

SUSTAINABLE SITES					
LEED Rating Systems	Credit Name	Credit Requirements	Product Compatibility	Calculation	Points Available
LEED-NC 2009 LEED-S 2009 LEED-CS 2009	SS Credit 7.1 Heat Island Effect: Nonroof	For 50% of hardscape use any combination of materials that possess SRI of 29 or greater (or are open-grid or provide shading as detailed by LEED 2009 rating systems).	Products specified for outdoor use in lighter colors will qualify for contribution to this credit. SRI to be calculated with emittance per ASTM E 408/C 1371 and reflectance per ASTM E 903/E 1918 or C 1549. These test will need to be done by a 3rd party lab.	Total sq ft of Ragno qualifying tile, divided by total square fee of hardscape area, equals Ragno's contribution to 50% of total qualifying hardscape area.	1
LEED EBOM 2009	SS Credit 7.1 Heat Island Effect: Nonroof	<p>OPTION 1:</p> <p>Use any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots):</p> <ul style="list-style-type: none"> <li>-Provide shade from the existing tree canopy or within 5 years of landscape instillation; landscaping (trees) must be in place at the tim eof certification application.</li> <li>-Provide shade from structures covered by solar panels that produce energy used to offset some nonrenewable resource use.</li> <li>-Provide shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29. Implement a manintenance program that ensures these surfaces are cleaned at least every 2 years to maintain good reflectance.</li> <li>-Use hardscape materials with an SRI of at least 29 and implement a maintenandc program that ensures these surfaces are cleaned at least every 2 years to maintain good reflectance.</li> </ul> <p><b>OR</b></p> <p>OPTION 2:</p> <p>Place a minimum of 50% of parking spaces under cover. Any roof used to shade or covering parking must have an SRI of at least 29, be a vegetated roof or be covered by solar panels that produce energy used to offset some renewable resource use.</p> <p>Implement a maintenance program that ensures these surfaces are cleaned at least every 2 years to maintain good reflectance. The top level of a multi-level parking structure is included in the total parking spaces calculation but is not considered a roof and is not required to be a SRI surface.</p>	See above	See above	1
LEED-NC 2009 LEED-S 2009 LEED-CS 2009	SS Credit 7.2 Heat Island Effect: Roof	<p>OPTION 3:</p> <p>Install high-albedo and vegetated roof surfaces that, in combination, meet the following criteria:</p> <p>Area Roof Meeting Minimum SRI(20)/0.75 + Area of vegetated roof/0.5 = Total Roof Area</p>	Products specified for outdoor use that meet an SRI of 29 qualify for this credit. SRI to be calculated with emittance per ASTM E 408/C 1371 and reflectance per ASTM E 903/E 1918 or C1549. These tests will need to be done by a 3rd party lab.	Total sq ft of Ragno qualifying tile, divided by total square fee of hardscape area, equals Ragno's contribution to 50% of total qualifying hardscape area.	1
LEED EBOM 2009	SS Credit 7.2 Heat Island Reduction: Roof	<p>OPTION 3:</p> <p>Install high-albedo and vegetated roof surfaces that, in combination, meet the following criteria:</p> <p>Area Roof Meeting Minimum SRI/0.75 + Area of Vegetated Room/0.5 = Total Roof Area</p>	See above	See above	1



MATERIALS and RESOURCES					
LEED Rating	Credit Name	Credit Requirements	Product Compatibility	Calculation	Points Available
LEED-NC 2009 LEED-S 2009 LEED-CS 2009	MR Credit 4: Recycled Content	Use materials with recycled content, such that the sum of post-consumer plus 1/2 pre-consumer % of recycled content by weight (as defined per ISO 14021-1999) constitutes at least 10% or 20% of the total dollar value of the materials in the project.	Products contains approx 4.5% - 45% post-industrial recycled content. (See chart below) 1/2 of which can be used to contribute to this credit.	Total cost of Ragno tile (x) 1/2 recycled content, divided by total materials cost, equals Ragno's % contribution to 10% or 20% of total project materials dollars spent on recycled content.	10%=1 20%=2
	MR Credit 5: Regional Materials	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) can contribute to the regional value.	Projects located within 500 miles of either manufacturing facilities AND supplying clay pits qualify for contributions to this credit.	Total cost of Ragno tiles (x) % manufactured AND extracted within 500 miles of project site, divided by total project materials cost equals Ragno's % contribution to 10% or 20% of total project materials dollars spent on regional content.	10%=1 20%=2
LEED-CI 2009	MR Credit 5: Regional Materials	OPTION 1 (1 point) Use a minimum of 20% of the combined value of construction and Division 12 (Furniture) materials and products that are manufactured regionally within a radius of 500 miles of the project. <b>OR</b> OPTION 2 (2 points) Meet the requirements for Option 1. Use a minimum of 10% of the combined value of construction and Division 12 (furniture) materials and products extracted, harvested or recovered, as well as manufactured, within 500 miles of the project.	Option 1: Ragno products that are manufactured within 500 miles of project site. <b>OR</b> Option 2: Projects located within 500 miles of manufacturing facilities AND raw material suppliers qualify for contributions to this credit.		
LEED-EBOM 2009	MR Credit 3: Sustainable Purchasing Facility Alterations and Additions	Maintain a sustainable purchasing program covering materials for base building renovations, demolitions, refits and new construction additions and achieve sustainable purchases of 50% of total purchases (by cost) during the performance period.	Tile materials that are either SCS FloorScore-certified and constitute a minimum of 25% of the finished floor <b>OR</b> contain at least 10% post-consumer and/or 20% postindustrial recycled material, as defined by ISO 14021-1999 <b>OR</b> contain at least 50% material harvested and processed or extracted and processed within 500 miles of the project qualify to contribute to the 50% sustainable purchase requirement.	Cost of Ragno tile purchased for alteration/addition divided by total addition/alteration base building materials cost equals Ragno's % contribution to 50% sustainable materials purchase requirement. Supporting documentation required.	1

