

UHPC PLUS — AIR

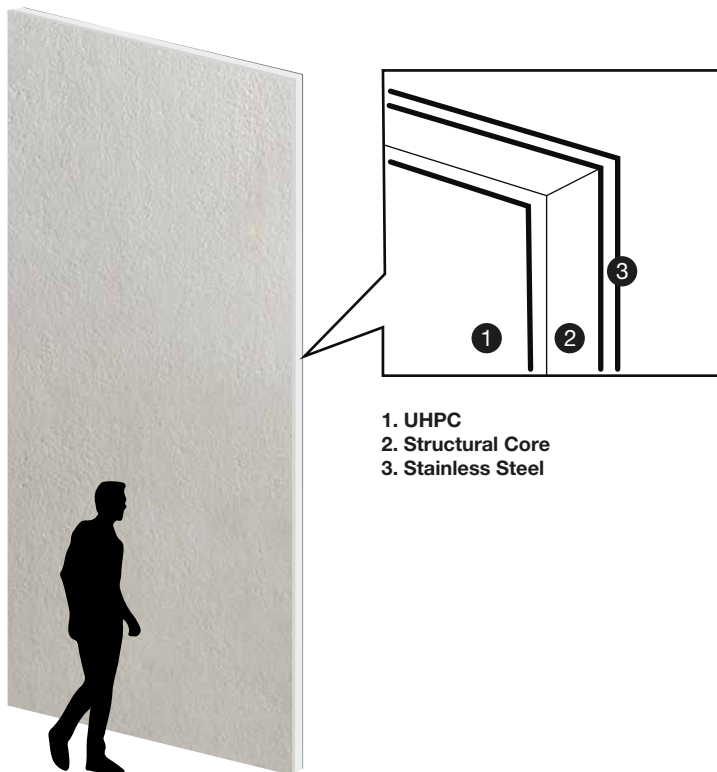
The **GammaStone UHPC Plus AIR** solution is composed of ultra-thin high-performance concrete reinforced with amorphous metal fibers.

UHPC PLUS — AIR



[EU]	<hr/> Max panel sizes: 4150x1650 mm (6,84 m²) <hr/>		
	Total panel thickness	UHPC thickness	Panel weight
	16 mm	5 mm	18 kg/m ²
[USA]	<hr/> Max panel sizes: 163-25/64" x 64-61/64" (73.67 ft²) <hr/>		
	5/8"	13/64"	39,7 lb/sqft

PANEL STRUCTURE



Technical data sheet

Test	Description	Result
UNI EN ISO 10545-8:2014	Determination of linear thermal expansion	1.6
UNI EN 772-14:2003	Determination of moisture movement	0.04 ÷ 0.13 mm/m
UNI EN ISO 10545-4:2012 UNI EN 12467:2016	Determination of the breaking strength	4.3 ÷ 6.2 N/mm ² 2.9 ÷ 3.9 N/mm ²
UNI EN 12089:2013	Determination of bending behavior	4160 ÷ 5867 kPa
UNI EN 12467:2016	Determination of frost/defrost resistance	No fault
UNI EN 12467:2016	Determination of water absorption	No water
UNI EN ISO 10545-9:2013	Determination of resistance to thermal shock	No fault
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
ETAG 034-1:2012	Wind depression load resistance	4610 Pa
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 combustibile Non-combustibile
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
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 UHPC Plus AIR panel with 5mm thick UHPC. The complete list of tests and certifications can be found on gammastone.com.

Conforme CAM



General and geometrical tolerances

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

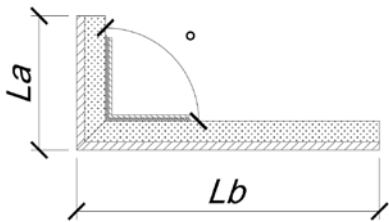
(sizes in mm per double assembled returns)

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 1000	L More than 1000
± 1°	± 0°30'	± 0°20'



$$L = La + Lb$$

General and geometrical tolerances

Edges for monolithic assembled returns

Dimension of the bevel or radius of the monolithic edge

UHPC	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 UHPC tolerance + the tolerance of the AIR panel laminated to the slab of UHPC.

Maximum Thickness deviation of AIR Panel (Σ Deviation in mm)	$\pm 2,50$
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Deviation from the diagonals of the single non assembled panels

Diagonal Dimension D1	Difference with Diagonal D2
Up to 1000 mm	2 mm
Between 1000 and 2000 mm	3 mm
Above 2000 mm	5 mm

ATTENTION: Deviating from the above specifications requires written agreement between both parties.