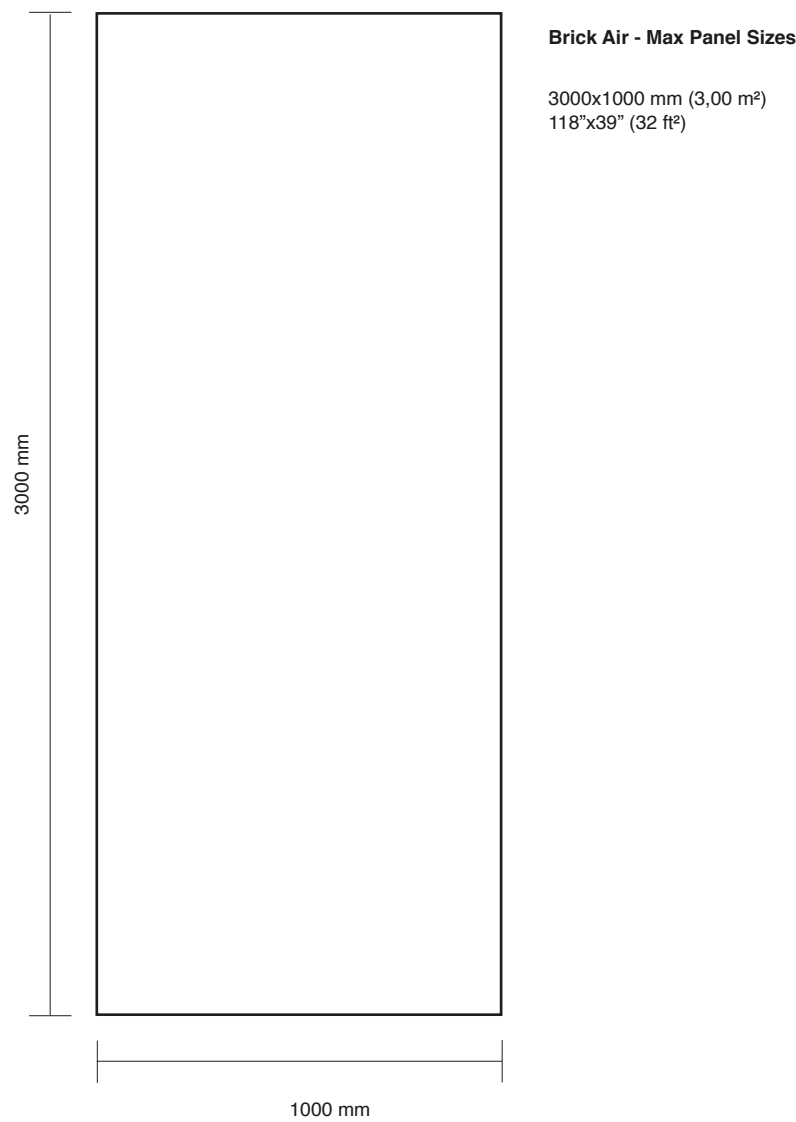


The GammaStone Brick AIR solution allows dry installation of Klinker or porcelain bricks with the advantages of a fast installation and beautiful aesthetics. The panels are delivered ready for installation, with the bricks pointed. The joints between panels are designed to guarantee a unique effect on the entire façade.

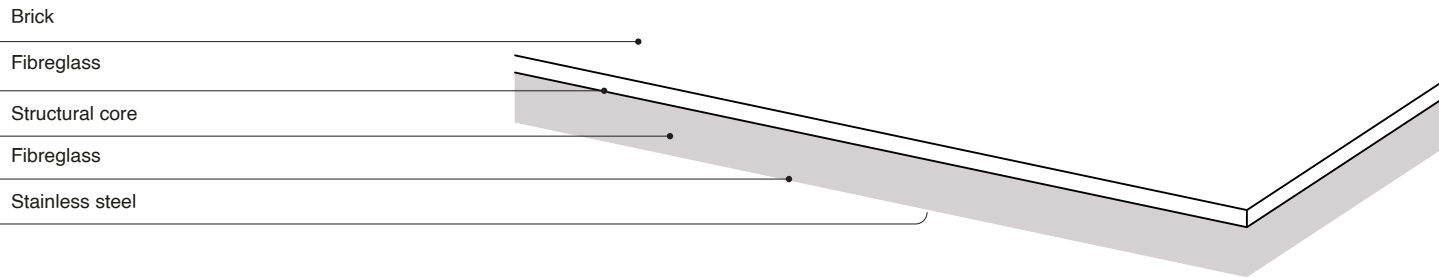


BRICK AIR

General data



Panel Structure



Colors

FACCIAVISTA



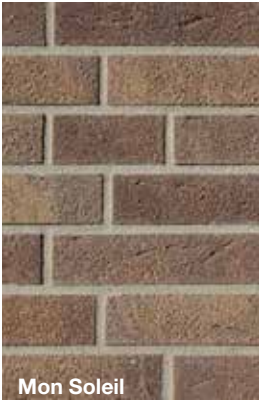
Colors

KLINKER



Colors

KLINKER •



Colors

GRES



Solutions

Zip - Without Zip



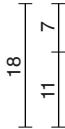
Without Zip



General and Geometrical tolerance

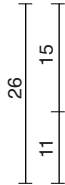
Brick Gres 7 mm

TECHNICAL DATA	EU	USA	PANEL STRUCTURE	
Max panel sizes				
Brick Gres	3000x1000 mm (3,00 m²)	118"x 39" (32 ft²)		
Total Panel Thickness				
Brick Gres	18 mm	≈ 23/32"		
Brick Thickness				
Brick Gres	7 mm	≈ 9/32"		
Panel weight				
Brick Gres	17 kg/m²	3.5 lb/sqft		



