

alubuild
Shape your vision.



ALUMINIUM COMPOSITE PANEL

GENERAL CATALOGUE



YOUR IDEALS,
OUR SOLUTIONS

alubuild

WE MANUFACTURE ALUMINIUM COMPOSITE PANELS FOR ARCHITECTURE, CONSTRUCTION, CORPORATE IDENTITIES, SIGNAGE AND TRANSPORTS.

With headquarters in Vila Verde, Braga (Portugal), Alubuild has the most recent and complete line of production of aluminium composite panels, Buildbond, which responds to the most diverse market demands. The Buildbond panels grant flatness, wide variety of thicknesses, textures, coatings and colours, as well as providing high corrosion resistance.

Alubuild is the first Portuguese company to manufacture aluminium composite panels for which is equipped with a machining and transformation service centre, and a modern laboratory equipped with state-of-art technology providing greater quality control. As a result, Alubuild is ready to respond to the different sectors of activity such as architecture, corporate identity, signage and transports.

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Shape your vision.





ALUBUILD

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WHY BUILDBOND

The aluminium composite panels are increasingly asserting themselves as a great value product, by featuring such qualities as durability, versatility, lightness, high resistance and, above all, by being free from hygroscopic and thermal movements, which are found to be the cause of pathological manifestations in adhered coatings.

The cost of a building should always be analysed from a life cycle perspective where they are evaluated:

- . The initial investment
- . The maintenance cost
- . The longevity of the implemented system

According to several academic studies carried out related to ventilated facade execution systems, based on a fifty-year period, it was found that from the set of studied solutions and according to economic parameters involved, the initial investment, maintenance cost and deconstruction cost, the most economic construction technology corresponds to the execution of a ventilated facade equipped with an aluminium composite panel.





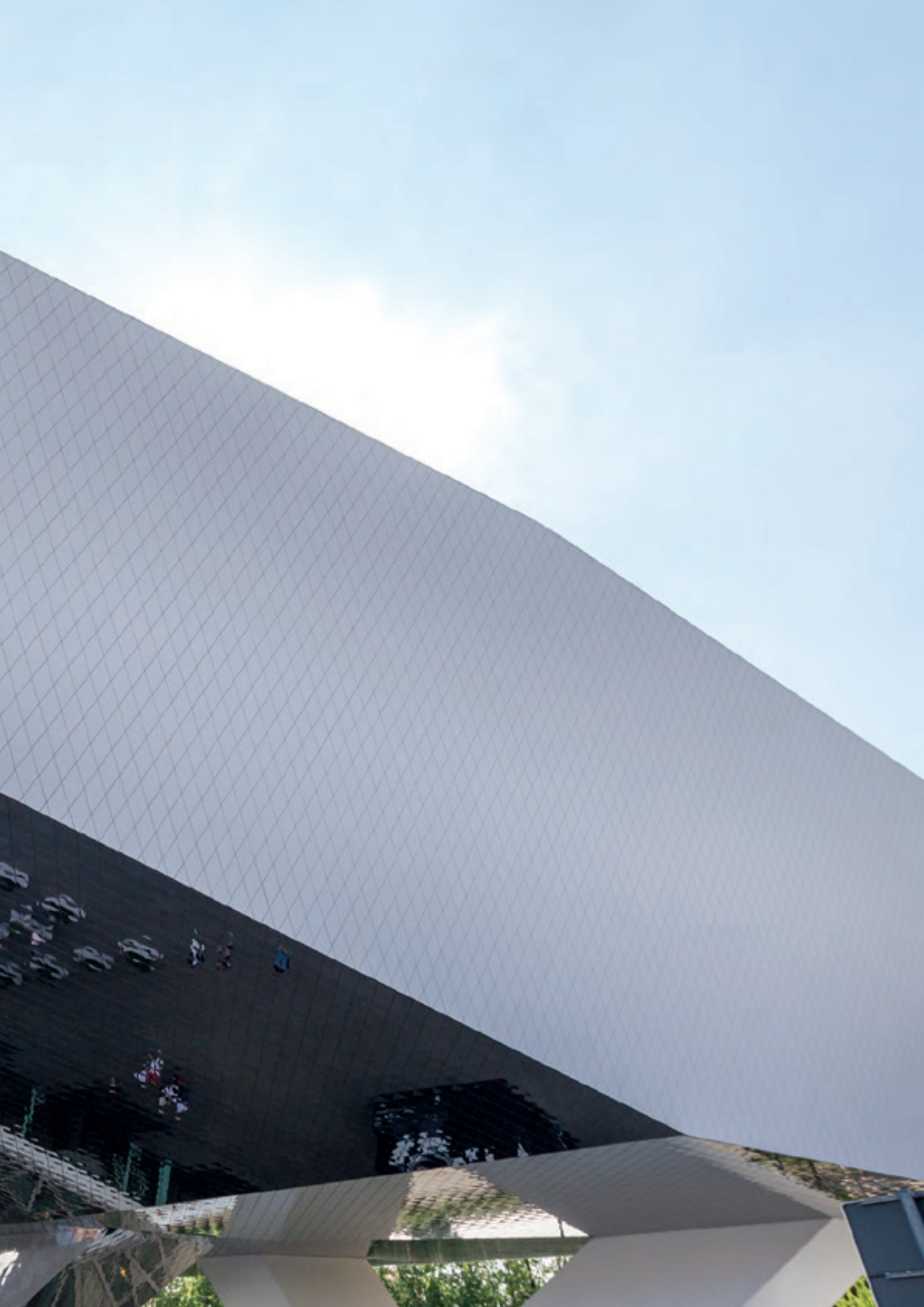
The most frequent application of Buildbond panels is on ventilated facades, these being considered a sustainable constructive solution which combine innovation and energy efficiency, thus assisting in improving thermal comfort since it can reduce a building's energy consumption between 30% to 50%. The ventilated façade system creates a second layer in relation to the building's main façade by protecting it. The Buildbond panels are attached to an aluminium frame that are anchored into the building's structure.

