

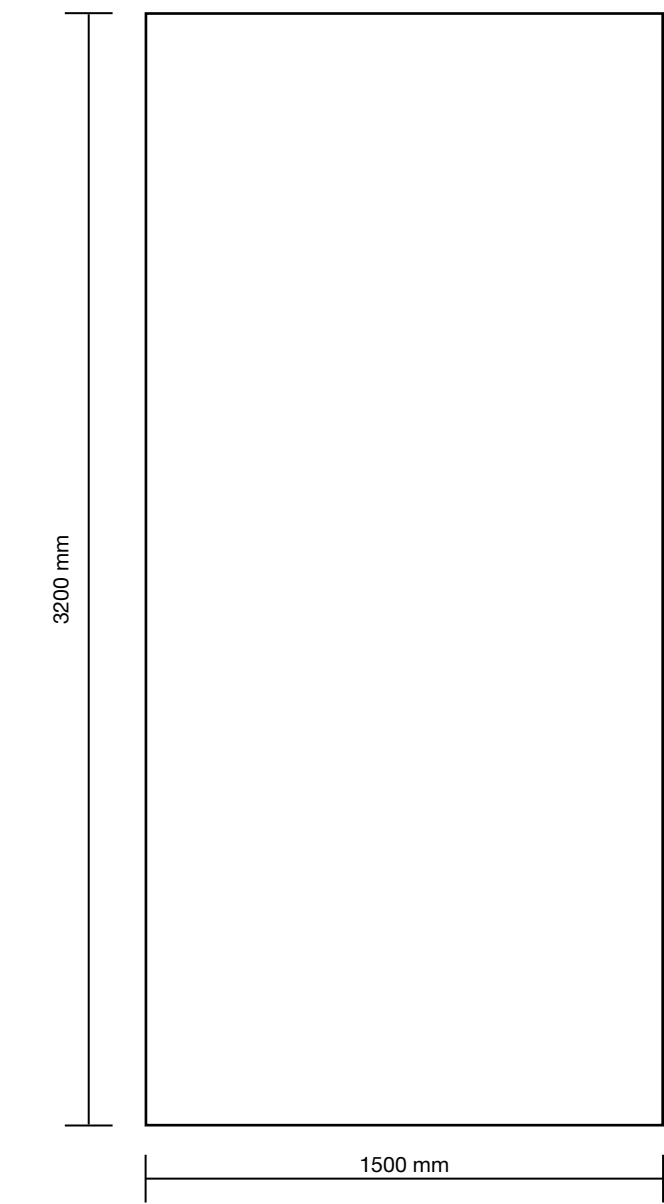
The GammaStone Natural AIR solution, made of natural stone, enables the mechanical installation of large-sized panels composed of marble, granite, limestone, or travertine.

This system allows for the creation of beams, columns, and other architectural elements with a monolithic appearance, achieving a seamless one-piece effect. The available sizes depend on the block dimensions, with a maximum size of 3200x1500 mm.



NATURAL AIR

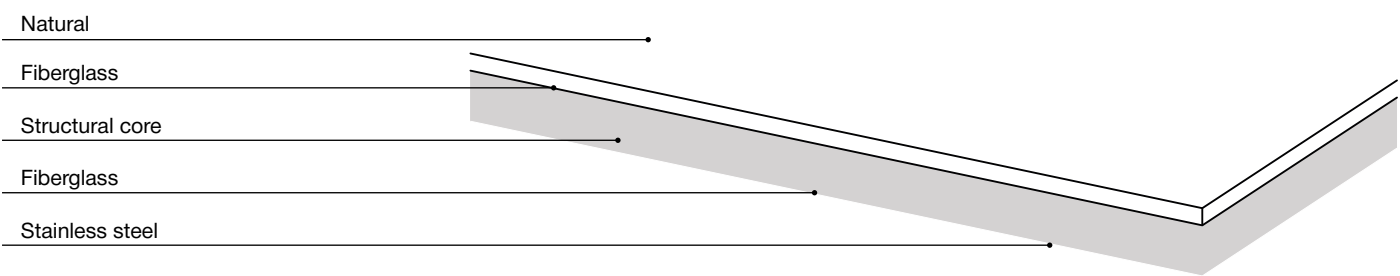
General Data



Max Panel Size

3200x1500 mm (4,8 m²)
126"x59" (52.42 ft²)

