



PACKAGING

50 lbs. (23.6 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

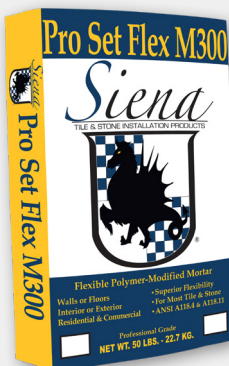
Allow freshly applied material to dry at least 24 hours before grouting or light foot traffic. Drying time may vary due to porosity of substrate and tile, climate, job conditions and should not take more than 24 hours at an ambient and surface temperature of 70°F (21°C) and 55% humidity. When used to 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.

GROUTING

Grouting should be done 24 - 48 hours after tile installation.

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.



Pro Set Flex M300

HIGHLY POLYMER MODIFIED PORTLAND CEMENT MORTAR



Siena Pro Set Flex M300 is a high-performance polymer-modified mortar designed to give superior bond strength to the most demanding tile or veneer installations. Siena Pro Set Flex M300 is manufactured with a mixture of portland cement, graded aggregates and other proprietary additives to produce a flexible, high-quality bonding mortar with non-sag, exceptional strength, moisture and mildew resistant properties. Siena Pro Set Flex M300 has a greater open time and coverage than standard mortars. It is available in both white and gray colors and exceeds all the requirements of ANSI A118.4, A118.11, and A118.15 specifications.

FEATURES	BENEFITS
High Performance	Exceptional Bond Strength
Smooth and Creamy	Easy to Use, Even on Demanding Installs
Residential & Commercial	Excellent Non-Sag, Moisture & Mildew Resistance
Complete Specifications	Exceeds ANSI A118.4, A118.11, and A118.15 Entire Testing Requirements

BASIC USES

Siena Pro Set Flex M300 is a highly polymer-modified bonding mortar used for interior and exterior installations of most tile, large format porcelain, veneer, stone, glass, pavers, mosaics, and thin brick. Siena Pro Set Flex M300 can be used on floors and walls in residential and commercial projects. Refer to manufacturer's specifications to verify that the tile or veneer can be installed using a portland cement-based bonding mortar.

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, CMU, brick, exterior grade plywood, well bonded existing tile and stone properly prepared with Siena Gripping Primer (interior only).

SURFACE PREPARATION

All surfaces, substrates, tile and veneer must be structurally sound, clean and free of debris, dirt, dust, efflorescence, wax, grease, oils, curing agents, cleaning solutions, sealers, adhesive residues or gypsum-based underlayments, or anything that would hinder proper bond. Smooth or painted surfaces, substrates, tile and veneer can be prepared by mechanical means such as sanding, scraping or using Siena Gripping Primer (interior only). Clean surface with a damp sponge prior to application, but do not allow water to puddle. Substrate temperature must be within 45°F (7.2°C) and 85°F (29.4°C). For complete installation methods see the TCNA (Tile Council of North America) Handbook and ANSI A108.5.

MIXING

Mix by hand or use a mixer not to exceed 300 rpm to avoid too much entrapped air. Add gradually one 50 lb bag of Siena Pro Set Flex M300 to approximately 1-1/2 gal (5.7L) of potable water. Water must be cool in temperature, clean and clear. Do Not use hot or warm water or admix. Mix material thoroughly to a smooth consistency and let it slake (stop mixing) for 10 minutes and then break the set by remixing. Do Not add additional water, admix or powder after slake period. During application, occasionally stir the mixture to help maintain workability.



Pro Set Flex M300

HIGHLY POLYMER-MODIFIED PORTLAND CEMENT MORTAR

CEMENTITIOUS SUBSTRATES

Cementitious substrates that are smooth, such as poured in place or tilt-up wall, or substrates that have a release agent, oil, film, paint, waterproof agents, etc. must be cleaned and properly prepared prior to installation. These surfaces can be prepared by sanding, scraping or bead blasting. Clean Surface with a damp sponge prior to installation. Substrate deflection not to exceed L/360.

NON-CEMENTITIOUS SUBSTRATES

For walls such as drywall, replace with approved backer board units, or screw in diamond lath to studs and apply a 3/8" to 3/4" layer of Siena M300 to create a reinforced cementitious substrate. For interior floors with plywood or OSB, the floor joist must be less than 19.2" on center, and deflection not to exceed L/360. Use Siena Fracture Shield or Siena Dragon Skin as a membrane over the interior wood substrates. Clean Surface with a damp sponge prior to membrane installation.

