

# NAVAL DIVISION



**ABET**



HIGH-TECH  
SOLUTIONS



1937

**1937 Metalleido** Composite Panels was born in June 2000 from Metalleido s.r.l., an established company specialized in the treatment and impregnation of cotton fabrics with phenolic resins since 1937.

1993

**1993 Monocore Line** at the end of 1993 Metalleido patents the machine for making the Monocore panel and starts mass production. In those years, the Mitlight panel was the first to be approved according to the IMO 653 standards for fast ferries and enjoyed considerable success with the first ferries of the MDV series by Fincantieri.

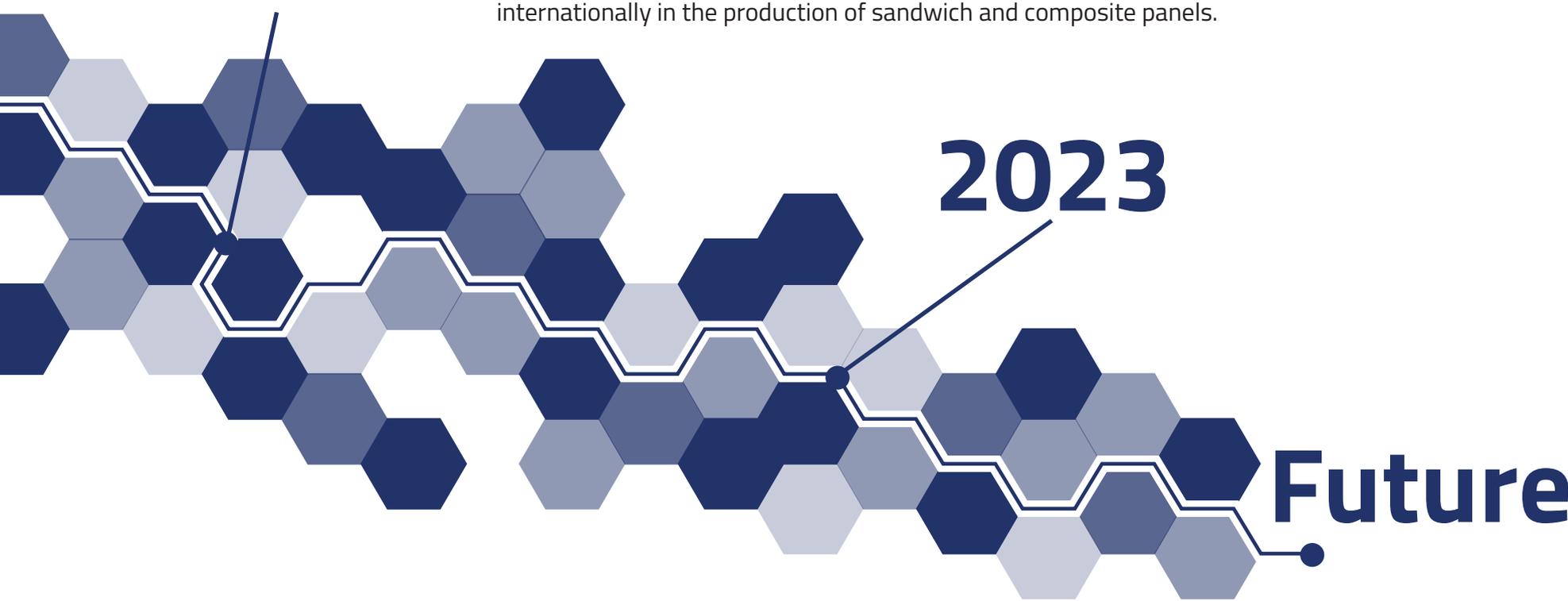
2008

**2008 Honeycomb Line** In June 2000 Metalleido Components became part of the Abet Group, a leading company for the production of decorative plastic laminates. The company relocates in Borgo Fornari where it sets up the automatic production line for composite panels with a honeycomb and Nomex core.