Panel Structure



Material

TRAVERTINE



Romano



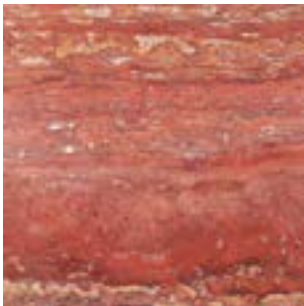
Classico



Silver Romano

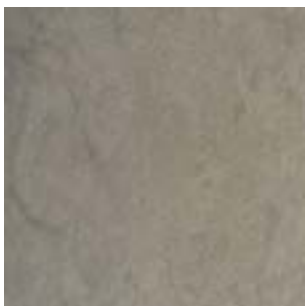


Silver



Rosso

LIMESTONE



Gray



Moleanos



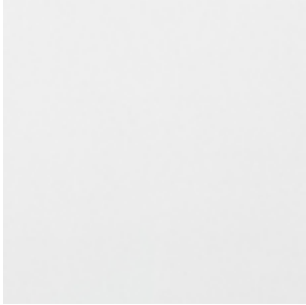
Indiana



NATURAL AIR - Finishes

Material

MARBLE



Bianco Thassos



Statuario



Bianco Carrara C



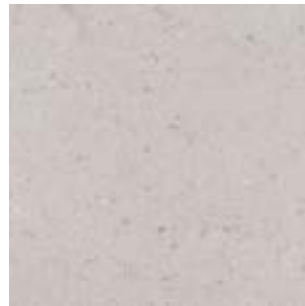
Statuarietto



Bianco Carrara Cd



Covelano Bianco Lasa



Lipica Fiorito



Bianco Asiago Verso



Botticino Classico Extra



Crema Marfil



Botticino Classico



Rosso Verona



Grigio Carnico



Nero Marquinia



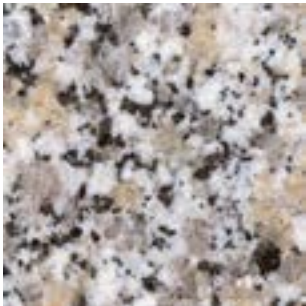
Trani

Material

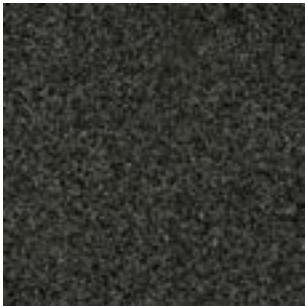
GRANITE



Bianco Sardo



Rosa Beta



Nero Africa



Nero Assoluto

Materials available upon request from quarries worldwide.



Finishes



HONED



BRUSHED



BUSH - HAMMERED



SANDBLASTED



STRIATED

General and Geometrical Tolerance

Natural Air - 8 mm

TECHNICAL DATA	EU	USA	PANEL STRUCTURE
Max Panel Sizes	3200x1500 mm (4,8 m²)	126"x59" (52.42 ft²)	
Total Panel Thickness	19 mm	≈ 3/4"	
Stone Thickness	8 mm	≈ 5/16"	
Panel Weight	28 kg/m²	5.73 lb/sqft	

Natural Air - 12 mm

TECHNICAL DATA	EU	USA	PANEL STRUCTURE
Max Panel Sizes	3200x1500 mm (4,8 m²)	126"x59" (52.42 ft²)	
Total Panel Thickness	23 mm	≈ 7/8"	
Stone Thickness	12 mm	≈ 15/32"	
Panel Weight	36 kg/m²	7.4 lb/sqft	

Natural Air (Granite) - 12 mm

TECHNICAL DATA	EU	USA	PANEL STRUCTURE
Max Panel Sizes	3200x1500 mm (4,8 m²)	126"x59" (52.42 ft²)	
Total Panel Thickness	23 mm	≈ 7/8"	
Stone Thickness	12 mm	≈ 15/32"	
Panel Weight	36 kg/m²	7.4 lb/sqft	

Dimensional Deviations

(size in mm)

Up to 1.000	More than 1.000 Up to 2.000	More than 2.000 Up to 4.000
± 1	± 1.5	± 2

Dimensional Deviations of Monolithic Assembled Returns

(size in mm per each assembled return)

Up to 500	More than 500 Up to 100	More than 1.000 Up to 2.000
-1 +2	-1 +2.5	-1.5 +3

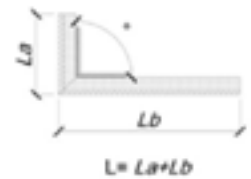
(size in mm per each assembled return)

Up to 500	More than 500 Up to 100	More than 1.000 Up to 2.000
-1 +3	-1 +3.5	-1.5 +4

Edge Tolerances for Monolithic Assembled Returns

Limit deviations refer to the total lenght in mm of the panels on the sides of the return

L Up to 500	L More than 500 Up to 100	L More than 1.000
±1°	±0°30'	±0°20'

**Edges fo Monolithic Assembled returns**

Dimension of the bevel or radius of the monolithic edge

Natural Stone	Max 5 mm
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Thickness

The thickness tolerance of the Air Panel is strictly linked to the material used beacuse it is determinated by the sum of stone tolerance + the tolerance of the Air Panel laminated to the slab of stone.

