

EasyAir




GammaStone

Architectural & Design Evolutions



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EasyAir
the easy-to-install, lightweight,
and secure cladding system.

UHPC Plus Air. Grain Urban Gray - Honed. Panels 60x120 cm (24x48") and Internal corners 30x30x60cm (12x12x24")

EasyAir

GammaStone is synonymous with creativity and excellence, qualities stemming from our experience in manufacturing integrated panels for facade systems. Thanks to our fully automated robotic production, we guarantee (ensure) a certified, versatile, and high-quality complete enclosure service.

Our new high-performance product, EasyAir, aims to bring our patented and innovative technology, previously dedicated only to large buildings, into every home. EasyAir is designed for both interior and exterior applications and can be tailored to meet any requirement through custom cutting during installation. It is also easy to install with our specially designed dry hanging system.





Standard Size



Easy to install



Extreme Lightness



Bending Resistant



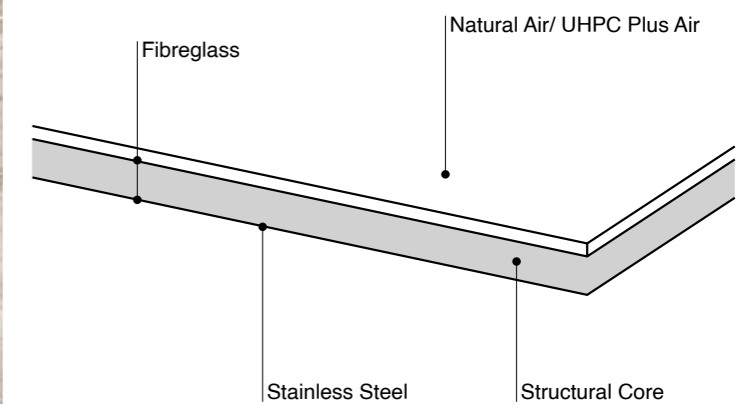
Resistant to thermal shocks



Air Technology

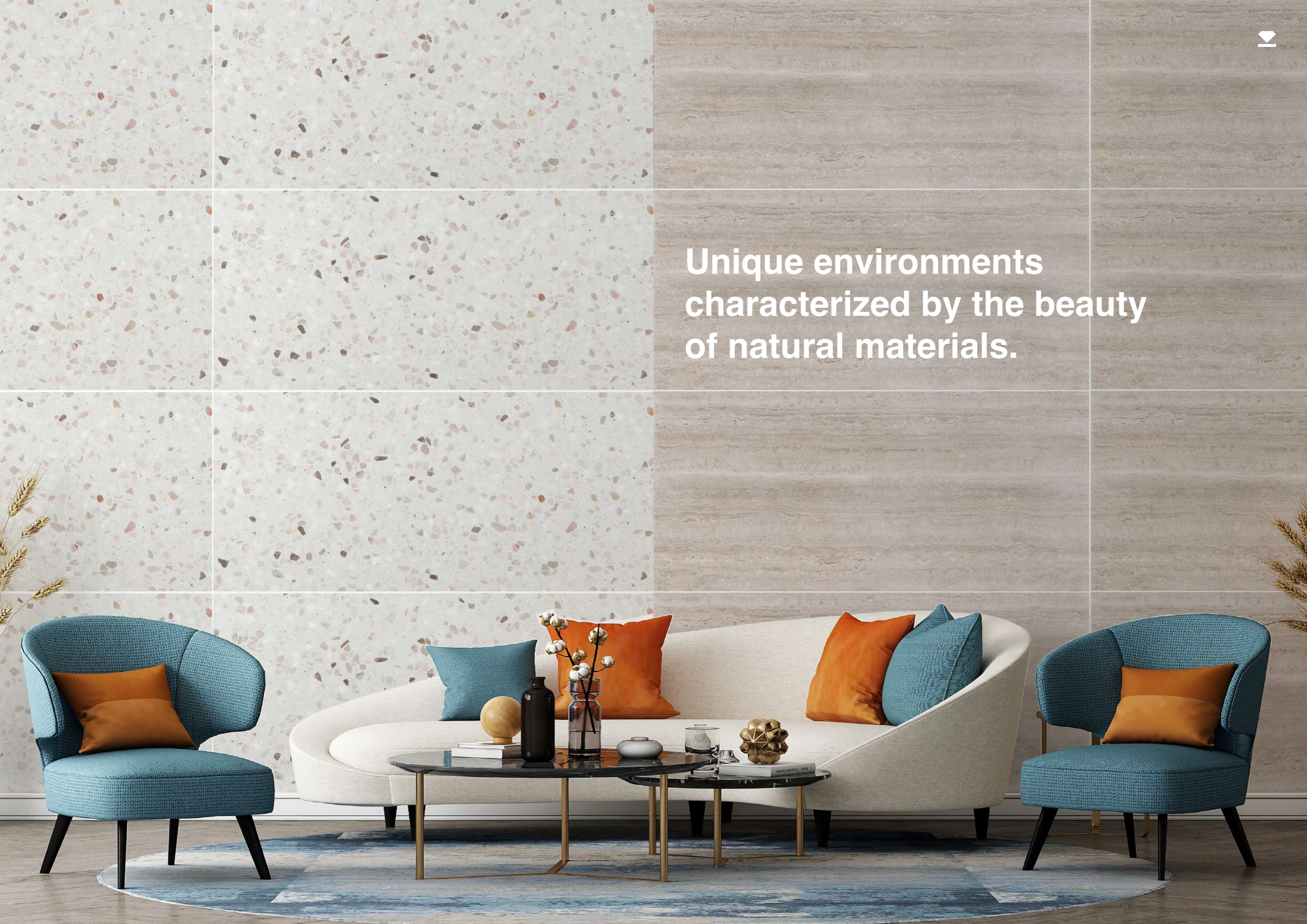
EasyAir is made with the innovative patented GammaStone Air system, which is the main strength of our products, created using innovative technologies that make them extremely lightweight. Our panels exhibit high resistance to impact, bending, and compression, and they stand out for their thermal and acoustic efficiency. EasyAir can be manufactured using natural stone and UHPC (Ultra High-Performance Concrete), an advanced solution that ensures high-performance standards and unparalleled aesthetic beauty.

Panels Structure





Unique environments
characterized by the beauty
of natural materials.



Natural Air

GammaStone Natural Air in Roman Travertine is our customized solution for EasyAir, allowing the creation of natural stone panels for both indoors and outdoors in any type of building. This solution can be customized with Travertine bestowing buildings with timeless beauty that exudes grandeur and sophisticatio.



Roman Travertine - Honed



Natural Air. Roman Travertine - Honed. Panels: 60x120 cm (24x48")



UHPC Plus Air

GammaStone UHPC Plus Air is an “Ultra High-Performance Concrete” panel tailored to the needs of the EasyAir system. Our UHPC boasts extremely high strength and remarkable flexibility against all types of natural stress. For EasyAir, we have selected four UHPC Plain and four UHPC Grain to make any structure unique and inimitable.