Brick Klinker 15 mm

TECHNICAL DATA	EU	USA	PANEL STRUCTURE	
Max panel sizes				
Klinker	3000x1000 mm (3,00 m²)	118"x 39" (32 ft²)		
Total Panel Thickness				
Klinker	26 mm	≈ 1/32"		
Brick Thickness				
Klinker	15 mm	≈ 19/32"		
Panel weight				
Klinker	32 kg/m²	4.5 lb/sqft		



Dimensional deviations

(sizes 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

(sizes in mm per each assembled return)

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

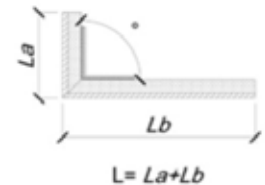
(sizes in mm per double assembled return)

Up to 500	More than 500 Up to 1.000	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 length in mm of the panels on the sides of the return

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

**Edges for monolithic assembled returns**

Dimension of the bevel or radius of the monolithic edge

Brick	Max 5 mm
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Thickness

The thickness tolerance of the Air Panel is strictly linked to the material used because it is determined by the sum of the Brick tolerance + the tolerance of the AIR panel laminated to the slab of Brick

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

Brick	tsg	Variable ¹	tss+tsg
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¹Depends on the type of brick 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
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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	Standard Test Method for Flatwise Tensile Strength	1,37 ± 0,05 MPa
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

AMERICAN TESTS

Test	Description	Result
ASTM C67/C67M-18	Freeze Thaw Cycling Resistance Evaluation (Continued) MASS CHANGE	0,16 %
ASTM C273/C273M-18	Shear - Calculated Results	902,0 psi
	Shear - Calculated Results (C481 Aged)	1.040,50 psi
ASTM C364/C364M-16 E	Edgewise Compressive Strength	3.397 psi
	Edgewise Compressive Strength (C481 Aged)	3.686 psi
ASTM C365/C365M-16	Flatwise Compressive Strength	948 psi
	Flatwise Compressive Strength (C481 Aged)	1.883 psi
ASTM C297/C297M-16	Flatwise Tensile Bond Strength Evaluation	91,4 psi
	Flatwise Tensile Bond Strength Evaluation (C481 Aged)	88,5 psi
ASTM C393/C393M-16	Results (Control - Lengthwise Production)	300,3 psi
	Results (Control - Crosswise Production)	249,8 psi
	Results (C481 Aged - Lengthwise Production)	306,0 psi
	Results (C481 Aged - Crosswise Production)	237,4 psi
ASTM D1781-98(2012)	Climbing Drum Peel Strength	140,61 lb _f
	Climbing Drum Peel Strength (C481 Aged)	120,24 lb _f
ASTM G154-16	UV Exposure/ D2244 Color Shift Evaluation	0,78 ΔE
	UV Exposure/ D2244 Color Shift Evaluation (Grout)	0,92 ΔE

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EUROPEAN TESTS

Test	Description	Result
UNI EN ISO 10545-3:2000	Determination of water absorption	0,9%
UNI EN 12089:2013	Determination of bending behavior	27772 kPa
UNI EN ISO 10545-12:2000	Determination of frost resistance	No fault
UNI EN 12664:2002	Thermal resistance	0,237 m ² K/W
UNI EN 826:2013	Determination of compression behavior	1377 kPa
UNI EN ISO 9142:2004	Accelerated ageing	No fault
UNI EN ISO 9227:2012	Resistance in Neutral Salt Spray NSS	No fault
UNI EN ISO 10545-9:2013	Thermal shock resistance	No fault
UNI EN 772-14:2003	Determination of moisture movement	0.0 mm/m
UNI EN 14019:2004 ETAG 034-1:2012	Impact resistance	No damage
ETAG 004:2013	Heat-Rain 80 cycles and Heat-Cold 5 cycles resistance	No fault
UNI EN ISO 10545-8:2014	Determination of linear thermal expansion	2.1 (<0.1 mm/600 mm)
UNI EN ISO 10545-4:2012	Determination of the breaking strength	22.9 ± 1.7 N/mm ²
UNI EN ISO 10545-4:2012	Flexure after Heat-Rain 80 cycles + Heat-Cold 5 cycles	23.2 ± 3.0 N/mm ²
Rif. Test Certimac POI	Determination of bond strength by pull-off	1.63 ± 0.20 N/mm ²
Rif. Test Certimac POI	Bond strength after Heat-Rain 80 cycles + Heat-Cold 5 cycles	1.42 ± 0.25 N/mm ²
Rif. Test Certimac POI	Bond strength after water immersion (21 days)	1.01 ± 0.27 N/mm ²
ETAG 034-1:2012	Wind depression load resistance	4610 Pa
MED 2014/90/EU	Determination of calorific value	Passed
MED 2014/90/EU	Determination of the limited ability to propagate the flame	Passed

The tests refer to a GammaStone Brick AIR panel with 20 mm thick brick. The complete list of tests can be found on gammastone.com



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BRICK AIR