EasyAir

The Cladding Evolution

GammaStone

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

UHPC Plus Air. Grain Urban Gray - Honed. Panels 24x48” (610x1219 mm) and Internal corners 12x12x24” (305x305x610 mm)

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 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.

Natural Air. Roman Travertine - Honed. Panels 24x48" (610x1219 mm)

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.

Standard Size

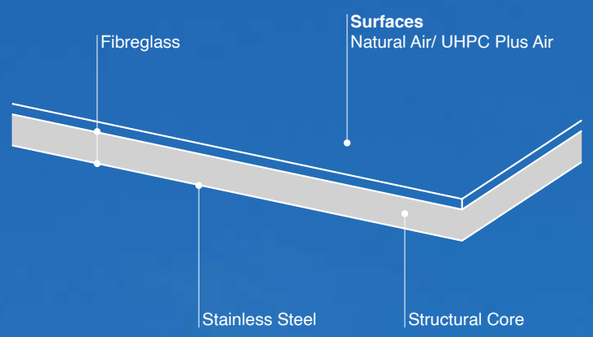
Easy to install

Extreme Lightness

Bending Resistant

Resistant to thermal shocks

Panels Structure



Unique environments characterized by the beauty of natural materials.

UHPC Grain Bianco - Honed. Panels 24x48” (610x1219 mm) and **Roman Travertine** - Honed. Panels 24x48” (610x1219 mm)

Natural Air

GammaStone Natural Air in Travertine or Limestone 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 bestows buildings with timeless beauty that exudes grandeur and sophisticatio.

Roman Travertine
Origin: Europe

Limestone Beige
Origin: Europe

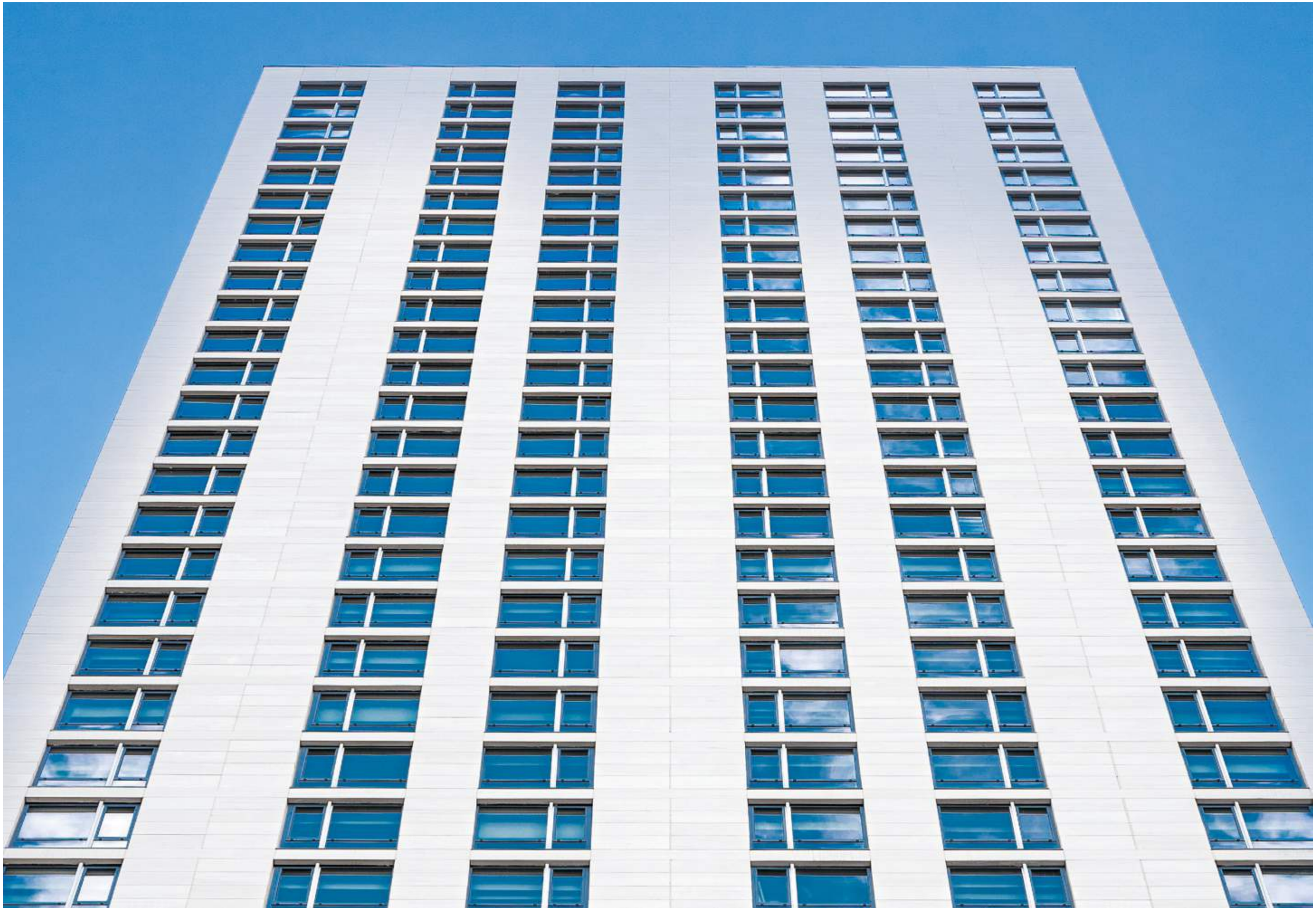
Limestone Gray
Origin: Europe

Finish: Honed
Any other Natural Stones and finishes on request

Panel Dimension: 24x48”

Panel Thickness: 43/64”

Roman Travertine - Honed. Panels 24x48” (610x1219 mm)



Limestone Beige - Honed. Panels 24x48” (610x1219 mm)

Limestone Gray - Honed. Panels 24x48” (610x1219 mm)

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

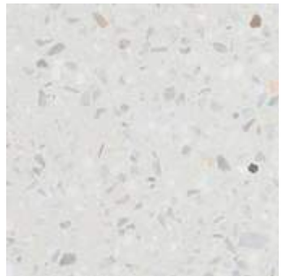
Bianco

Urban Gray

Sabbia

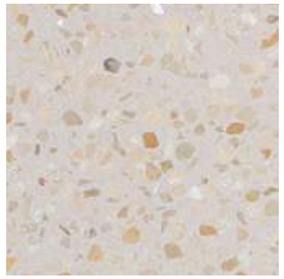
Terracotta

UHPC Plus Air - Grain



Bianco

Urban Gray



Beige

Terracotta

Finish: Honed
Any other colors and finishes on request

Panel Dimension: 24x48” (610x1219 mm)

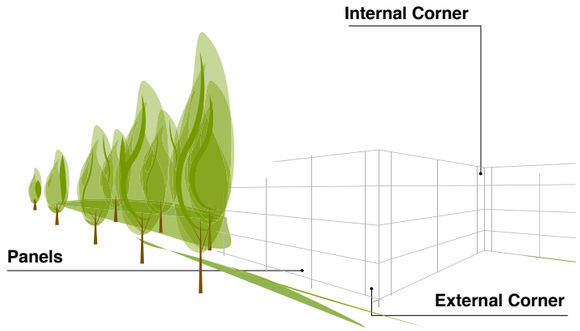
Panel Thickness: 3/4” (19 mm)

UHPC Grain Urban Gray - Honed. Panels 24x48” (610x1219 mm)

UHPC Plain Urban Gray- Honed. Panels 24x48” (610x1219 mm)

Size and Monolithic Elements

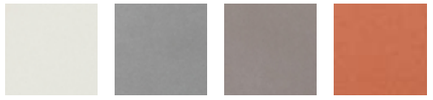
EasyAir panels are versatile and flexible for various applications, thanks to the numerous standard sizes we produce, including angular variants of monolithic architectural elements, to meet a wide range of aesthetic and functional buildings requirements.