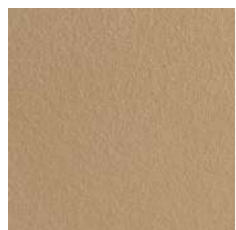
▼ UHPC Plus Air - Plain



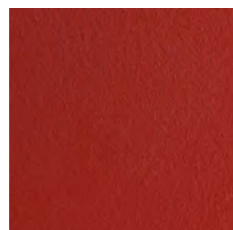
Bianco - Honed



Grigio - Honed

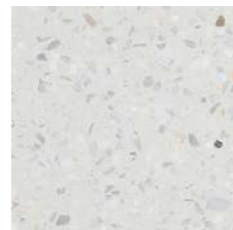


Sabbia - Honed



Rosso Mattone - Honed

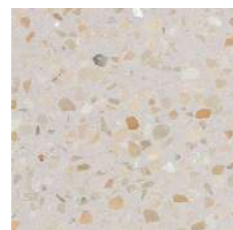
▼ UHPC Plus Air - Grain



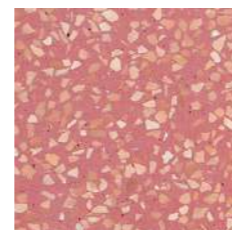
Bianco - Honed



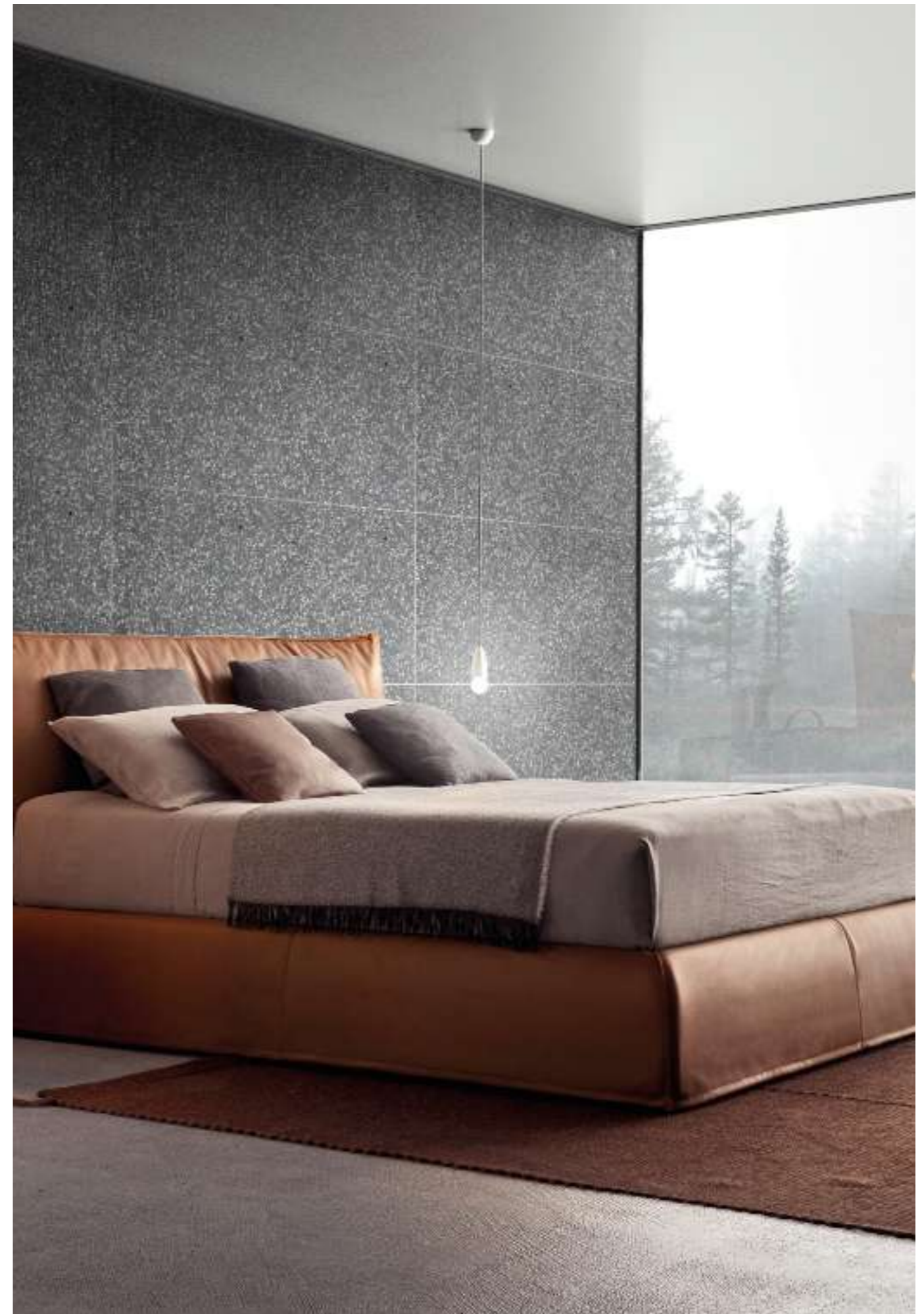
Urban Gray - Honed



Beige - Honed



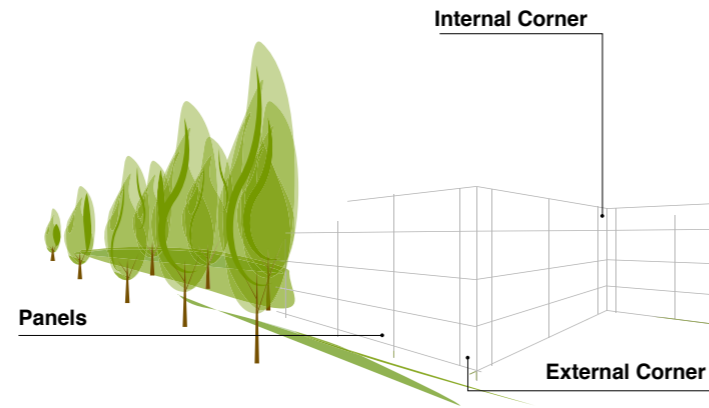
Rosso - Honed



UHPC Plus Air. Grain Urban Gray - Honed. Panels: 60x120 cm (24x48")

Sizes and Monolithic Elements

EasyAir panels are versatile and flexible for various applications, thanks to the numerous standard sizes we produce, including angular variants of monolithic architectural elements, to meet a wide range of aesthetic and functional buildings requirements.



Natural Air



Travertine

UHPC Plus Air - Plain



Bianco



Grigio



Sabbia



Rosso Mattone

UHPC Air - Grain



Bianco



Urban Gray

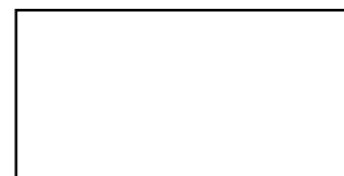
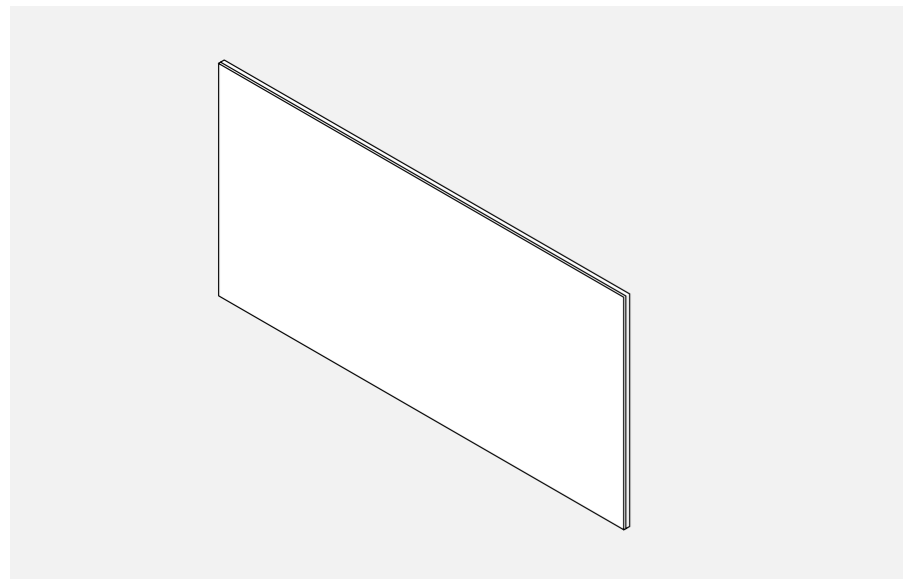


