



Epoxy Grout & Mortar

GROUT & MORTAR



PACKAGING

1/2 Gallon Unit Consists of:

- Part A - One Pint of Epoxy Resin (1 lb)
- Part B - Half a Pint of Hardener (0.5 lb)
- Part C - 5 lbs Silica

1 Gallon Unit Consists of:

- Part A - One Quart of Epoxy Resin (2 lbs.)
- Part B - One Pint of Hardener (1 lb)
- Part C - 10 lb Silica

2 Gallon Unit Consists of:

- Part A - Two Quart of Epoxy Resin (4 lb)
- Part B - One Quart of Hardener (2 lb)
- Part C - 20 lb Silica

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 Sienna web site at www.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 Epoxy Grout & Mortar is a high performance, stain resistant, water cleanable epoxy grout and mortar that is manufactured with 100% epoxy resin solids, graded aggregates and proprietary additives to produce a high strength, impermeable, shock resistant mortar and a high chemical and stain resistant grout. Sienna Epoxy Grout & Mortar does not require a sealer and it is available in 36 premium colors, and complies with ANSI A118.3.

FEATURES	BENEFITS
Motral & Grout Applications	Water-Cleanable
Acid & Alkali Resistant	Stain Resistant
Commercial & Industrial Use	Available in 36 Colors

BASIC USES

Sienna Epoxy Grout & Mortar is used as a grout and mortar for interior and exterior applications of most ceramic tiles, glass tiles, pavers, marble and stones. It can be used on floors, walls and in mortar beds from 1/16" up to 1/8" and grout joints from 1/16" up to 3/8". Sienna Epoxy Grout & Mortar is used in residential and commercial projects where high performance, chemical and stain resistance is require such as walls, floors, countertops, vanities, showers, pools, etc.

RECOMMENDED SUBSTRATES

Suitable substrates, when properly prepared, include: Masonry block and brick, concrete (28 days), cement backer units (per manufacturers' specifications), fully cured portland cement mortar beds (28 days), properly prepared existing tile, exterior grade plywood (only on residential dry interior floors, walls and countertops), steel, glass and fiber glass.

SURFACE PREPARATION

All surfaces to receive application must be stable, structurally sound, dry, clean and free of debris, dirt, dust, efflorescence, grease, oils, curing agents, cutback residue, 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 sandblasting or scraping. Protect areas around the application from exposure to epoxy. The surface temperature during and in the next 48 hours after the application should be between 65 °F and 95 °F. For more complete installation procedures see the TCNA (Tile Council of North America) Handbook sections F-143, F-131, TR-711 and TR-912 and ANSI A108.6.

MIXING

In a clean pail, pour Part A and B and mix thoroughly with a margin trowel or a low speed mixer (300 RPM). While mixing slowly add Part C. Do not overmix. Overmixing will entrap too much air, and can also cause the epoxy to flash set.

MAINTENANCE

Consult tile or stone manufacturer for maintenance. Use a neutral pH cleaner for floors and rinse with clean water. Remove any fatty acids and oils from the grout as soon as possible to prevent damage. Avoid using "No rinse" cleaning solutions on epoxy.



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CEMENTITIOUS SUBSTRATES

Cementitious substrates should be fully cure and dry. They can be cleaned by sanding, scraping or chipping. Smooth or painted cementitious surfaces can also be prepared by sandblasting, scraping or chipping. Substrate deflection should not exceed 1/240. See "Surface Preparation" section.

NON-CEMENTITIOUS SUBSTRATES

Smooth substrates such as steel, glass, or fiberglass should be free from contaminants such as oils, rust, release agents, dust, or any other substance that can hinder proper bond. Also they may require roughening to promote proper bonding.

TILE SUBSTRATES

Existing tile must be sound, well bonded, clean and free of any deleterious substance that may prevent adhesion. Smooth surfaces may require roughening to promote proper bonding

PLYWOOD SUBSTRATES

Use epoxy only over exterior grade plywood. Wooden flooring should not have a deflection exceeding 1/240 of span in either dead or live loads. Securing should be done with screw-type nails and glue. A 3/16" (4.8 mm) gap for expansion should be left about the plywood sheets and surrounding materials. These gaps should be left empty after the installation.