Natural Air

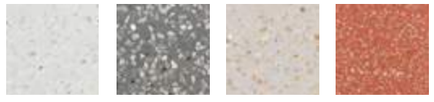
Roman Travertine | Limestone Beige | Limestone Gray

UHPC Plus Air - Plain



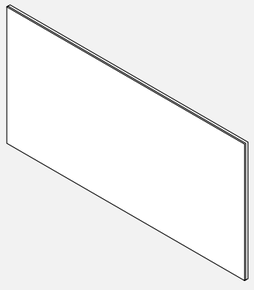
Bianco | Urban Gray | Sabbia | Terracotta

UHPC Plus Air - Grain



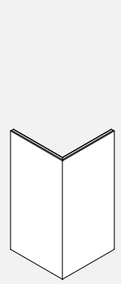
Bianco | Urban Gray | Beige | Terracotta

Panel

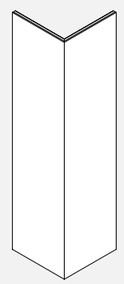


24x48” (610x1219 mm)

External Corners

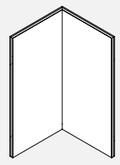


12x12x24” (305x305x610 mm)

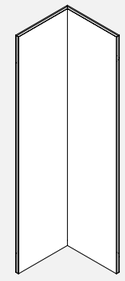


12x12x48” (305x305x1219 mm)

Internal Corners



12x12x24” (305x305x610 mm)



12x12x48” (305x305x1219 mm)

Panel thickness and weight

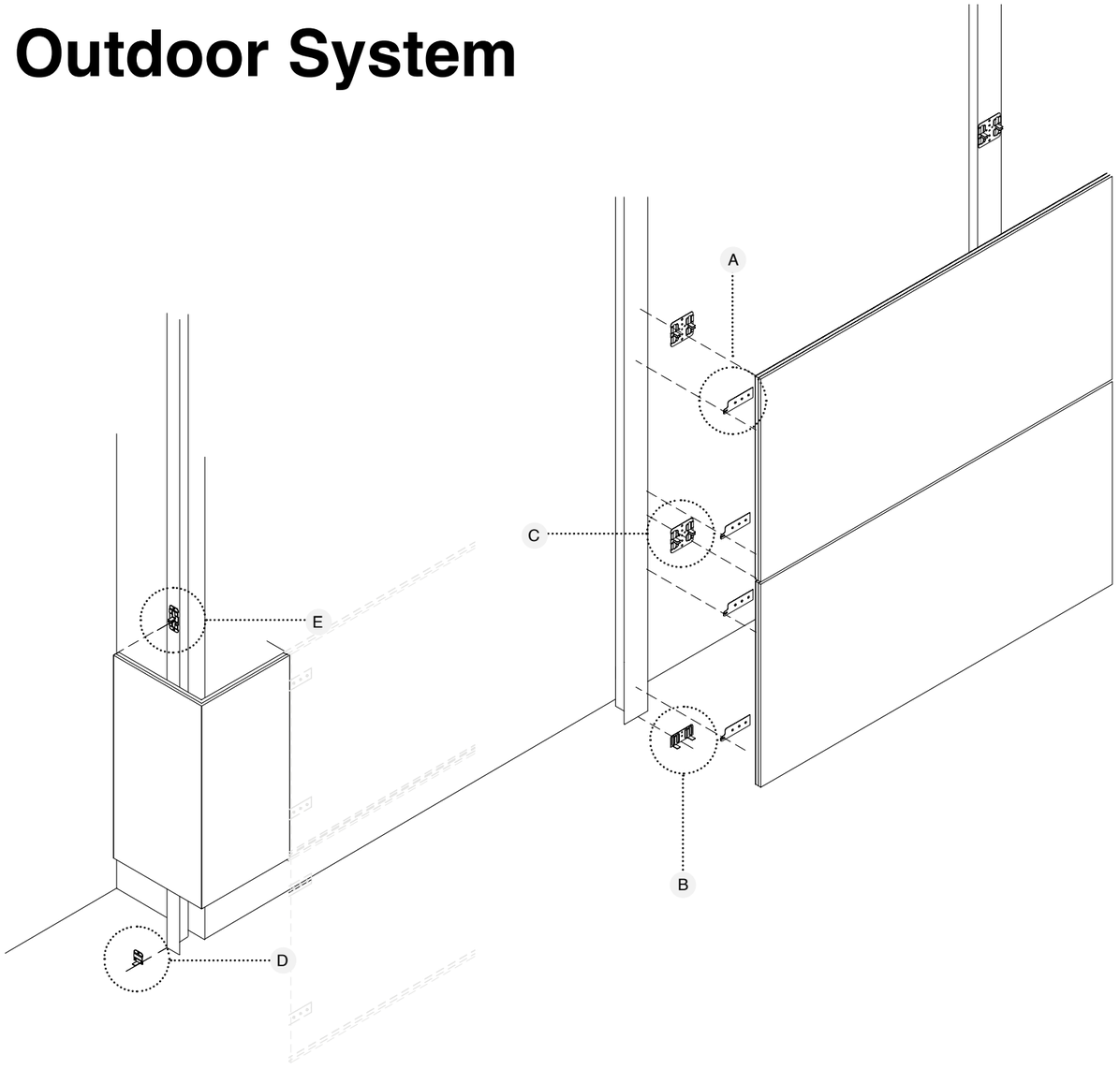
Natural Air
Thickness: **17 mm** (43/64”)
Weight: **25 kg/m²** (5.1 lb/sqft)

UHPC Plus Air
Thickness: **19 mm** (3/4”)
Weight: **24 kg/m²** (4.9 lb/sqft)

Outdoor System

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.

Outdoor System



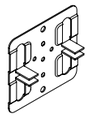
Kit Anchors

The external installation system includes a clip, four plates to connect the panel to the floor, and another to connect the panels together.