Beige



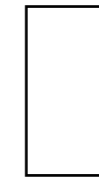
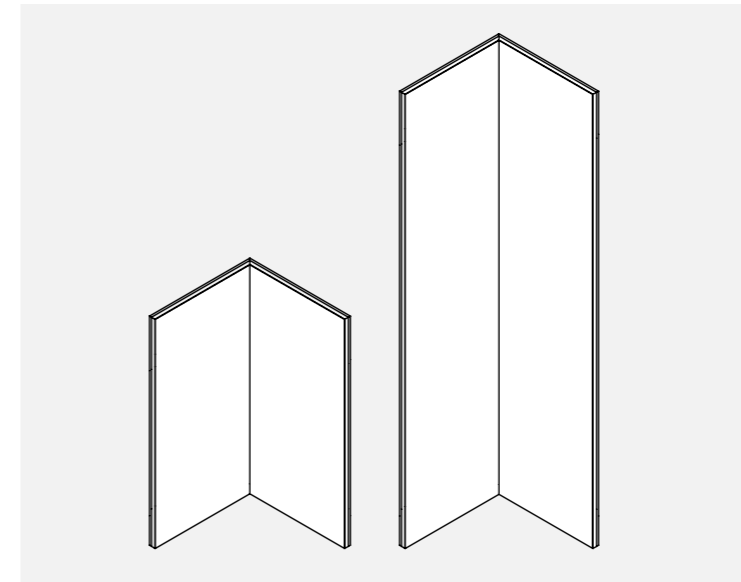
Rosso

Panel



60x120 cm (24x48")

Internal Corners



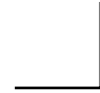
30x60 cm (12x24")



30x120cm (12x48")

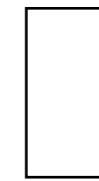
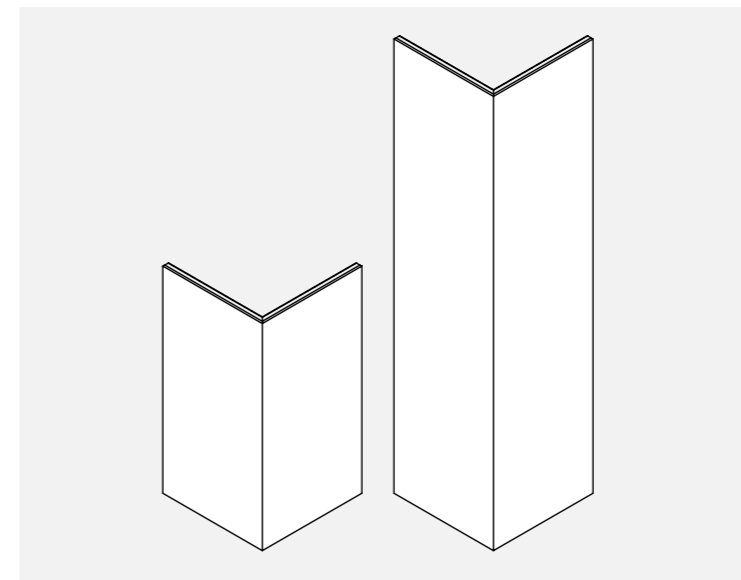


30x30cm (12x12")

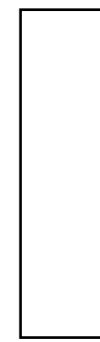


30x30cm (12x12")

External Corners



30x60 cm (12x24")



30x120cm (12x48")



30x30cm (12x12")



30x30cm (12x12")

Panel thickness and weight

Natural Air

Thickness: 17 mm (3/4")
Weight: 25 kg/m² (5.1 lb/sqft)



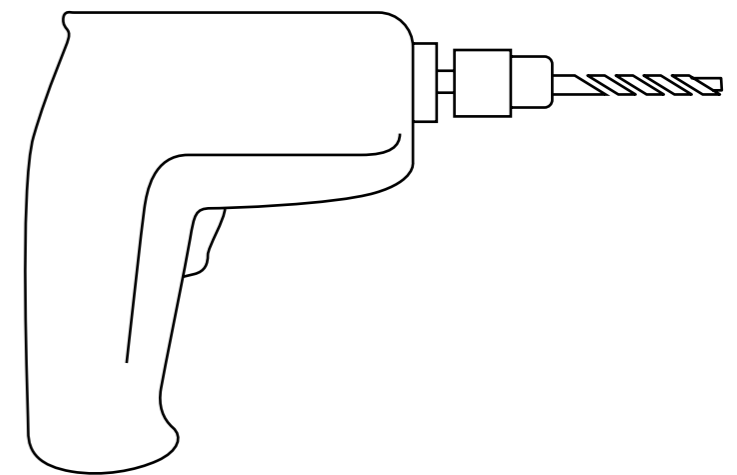
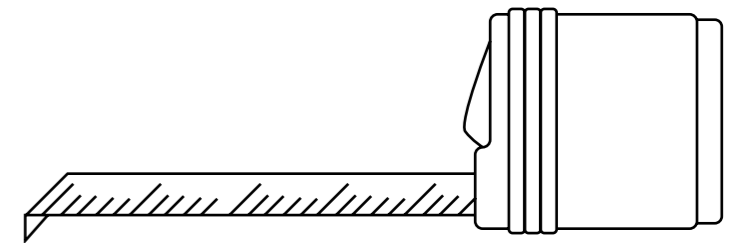
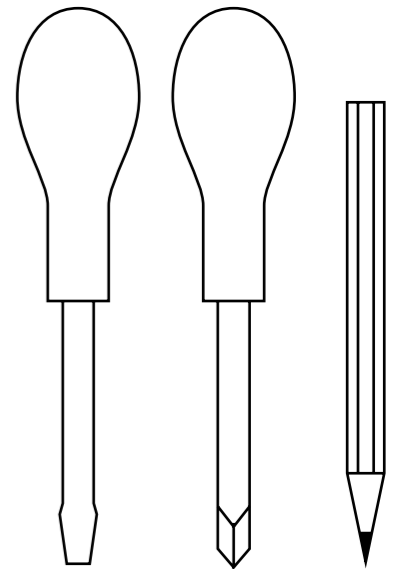
UHPC Plus Air

Thickness: 19 mm (3/4")
Weight: 24 kg/m² (4.9 lb/sqft)