TILE SUBSTRATES

Use Siena Gripping Primer (interior only) 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.

EXPANSION & CONTROL JOINTS

Never apply Siena Pro Set Flex M300 over any expansion or control joint. For more information regarding these type of joints see TCNA (Tile Council of North America) Handbook and EJ-171.

APPLICATION

The size of the working area should be covered 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 full contact to the back of the tiles or veneer. Set the tiles or veneer over wet mortar, applying firm pressure to flatten the ridges and assure full contact. Periodically check already placed tiles or veneer to verify that there is sufficient mortar transfer between the substrate and the back of the tile or the veneer. Back-butter is recommended for tiles and veneer that are 15" or longer on one side in interior installations. For exterior installations, the TCNA requires back-buttering and a wet-to-wet bond on tiles and veneer that are 15" or longer on any one side. Align tiles or veneer immediately after their placement and clean any excess material with a damp sponge. Tiles or veneer that have been set for more than 10 - 15 minutes should not be readjusted. If any adjustment is needed after set time, scrape off existing mortar and reapply with fresh mortar as described above.

LIMITATIONS

DO NOT apply Siena Pro Set Flex M300 over 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 45°F (7.2°C) or above 85°F (29.4°C). When hot, dry, or windy conditions exist, protection must be provided. The ambient and surface temperature must maintain the above requirements until fully dried. Material that is allowed to freeze may suffer irreparable damage. Protect all work from inclement weather with an approved protective system until fully dried (See Drying & Curing). DO NOT add any other materials to the mixture of the product without written approval from Siena, Omega Products International. DO NOT deviate in the mixing or application procedures contained in this, or any other Siena Product data sheets without written approval from Siena or Omega Products International. DO NOT use with green or red marbles as they may react with the mortar, warp and detach. For these moisture sensitive materials use Siena Epoxy Mortar & Grout.

TECHNICAL DATA

PROPERTY		RESULTS	
Open Time		25 Minutes	
Pot Life		4 Hours	
PROPERTY	ANSI TEST METHOD	REQUIREMENTS	RESULTS
Sag	A118.15	Sec. 6.1.4	≤0.02 in
Glazed Wall Tile Shear Strength	A118.15	Sec. 7.1.2, 7 days	>450 psi
		Sec. 7.1.4, 28 days	800 psi
Porcelain Tile Shear Strength	A118.15	Sec. 7.2.3, 7 days	>300 psi
		Sec. 7.2.5, 28 days	450 psi
Quarry Tile Shear Strength	A118.15	Sec. 7.3.2, 28 days	>150 psi
		Sec. 7.3.3, 28 days	200 psi
Quarry Tile/ Plywood Shear Strength	A118.11	Sec. 4.1.1, 7 days	>100 psi
		Sec. 4.1.2, 28 days	200 psi

COVERAGE

Notch Trowel 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)	80 ft ² (7.4m ²)
1/2" x 1/2" (12.7 x 12.7 mm)	40 ft ² (3.6m ²)
3/4" x 9/16" x 3/8" (19 x 14 x 9 mm)	40 ft ² (3.6m 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.

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

SAFETY

Avoid contact with eyes or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush immediately with running water for at least 15 minutes. Consult a physician immediately. Do not take internally. Be sure to provide adequate ventilation in enclosed areas. Use of an approved respirator is recommended.

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.

KEEP OUT OF REACH OF CHILDREN

Disclaimer

Omega Products International [Manufacturer] MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT SOLD HEREIN. The recommendations, suggestions, statements and technical data are based on the best knowledge available to Manufacturer and are given for informational purposes ONLY and without any responsibility for their use. It is expressly understood and agreed, as a condition of the use of this product, that the buyer's sole and exclusive remedy for any claimed defective product against Manufacturer shall be the replacement of products actually proven to be defective. Handling and use of the products are beyond the

control of Manufacturer; therefore, no warranty is made, expressed or implied, as to the results obtained from the use of the product or against any claims for infringement of patents resulting from use of the product. Under no circumstance shall Manufacturer be liable for incidental or consequential damages arising out of the use or the improper application of the product. Before applying the product, the user shall determine the suitability of the product for his or her independent use, assuming all risks and liability whatsoever in connection therewith. This writing constitutes a complete and exclusive statement of the understanding between Manufacturer and Buyer.