A EasyClip

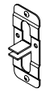
B Support plate
horizontal 2 flaps

C Support plate
horizontal 4 flaps

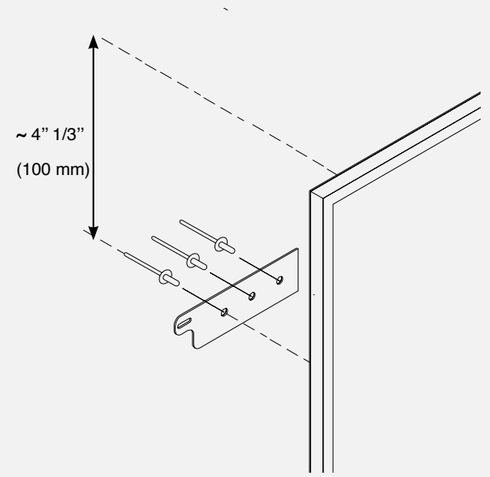


D Support plate
vertical 1 flap

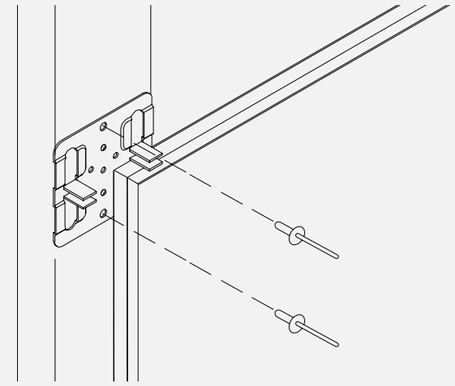
E Support plate
vertical 2 flaps



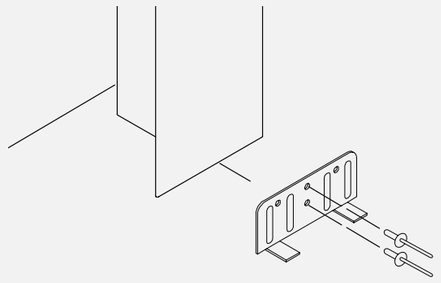
A - EasyClip

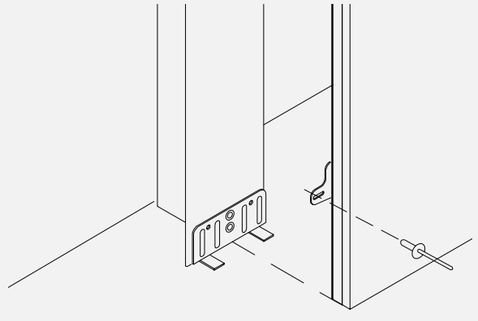


**C - Support plate
horizontal 4 flaps**

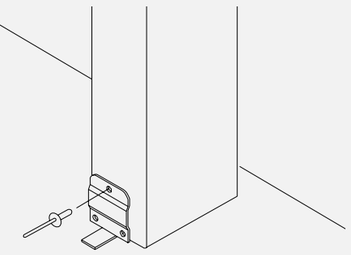


**B - Support plate
horizontal 2 flaps**

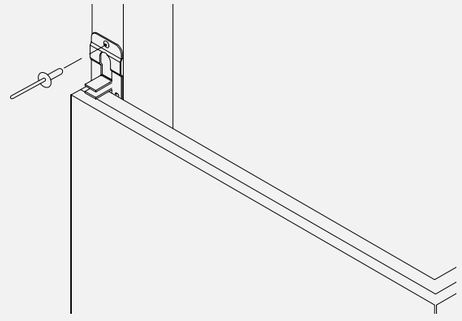




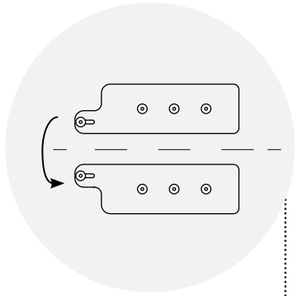
**D - Support plate
vertical 1 flap**

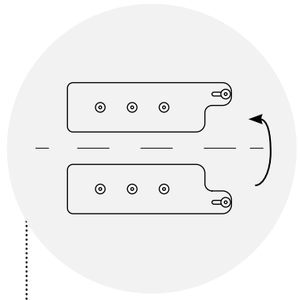


**E - Support plate
vertical 2 flaps**

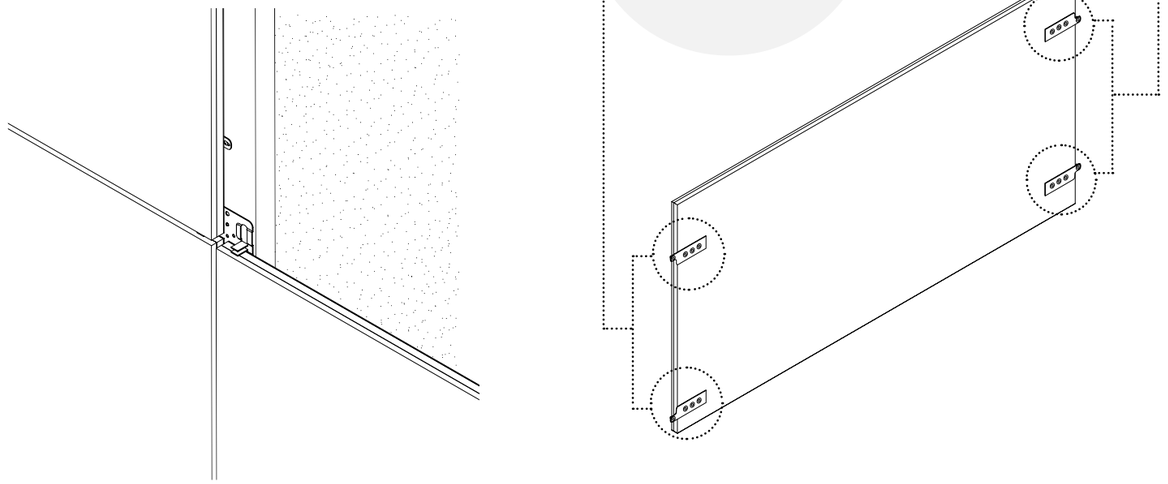


EasyClip

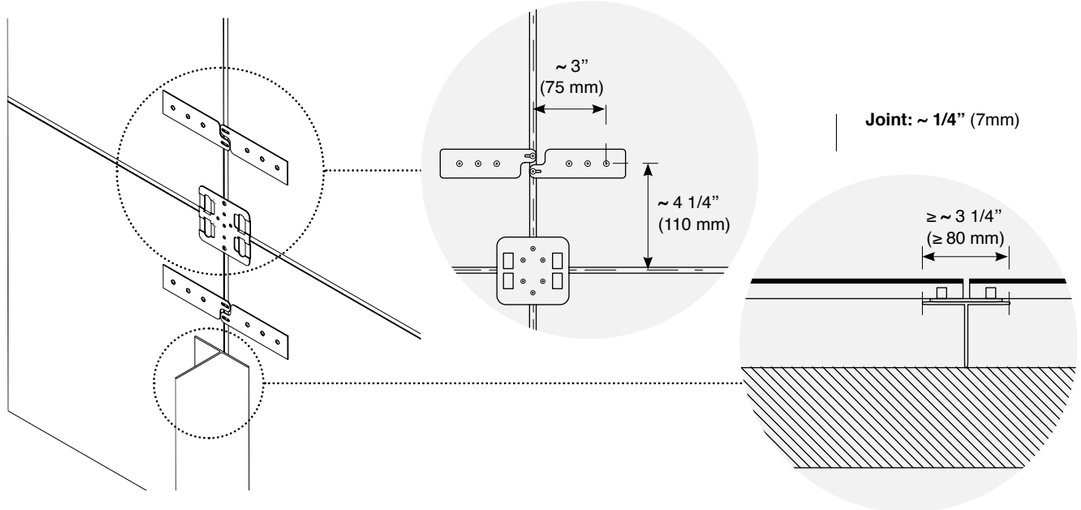




Front view

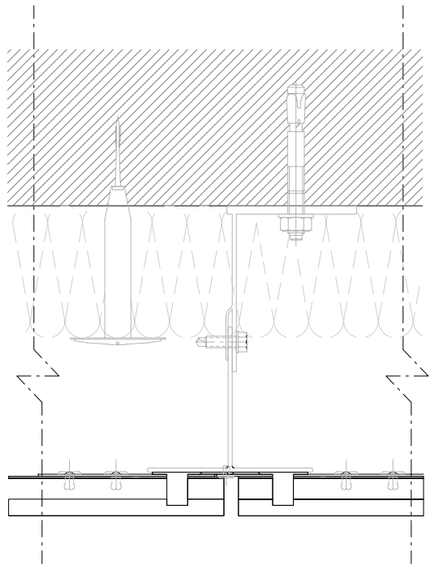


Back view

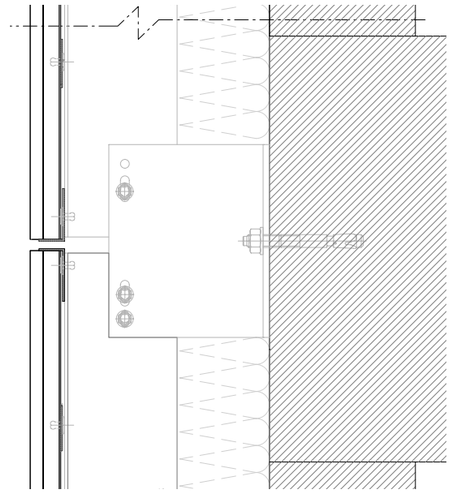


TYPICAL DETAILS

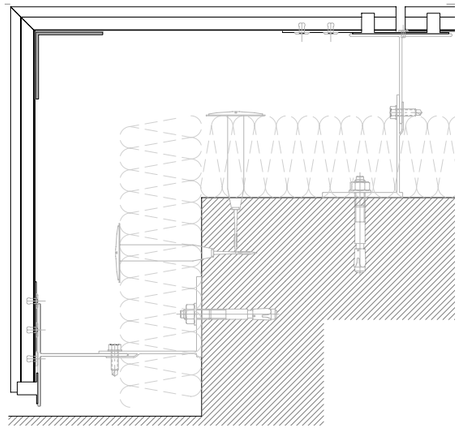
Horizontal Section



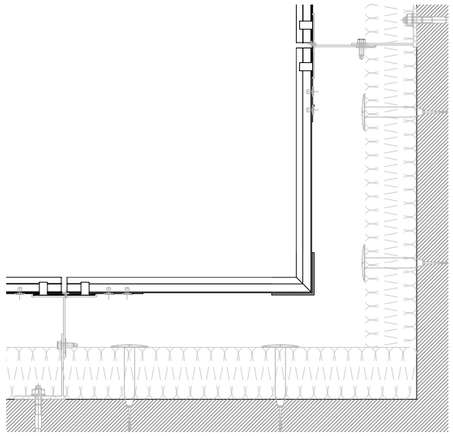