The fundamental principle of ventilated facades is to allow the creation of a space for air circulation on the lower and upper openings, thus enabling the creation of the air box/ventilation space in the cavity between the two walls. This cavity produces the so-called chimney effect enabling permanent air circulation in the ventilated chamber, and getting greater thermal comfort inside the building.

The chimney effect happens when the warmer air rises by convection allowing cooler air to enter the chamber. The cavity air changes continuously and does not heat the wall of the building which remains protected by preserving the temperature inside the building.

YOUR PRODUCTS
ARE OUR MISSION





OUR PRODUCTS

Buildbond is an aluminium composite panel made up of two aluminium-alloy sheets 5005 / 3005 / 3105 and an intermediate core, consisting of thermoplastic and non-combustible minerals.

Buildbond is available in three different colours depending on the mineral load and its noncombustibility:

- .Buildbond A2** – Non-combustible core
- .Buildbond FR** – Fire retardant core
- .Buildbond PE** – Low-density polyethylene core

The coloured coating with Polyester paintings, PVDF or FEVE, offers a wide range of solutions providing the highest resistance to ageing, protection against corrosion and UV rays, as well as excellent behaviour when shaped. The Buildbond panels are available in a full range of colours, glosses, textures, metal, natural or anodized finishes, as requested by the customer.

buildbond



DESIGN WITHOUT LIMITS

The BUILDBOND panels are available in XL format or shape.
With a **width of 2m**, these panels are an added value for architects and installers allowing to reinforce creativity and design to their projects.



buildbond'A2

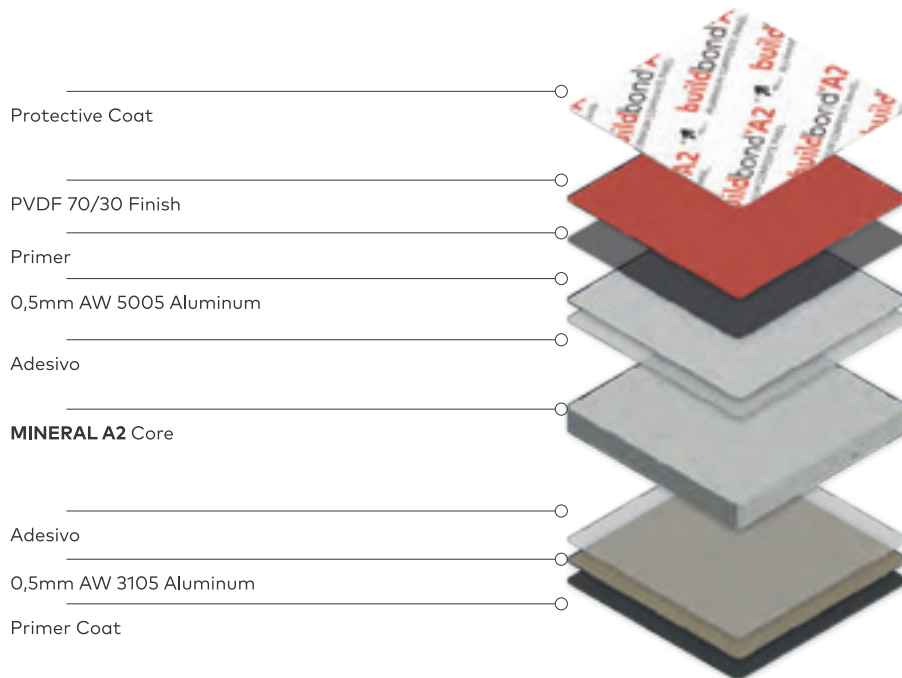
Buildbond A2 is a composite panel made up of two aluminium sheets and class "A2 - s1, d0" mineral non-combustible core, according to the European standard EN13501-1 classification.

This panel can be manufactured in various dimensions up to a width of 2m, Buildbond XL, being an asset for more demanding projects.

