuracy of any data and seek certification if appropriate.

INSTALLATION:

SURFACE PREPARATION:

Concrete and plaster surfaces:

All floors should be 28 days cured

Ultra Crete premium latex-Portland cement mortar is a high-strength, all purpose bonding mortar formulated for the installation of ceramic, mosaic, quarry tiles and dimension stone (absorptive, semi-vitreous and vitreous) tiles. It may be used for either floors or walls in both interior or exterior applications where a latex-Portland cement mortar is required. Redispersible powder additives are used to improve adhesion, provide greater bond strength and resistance to impact and shock. These additives allow for some latitude in time, working conditions and temperature. Do not use to install resin-backed stone. For use in service requirements of residential, light commercial and light industrial as follows:

- Ceramic
- Quarry
- Concrete Substrates
- Cementitious Backer Units
- Mosaics
- Dimension Stone
- Gypsum Wallboard (Interior Only)
- Masonry

and shall be structurally sound, clean and free of any moisture, wax, oil, paint particles, curing agents or foreign matter. The slab should have a steel trowel or broom swept finish. Remove any liquid curing agents or concrete sealers, followed by a clear water wash. Surfaces may be cleaned with sulfamic acid (SGM Safe Clean Crystals) then thoroughly flushed and neutralized. Concrete shall be free of any efflorescence and hydrostatic pressure. Test to confirm that concrete can absorb water by sprinkling water droplets. If water beads up and does not absorb into substrate, scarify surface via mechanical abrasion with a Carborundum disk followed by a clear water wash. Test again to ensure that water is absorbed into substrate before proceeding with installation. Smooth concrete should also be roughened to ensure a mechanical bond. For hot and dry conditions, lightly dampen surface with water leaving no standing water. When used to install tile in any area that will be continually wet (shower receptors, swimming pools, etc.) allow mortar to cure a minimum of 14 days before exposure to water.

Plywood and wooden substrates:

All plywood floors (including sub floors) shall be engineered to meet all ANSI requirements. All plywood shall be exterior grade (for interior, residential

and light commercial use in dry areas only), free of dust, oil or other foreign matter.

Alternate Surfaces:

To bond over existing ceramic tile, marble, vinyl, vct and resilient flooring, floors must be bonded well to its sub floor and free of any wax, oil, dust or paint particles. For use over existing ceramic tile scarify surface of tile via mechanical abrasion with a Carborundum disk followed by a clear water wash. Do not use over wood, vinyl, particle board, luan plywood, gypsum based underlayments, wall coverings, adhesive residue, masonite, metal, glass, plastic or painted surfaces. Surfaces such as these will prevent bonding and should be covered with a cleavage membrane topped with a 3/8" to 3/4" (9.5 to 19.1 mm) reinforced mortar bed for floors. Wait a minimum of 20 hours before dry-set mortar may be applied to the mortar bed. Ultra Crete may be used for radiant heating system installations. Not recommended for setting green or black marble, vitreous or impervious tile. The green and black moisture sensitive marbles must be set with EGS epoxy mortar. Consult SGM technical service department for product & installation recommendations.

Expansion Joints: Do not tile over expansion, cold or control joints.

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TECHNICAL DATA

APPLICABLE STANDARDS

ANSI American National Standard Institute (ANSI)

Meets requirements for powder mortars found in ANSI A118.4, A118.11 and ANSI A108.5 specifications.

Optimal time of adherence:	More than 50 min. at 70°F (21°C)
Adjustability:	More than 35 min. at 70°F (21°C)
Life time after mixing:	3 Hours
Curing time:	9 Hours
Adhesion Hardness Mosaics (7 days)	Over 222 lbs. /square inch
Adhesion Hardness Tiles (7 days)	Over 396 lbs. /square inch

Our material is tested and certified by independent laboratories. All the information provided here is real and true; however, we reserve the right to change products and specifications without prior notice. SGM advises all interested parties to satisfy any doubts regarding the accuracy of the data provided here and to seek any product certification if they consider it appropriate.

11/2020

Follow TCNA handbook method EJ 171 for detailed specifications.

