



# Pro Set Flex M300

POLYMER-MODIFIED PORTLAND CEMENT MORTAR



## PACKAGING

50 lbs. (23.6 kg) Bags

## 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.

## GROUTING

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

## MATERIAL CALCULATOR

Visit the Sienna web site at SiennaProducts.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.



Sienna Pro Set Flex M300 is a high performance polymer-modified mortar designed to give superior bond strength to the most demanding tile installations. Sienna Pro Set Flex M300 is manufactured with a mixture of Portland cement, graded aggregates and other proprietary additives to produce a flexible, high quality tile adhesive with non sag and mildew resistant properties. Sienna 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 the requirements of ANSI A118.4, A118.11 and A118.15.

| FEATURES                 | BENEFITS                                 |
|--------------------------|--|
| High Performance         | Exceptional Bond Strength                |
| Smooth and Creamy        | Easy to Use                              |
| Flexible                 | Bridges Stretch Cracks up to 1/8"        |
| Residential & Commercial | Excellent Sag Resistance                 |
| White & Grey Colors      | Exceeds ANSI A118.4, A118.11 and A118.15 |

## BASIC USES

Sienna Pro Set Flex M300 is used as a polymer-modified mortar for interior and exterior application of most tile, stone, glass tile, pavers, and thin brick veneers. Sienna Pro Set Flex M300 can be used on floors and walls up to 3/16" thick 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 Sienna Gripping Primer.

## SURFACE PREPARATION

All surfaces to receive application 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 can be prepared by mechanical means such as sanding, scraping or using Sienna Gripping Primer. Dampen surface 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 Sienna 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.



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## CEMENTITIOUS SUBSTRATES

Cementitious substrates can be cleaned by mechanical means such as sanding, scraping, scraping or chipping. Smooth painted or waterproof cementitious surfaces can be prepared by mechanical means such as sandblasting, scraping or using Siena Gripping Primer. Dampen the surface prior to the 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

For walls, apply a 3/8" to 3/4" thick layer of wire reinforced mortar bed, and for floors apply a minimum of 1 1/4" wire 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.

## EXPANSION & CONTROL JOINTS

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

## 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, applying firm pressure to flatten the ridges and assure good contact. Periodically check already placed tiles to verify that there is sufficient mortar transfer with the back of the tile. Back-butter the tiles if required. Align tiles immediately after their placement and clean any excess material with a damp sponge. Tiles that have been setting for more than 10 - 15 minutes should not be readjusted.

## 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.

## CLEANING

Cleaning may be accomplished with water immediately after use.

## 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<br>≤0.02 in | 0.02 in             |
| Glazed Wall Tile Shear Strength           | A118.15          | Sec. 7.1.2,<br>7 days  | >450 psi<br>630 psi |
|   |                  | Sec. 7.1.4,<br>28 days | >450 psi<br>800 psi |
| Porcelain Mosaic Tile Shear Strength      | A118.15          | Sec. 7.2.3,<br>7 days  | >300 psi<br>350 psi |
|   |                  | Sec. 7.2.5,<br>28 days | >400 psi<br>450 psi |
| Quarry Tile Shear Strength                | A118.15          | Sec. 7.3.2,<br>28 days | >150 psi<br>280 psi |
|   |                  | Sec. 7.3.3,<br>28 days | >100 psi<br>200 psi |
| Quarry Tile/<br>Plywood<br>Shear Strength | A118.11          | Sec. 4.1.1,<br>7 days  | >100 psi<br>120 psi |
|   |                  | Sec. 4.1.2,<br>28 days | >150 psi<br>200 psi |

## COVERAGE

Square Notch Trowel Coverage

|                                     |   |
|-------------------------------------|---|
| 1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)   | 90 ft <sup>2</sup> (8.4m <sup>2</sup> ) |
| 1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm) | 80 ft <sup>2</sup> (7.4m <sup>2</sup> ) |

Square Notch Trowel Coverage

|                                      |   |
|--------------------------------------|---|
| 3/4" x 9/16" x 3/8" (19 x 14 x 9 mm) | 40 ft <sup>2</sup> (3.6m <sup>2</sup> ) |
|--------------------------------------|---|

*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.*

## TECHNICAL ASSISTANCE

Technical information is available on our web site at: SienaProducts.com, by calling Omega Products International at: 800.600.6634, 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, Inc., 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

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