Vertical Section



External Corner

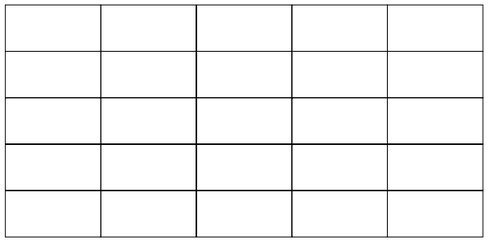


Internal Corner

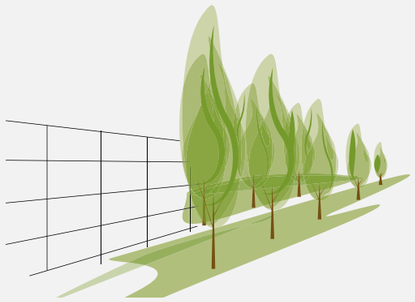


Installation guide

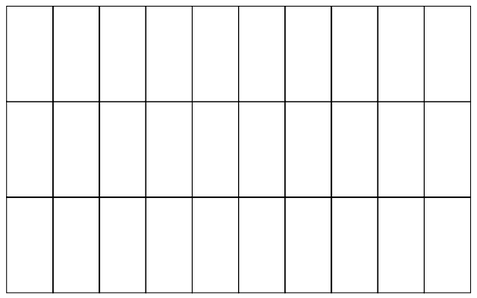
Horizontal



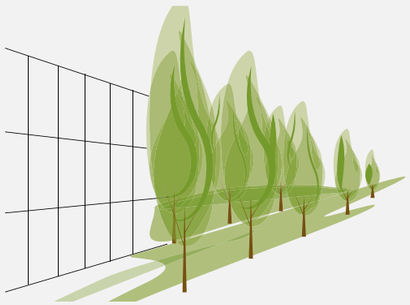
Example



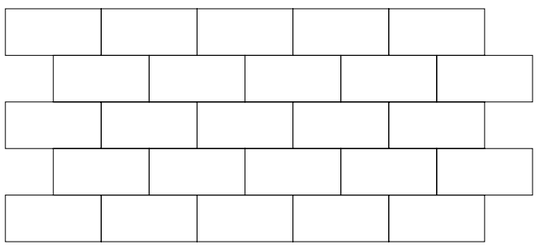
Vertical



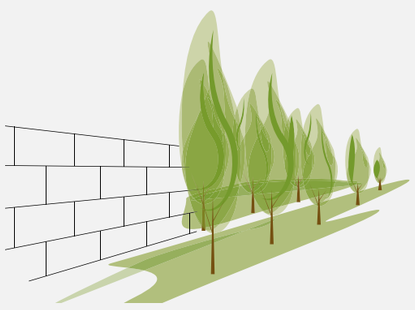
Example



Horizontal with vertical misaligned joints

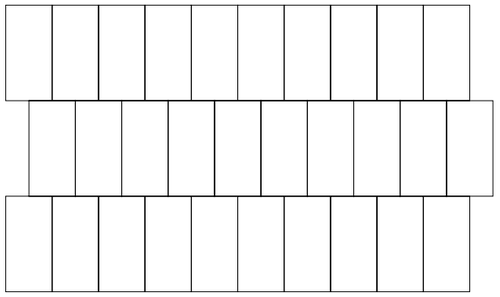


Example

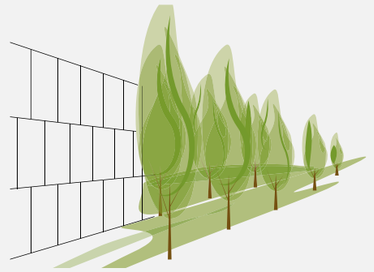


Vertical with misaligned joints

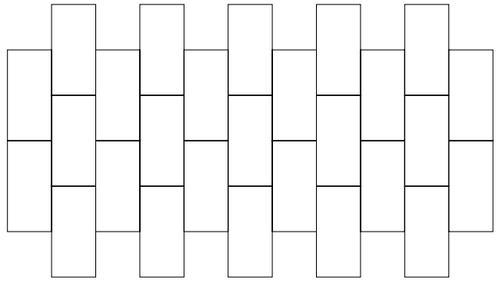
1



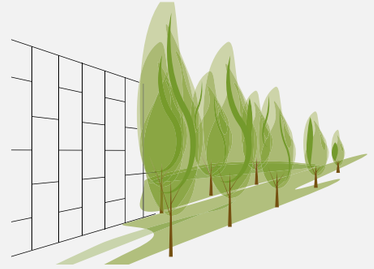
Example



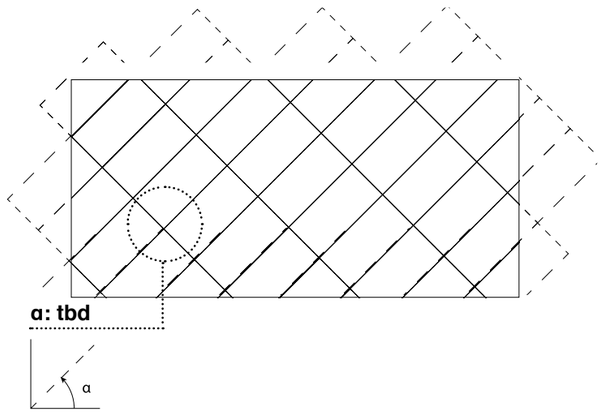
2



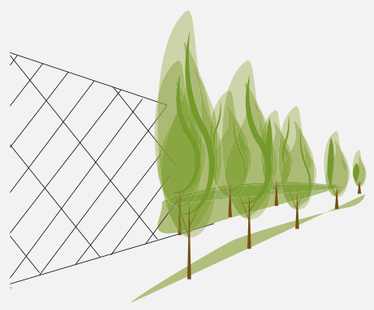
Example



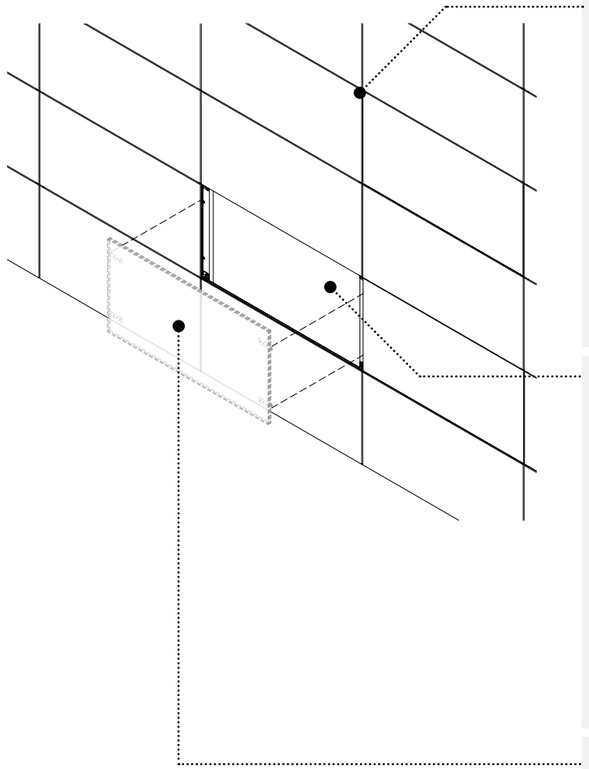
Diagonal



Example

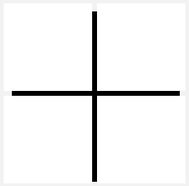


Advantages



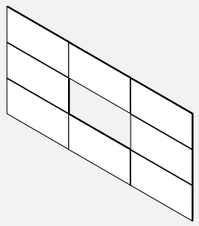
Perfect alignment of the joints

The alignment of the joints is given and fixed by the use of ‘support plates’ that uniquely define the joints themselves.