The composite panels have low weight, flatness, resistance to impact, bending capacity and are easy to transform, which allows them to be shaped in various ways.

As a standard application, Buildbond A2 is coated with polyvinylidene fluoride, PVDF 70/30 of high technology due to its excellent durability, colour consistency and offering a warranty of up to 20 years.

Buildbond A2 panels are particularly recommended for projects of ventilated facades in high-rise buildings whose fire safety requirements are high.



Total thickness	4mm
Width	1.000, 1.250, 1.500 and 2.000 mm
Length	2.000 to 6.000 mm
Weight	8,4 kg/m ²
Reaction to fire	A2-s1,d0

NOTE: Other specifications on request .



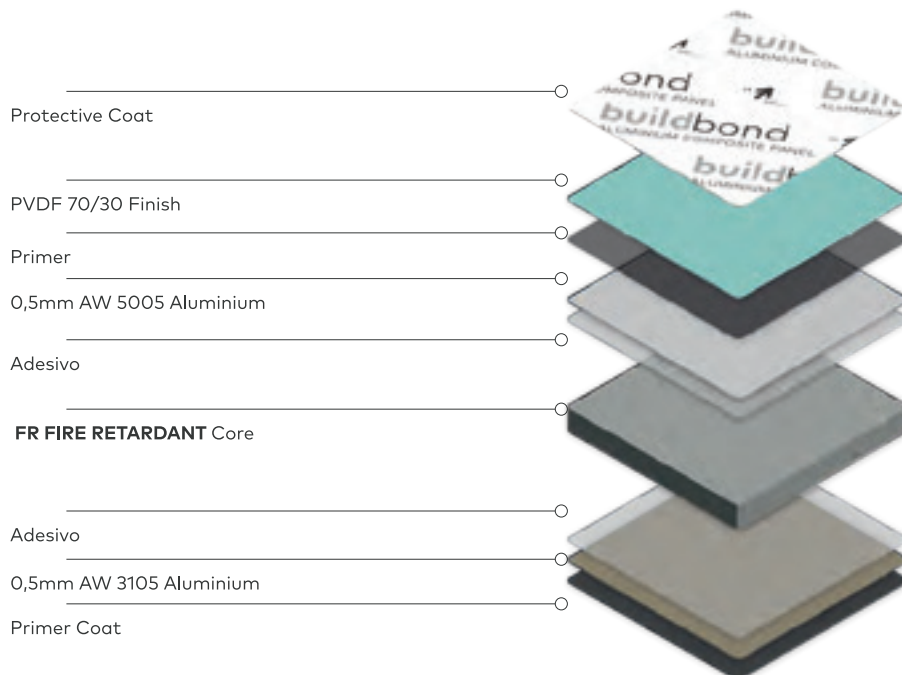
Buildbond FR is a composite panel made up of two aluminium sheets and a class "B – s1, d0" polymer and fire-retardant mineral core for situations where it is necessary to ensure there is no spread of the flame in contact with the fire.

This panel can be produced in various dimensions up to a width of 2m, Buildbond XL, being an asset for more demanding projects.

The composite panels have low weight, flatness, resistance to impact, bending capacity and are easy to transform, which allows them to be shaped in various ways.

As a standard application Buildbond FR is coated with polyvinylidene fluoride, PVDF 70/30 of high technology due to its excellent durability, colour consistency and offering a warranty of up to 20 years.

The Buildbond FR panels are particularly recommended for projects of ventilated facades, interior decoration, corporate identity elements, industry and transports.



Total thickness	4mm or 6mm
Width	1.000, 1.250, 1.500 and 2.000 mm
Length	2.000 to 6.000 mm
Weight	since 7,6 kg/m ²
Reaction to fire	B-s1,d0

NOTE: Other specifications on request .



buildbond'PE

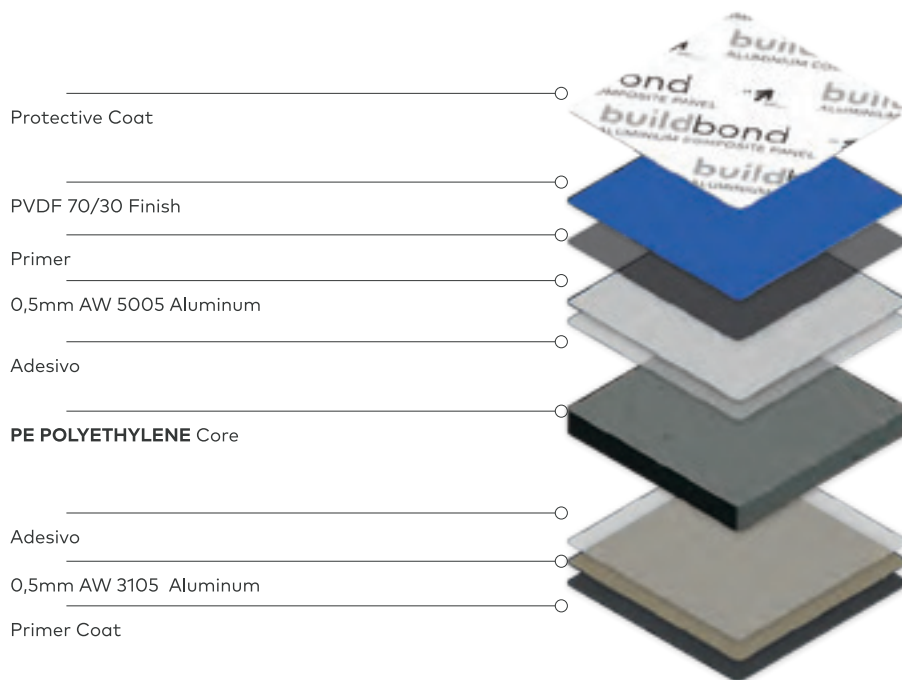
Buildbond PE is a composite panel made up of two aluminium sheets and an inner core of thermoplastic resins (low-density polyethylene).