WARNING:

Product is alkaline on contact with water. Use paddle for mixing to avoid splashing into eyes or contact with skin. During mixing or application avoid contact with eyes. In case of such contact, flood eyes repeatedly with water and CALL PHYSICIAN. Wash thoroughly after handling and before smoking or eating. Do not take internally. CONTAINS FREE SILICA DO NOT BREATHE DUST. Prolonged exposure to dust may cause delayed lung disease (Silicosis). **WARNING:** This product may expose you to chemicals, including silica, which the state of California recognizes as a cause of cancer. For more information, visit www.P65Warnings.ca.gov. Use NIOSH approved masks at all times to handle silica dust. **KEEP OUT OF REACH OF CHILDREN.**

MIXING:

Add Ultra Crete mortar powder to approximately 1 ½ gal (5.7 L) cool, clean potable water per 50lb (22.7Kg) bag. Machine mixing with a slow speed drill and mixing paddle is preferred (250-350 RPM). Higher speeds are not recommended and will entrain air. Mix the two components together thoroughly until smooth. The proper consistency is obtained when the mortar is applied with the notched trowel to the substrate and the ridges formed do not flow or slump. Allow mortar to slake for 5 minutes, and then remix before use. Do not add any additional water, latex or powder after the mortar has slaked. Re-mix mortar occasionally during use and discard after initial set in bucket.

APPLICATION:

Detailed installation procedures may be found in TCNA handbook and ANSI 108.5. All materials and effected areas should remain above 50° degrees (10° C) or below 100° degrees F (38° C) 24 hrs. prior and 72 hrs. after placement. Apply mixed mortar liberally with the flat side of trowel, using sufficient pressure to key into substrate; then apply additional mortar with notched edge of trowel leaving enough mortar

to give 100% coverage with the back of tile. Place tile while surface is wet and tacky and spread mortar over an area no greater than can be covered with tile before the mortar skins over. Place tiles with a twisting motion and beat lightly before initial set takes place to fully embed in the mortar. Mortar that has formed a skin should be re-troweled before applying tile. Some irregular tiles may require back buttering. During the setting of tile, it is recommended to periodically remove a tile and check to see that sufficient transfer of mortar is being attained. Industry standards require a minimum of 3/32" (2 mm) mortar thickness after beat in. Do not adjust tiles after they have been set more than 10 to 15 minutes. Note: It is suggested that a mock-up for the evaluation of surface preparation techniques and application be done by applying 3-4 tiles and bonding mortar from the actual installation. These tiles should be left to cure for 3-7 days and then removed to determine if an adequate bond has been obtained before commencement of the installation. A ¼" gap shall be left around vertical abutments to allow for structural movement and filled with appropriate Elastomeric sealant.

CLEANING:

Use water to remove uncured mortar.

CURING AND GROUTING:

Minimum cure is reached in 12-24 hours. Setting may vary according to atmospheric conditions. Normal grouting should be done 48 hours later.

COVERAGE:

Approximately 75 sq. ft. per 50 lbs. When applied with ¼" X ¼" (6.4mm X 6.4mm) sq. notched trowel. 65 sq. ft using ¼" X 3/8" (6.4mm X 9.5mm) sq. notched trowel. 40 sq. ft. using ½" X ½" (13mm X 13mm).

SHELF LIFE:

Up to one year from date of manufacture in unopened properly stored container.

AVAILABILITY & COST:

Availability: SGM, Inc. has manufacturing and distribution inventory facilities throughout the

United States and abroad, allowing for timely deliveries. Contact SGM, Inc. for local availability. **Packaging:** Multi - ply heavy-duty lined bag, net wt. 50 lb. (22.7kg). **Cost:** Ultra Crete is competitively priced. For specific price information, contact SGM, Inc

WARRANTY:

SGM Inc. warrants this product will perform in accordance with its intended use for a period of one year from the date of manufacture. Any claim for defective product must be submitted in writing to SGM Inc. and samples of defect must be provided. SGM Inc. sole obligation will be to replace any product determined to be defective by SGM Inc. EXCEPT AS PROVIDED HEREIN, SGM INC. MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. IN NO EVENT SHALL SGM INC. BE LIABLE FOR DAMAGES OF ANY KIND OR NATURE, WHETHER ARISING BY CONTRACT, TORT OR OTHERWISE. SGM INC.'S SOLE OBLIGATION WILL BE TO REPLACE ANY PRODUCT DETERMINED BY SGM INC. TO BE DEFECTIVE.

MAINTENANCE:

None required.

TECHNICAL SERVICES:

Technical assistance, including more detailed information, product literature, test results, project list, samples, assistance in preparing project specifications and arrangements for job site inspection and supervision, is available by contact Technical Services Department.

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 **WARNING:** This product can expose you to chemicals including silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.