**2015 Merger with Abet Laminati** Merger into Abet Laminati S.p.A. On the 1st of January 2015 Metalleido Composite Panels becomes part of Abet Laminati S.p.A. and all the machinery and offices are transferred to Bra

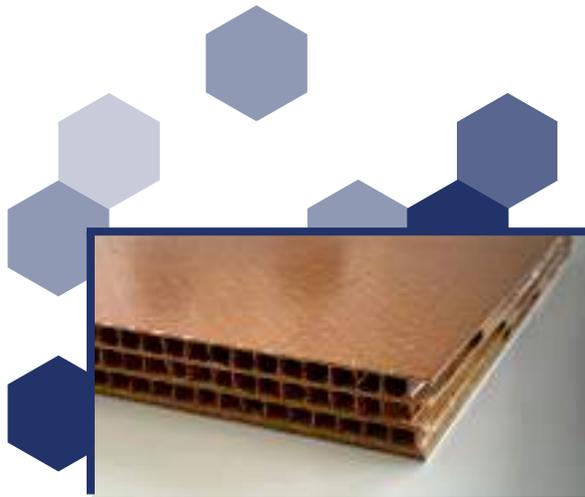
**2023 Abet High Tech Solutions** In February 2023 in Bra, Abet High Tech Solutions becomes an independent operating company to become in all respects a leader constantly engaged in the research and development of solutions that allow it to keep its products at the forefront both nationally and internationally in the production of sandwich and composite panels.

# 2015



# 2023

# Future



# MONOCORE

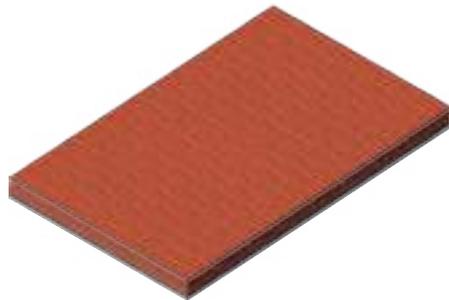
MONOCORE® 3D FP is a sandwich panel made of three-dimensional glass fibres impregnated with phenolic resin. It is patented and mass-produced by Abet Group.

Its main features are its extremely low weight and high mechanical performance. It can be supplied uncoated (basic version) or coated with Abet laminates (in various decors and finishes), wood, or resin. It is particularly suitable for flooring applications in the railway and maritime sectors.

Note: the panel surface shows a slight transverse waviness between the two points of the 3D fabric.

This specific construction is an integral part of the product and ensures good mechanical properties (see table below). The transverse waviness is an intrinsic characteristic of the product and cannot be considered a defect.

## COMPOSITION



3D Fiberglass+phenolic resin

<b>Width</b>	1200mm [3.9']
<b>Length</b>	Up to max. 2800mm (other lengths on request) [9.2']
<b>Weight</b>	Refer to the technical sheet
<b>Temperature Resistance</b>	-40°C to +100°C
<b>Fire Properties</b>	DIN EN 45545-2