This panel can be produced in various dimensions up to a width of 2m, Buildbond XL, being an asset for more demanding projects.

The composite panels have low weight, flatness, resistance to impact, bending capacity and are easy to transform, which allows them to be shaped in various ways

As a standard solution, Buildbond PE is coated with polyvinylidene fluoride, PVDF 70/30 of high technology due to its excellent durability, colour consistency and offering a warranty of up to 20 years.

The Buildbond PE panels are particularly recommended for interior decoration, corporate identity elements, stands, fairs, exhibitions, signage and outdoor spaces among others.



Total thickness	4mm or 6mm
Width	1.000, 1.250, 1.500 and 2.000 mm
Length	2.000 to 6.000 mm
Weight	since 5,5 kg/m ²

NOTE:.. Other specifications on request.



WE SUCCEED
IN DEALING WITH
YOUR PROJECTS





BENEFITS

INCOMBUSTIBILITY

The protection of human life is the priority for Alubuild, so the panels are subjected to the most rigorous fire tests in order to strictly comply with all national and international fire safety regulations in force. The Buildbond A2 panels meet these requirements due to its noncombustible mineral core, i.e., reaction to fire class a2-s1 d0.

SUSTAINABILITY

The Alubuild's rationale is to contribute on a daily basis for a future and sustainable economy. As such, in order to reduce the ecological footprint in the world, Buildbond panels are produced using recycled materials by means of renewable energy being the panels fully recyclable in all their components.

QUALITY ASSURANCE

The Buildbond panels have a durability and a very long service life with warranties exceeding 20 years, depending on the type of paint used, location and type of application.

RANGE OF COLOURS & DESIGN

Alubuild has a wide range of colours, finishes and textures to allow architects and designers to expand their creativity in designs and projects





DURABILITY



100% RECYCLABLE



**WIDE RANGE OF COLOURS,
GLOSSSES & TEXTURES**



**HIGH RESISTANCE
TO IMPACT**



**SPEED AND EASE
OF ASSEMBLY**



**RESISTANT TO WEATHER
& UV RAYS**



EASY TO MOULD



FLATNESS



LIGHTNESS



LOW MAINTENANCE



WE ARE COMMITTED
***A MORE SUSTAINABLE
WORLD***





APPLICATIONS

**BUILDBOND IS A PANEL
EXTREMELY VERSATILE
ALLOWING A DIVERSITY
OF APPLICATIONS:**

- .Ventilated facades
- .Pillar and beam cladding
- .Interior and furniture spaces
- .False ceiling, roofing and partitions
- .Billboards
- .Corporate identity and visual communication
- .Advertising totem, porches & exterior doors
- .Industrial application, motor vehicle and railway vehicle coating
- .Fair stands and exhibitions
- .Facade rehabilitation of existing buildings





ADVANTAGES

BUILDBOND PANELS ARE THE IDEAL PRODUCT TO REHABILITATE OR RENEW THE FACADE OF A BUILDING, EITHER RESIDENTIAL, COMMERCIAL OR INDUSTRIAL, TURNING A PROBLEMATIC AND OLD FACADE INTO A NEW ONE WITH AN APPEALING DESIGN.

IMPROVEMENT IN LIVING CONDITIONS

Replacing old worn-out materials showing cracks and deficiencies by Buildbond panels, add not only design but also functionality, improving thermal, acoustic and fire safety comfort.

CORRECTION OF IMPERFECTIONS, CRACKS AND MISALIGNMENTS

By applying Buildbond panels in a ventilated facade we succeed in hiding all existing imperfections and anomalies in the facade previously exposed to the environment, new coating being placed on the building with new format, colour and more appealing image.





MINIMAL MAINTENANCE

In the traditional construction system (masonry) is necessary to do an annual cleaning, and in more demanding situations, repairing the cracks, occasional corrections and a new painting to the facade.

However, the Buildbond panels have a greater resistance to dirt, enabling self-cleaning systems or cleaning with pure water.