Installation Systems



Outdoor Installation System

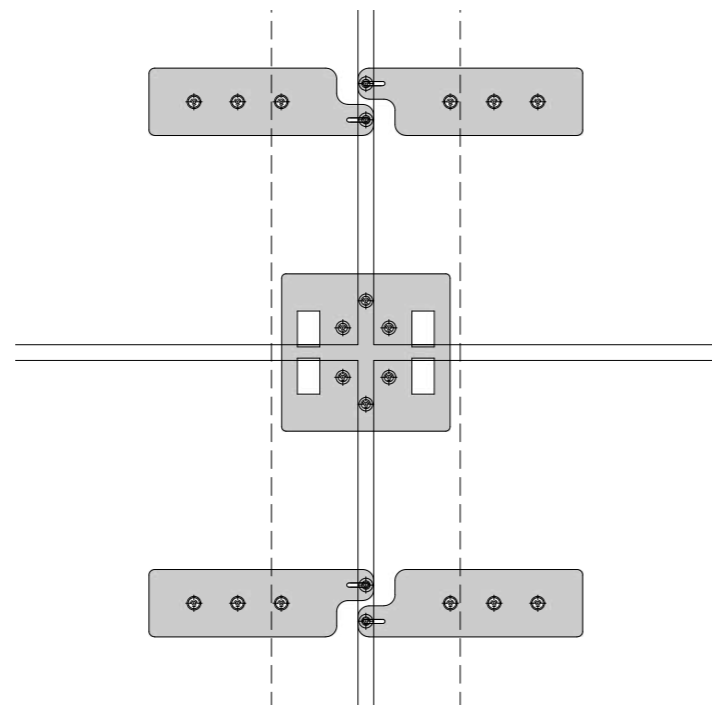
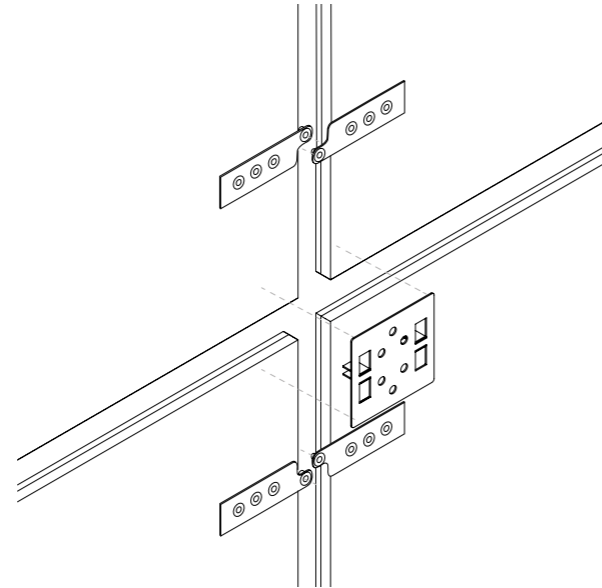
TYPICAL DETAILS



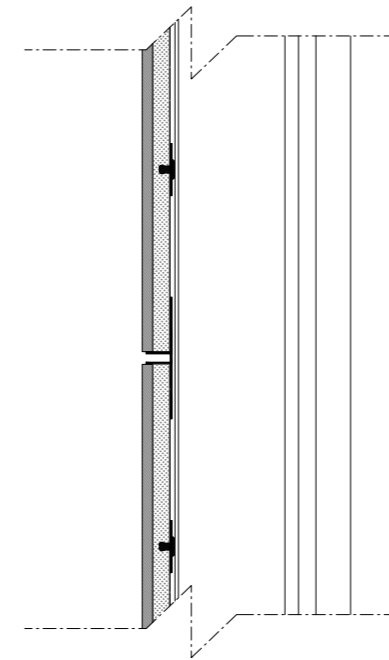
Thanks to the performance of our system, EasyAir is highly versatile and it is suitable for a wide range of applications. The external installation system includes a plate to connect the panel to the floor and another to link the panels together.