INDOOR ENVIRONMENTAL QUALITY					
LEED Rating	Credit Name	Credit Requirements	Product Compatibility	Calculation	Points Available
LEED-NC 2009 LEED-CI 2009 LEED-CS 2009	IEQ Credit 4.3: Low-Emitting Materials-Flooring Systems	All hard surface flooring must be certified as compliant with the FloorScore standard (current as of the date of this rating system, or more stringent version) by an independent third-party. <b>OR</b> <u>All flooring elements installed in the building interior must meet the testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from various sources using Small-Scale Environmental Chambers, including 2004 Addenda.</u> <b>Alternative Compliance Path:</b> 100% of noncarpet finished flooring must be FloorScore certified (or CA 01350) and must constitute at least 25% of the finished floor area.	All hard surface flooring must meet the requirements of the FloorScore standard (current as of the date of this rating system, or more stringent version) as shown with testing by an independent third-party. Mineral based finish flooring products such as <b>tile</b> , masonry, terrazzo, and cut stone without integral organic-based coatings and sealants and unfinished/untreated solid wood flooring <b>qualify for credit without any IAQ testing requirements.</b>  In addition, all Ragno products produced in the USA have been tested by an independent laboratory, based on CA-01350 standards, and certified to contain no VOCs.	No calculations required	1
LEED-S 2009	IEQ Credit 4.3: Low-Emitting Materials-Flooring Systems	All flooring elements installed in the building interior must meet the testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from various sources using Small-Scale Environmental Chambers, including 2004 Addenda.	See above	No calculations required	1
	IEQ Credit 4.6: Ceiling and Wall Systems	All wall coverings installed in the building interior must meet the testing and product requirements of the CA01350.	See above	No calculations required	1

ADDITIONAL COMPANY/PRODUCT INFORMATION - GENERAL AND SUSTAINABILITY



Ragno USA is a member of the United States Greenbuilding Council.



For select product lines, Marazzi has obtained the Ecolabel mark, an environmental quality seal from the European Union, granted to products that meet and comply with standards for environmental quality and the rational use of energy resources and natural resources that are set by the EU.



The Marazzi Group was the first ceramics manufacturer in Italy to obtain EMAS certification, at its Fiorano plant. This EU certification is awarded to companies which have adopted highly environmentally-efficient manufacturing systems.



ISO 14001

Select production facilities in Italy have been certified under ISO 14001 regulations.



Engaged with MindClick SGM, a leading sustainability consulting firm, to benchmark our sustainability performance and create an ongoing performance measurement system.

**LEED 2009 CREDIT CATEGORY ANALYSIS**  
**COMMERCIAL PRODUCT CONTRIBUTION MATRIX**



QUALIFYING PRODUCTS BY TYPE						
Product Description	Heat Island Effect: Roof (7.1) & Non-Roof (7.2) SSC7.1 & 7.2	Recycled Content MRC4	Regional Materials MRC5	Sustainable Purch Facility Alter & Adds EBOM MRC3	Low Emitting Materials: IEQC4.3	Low Emitting Materials: Ceiling and Wall IEQC4.6
<b>PORCELAIN STONEWARE</b>						
<b>Color Body Porcelain</b>						
Arte	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Eternal Limestones	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Metropolitan*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Nabuk*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Revision*	Not Testing	45% pre-consumer	Not Applicable	See above	Not Testing	Not Testing
Textile*	Not Testing	44% pre-consumer	Not Applicable	See above	Not Testing	Not Testing
<b>Glazed Porcelain</b>						
Arkitesutto*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Boardwalk	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Borgoforte	Will Test Upon Request	7% pre-consumer	Sunnyvale, TX: 99% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Burgundy	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Calabria	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Cathedral Stone	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Cleftstone	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Cometstone	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Eclipse	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Harbour Rock	Will Test Upon Request	7% pre-consumer	Sunnyvale, TX: 99% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
I Marmi Di Rapolano*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Kashmere	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Lagoon	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Le Cave*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Le Pietre Di Samarcanda*	Not Testing	45% pre-consumer	Not Applicable	See above	Not Testing	Not Testing
Maple Ridge	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Maraja (20x20 NE ONLY)	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Petra	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Princes	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Redwoods	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Riverstone (16x16 BG & MT)*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Riverstone (6.5x6.5, 13x13 & 20x20)	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Rustic Ridge	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Status	Will Test Upon Request	7% pre-consumer	Sunnyvale, TX: 99% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Titanium	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Victoria*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Western Stone	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
Woodland Terrace	Will Test Upon Request	21% pre-consumer	Florence, AL: 45% w/in 500 miles	See above	3rd Party Certified	3rd Party Certified
<b>Through Body Porcelain</b>						
Lastricato*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
<b>GLASS</b>						
Crystal Stone*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing
Glass Mosaic*	Not Testing	0%	Not Applicable	See above	Not Testing	Not Testing

\*Imported products.