ENERGY EFFICIENCY

The ventilated chamber created between the existing facade and the new coating allows constant air circulation through pressure difference convection, thus creating a "*chimney effect*".

This constructive solution which combines innovation and energy efficiency, thus assisting in improving thermal comfort since it can reduce a building's energy consumption between 30% to 50%.

VERSATILITY AND CUSTOMIZATION

With Buildbond panels it is possible to maintain or change the facade reading, making new 3d modulation, applying the composite aluminium to all trimmings, corners and clasps of facades, making it a unique and personalized element.

Being an inspiration for architects and designers it is possible to create or transform a facade into something totally new, bold and unique, because the capabilities of the Buildbond panels are unlimited in terms of colours, shapes, finishes and textures.

***WE CREATE* VALUE**





COLOURS & FINISHES

Alubuild has a range of colours, glosses, textures and high-quality natural finishes divided by:

.Solids

.Metallized

.Wood

.Prismatics

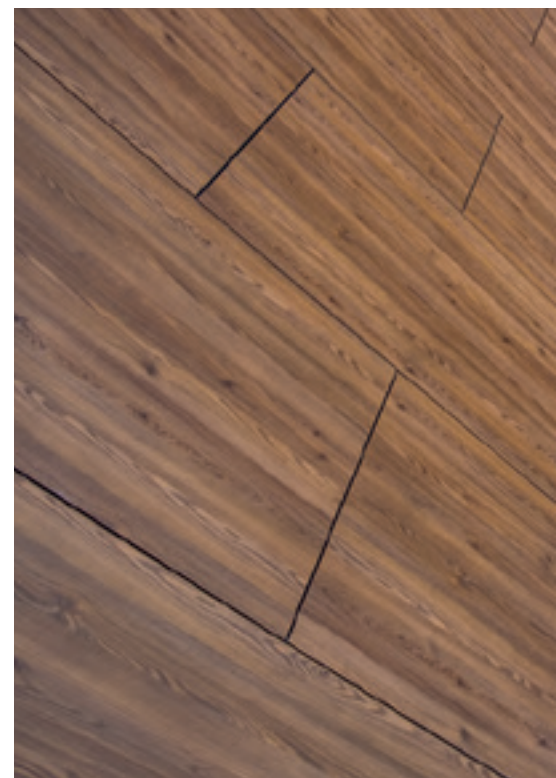
.Specials

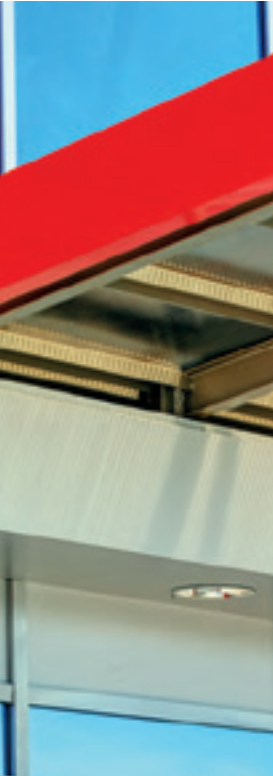
All colours can be supplied according with the RAL colour standard and applied to panels up to 2m of width, thus responding to any challenge and project.

The Buildbond panels can also be manufactured combining other metals such as copper, titanium or zinc, offering several finishing possibilities.



For catalog download, please visit us at:
www.alubuild.pt





WE CONTRIBUTE
INNOVATIVE DESIGNS





MECHANIZATION

Alubuild has a mechanization and transformation service centre for Buildbond panels which enable to create different sizes and shapes according to the specifications of each project.



CUT



BENDING



EDGING



BENDING WITH ROLLERS



MILLING



DRILLING



RIVETING



BUILT-IN



PUNCHING & DIE CUTTING



ASSEMBLY SYSTEM

Alubuild has various solutions for your projects. Regardless of horizontal or vertical modulation with visible or hidden flat or curved fixings, Buildbond panels are compatible with all systems, among which stand out the following 4:



CASSETTE SYSTEM ~ SUSPENSION

The cassette system adapts to vertical modulation. Its quick installation and structural lightness contribute to a more efficient execution of the project with an excellent transition of loads.



RIVETED SYSTEM

The riveted system is a light solution, simple and quick to install due to its Tprofile substructure.



