

MIXCELL® Laminate - HPL (6,35/15)(0,9-0,9)S(1)

Description of the product

HPL is a sandwich panel with a cosmetic finish, consisting of an aluminium honeycomb core and decorative plastic laminate (HPL) skins. The panel can also be supplied with undecorated laminates. Main fields of application: furniture, lifts, shipbuilding, rail transport, road transport.

Layers

1) INTERNAL CORE

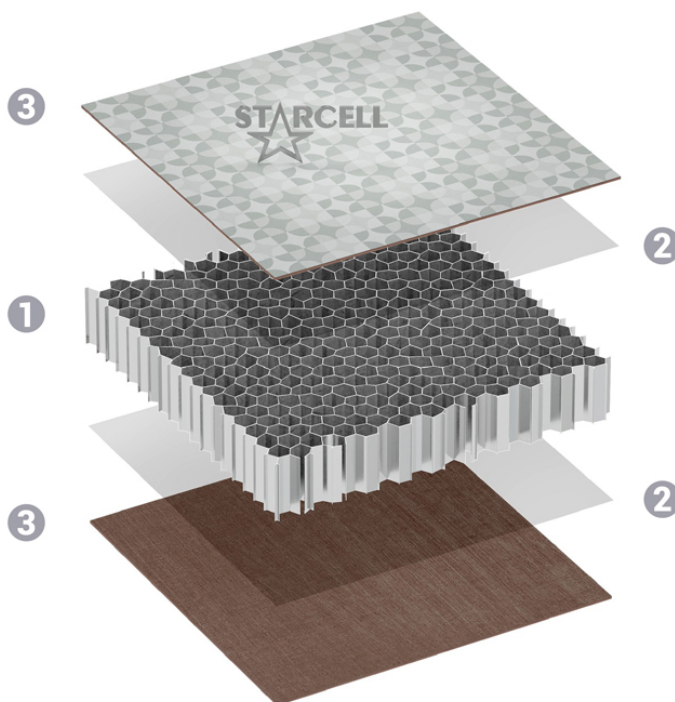
aluminium honeycomb
(Starcell production)
aluminium alloy: 3000 series
density: 29 - 40 - 56 - 65 kg/m³
cell diameter:
6.35 - 10 - 12.7 - 19 mm

2) ADHESIVE

thermosetting system (Starcell formula)

3) OUTDOOR SKINS

laminated decorative plastic (HPL)
thickness of the skins: 0.6 - 0.9 - 1.2 - 1.5 - 2.0 mm



Technical sheet of the support panel

PRODUCT ID CODE

Code structure	Value in this sheet	Meaning
MIXCELL®		family to which the product belongs
Laminate		subfamily to which the product belongs
HPL (n/n)(n-n)		panel type
HPL (n/)()	6,35/ =	size (mm) of the hexagonal honeycomb cell
HPL (/n)()	/15 =	panel thickness (mm)
HPL (/)(n-n)	0,9-0,9	thickness (mm) of the two skins
S(n)	1=	standard dimensions (mm) - S(1) = 1.000 X 1.000

CHARACTERISTICS OF MATERIALS AND COMPONENTS

Front finishing layer

material:	decorative laminate
type:	HPL
standard thicknesses (mm):	0,6 - 0,9 - 1,2 - 1,5 - 2,0
surface appearance:	smooth - coarse - textured
standard adhesive:	thermosetting system (Starcell formula)

Hexagonal cell honeycomb

material:	aluminium foil
type:	3000 series alloy
foil thicknesses (µm):	70
density (kg/m³):	29 - 40 - 56 - 65
standard cell sizes (mm):	6,35 - 10 - 12,7 - 19

Back structural skin

material:	decorative laminate
type:	HPL
standard thicknesses (mm):	0,6 - 0,9 - 1,2 - 1,5 - 2,0
surface appearance:	raw - smooth - coarse - textured
standard adhesive:	thermosetting system (Starcell formula)

PHYSICAL AND DIMENSIONAL CHARACTERISTICS OF THE PANEL

Dimensions

standard (mm):	S(4) = 1.220 X 2.440 - S(11) = 1.300 X 3.050
special (mm):	1.300 - maximum length: 3.050
tolerance (mm):	± 1 (squared panels)

Thicknesses

standard (mm):	6	10	15	20	25	30	50
special (mm):	other thicknesses on request						
tolerance (mm):	± 0,3						

Weights*

weights referred to standard thicknesses (kg/m²):	3,30	3,50	3,80	4,00	4,30	4,50	5,70
tolerance (kg/m²):	± 0,2						

*The weights refer to panels with the following characteristics:

cell size (mm): 10

foil thickness (µm): 70

thickness of the skins (mm): 0,9

MECHANICAL CHARACTERISTICS OF THE PANEL

The characteristics of this sheet refer to the following type of panel:

MIXCELL® Laminate - HPL (6,35/15)(0,9-0,9)S(1)

Starcell's Technical Department will gladly work with customers to determine the features of other panel configurations

Type	Standard	Characteristic value						
standard thicknesses	-	6	10	15	20	25	30	50
maximum load* (N):	DIN 53293; EN 14125			700				
deflection at Max* load (mm):	DIN 53293; EN 14125			10,00				
resistance to peeling* (N):	DIN 53295	> 100 (min.) - >80 (after ageing)						
operating temperature (°C):		from -15 °C to +75 °C						

(*) values obtained by Starcell's Internal Laboratory.

CERTIFICATIONS

Type	Standard	Sector	Class
fire behaviour of the panel	IMO Res. MSC.307(88) - 2010FTP Code	SHIPBUILDING	validation in progress
fire behaviour of the honeycomb	ISO 1182		0

PROPERTIES

- High rigidity combined with a very low overall weight.
- Excellent dimensional stability, also in terms of flatness over time.
- Excellent resistance to shear and bending forces.
- Excellent resistance to peeling.
- Ease of machining with manual or CNC equipment suitable for woodworking.
- Wide operating temperature range.
- Surface particularly suitable for gluing additional finishes (to be applied on non-decorative HPL laminate).

FIELDS OF APPLICATION

Typical applications of the MIXCELL® Laminate - HPL panel are interior design.

STORAGE

The MIXCELL® Laminate - HPL panel is a product in the "semi-finished products" category and therefore is subject to further processing; we recommend storing the panels horizontally in a closed and dry environment, possibly away from heat sources and to support them along their edges.

SAFETY DATA SHEETS

On request, safety data sheets for this product are available in Italian or English. For more information, please visit: www.starcellspa.com.

Scheda tecnica aggiornata al 20-09-2019