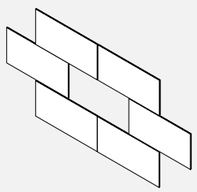
Non sequential installation

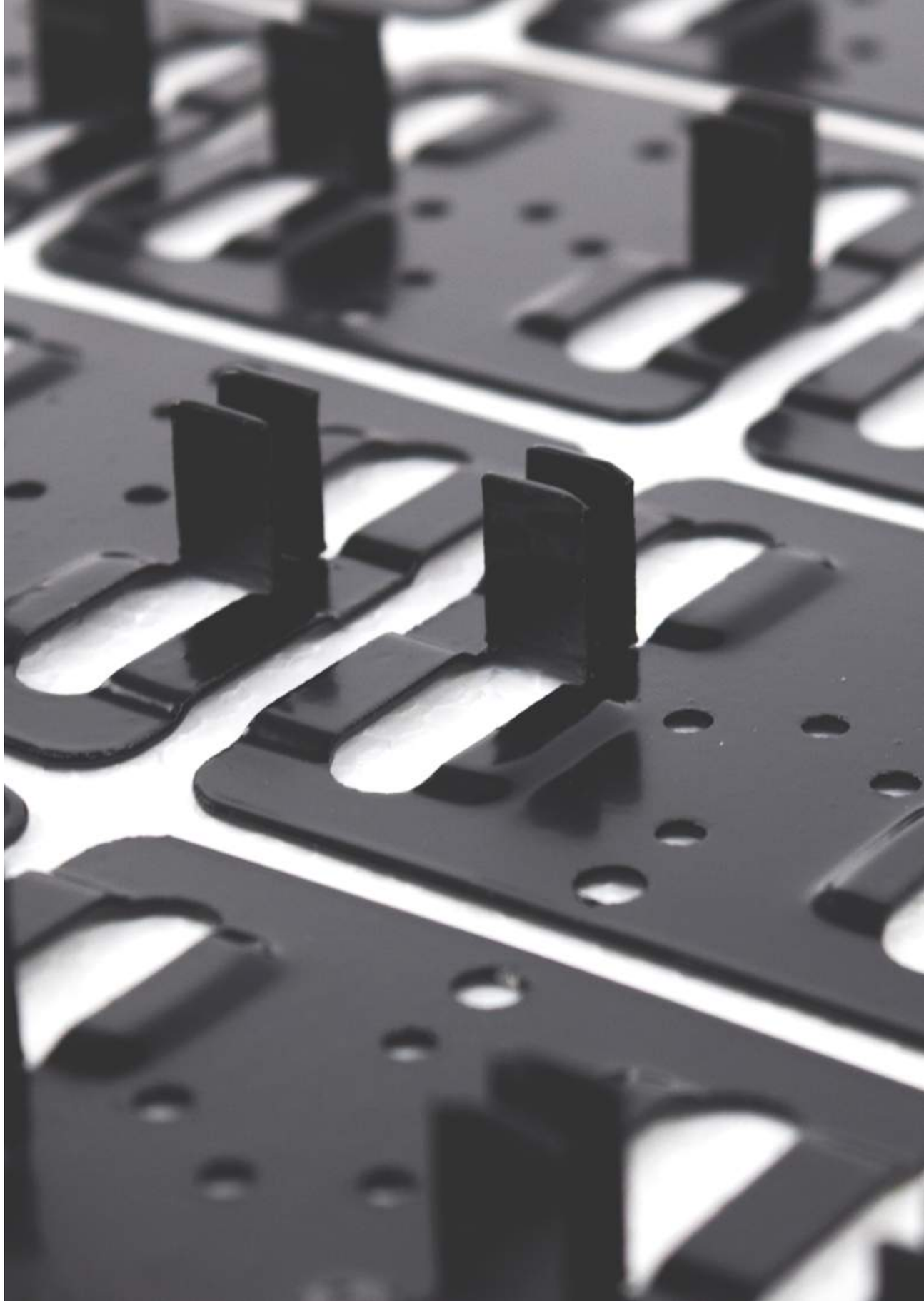
Non-sequential panel installation is possible due to the independent EasyClip fixing system.



Independent removal

Thanks to the EasyClip fastening system, it’s possible to remove the individual panel independently of its position.

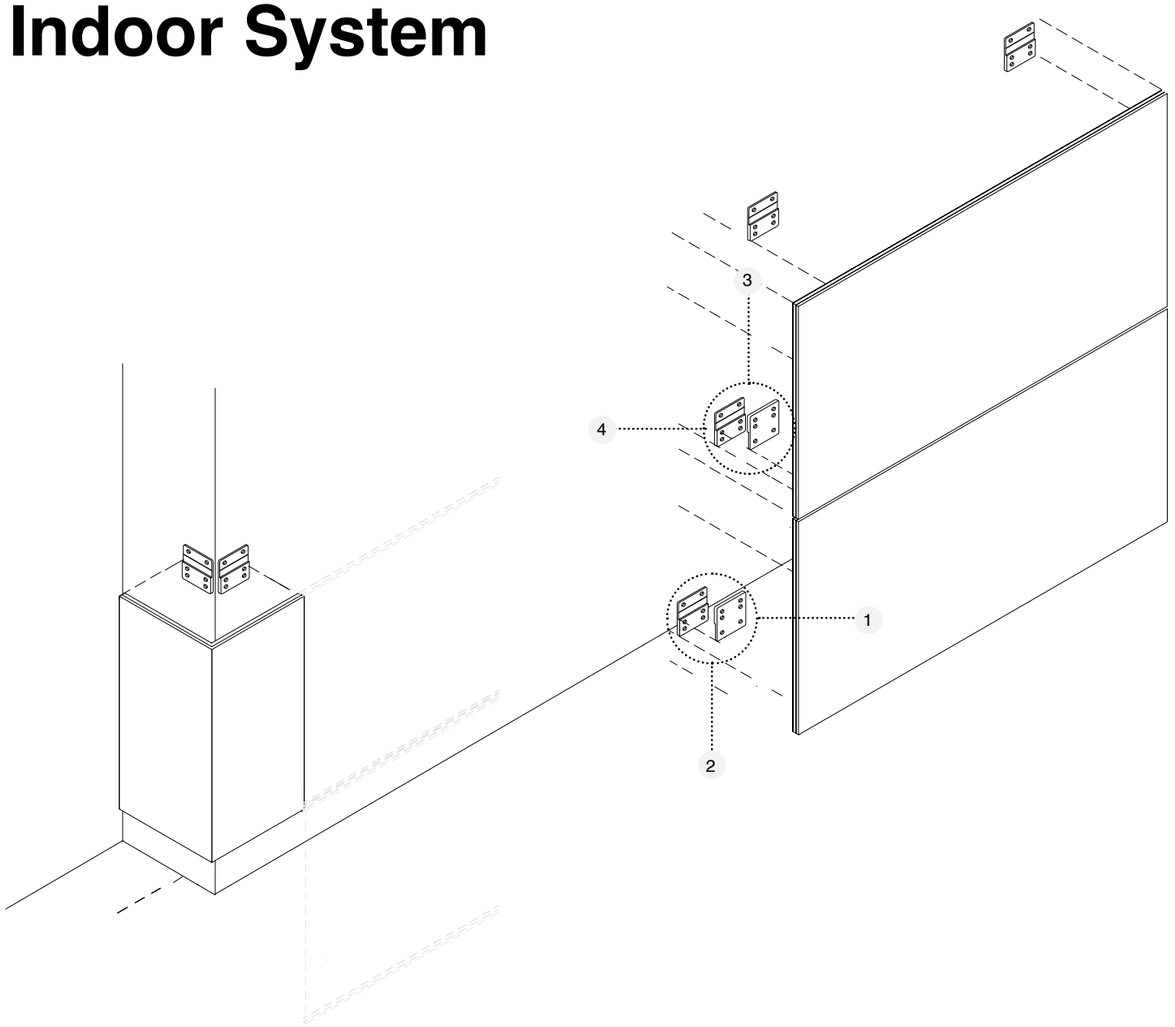




Indoor System

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.

