

# HYLITE®

## LIGHTNESS IN ALU LOOK

THE FIRST CHOICE FOR NUMEROUS APPLICATIONS



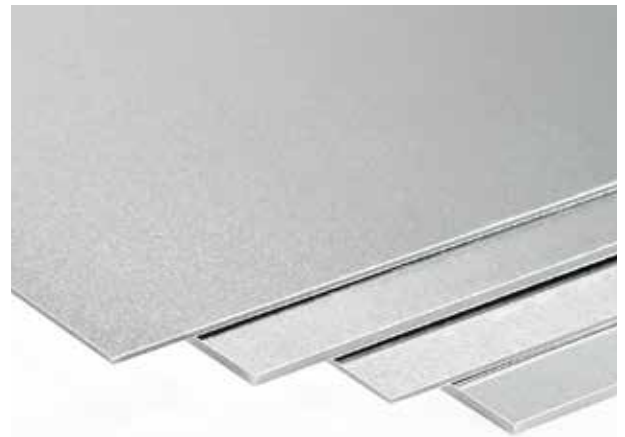
# HYLITE®



HYLITE® is an aluminium composite panel with a polypropylene core and aluminium cover layers.

HYLITE®, the world's thinnest composite panel with thicknesses of 1.2 mm and 2 mm, offers another special feature: the panel's core material can provide a hinge function, which withstands repeated bending without damage. This function is achieved by milling grooves at the same position into both outer aluminium skins. RWTÜV testing has shown that the hinge application is unimpaired even after 80.000 bends.

Creative design options for transportation, furniture making, product design, display and Point of Sale advertising as well as office supplies can be created with HYLITE® using a variety of processing techniques. Individual 3-D applications can be achieved by contour cutting, forming or other standard means of processing aluminium composite panels. Even when used on large surface areas, HYLITE® is lightweight and its dimensional stability is excellent.



## PRODUCT RANGE

Colours	Aluminium-Look, White, other colours on request	
Panel thickness	<b>1.2 mm</b>	<b>2 mm</b>
Core	Polypropylene	Polypropylene
Cover sheet thickness	0.2 mm	0.2 mm
Standard formats (WxL)	1540 x 3000 mm	1540 x 3000 mm

HYLITE® is available in a variety of thicknesses and dimensions. The above dimensions are standard ex works. Individual sizes are available on request.

## HYLITE® – AT A GLANCE

■ Dimensional stability at temperatures between +120°C and, for a limited period, + 150°C (approx. 30 minutes) make HYLITE® the first choice for a wide number of applications.

■ HYLITE® offers an outstanding range of applications, in particular three-dimensional formability.

■ HYLITE® and aluminium have similar properties and can be processed using the same equipment.

■ HYLITE® offers optimum results in direct digital printing and minimal weight for an aluminium composite panel.

■ HYLITE® is excellent in terms of recycling. Both the aluminium and plastic components can be easily separated for recycling. A combination of minimal material usage and the ensuing low energy consumption mean HYLITE® is in line with sustainability criteria.

■ HYLITE® can also be embossed and engraved provided ultimate elongation is taken into consideration.

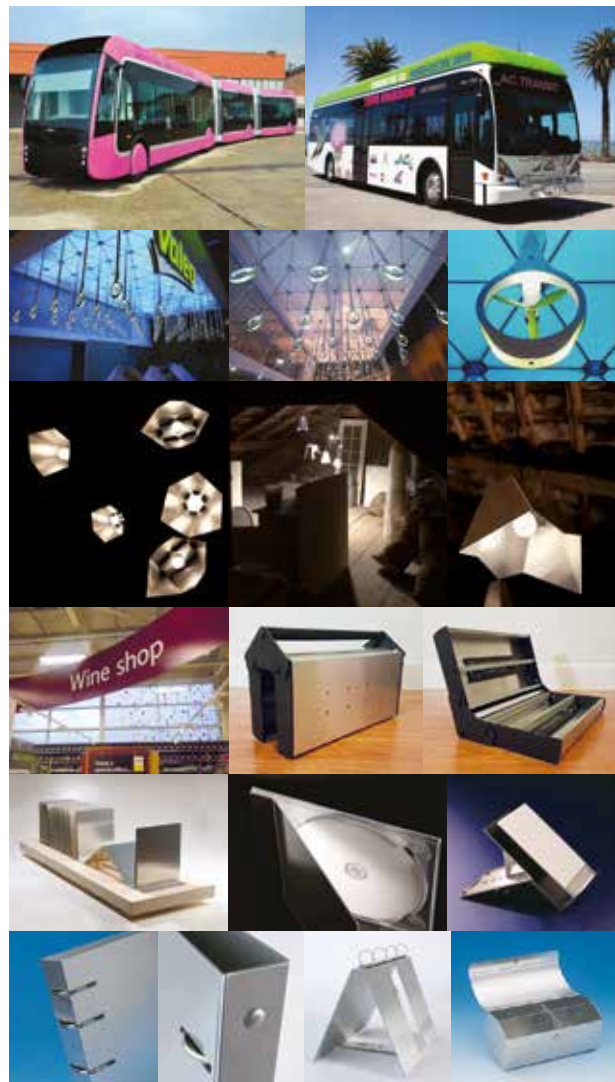
## PROCESSING

- |                   |                           |
|-------------------|---------------------------|
| ■ Cutting         | ■ Roll bending            |
| ■ Sawing          | ■ Folding                 |
| ■ Drilling        | ■ Punching                |
| ■ Gluing          | ■ Profile milling         |
| ■ Riveting        | ■ Screen printing         |
| ■ Screwing        | ■ Direct digital printing |
| ■ Bending         | ■ Embossing               |
| ■ Contour cutting | ■ Water jet cutting       |
| ■ Powder coating  | ■ Hinge joint routing     |

For advice regarding tools and equipment or hints about how to achieve optimal processing results, please feel free to get in touch.

## APPLICATION

- Signage
- Lettering
- Furniture construction
- Lighting
- Office supply
- Creative work
- Machine cladding
- Interior linings (Bus, Caravan, Mobile Homes)
- Service trolleys in the plane



## PRODUCT PROPERTIES

<b>Panel thickness</b>	<b>1.2 mm</b>	<b>2 mm</b>
Aluminium cover sheets	0.2 mm	0.2 mm
Alloy (EN 4852)	EN AW-5182 (AlMg4.5Mn0.4)	
Cover sheet hardness	Hardness (H18)	
<b>Core material</b>	<b>Polypropylen PP</b>	
Panel weight	1.8 kg/m <sup>2</sup>	2.5 kg/m <sup>2</sup>
Thickness tolerance (EN 485-4)	+/- 0.09 mm	+/- 0.12 mm
<b>Mechanical Properties</b>		
Modulus of elasticity [E]	70.000 N/mm <sup>2</sup>	
Yield strength [R <sub>p0,2</sub> ]	≥ 320 N/mm <sup>2</sup>	
Tensile strength [R <sub>m</sub> ]	≥ 380 N/mm <sup>2</sup>	
Section modulus [W]	0.2 cm <sup>3</sup> /m	0.36 cm <sup>3</sup> /m
Flexural rigidity (incl. lateral contraction) [ExI]	80 kNcm <sup>2</sup> /m	230 kNcm <sup>2</sup> /m
Ultimate elongation	4 %	4 %
<b>Thermal Properties</b>		
Service temperature range	-30 to +120 °C	
Temporary temperature (up to 30 minutes)	+150 °C Sufficient for powder or dip coating	
Coefficient of thermal expansion	24 x 10 <sup>-6</sup> 1/K	

Further technical information about HYLITE® is available on request.