



Crete Admix AX400

ADMIXTURE

PACKAGING

5 gal (18.9 L) bucket
Siena Crete Powder
50 lb (22.7 kg) bag

STORAGE

Store in a cool, dry location at a temperature between 40°F (4°C) and 90°F (32°C). Do not store in direct contact with the ground or concrete. Store out of direct sunlight and protect from weather and other damage

DRYING & CURING

Allow freshly applied material to dry at least 24 hours before grouting or light foot traffic. Drying time may vary due to porosity of substrate and tile, climate, job conditions and should not take more than 24 hour at an ambient and surface temperature of 70°F (21°C) and 55% humidity. When used to install tile in an area that will be continually wet (pools, fountains) allow complete installation to dry a minimum of 14 days before exposure to water. Material is fully cured in 28 days.

MATERIAL CALCULATOR

Visit the Siena web site at SienaProducts.com and click on the "Material Calculator" tab for recommended products and to calculate the amount of materials needed for each project. Always follow all manufacturers' recommendations and warranty information prior to any tile or stone installation.



Siena Crete Admix AX400 is a latex additive designed to be used with Siena Crete Powder or site mixed with sand and cement to create an economical polymer-modified mortar for use in high moisture environments, heavy traffic areas, and demanding installations of tile, stone and thin brick veneer. Siena Crete Admix AX400 is manufactured with a mixture of high quality polymer and other proprietary additives to produce a premium liquid admixture which offers higher bond strength, greater flexibility, resistance to frost, longer open time and better coverage than standard mortars. Siena Crete Powder is available in either white or grey color, and when properly mixed with Siena Crete Admix AX400 the mortar complies with ANSI A118.15 requirements.

FEATURES	BENEFITS
Walls & Floors	Superior Strength
Freeze-Thaw Stable	Allows for Substrate Adjustments from Climate Changes
Interior & Exterior	For Most Tile & Stone
Residential & Commercial	Meets ANSI A118.15 (when mixed with Siena Crete Powder)

BASIC USES

Siena Crete Admix AX400 is used for bonding most tile and stones in both interior and exterior applications, and it is freeze-thaw stable. Siena Crete Admix AX400 can be used with the Siena Crete Powder mix or site mixed with sand and cement. In thin brick applications the increased flexibility allows for typical substrate adjustments from climate and temperature changes without shearing. Siena Crete Admix AX400 can be used on floors, walls and in residential and commercial projects.

RECOMMENDED SUBSTRATES

Properly prepared substrates includes: Cured concrete (28 days), portland cement mortar beds, brown coat, backer boards (per manufacturer's specifications), gypsum boards (dry interior walls only), masonry block, brick, exterior grade plywood, well bonded existing tile and stone properly prepared with Siena Gripping Primer.

SURFACE PREPARATION

All surfaces to receive application must be solid, stable, structurally sound, dry, clean and free of debris, dirt and dust, efflorescence, grease, oils, curing agents and cleaning solutions that would hinder proper bond. Ensure that all surfaces are free of any coatings, sealers, adhesive residues or gypsum-based underlayments. Smooth or painted cementitious surfaces can be prepared by mechanical means such as sandblasting or scraping. Dampen surface prior to application, but do not allow water to puddle. For more complete installation procedures see the TCNA (Tile Council of North America) Handbook & ANSI A108.5.





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CEMENTITIOUS SUBSTRATES

Cementitious substrates can be cleaned by mechanical means such as sanding, scraping or chipping. Smooth, painted, or waterproof surfaces can be prepared by mechanical means such as sandblasting, scraping or using Siena Gripping Primer. Dampen the surface prior to application but do not allow water to puddle. Substrate deflection not to exceed L/360. For complete installation methods see the TCNA (Tile Council of North America) Handbook and ANSI A108.5.

NON-CEMENTITIOUS SUBSTRATES

Use a cleavage membrane on surfaces with bonding problems, like plywood or painted surfaces. For walls, apply a 3/8" to 3/4" thick layer of lath reinforced mortar bed; for floors, apply a minimum of 1 1/4" lath reinforced mortar bed. Let it set for at least 20 hours and then apply the mortar.

TILE SUBSTRATES

Use Siena Gripping Primer over the existing tile and allow to dry (20 - 60 mins.) before applying mortar. Existing tile must be sound, well bonded, clean and free of anything that would hinder proper bond or prevent adhesion. For complete installation methods see the TCNA (Tile Council of North America) Handbook and ANSI A108.5.