GLUED SYSTEM

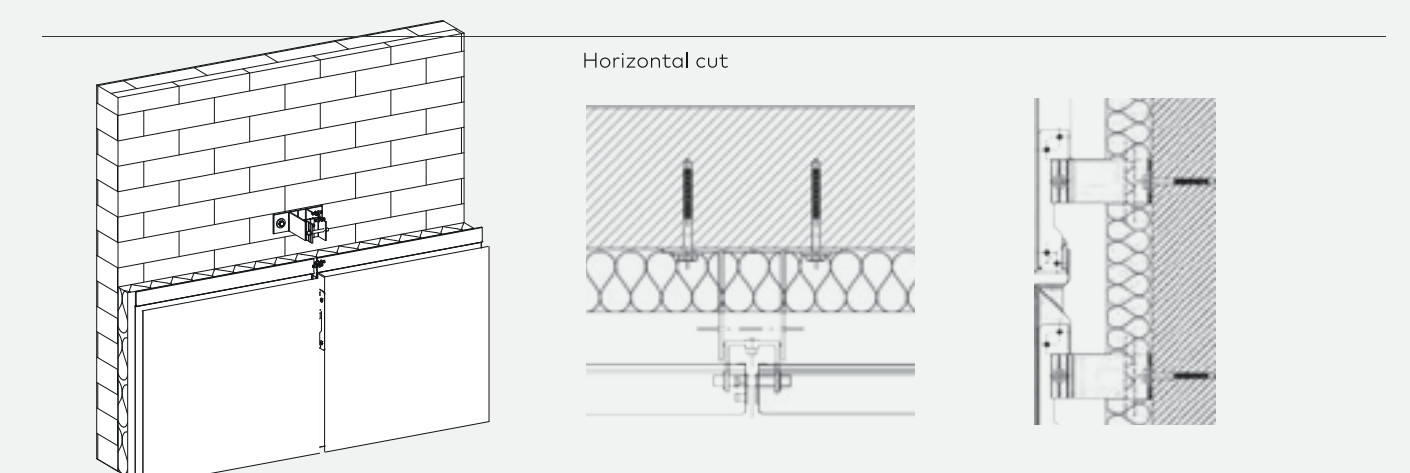
The glued system allows geometrization of its perimeter, as well as a great combination of false ceiling finishes providing a visually homogeneous solution.



MALE-FEMALE SZ SYSTEM

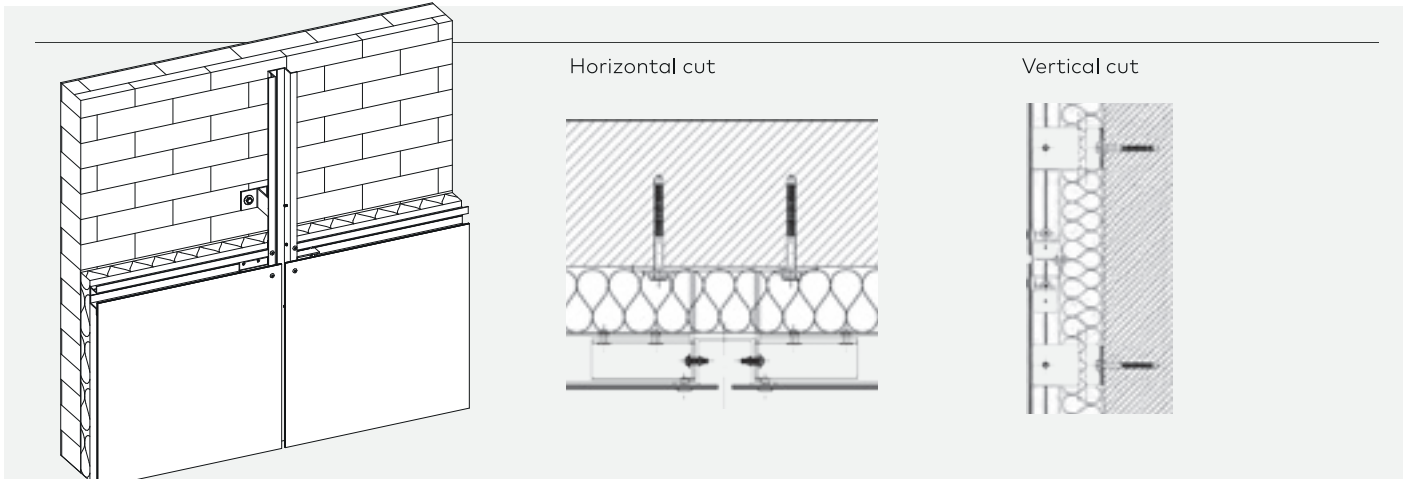
The male-female SZ system adapts perfectly to the continuous shapes of concave and convex curved facades with openings and front tray modulation benefiting from a quick placement.

