



SANTA
REGINA

Engineered Terrazzo

January 2007



Engineered Terrazzo All Natural Ingredients

Santa Regina Engineered Terrazzo is all natural. Various aggregates such as marble, granite, river rock, quartz and fluorite are used to create the product. Some tiles are comprised of 60% post-industrial recycled material. The aggregate is bonded with a pigmented cement. The different colors of the aggregate and cement pigment combine to produce unlimited color matrixes. Custom designs can be created for as little as 8,000 sq. ft.





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Tile Characteristics

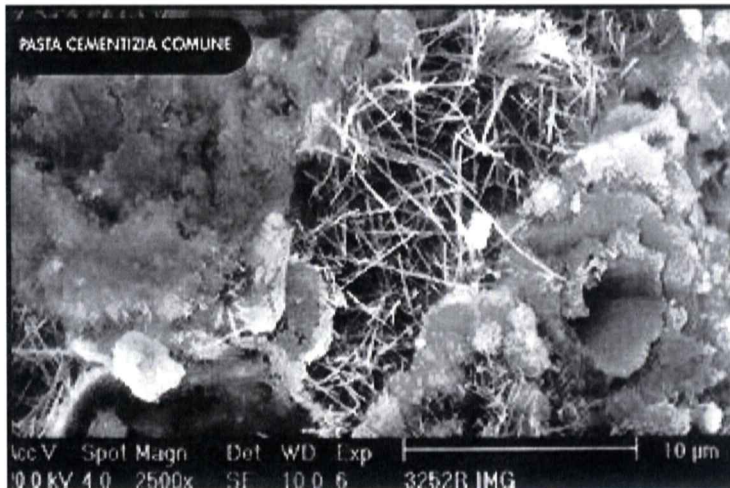
- **Continuity of Color and Design** – Remain the same for large orders
- **Compression Strength** – >40,000 psi
- **Resistance to Water** – $\leq 0.4\%$ absorption
- **Stain Resistant** – Factory applied sealing system provides 10 year stain resistant warranty. Stain proof warranty available.
- **Easily Installed** – Medium bed thin-set with $\frac{1}{2}$ inch notched trowel
- **Low Maintenance** – Neutral ph cleaner with sealer. No waxing or sealing required.
- **Calibration** – Rectified with tolerances of $< 1/100^{\text{th}}$ of one inch
- **Sizes** – 16"x16" and 24"x24" tiles
- **Thickness** – $3/8"$ to $5/8"$ depending on tile size
- **Finishes** – Polished, Natural, or Antique

The engineered terrazzo is manufactured using a patented Vibration Vacuum Process. A mixture of decorative marble, granite, fluorite, river rock and/or quartz together with white cement, pigment and water are placed into individual molds.

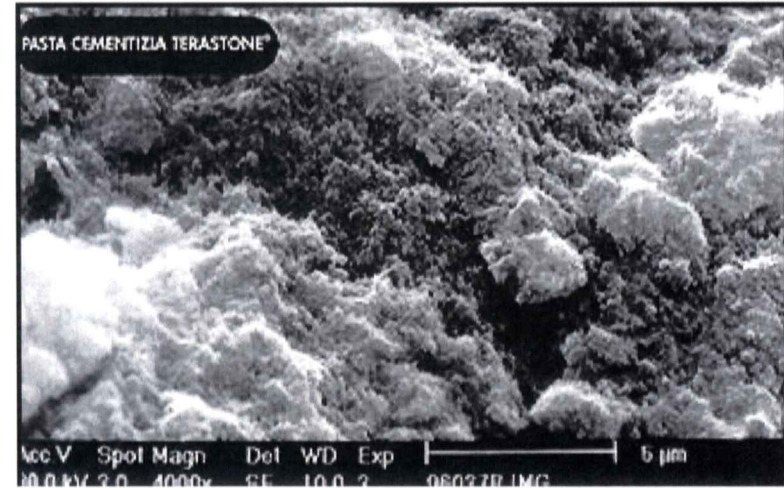


The molds are then transferred into the vibration vacuum chambers for about three minutes. Almost 90% of the atmosphere is vacuumed away while the chamber vibrates.

The result of the Vibration Vacuum Process yields a dense product with stronger structural strength, reduced water absorption and improved finishing capabilities. Compression strengths of greater than 40,000 psi are achieved.



Poured-in-place Terrazzo.



Santa Regina Int'l Engineered Terrazzo

The photograph on the left is poured-in-place terrazzo. The photograph on the right is Santa Regina engineered terrazzo at almost twice the magnification. The naturally occurring cracks and fissures of terrazzo are virtually eliminated.



Factory Applied Sealer

All Santa Regina tiles are factory sealed using an ionized sealer. The result is a 10 year stain resistant seal. Sealing the grout after installation will give you a 10 year stain proof warranty. Regularly scheduled cleaning with our neutral ph cleaner which contains small amounts of the ionized sealer will recondition your seal every time you clean.





Product Comparison

Life Cycle Cost Analysis	Santa Regina	Polyester Resin Tile	Pre-Cast Terrazzo Tile	Cement Terrazzo	Epoxy Terrazzo
Project Square Feet	20,000	20,000	20,000	20,000	20,000
National Avg. Annual Maintenance Cost psf	\$ -	\$ 0.35	\$ 0.35	\$ 0.58	\$ 0.46
National Average Installed Price psf	\$ 12.00	\$ 9.00	\$ 12.00	\$ 15.00	\$ 20.00
Total Installed Price	\$ 240,000	\$ 180,000	\$ 240,000	\$ 300,000	\$ 400,000
Annual Maintenance Cost psf	\$ -	\$ 7,000	\$ 7,000	\$ 11,600	\$ 9,200
Inflation Factor	2.50%				
Maintenance Cost over 10 yrs.	\$ -	\$ 78,424	\$ 78,424	\$ 129,959	\$ 103,071
Flooring System Cost over 10 yrs.	\$ 240,000	\$ 258,424	\$ 318,424	\$ 429,959	\$ 503,071
Additional Cost for Floor System		\$ 18,424	\$ 78,424	\$ 189,959	\$ 263,071
Life Cycle Cost per Square Foot	\$ 12.00	\$ 13.84	\$ 19.84	\$ 31.00	\$ 38.31
Premium over Santa Regina		115%	165%	258%	319%

Performance Characteristics	Santa Regina	Polyester Resin Tile	Pre-Cast Terrazzo Tile	Cement Terrazzo	Epoxy Terrazzo
Compressive Strength	> 40,000 psi	< 5,000 psi	< 8,000 psi	< 7,000 psi	< 12,000 psi
Water Absorption	≤0.4%	< 1%	4½%	10-15%	< 1%
Flexural Strength	> 1,100 psi	Flexible	950 psi	N/A	N/A
Dimensional Tolerance	±.01"	±.003"	±.06"	N/A	N/A
Warpage	< 1%	Flexible	>1½%	N/A	N/A
Warranty	Life of Building	20 years	One Year	Various	Various
Photo-Sensitive	No	Yes	No	No	No
Flame Resistant	No Effect	Smokes	No Effect	No Effect	Smokes
Post Installation Sealer	None Needed	Two Coats	Two Coats	Various	Various
Aggregate Choices	Gr, Gl, M, F, RR, Q	Gr, M	M, Gl	M, Gl	M, Gl

Gr - Granite, Gl - Glass, M - Marble, F - Fluorite, RR - River Rock, Q - Quartz