MIXING

Mix by hand or use a low-speed mixer of less than 300 rpm to avoid entrapping too much air. Add gradually one 50lb sack of Siena Crete Powder to 1 1/2 gallons (5.7 L) of Siena Crete Admix AX400. Mix the material thoroughly to a smooth consistency and let it slake (stop mixing) for 10 - 15 minutes and then break the set by mixing again. Do not add any more water, admixture, or powder after the slake period. Lightly mixing or stirring occasionally will help maintain the mixture's smooth consistency. For on-site mixtures of sand and cement, mix 5 gallons of Siena Crete Admix AX400 with one 94 lb bag of portland cement and one 100 lb bag of #60 silica sand.

APPLICATION

The size of the working area should be such to be covered with tiles within 15 - 20 minutes. Using the flat side of the notch trowel apply a tight thin layer of mortar over the substrate. Then add more mortar and comb the material in one direction using the appropriate notch size to achieve 100% contact to the back of the tiles. Set the tiles over the mortar with a firm pressure to flatten the ridges and assure good contact. Periodically check already placed tile or veneers to verify that there is sufficient mortar transfer with the back of the tile or veneer to the substrate. For exterior installations a 95% wet to wet bond and back-buttering each piece of veneer or tile is required. Align tiles immediately after their placement and clean any excess material with a damp towel. Tile that have been setting for more than 20 minutes cannot be readjusted.

EXPANSION & CONTROL JOINTS

Never apply mortar over expansion or control joint. For more information see EJ-171 in the TCNA Handbook (Tile Council of North America).

TECHNICAL ASSISTANCE

Technical information is available on our web site at: SienaProducts.com, by calling Omega Products International at: 951.737.7447, or by email at: info@omega-products.com

KEEP OUT OF REACH OF CHILDREN

Disclaimer

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TECHNICAL DATA

Open Time at 73°F (23°C)	40 Minutes
Adjustability at 73°F (23°C)	40 Minutes
Bucket Life at 73°F (23°C)	5 Hours
Compressive Strength ASTM C-109	>5000 psi

Shear Strengths per ANSI A118.15

Glazed Wall Tile	
Dry Cure at 7 Days	>500 psi
28 Days	>750 psi
Water Immersion at 7 Days	>450 psi
Freeze-Thaw at 28 Days	>450 psi
Quarry Tile	
Dry Cure at 7 Days	>450 psi
28 Days	>550 psi
Freeze-Thaw at 28 Days	>350 psi
Impervious Ceramic Mosaics	
Dry Cure at 7 Days	>450 psi
28 Days	>600 psi
Water Immersion at 7 Days	>400 psi
Freeze-Thaw at 28 Days	>300 psi

Water Absorption ANSI A118.6	< 4%
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Square Notch Trowl Coverage

1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)	90 ft ² (8.4m ²)
1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm)	70 ft ² (6.5m ²)
1/2" x 1/2" x 1/2" (13 x 13 x 13 mm)	50 ft ² (5.6m ²)

Note: Values listed above are typical results for tests indicated and should not be considered specifications. Actual product performance will depend on job conditions, temperature, humidity and application methods.

CLEANING

Cleaning may be accomplished with water immediately after use.

LIMITATIONS

DO NOT apply SIENA CRETE ADMIX AX400 directly over luan plywood, improperly cured or wet plywood, particle board, stripwood, gypsum mortar beds, asphalt sheeting, vinyl covered wall board, Masonite, cement asbestos board, metal, glass, plastic or any dimensionally unstable substrate. DO NOT apply at temperatures below 40°F (4°C) or above 90°F (32°C). Avoid freezing until the material is dry. DO NOT use with green or red marbles, they may react with the mortar and warp and detach. When used to install tile in an area that will be continually wet (pools, water features, etc.) it is recommended that the complete installation shall be cured a minimum of 14 days and allowed to thoroughly dry before exposure to water. DO NOT apply mortar over expansion or control joint.

WARNING

Omega Products International, as a blender of processed material in the State of California, is required by Proposition 65 to warn that one or more of the components contained in this product, could contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. The State of California (Proposition 65) requires this warning in the absence of definitive testing to prove that the defined risks do not exist. We believe this product complies with all other applicable state and federal laws and regulations governing manufacturing, distribution and intended use. User is solely responsible for the legal disposal of this container and its contents.

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