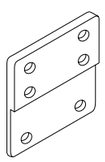
Indoor System



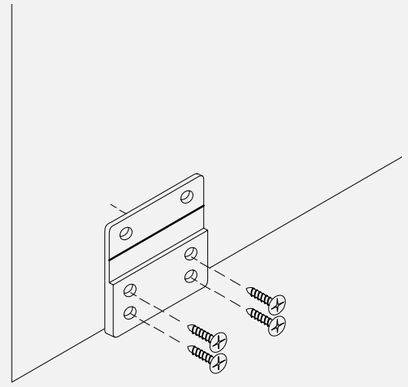
Kit Anchors

The indoor installation system features a single plate that attaches directly to the wall using high-strength screws, providing both durability and aesthetic appeal.

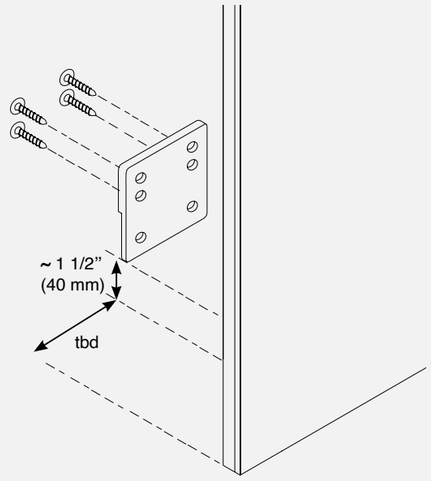
EasyPlate



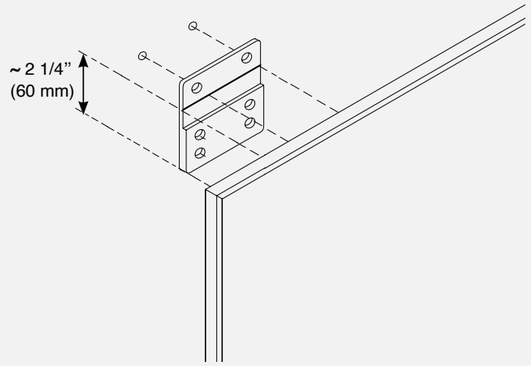
1 - EasyPlate - Base (support wall)



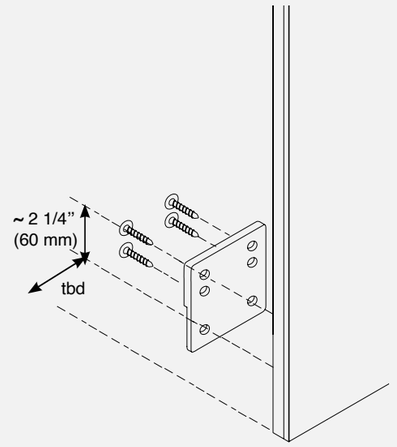
2 - EasyPlate - Base panel



3 - EasyPlate - Panel Top side

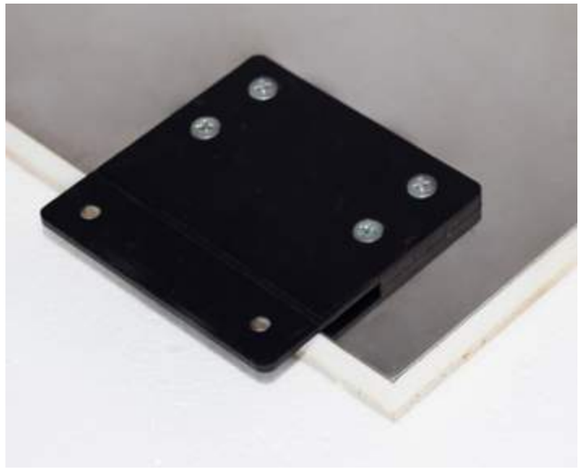


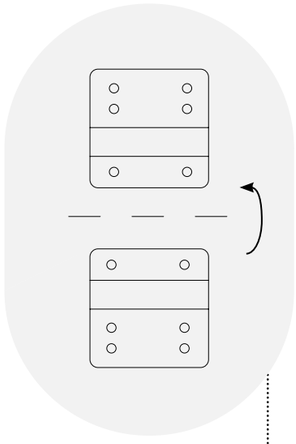
4 - EasyPlate - Panel Bottom side



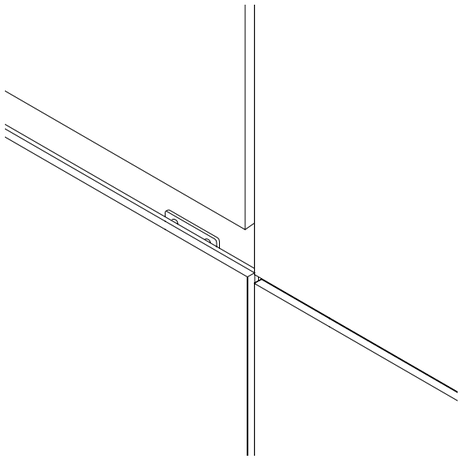
EasyPlate - Panel top side + bottom side