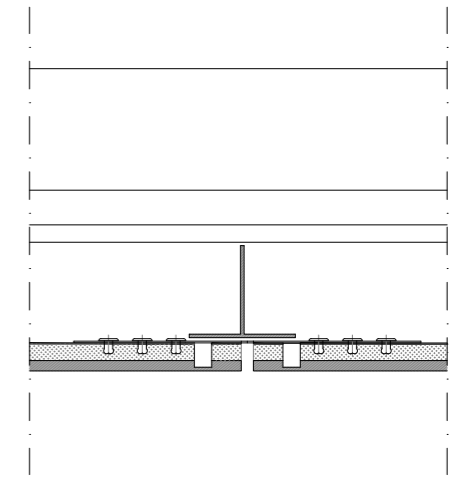
▲ EasyClip - outdoor



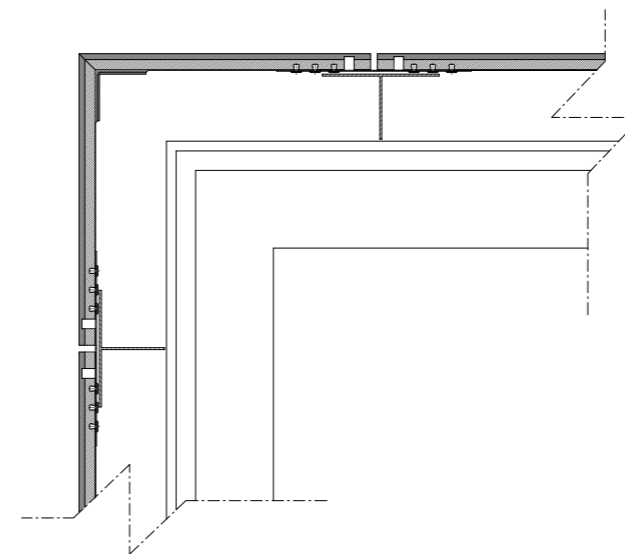
▼ Fixing System



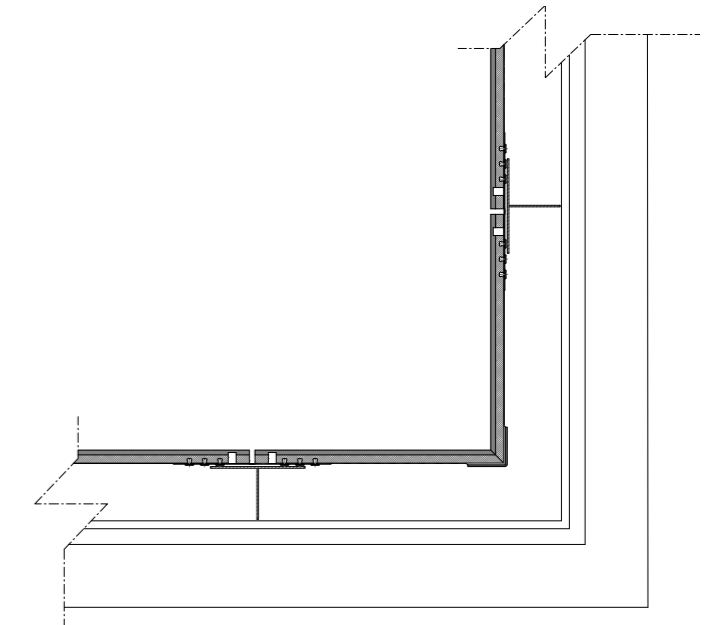
▲ Vertical Section



▲ Horizontal Section



▲ External Corner



▲ Internal Corner

Indoor Installation System

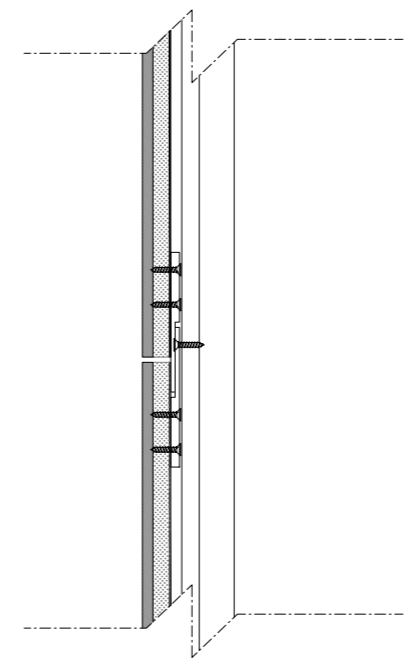
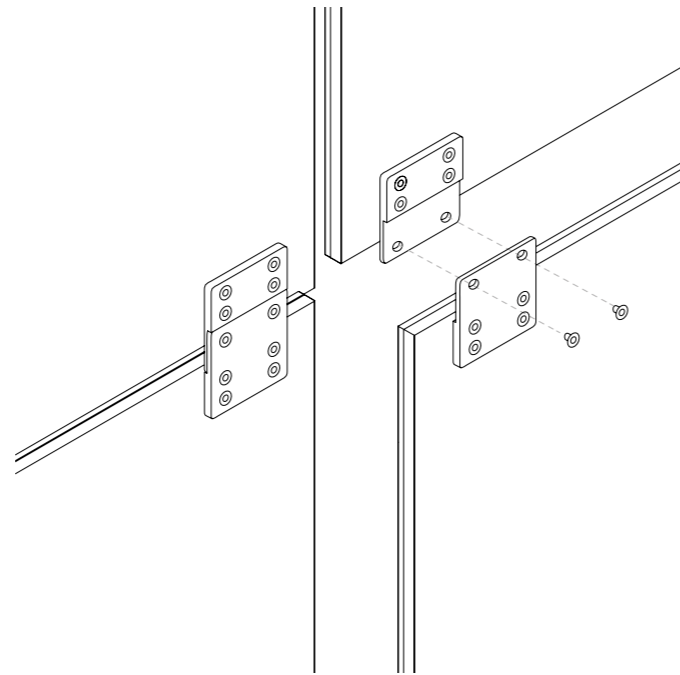
TYPICAL DETAILS



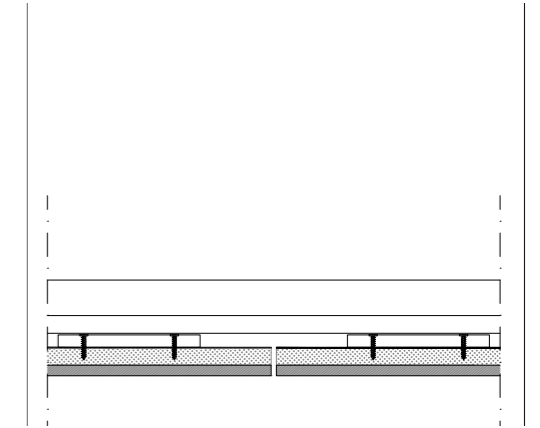
EasyAir is extremely versatile and is also well-suited for indoor spaces. The indoor installation system features a single plate that attaches directly to the wall using high-strength screws, providing both durability and aesthetic appeal.