EXPANSION & CONTROL JOINTS

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

APPLICATION

As A Mortar

The size of the working area should be such that it will be covered with tiles before the mortar skins over. This can vary with jobsite temperature and conditions, however in general it should be under 30 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 and with a firm pressure move the tile back and forth perpendicular to the trowel ridges. This will flatten the ridges and assure good contact. Periodically check already placed tiles to verify that there is sufficient mortar transfer to 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 towel before it cures.

As A Grout

Allow the tile mortar to set for 48 hrs before grouting. Check that the grout joint depth is at least 2/3 the thickness of the tile. Make sure the tile is clean and free of contaminants that could stain the grout. Grout releases can help preventing epoxy film on unglazed tile or stone. Using a hard rubber float with sharp edges, fill the joints completely with the grout leaving them flush with the tile edges. Apply material as needed to cover all voids and gaps and to ensure that the material is well compacted. Remove excess grout by holding the float at a 90° angle to the tile surface and drag in a diagonal direction to the grout joints. Make sure that the grout is flush with the tiles. Immediately clean any residual grout from the surface of the tiles before applying another unit. Do not allow the grout to set on the tile. Without disturbing the freshly applied grout, scrub the tile surface with a scouring pad to loosen the epoxy film and use plenty of sponges and water to remove the epoxy but be careful to protect un-grouted joints from water. The final cleaning is done by dragging a damp towel diagonally to the joints. Frequently rinse the towel with clean water to avoid epoxy buildup. Let the tiles dry for a couple hours then check again for any residue. Repeat cleaning as needed.

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

TECHNICAL DATA

ANSI A118.3

Water Cleanable	90 minutes
Initial Set @ 75°F (24°C)	> 5 hours
Shrinkage 7 Days	< 0.25%
Vertical Joint Sag	None
Bond Strength Vitreous Tile 14 Days	>1,200 psi
Compressive Strength 7 Days	>7000 psi
Tensile Strength 7 Days	>2000 psi

COVERAGE

As Mortar - 3/16" x 1/4" V-Notch = 36 sq.ft. per gallon
1/4" x 1/4" Square Notch = 22 sq.ft. per gallon

As Grout - Per 1 Gallon Unit

TILE SIZE	JOINT WIDTH									
	1/16" (1.6mm)		1/8" (3.2mm)		3/16" (4.8mm)		1/4" (6.3mm)		3/8" (9.5mm)	
	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²
1"x1"x3/16" 25x25x5mm	80	7.4	40	3.7	27	2.5	20	1.85	13	1.2
2"x2"x3/16" 50x50x5mm	142	13.2	71	6.6	47	4.4	35	3.2	24	2.2
2"x2"x5/16" 50x50x8mm	93	8.6	46	4.3	31	2.9	23	2.1	15	1.4
2"x4"x5/16" 50x100x8mm	118	11	59	5.5	39	3.6	30	2.8	20	1.85
4"x4"x5/16" 100x100x8mm	167	15.5	83	7.7	55	5.1	41	3.8	28	2.6
4"x8"x1/2" 100x200x12mm	148	13.7	74	6.9	49	4.5	37	3.4	25	2.3
6"x6"x1/2" 150x150x12mm	167	15.5	84	7.8	56	5.2	42	3.9	28	2.6
12"x12"x5/16" 300x300x8mm	500	46.4	250	23.2	167	15.5	125	11.6	83	7.7
18"x18"x3/8" 450x450x9mm	500	46.4	250	23.2	200	18.6	150	13.9	100	9.3
12"x24"x3/8" 300x600x9mm	500	46.4	250	23.2	167	15.5	125	11.6	83	7.7
3 7/8"x8"x3/4" 97x200x19mm	100	9.3	50	4.6	33	3.1	25	2.3	17	1.6
3 7/8"x8"x1 3/8" 97x200x35mm	53	4.9	27	2.5	18	1.7	13	1.2	9	0.8

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 Epoxy Grout & Mortar directly over wood, luan plywood, improperly cured or wet plywood, particle board, stripwood, gypsum mortar beds, asphalt sheeting, Masonite, cement asbestos board, plastic or any dimensionally unstable substrate. DO NOT apply at temperatures below 65°F (18°C) or above 95°F (35°C). DO NOT use with white or translucent marble, staining may occur. Some tile materials may damage, scratch, or stain when grouted with pigmented epoxy grouts. Determine the suitability of all tile materials to be used with the manufacturer and/or tile test by doing a mockup installation. DO NOT subject to temperatures above 250°F. Light colors may darken in exterior applications.

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

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