Resistance to weight



Acoustic



Lightness



Long lasting durability



Good fire behaviour



Easy to work

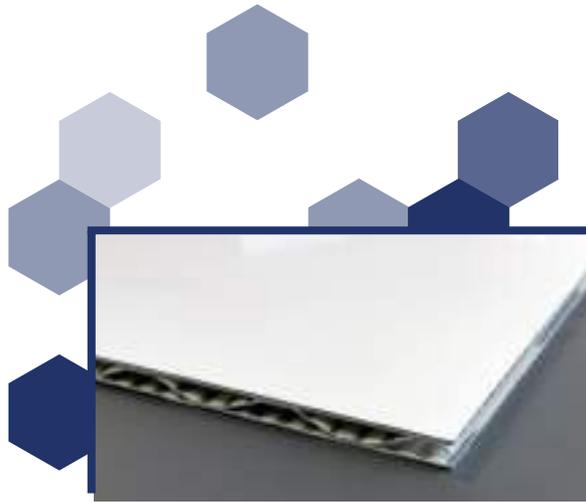


Easy to clean



Guarantee





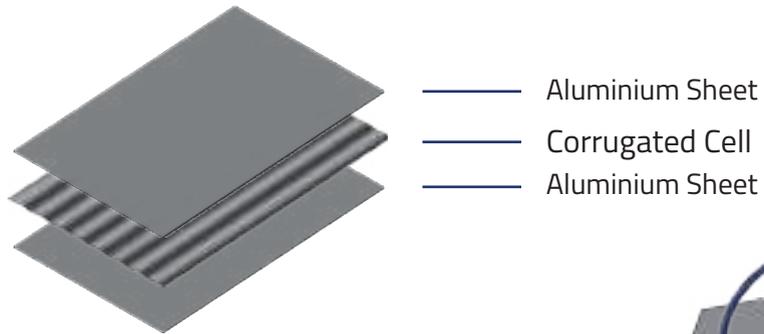
# TEBA

This multilayer structural panel features aluminum layers with a corrugated aluminum core. It has a non-slip, scratch-resistant surface that is non-porous to chemicals and grease.

This panel is commonly used in building construction.

<b>Width</b>	1250mm [4']
<b>Length</b>	Up to max. 3000mm (other lengths on request) [10']
<b>Weight</b>	Refer to the technical sheet
<b>Temperature Resistance</b>	-40°C to +100°C
<b>Fire Properties</b>	DIN EN 13501-1 : A2 s1 d0

## COMPOSITION



Curvable panel

6



Resistant to sunlight



Resistant to atmospheric agents



Good fire behaviour



Easy to work

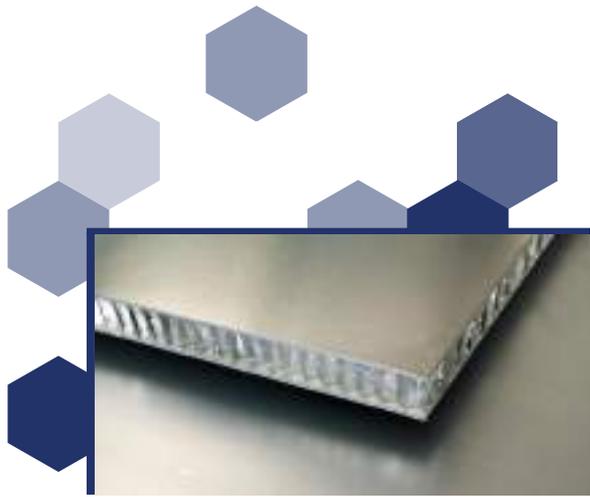


Easy to clean



Eco sustainable





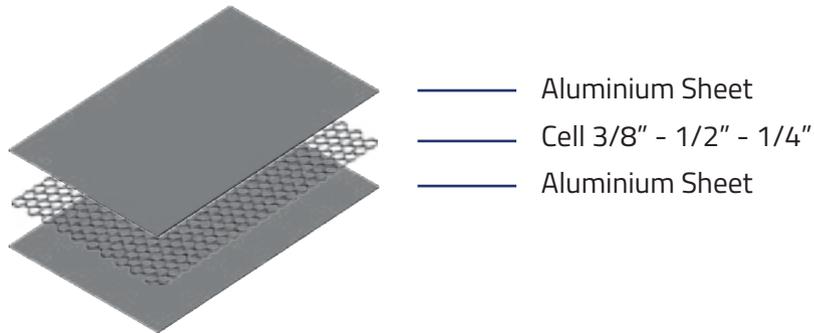
# ESACORE

The aluminum honeycomb structure offers an exceptional strength-to-weight ratio and can be covered with anodized aluminum, pre-painted aluminum, HPL, fiber cement, steel, and various other surfaces and finishes.