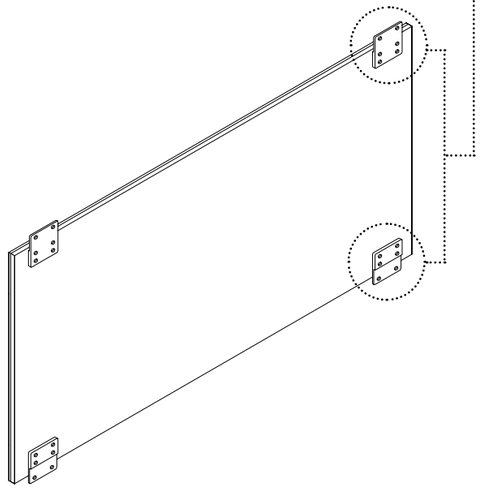
EasyPlate



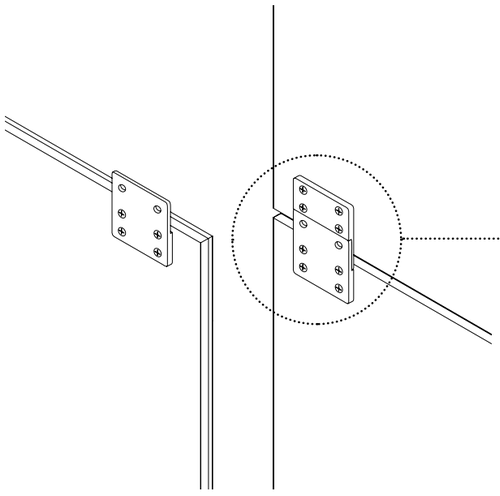


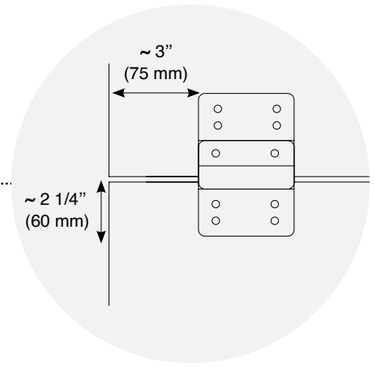
Front view





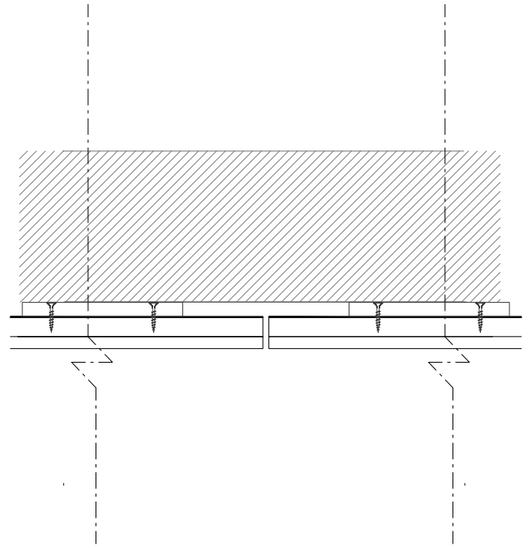
Back view



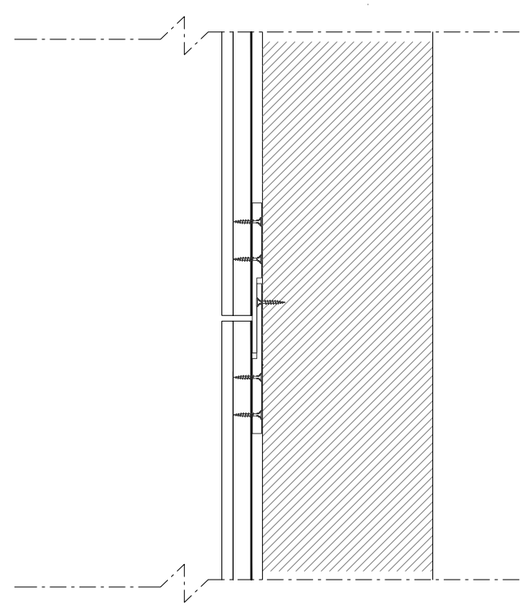


Joint: 1/8” (3mm)

Vertical Section



Horizontal Section



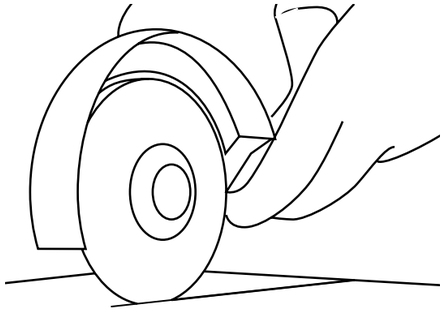
External Corner

Internal Corner

Processings. **Manual Cutting**

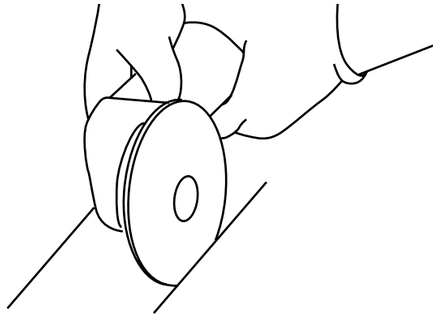
The Advantages of this type of cutting consist in the manufacturing facility and in the possibility of making cuts during the installation phase.

CUT TO SIZE



▼ **1**

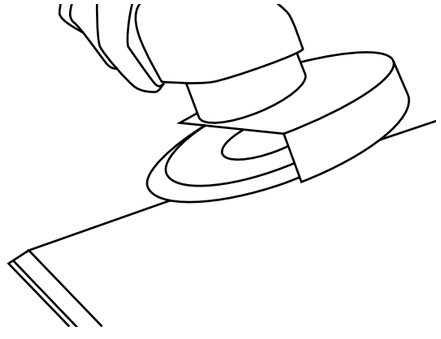
Cut the back of the panel using a steel cutting disk.



▼ **2**

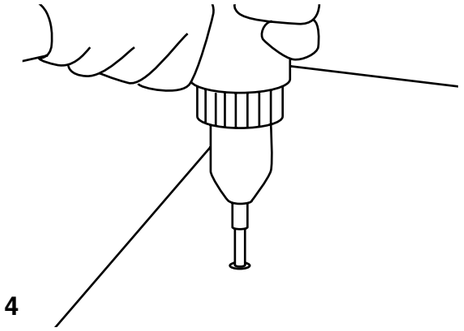
Cut the surface using a diamond blade mounted on an electric manual grinder.

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



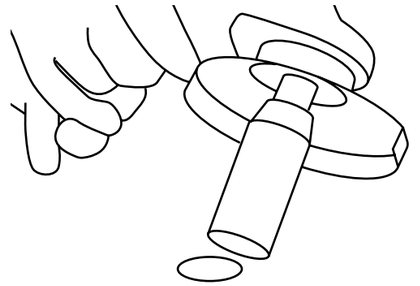
▶ **3** Fettle steel using a grinder.

DRILLING



▼ **4**

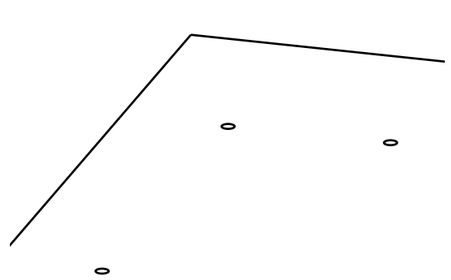
For manual drilling you can use tungsten bits up to a 5 mm diameter mounted on electric drills or cordless screwdrivers.

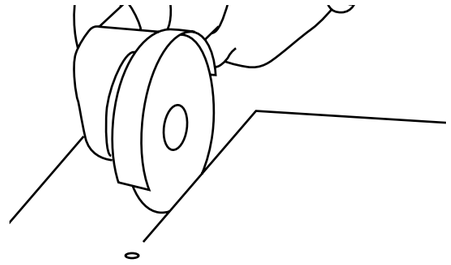


▼ **4.1**

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

INTERNAL CUT

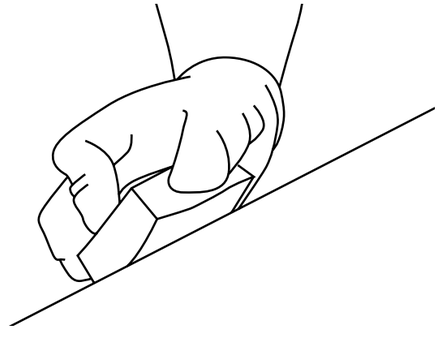




▼ **5**

For the realization of internal and “L” cuts it is recommended to round the opening vertices using bits with a radius of at least 5mm to reduce the risk of breakage. Then proceed with the cutting using diamond disks, 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



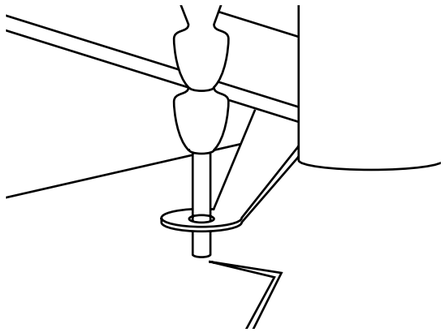
▶ **6**

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**

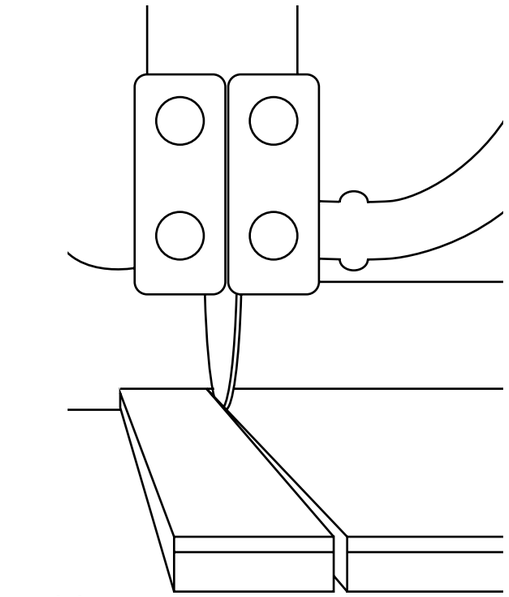
The last generation machines ara capable of increasing the quality standards of products, reducing the environmental impact.