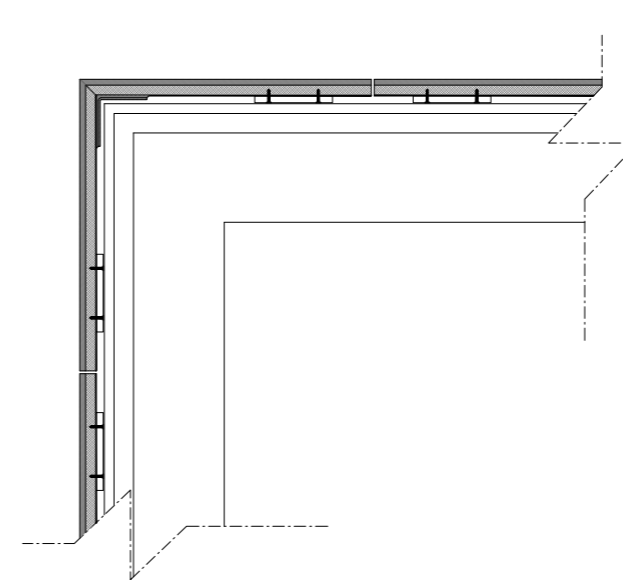
▲ EasyClip - Indoor



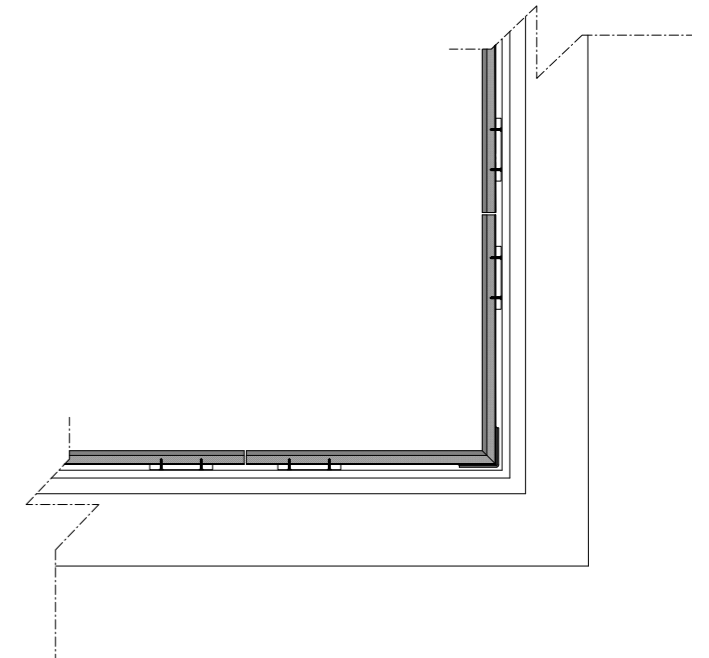
▲ Vertical Section



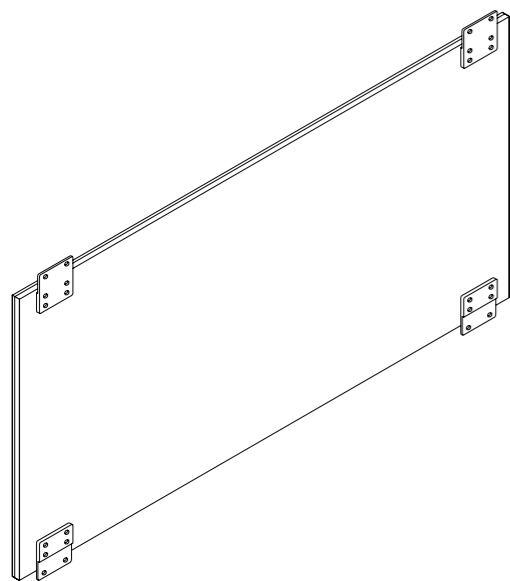
▲ Horizontal Section



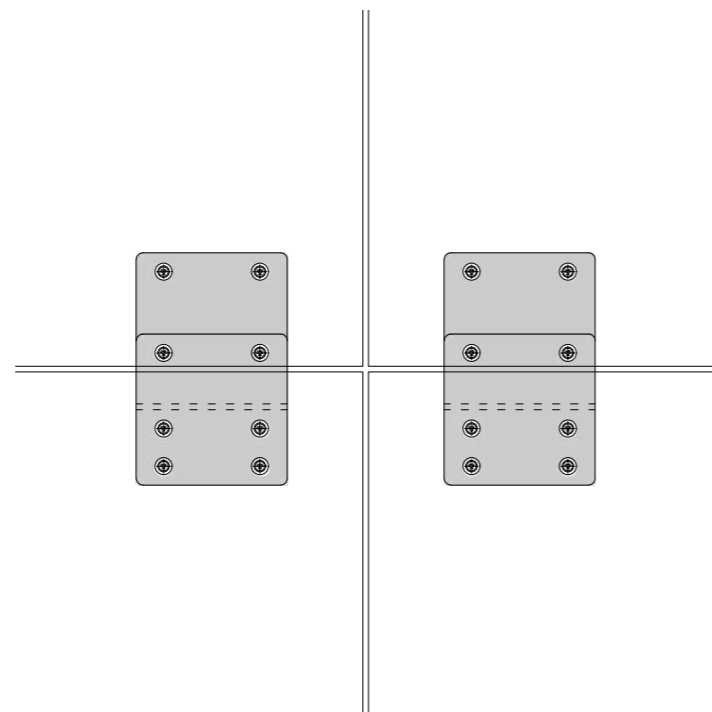
▲ External Corner



▲ Internal Corner



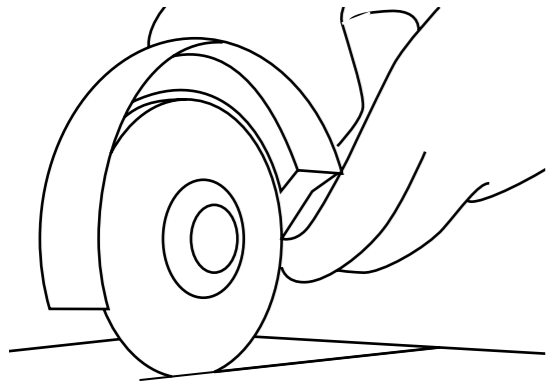
▼ Fixing System



Processings. Manual Cutting

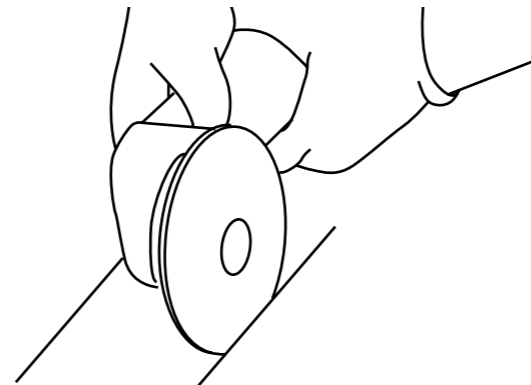
The Advantages of this type of cutting consist in the manufacturing facility and in the possibility of making cuts during the installation phase.

CUT TO SIZE



▼ 1

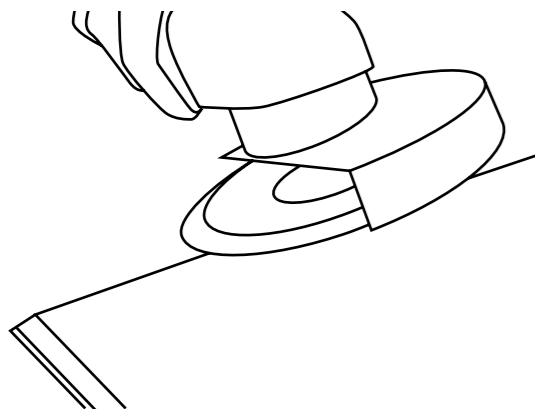
Cut the back of the panel using a steel cutting disc.



▼ 2

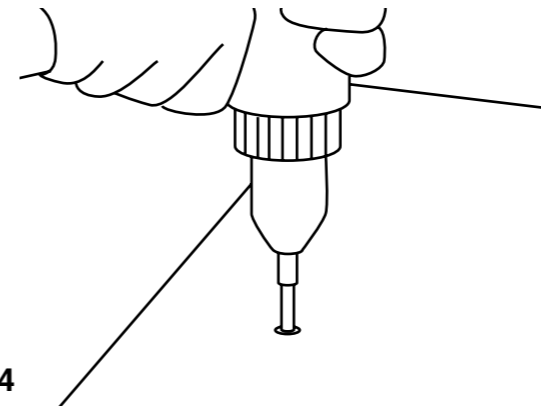
Cut the surface using a diamond blade mounted on an electric manual grinder.

Caution: It is necessary to proceed with high rotation speeds (> 10000 rpm) and low feed rates (<1m / min). Depending on the type of disc and on the length of the cut it may be necessary to water-cool the disc itself.



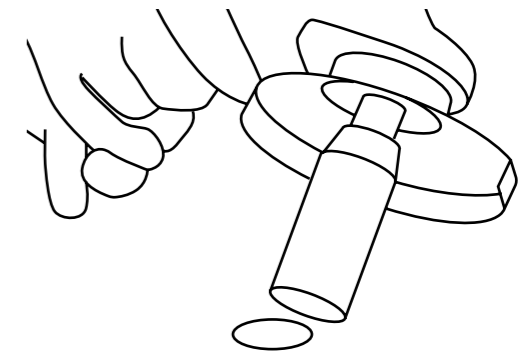
► 3 Fettle steel using a grinder.

DRILLING



▼ 4

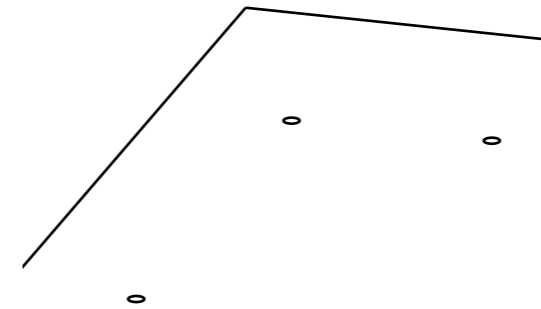
For manual drilling you can use tungsten bits up to a 10 mm diameter mounted on electric drills or cordless screwdrivers.



▼ 4.1

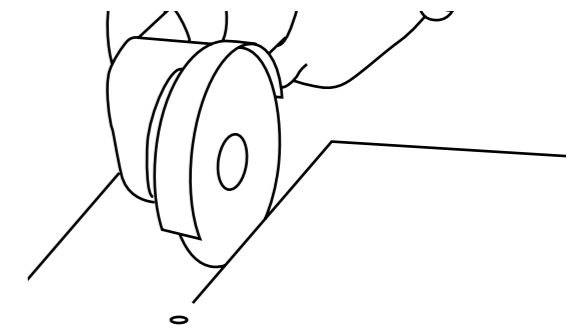
As an alternative it is possible to use cup cutters (or core drills) mounted on grinders, electric drills or cordless screwdrivers.