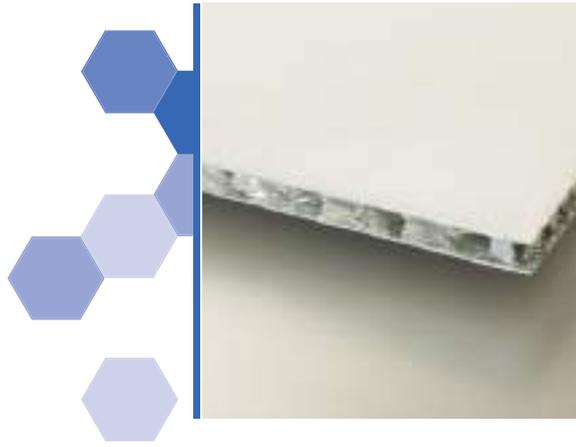
This versatile panel is suitable for multiple markets, including shipbuilding, railways, construction, and defense. It can also be used in the production of furniture, partitions, ceilings, and floors.

<b>Width</b>	1250mm, 1500mm [4', 5']
<b>Length</b>	Up to max. 4000mm (other lengths on request) [up to 13']
<b>Weight</b>	Refer to the technical sheet
<b>Temperature Resistance</b>	-40°C to +100°C
<b>Fire Properties</b>	DIN EN 13501-1 : A2 s1 d0

## COMPOSITION



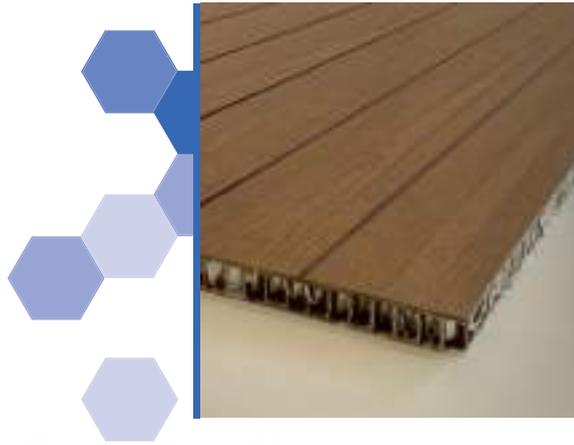




Esacore and Teba panels can be coated with pre-painted aluminum. This means the aluminum sheets are degreased, chemically pre-treated, and painted by the supplier, ensuring excellent performance for both exterior and interior applications.

## PRECOATED ALUMINUM





## WOOD

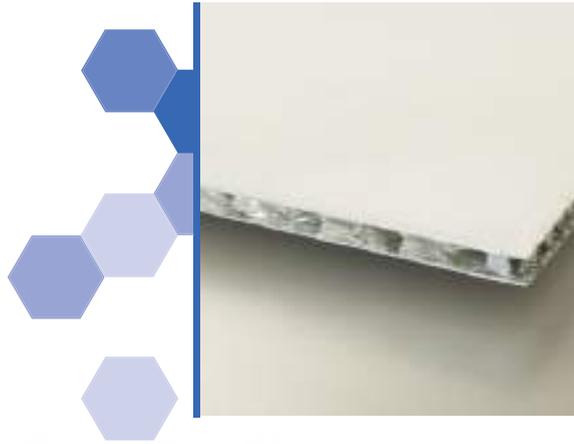
Monocore, Esacore, and Teba panels can also be veneered, meaning they can be faced with a natural wood veneer. This finish is often requested for interior elements (from furniture to partition walls) and provides an excellent aesthetic result—elegant and classic—while offering a much lighter solution.



## RESIN

Monocore, Esacore, and Teba panels can be coated with resin. This specific application makes the panel ideal for outdoor use, as it is highly resistant to weathering, while also offering long service life and excellent fire resistance.