CUT TO SIZE



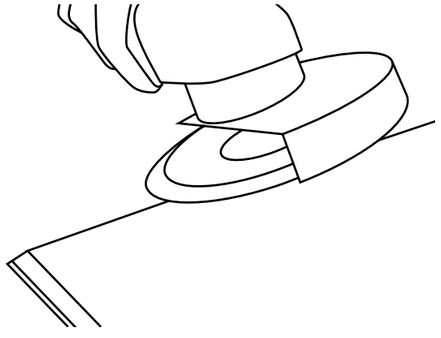
▼ **1**

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



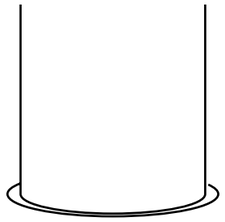
▼ **1.1**

EasyAir, in all its variants, can also be cut using diamond disks. 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 1m/ min. Depending on the type of disk 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.



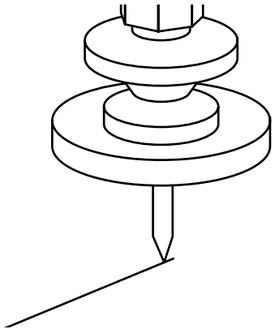
▼ **2** Fettle steel with a grinder.

DRILLING



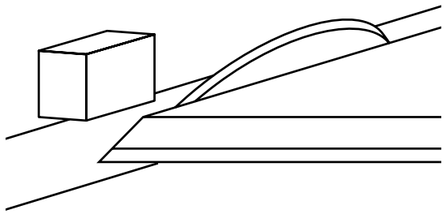
▼ **3**

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 8mm. The operating speed is 4mm/ 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 3m/ min.



▶ **4**

To make a 45 ° cut, you can use diamond disks 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.

Services

Shop Drawings

GammaStone with its skilled technical team provides professional and detailed shop drawings.

BIM

You can download BIM models from our website to include in project modeling.

Cutting List

The installer is also provided with a list of panels that need to be cut on-site.

BOM

For each project, the Bill of Material is provided, including both panels and all installation accessories.

Technical details

The technical details are provided for every project, such as the window returns, the starting and finishing panel details (first and last floor).

Static analysis

A static analysis is prepared, and upon request, the PE stamp can also be provided.

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 TESTS	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	Ignitabilty 0 Spread of flame 0 Heat Evolved 0 Smoke developed 0-1

AMERICAN TESTS	DESCRIPTION	VALUE
ASTM C393/C393M-16	Core Shear Properties (Negative Windload - Machine Direction) Core Shear Properties (Positive Windload) Core Shear Properties (Negative Windload - Crosswise Direction	102,4 psi 18,7 psi 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 Flexural Strength Evaluation (Negative Windload - Dry Condition) Ultimate Failure Flexural Strength Evaluation (Positive Windload - Dry Condition) Flexural Strength Evaluation (Negative Windload - Wet Condition) Flexural Strength Evaluation (Positive Windload - Wet Condition)	1.043 psi 2.932 psi 2.787 psi 891 psi 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) Flatwise Tensile Bond Strength Evaluation (Foam Core) Flatwise Tensile Bond Strength Evaluation (Steel)	359 psi 190 psi 57,6 psi

EUROPEAN TESTS	DESCRIPTION	VALUE
ETAG 004:2013	Heat-Rain 80 cycles	No faul
	Heat-Cold 5 cycles	No faul
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 absorbtion	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

UHPC Plus Air

FIRE TESTS	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
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

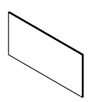
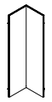
Wind Resistance

The test was performed in accordance with the EOTA standard guideline (European Organisation for Technical Approvals) ETAG 034-1:2012 April 2012 “Guideline for European technical approval of kits for external wall claddings - Part I: Ventilated cladding kits comprising cladding components and associated fixings.”

ISTITUTO GIORDANO
BEYOND CERTIFICATION

EOTA

Code List

	 **Panel** 24x48” (610x1219 mm)	 **External Corner** 12x12x48” (305x305x1219 mm)	 **External Corner** 12x12x24” (305x305x610 mm)	 **Internal Corner** 12x12x48” (305x305x1219 mm)	 **Internal Corner** 12x12x24” (305x305x610 mm)
Natural Air Roman Travertine Honed	**E60120NTF**	**E3030120NTAE**	**E3030120NTAI**	**E3060120NTAE**	**E3060120NTAI**
Natural Air Limestone Beige Honed	**E60120NBF**	**E3030120NBAE**	**E3030120NBAI**	**E3060120NBAE**	**E3060120NBAI**
Natural Air Limestone Gray Honed	**E60120NGF**	**E3030120NGAE**	**E3030120NGAI**	**E3060120NGAE**	**E3060120NGAI**
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 - Terracotta Honed	**E60120UPRF**	**E3030120UPRAE**	**E3030120UPRAI**	**E3060120UPRAE**	**E3060120UPRAI**
UHPC Plus Air - Bianco Honed	**E60120UGBF**	**E3030120UGBAE**	**E3030120UGBAI**	**E3060120UGBAE**	**E3060120UGBAI**
UHPC Plus Air - Urban Gray Honed	**E60120UGGF**	**E3030120UGGAE**	**E3030120UGGAI**	**E3060120UGGAE**	**E3060120UGGAI**
UHPC Plus Air - Beige Honed	**E60120UGBEF**	**E3030120UGBEAE**	**E3030120UGBEAI**	**E3060120UGBEAE**	**E3060120UGBEAI**
UHPC Plus Air - Terracotta Honed	**E60120UGRF**	**E3030120UGRAE**	**E3030120UGRAI**	**E3060120UGRAE**	**E3060120UGRAI**

Kit Outdoor System

 **EasyClip**	 **Support plate** Horizontal 2 flaps	 **Support plate** Horizontal 4 flaps	 **Support plate** Vertical 2 flaps	 **Support plate** Vertical 1 flaps	 **Rivet for** Clip/profile	 **Rivet for** Clip/panel
ECLIP500	**ECLIP2SO502**	**ECLIP4SO500**	**ECLIP2SV503**	**ECLIP1S504**	**ERIV3101000**	**ERIV512100**

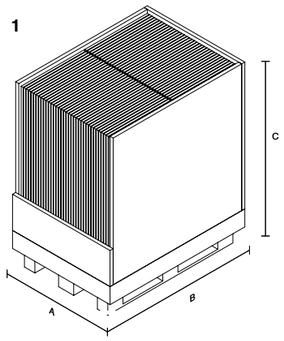
Kit Indoor System

 **EasyPlate**	 **Screw**
EABS500	**EVIT1000**

Packaging

	SIZE	THICKNESS	TYPE	DIMENSION	PCS	Sqm	WEIGHT
1 mm	610x1219 mm	19 mm	Cassa	A 936 - B 1264 - C 1350 mm	72	51,84 m²	1244 Kg
inch	24x48”	3/4”	Cassa	A ~ 3’ 3/4”- B ~ 4’ 1 3/4” - C ~ 4’ 6”	72	558 ft²	2742,5 lb
2 mm	305x305x1219 mm	19 mm	Cassa	A 936 - B 1264 - C 1350 mm	64	46,08 m²	1106 Kg
inch	12x12x48”	3/4”	Cassa	A ~ 3’ 3/4”- B ~ 4’ 1 3/4” - C ~ 4’ 6”	64	496 ft²	2438,3 lb
3 mm	305x305x610 mm	19 mm	Cassa	A 800 - B 1294 - C 870 mm	64	23,04 m²	576 Kg
inch	12x12x24”	3/4”	Cassa	A ~ 2’ 7 1/2” - B ~ 4’ 3” - C ~ 2’ 10”	64	248 ft²	1269,8 lb

1



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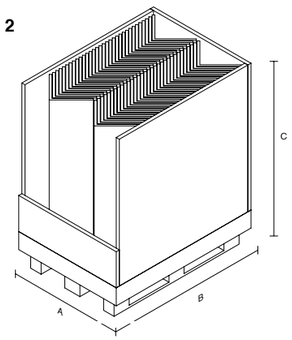

3