INTERNAL CUT

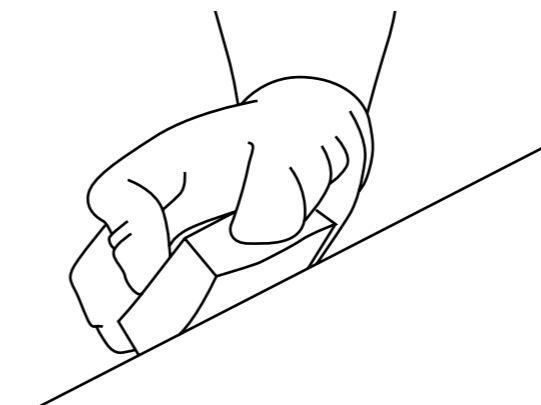


▼ 5

For the realization of internal and "L" cuts it is recommended to round the opening vertices using bits with a radius of at least 5 mm to reduce the risk of breakage. Then proceed with the cutting using diamond discs, making sure to stop the feed once the previously created hole has been reached. Follow the instructions mentioned earlier for drilling and cutting with diamond discs.



EDGES FINISH



► 6

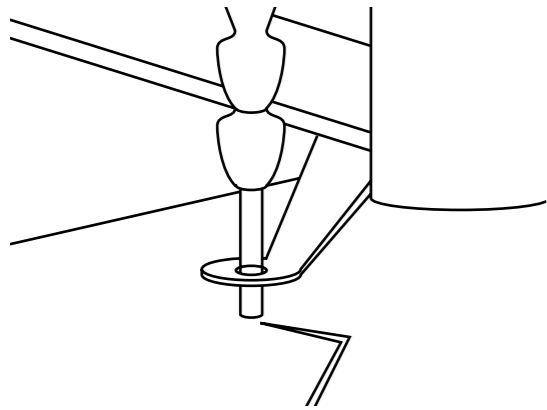
The edges can be finished manually using diamond sponges or sandpaper. A light pass on the side of the panel can achieve a chamfered edge effect, or with repeated passes, a beveled effect.



Processings. Automatic Machines

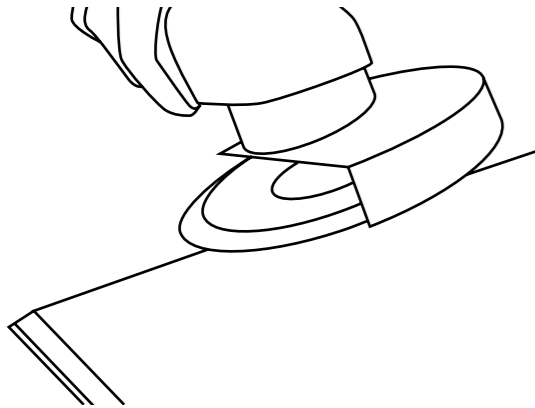
The last generation machines are capable of increasing the quality standards of products, reducing the environmental impact.

CUT TO SIZE

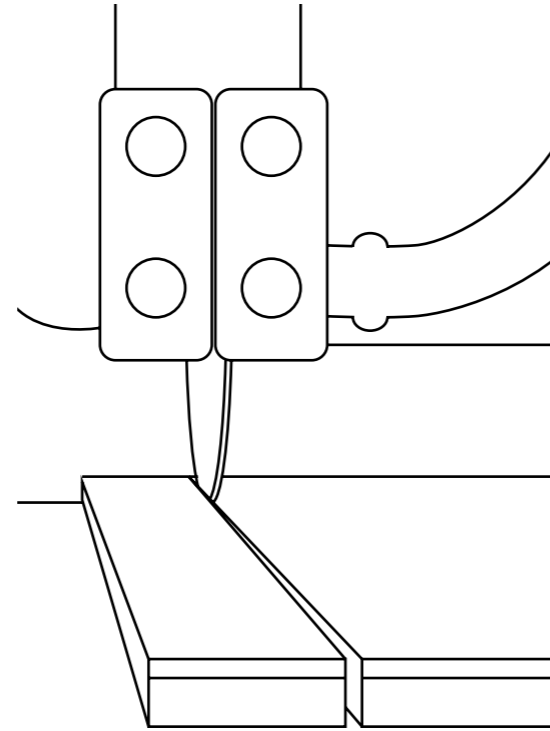


▼ 1

EasyAir, in all its variants, can also be cut using water-jet machines. We recommend an operating speed between 2 and 3 m / min.



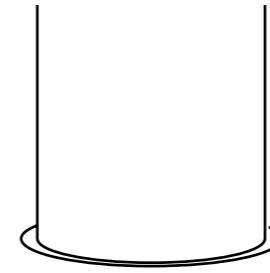
▼ 2 Fettle steel with a grinder.



▼ 1.1

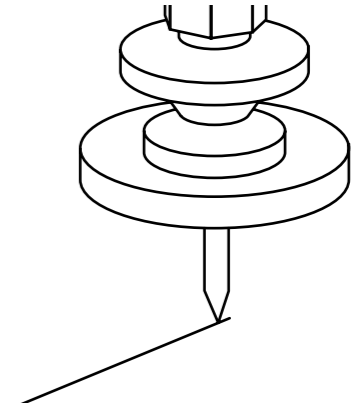
EasyAir, in all its variants, can also be cut using diamond discs. The discs should be designed for marble or UHPC and be in good conditions. It is recommended to proceed with high rotation speeds (> 2000 rpm) and a feed speed between 0.5 and 1 m / min. Depending on the type of disc and on the length of the cut it may be necessary to water-cool the disc itself. It is also recommended to reduce the rotational speed when the tool enters and exits the panel.

DRILLING



▼ 3

EasyAir, in all its variants, can also be drilled using CNC machines. A preliminary hole should be made using a diamond point, then, if necessary, use a milling machine to enlarge the hole to the required dimensions. Use a bit with a diameter between 4 and 8 mm. The operating speed is 4 mm / min, with a mandrel rotation of 900 rpm. When using these tools, it is advisable to: cool the point of contact with water, start drilling at a low rotational speed, adjusting the pressure based on the resistance offered by the type of EasyAir being worked on.

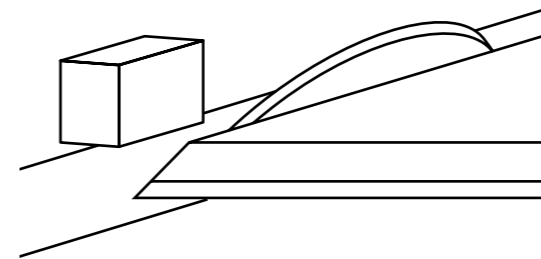


▼ 3.1

Easy Air, in all its variants, can also be drilled using water-jet machines. Water-jet cutting allows for holes of smaller diameter compared to those achievable with CNC machines. The operating speed should be between 2 and 3 m / min.

► 4

To make a 45° cut, you can use diamond discs inclined at 45°. In this way it is possible to create a corner with two slabs of EasyAir, in all its variants. The new edge should then be chamfered. Numerous types of edge finishing can be obtained using different wheels. The operating speed should be tested beforehand.



Certifications



GammaStone holds ISO 9001 certification issued by IMQ, the most important Italian certification body and a European leader in safety, quality, and sustainability testing and laboratory assessments.

Our products represent a combination of visual impeccability, technical excellence, and design quality. Their reliability and aesthetic perfection are accredited by significant international certifications.

All GammaStone Air panels have undergone rigorous testing required by the EOTA (European Organisation for Technical Approvals) following the ETAG guidelines and conducted by the Giordano Institute. They have proven to be extremely safe and suitable for application even in extreme weather conditions.