CASSETE SYSTEM

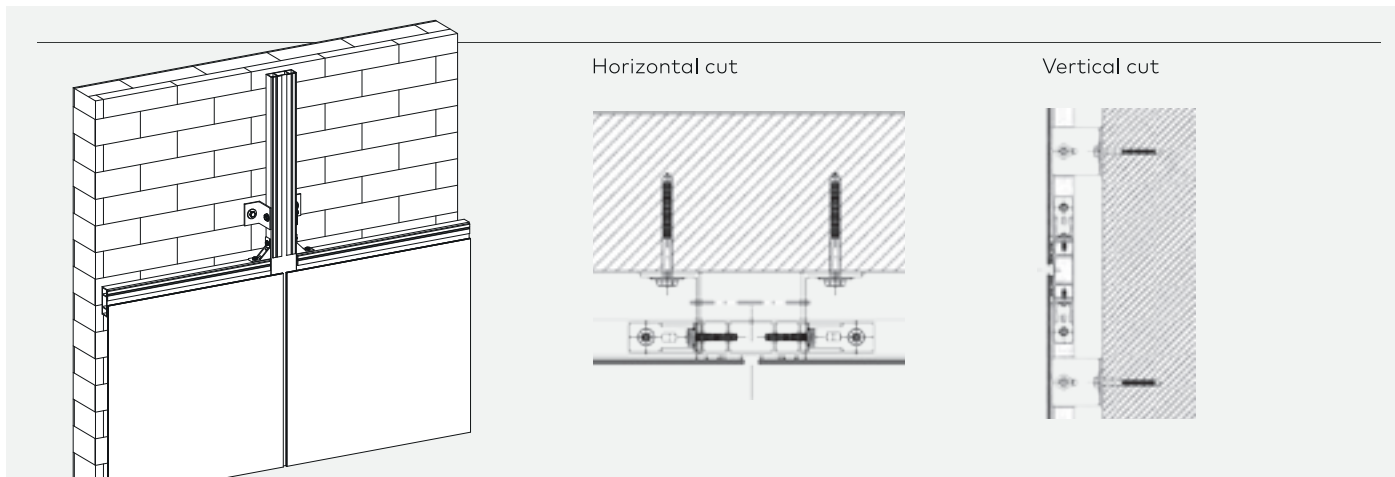




RIVETED SYSTEM

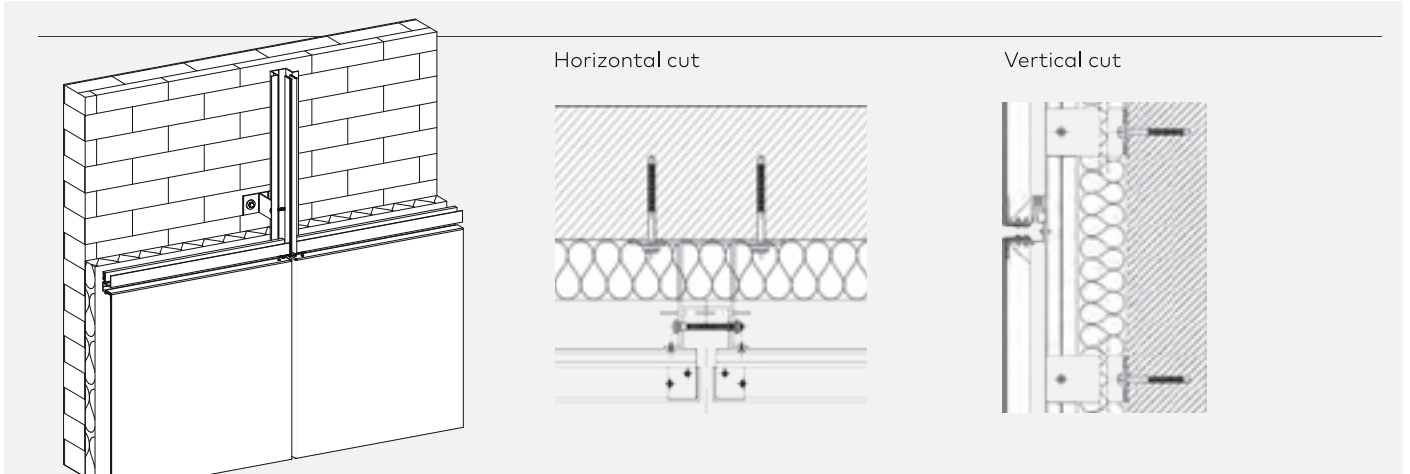


GLUED SYSTEM





MALE-FEMALE SYSTEM





ROMANIAN CULTURAL INSTITUTE
BUCURESTI



alubuild

Shape your vision.

Alubuild has an advanced and modern testing laboratory where each product is subject to a strict control of quality.

Buildbond panels are manufactured through a continuous process and each product has a detailed traceability allowing to know the date and time of its production.

In addition, Buildbond panels meet the specifications of the most demanding international standards, as well as the European guide EAD 090062-00-0404 / EAD 1046-00-1201 for ventilated facades and aluminium composite panels.



(em desenvolvimento)





TESTIMONIALS

"Three years ago, the building where I live in needed to be rehabilitated due to serious problems of cracks, infiltrations of water and signs of moisture into the dwellings.

At a building's condominium meeting we were offered a solution for ventilated facades equipped with aluminium composite that I was totally unaware of.

I've already seen this type of facades in premises and industries, but I never thought they could be used in homes.

What most caught my attention was the possibility to choose the finishes and colours, easy cleaning, durability of the composite and the new facade image looking like a brand-new building. I also thought that the time to carry out this work would take long, but after all the assembly of the plates was done quickly.

Despite the price being a little higher than the traditional solution, I have no doubt that the best option has been taken since not only has the thermal and acoustic comfort improved a lot, but the building design itself became much more attractive."