Material Thickness Deviation (mm)**Maximum Thickness Deviation of Air Panel (Σ Deviation in mm)**

Natural Stone	tsn	Variable ²	tss+tsn
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²Depends on the type of natural stone selected**Deviation from the Diagonals of the Single non Assembled Panels****Diagonal Dimension D1**

Up to 1000 mm
Between 1000 and 2000 mm
Above 2000 mm

Difference with Diagonal D2

2 mm
3 mm
5 mm

ATTENTION: Deviating from the above specifications requires written agreement between both parties.*The data shown in this technical data sheet are not binding and can be modified without any kind of notice.*

Technical Data Sheet

FIRE TEST

Test	Description	Result
UNI 9177:2008 UNI 8457:2010 UNI 9174:2010	Reaction to fire	Classe 1
UNI EN 13501-1:2009 UNI EN 13823:2010 UNI EN ISO 11925-2:2005	Fire classification	B - s1. d0
ASTM E 84 (UL 723)	Surface burning characteristics	Class A
ASTM E 136	Behavior of materials at 750°C (1382°F)	Non-combustible
CAN/ULC-S114 ASTM E1530:2006	Test for Non-Combustibility	Non-combustible
ASTM C297/C297M - 16	Flatwise Tensile Bond Strength Evaluation (Fiberglass Mesh)	359 psi
	Flatwise Tensile Bond Strength Evaluation	190 psi
	Flatwise Tensile Bond Strength Evaluation	57,6 psi
NFPA 285	Fire test	Passed
BS8414-1	Fire test	Passed
AS/NZS 1530	Determination of ignitability, flame-propagation, heat release and smoke release	Ignitability 0 Spread of flame 0 Heat Evolved 0 Smoke developed 0-1

AMERICAN TESTS

Test	Description	Result
ASTM C393/C393M-16	Core Shear Properties (Negative Windload - Machine Direction)	102,4 psi
	Core Shear Properties (Positive Windload)	18,7 psi
	Core Shear Properties (Negative Windload - Crosswise Direction)	100,2 psi
ASTM C272/C272M-18	Water Absorption of Core Materials	6,143 ibm/ft³
ASTM C880/C880M-18	Flexural Strength Evaluation (Negative Windload - Dry Condition)	1.043 psi
	Initial Failure	2.932 psi
	Flexural Strength Evaluation (Negative Windload - Dry Condition)	2.787 psi
	Ultimate Failure	891 psi
	Flexural Strength Evaluation (Positive Windload - Dry Condition)	2.903 psi
	Flexural Strength Evaluation (Negative Windload - Wet Condition)	
ASTM C482-02	Flexural Strength Evaluation (Positive Windload - Wet Condition)	
	Bond Strength Mitred Corner Joint Assembly Shear Loading Evaluation	992,4 lb _f

EUROPEAN TESTS

Test	Description	Result
ETAG 004:2013	Heat-Rain 80 cycles	No fault
ETAG 004:2013	Heat-Cold 5 cycles	No fault
UNI EN ISO 10545-8:2014	Determination of linear thermal expansion	6.6* (<0.3 mm/600 mm)
UNI EN 772-14:2003	Determination of moisture movement	0.4 mm/m
UNI EN ISO 10545-4:2012	Determination of modulus of rupture and breaking strength	2.8± 0.3 N/mm ²
UNI EN ISO 10545-4:2012	Breaking strength Heat-Rain 80 cycles + Heat-Cold 5 cycles	5.0± 0.5 N/mm ²

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EUROPEAN TESTS

Test	Description	Result
Rif. Test Certimac POI	Determination of bond strength by pull-off	1.15 ± 0.26 N/mm ²
Rif. Test Certimac POI	Bond strength after Heat-Rain 80 cycles + Heat-Cold 5 cycles	1.01 ± 0.31 N/mm ²
Rif. Test Certimac POI	Limit of detachment after water immersion (21 days)	0.27 ± 0.17 N/mm ²
UNI EN ISO 10545-3:2000	Determination of water absorption	6%*
UNI EN ISO 10545-9:2013	Determination of resistance to thermal shock	No fault
UNI EN ISO 10545-12:2000	Determination of frost resistance	No fault
ETAG 034-1:2012	Wind depression load resistance	4610 Pa
UNI EN 12664:2002	Determination of thermal conductivity	0.157 ÷ 0.170 W/mK
MED 2014/90/EU	Determination of calorific value	Passed
MED 2014/90/EU	Determination of the limited ability to propagate the flame	Passed

* It depends on the type of natural stone, the lower value refers to the Travertine, the highest value is for Sandstone. The results are based on tests made on a GammaStone Natural AIR panel in Sandstone sawn finish, untreated.



The GammaStone Natural AIR solution in natural stone allows the mechanical installation of large sized panels formed with marble, granite, limestone or travertine. It can be used to make beams, columns and any other architectural element with a monolithic result, creating the effect of one piece.

The available sizes depend on the block size, the maximum dimension is 3200x1500 mm

NATURAL AIR



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gammastone.com

NATURAL AIR - Material / Finishes / Technical Data Sheet / General and geometrical tolerances