Natural Air

FIRE TEST	DESCRIPTION	VALUE
UNI 9177:2008 UNI 8457:2010 UNI 9174:2010	Reaction to fire	Classe 1
UNI EN 13501-1-2009 UNI EN 13823:2010 NI EN ISO 11925-2:2005	Fire classification	B - s1, d0
ASTM E 84 (UL 723)	Surface burning characteristics	Class A
ASTM E136	Behavior of materials at 750°C (1382°F)	Non-combustible
CAN/ULC-S114 ASTM E1530:2006	Test for Non-Combustibility	Non-combustible
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



UHPC Plus Air

AMERICAN TESTS	DESCRIPTION	VALUE
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) Initial Failure	1.043 psi
	Flexural Strength Evaluation (Negative Windload - Dry Condition) Ultimate Failure	2.932 psi
	Flexural Strength Evaluation (Positive Windload - Dry Condition)	2.787 psi
	Flexural Strength Evaluation (Negative Windload - Wet Condition)	891 psi
	Flexural Strength Evaluation (Positive Windload - Wet Condition)	2.903 ps
ASTM C482-02	Bond Strength Mitered Corner Joint Assembly Shear Loading Evaluation	992,4 lb
ASTM C297/C297M-16	Flatwise Tensile Bond Strength Evaluation (Fiberglass Mesh)	359 psi
	Flatwise Tensile Bond Strength Evaluation (Foam Core)	190 psi
	Flatwise Tensile Bond Strength Evaluation (Steel)	57,6 psi

EUROPEAN TESTS	DESCRIPTION	VALUE
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/mm²
UNI EN ISO 10545-4:2012	Breaking strength Heat-Rain 80 cycles + Heat-Cold 5 cycles	5.0± 0.5 N/mm²
Rif. Test Certimac POI	Determination of bond strength by pull-off	1.15 ± 0.26 N/mm²
Rif. Test Certimac POI	Bond strength after Heat-Rain 80 cycles + Heat-Cold 5 cycles	1.01 ± 0.31 N/mm²
Rif. Test Certimac POI	Limit of detachment after water immersion (21 days)	0.27 ± 0.17 N/mm²
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	3700 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

FIRE TEST	DESCRIPTION	VALUE
UNI 9177:2008		
UNI 8457:2010	Reaction to fire	Classe 1
UNI 9174:2010		
UNI EN 13501-1-2009		
UNI EN 13823:2010	Fire classification	B - s1, d0
NI EN ISO 11925-2:2005		
ASTM E 84 (UL 723)	Surface burning characteristics	Class A
ASTM E136	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

EUROPEAN TESTS	DESCRIPTION	VALUE
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/mm² 2.9 ÷ 3.9 N/mm²
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
ETAG 034-1:2012	Wind depression load resistance	3700 Pa
MED 2014/90/EU	Determination of calorific value	Passed
MED 2014/90/EU	Determination of the limited ability to propagate the flame	Passed

Code List

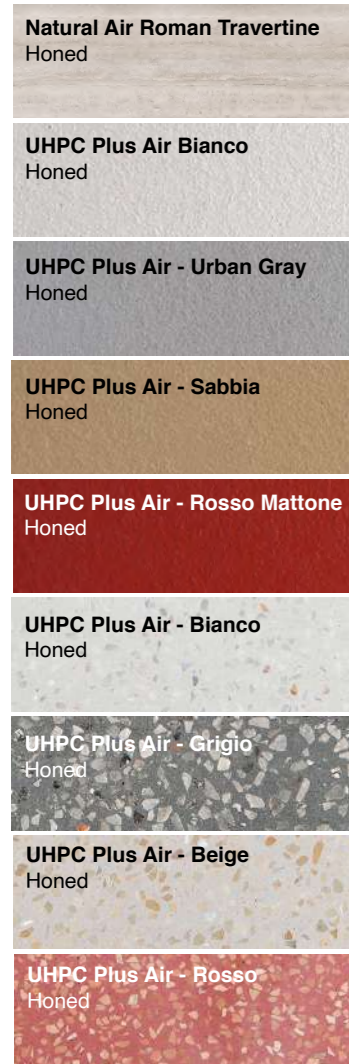
Packaging



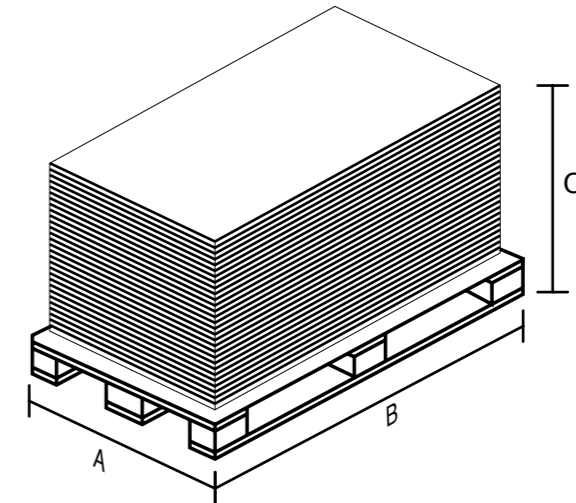
NOMINAL SIZES AND WORK SIZES

	Panel	External Corner	External Corner	Internal Corner	Internal Corner
Nominal Size	60x120 cm	30x30x120 cm	30x30x60 cm	30x30x120 cm	30x30x60 cm
Inch	24x48"	12x12x48"	12x12x24"	12x12x48"	12x12x24"
mm	(610x1219 mm)	(305x305x1219 mm)	(305x305x610 mm)	(305x305x1219 mm)	(305x305x610 mm)

	NOMINAL SIZE	WORK SIZE	THICKNESS	TYPE	DIMENSION	PCS	Sqm	Kg
mm	60x120	596x1200 mm	19 mm	Cassa	A 800 - B 1200 - C 890	30	21,6 m ²	450 Kg
inch	60x120	24x48"	3/4"	Cassa	A 31,5" - B 47,25" - C 35"	30	232,5 ft ²	992 lb



	Panel 60x120 cm	External Corner 30x30x120 cm	Internal Corner 30x30x120 cm	External Corner 30x30x60 cm	Internal Corner 30x30x60 cm
Natural Air Roman Travertine Honed	E60120NTF	E3030120NTAE	E3030120NTAI	E3060120NTAE	E3060120NTAI
UHPC Plus Air Bianco Honed	E60120UPBF	E3030120UPBAE	E3030120UPBAI	E3060120UPBAE	E3060120UPBAI
UHPC Plus Air - Urban Gray Honed	E60120UPUF	E3030120UPUAE	E3030120UPUAI	E3060120UPUAE	E3060120UPUAI
UHPC Plus Air - Sabbia Honed	E60120UPSF	E3030120UPSAE	E3030120UPSAI	E3060120UPSAE	E3060120UPSAI
UHPC Plus Air - Rosso Mattone Honed	E60120UPRF	E3030120UPRAE	E3030120UPRAI	E3060120UPRAE	E3060120UPRAI
UHPC Plus Air - Bianco Honed	E60120UGBF	E3030120UGBAE	E3030120UGBAI	E3060120UGBAE	E3060120UGBAI
UHPC Plus Air - Grigio Honed	E60120UGGF	E3030120UGGAE	E3030120UGGAI	E3060120UGGAE	E3060120UGGAI
UHPC Plus Air - Beige Honed	E60120UGBEF	E3030120UGBEAE	E3030120UGBEAI	E3060120UGBEAE	E3060120UGBEAI
UHPC Plus Air - Rosso Honed	E60120UGRF	E3030120UGRAE	E3030120UGRAI	E3060120UGRAE	E3060120UGRAI





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