Filipe Rocha
Condominium

"Based on knowledge of the architecture market, the panels' characteristics that stood out the most are flexibility, sustainability and modernity in all its aspects.

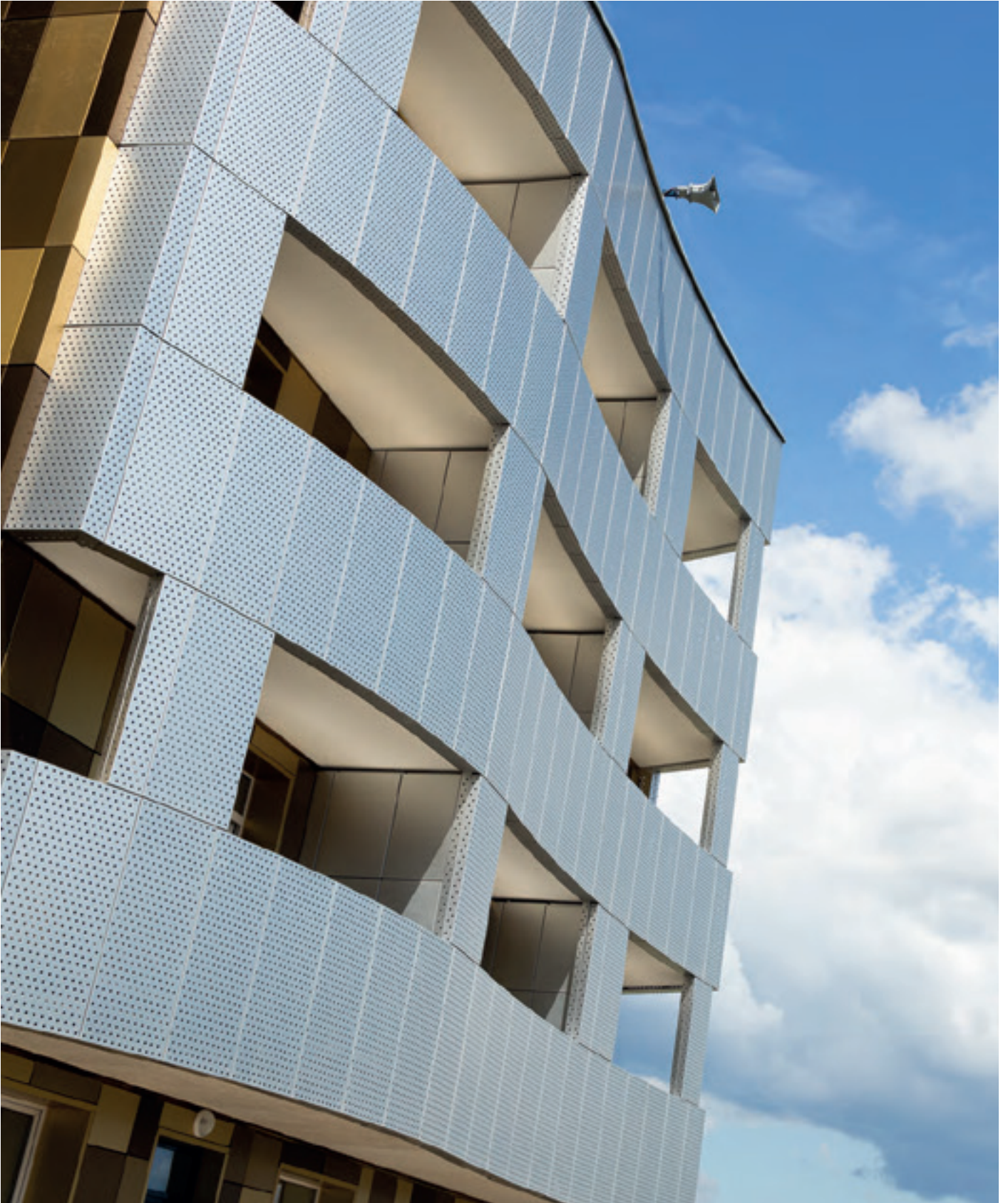
Conceptually, these days' design and innovation are associated. The aluminium composite panels are a technological evolution responding in an extremely effective way to problems of acoustic, thermal and reaction to fire. The lightness of this material associated to resistance, flexibility and recyclability of it are important factors to consider today.

The possibility of also combining the visual component with an extensive and wide range of finishes, colours, textures, dimensions, makes this product an associated material to modernity and future, meeting the highest creative standards.

The speed of application associated with a "clean" work allows a natural integration of this product into the building's interior or exterior spaces. And we must not consider these panels only in the context of the industry sector: the application in the residential market has also an enormous potential.

Alubuild reflect the experience and knowledge of the company's founders assisted by a professional team constantly evolving and technical training, which allows me to believe that it will be a benchmark in the national and international market."

Arq. Jorge Esteves
Ventura + Partners





*The presented images are merely examples of product applications.

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