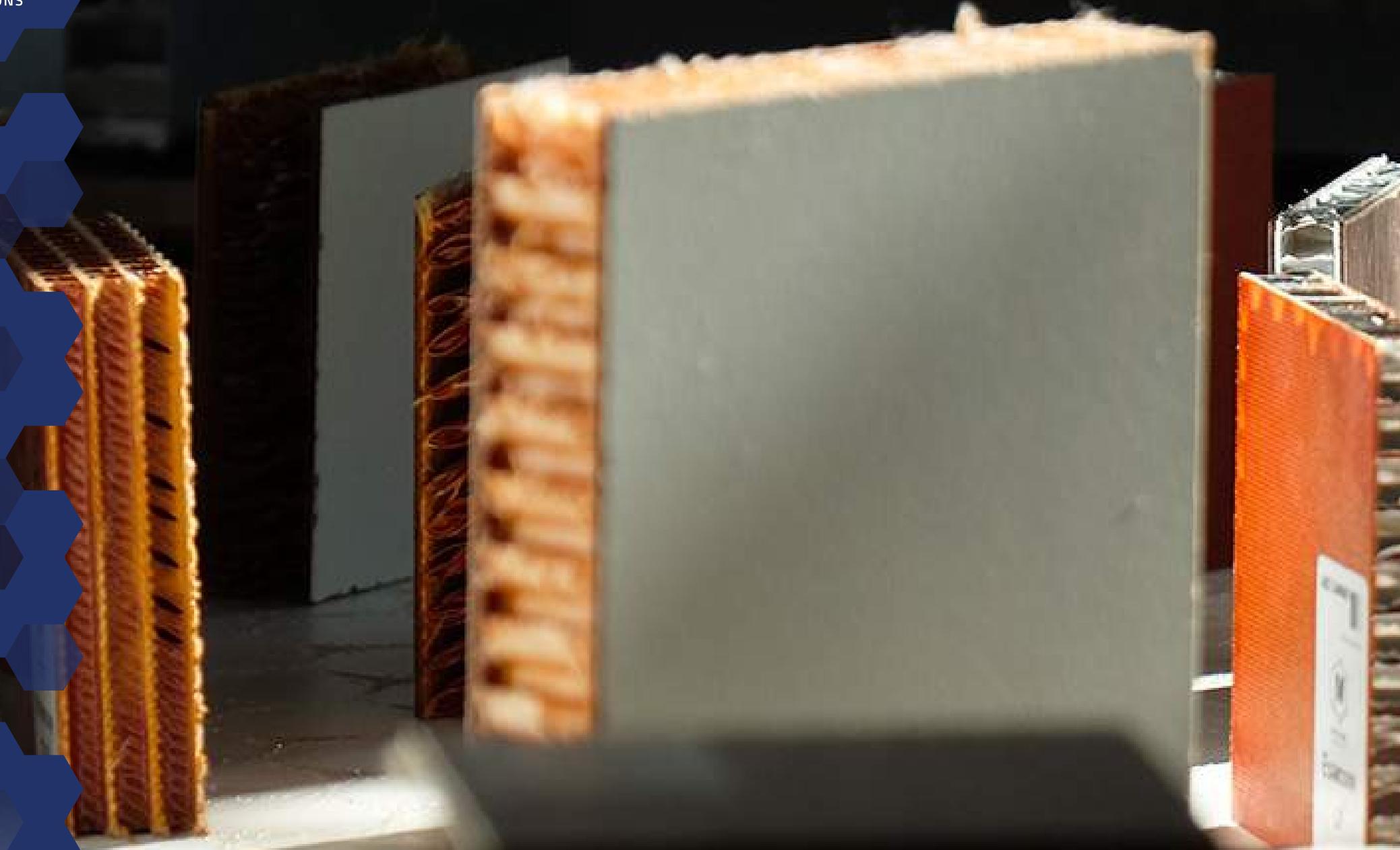




Esacore and Teba panels can also be covered with high pressure laminate (HPL). Similar to wood HPL is even lighter, laminate can be applied to an aluminum or fiberglass base. This versatile application is suitable for both indoor and outdoor areas, making it an ideal choice due to its durability and resistance to wear.

### **HPL (High Pressure Laminate)**







Abet HTS is committed to environmental sustainability.

The raw materials used in our panel production comply with international safety standards.

We are actively researching ways to recycle materials whenever possible and minimize the use of difficult-to-discard components.

Our manufacturing process ensures that no toxic substances are released during or after production.







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