STARCELL
HONEYCOMB & COMPOSITE PANELS

Via Sebenico 22 - 20124 Milano
Tel: +39 026883537 - Fax : +39 0269008152
E-Mail: info@starcellspa.com Website: www.starcellspa.com

RAWCELL® Wood - MDF (10/19)(3,0-3,0)S(13)

Description of the product

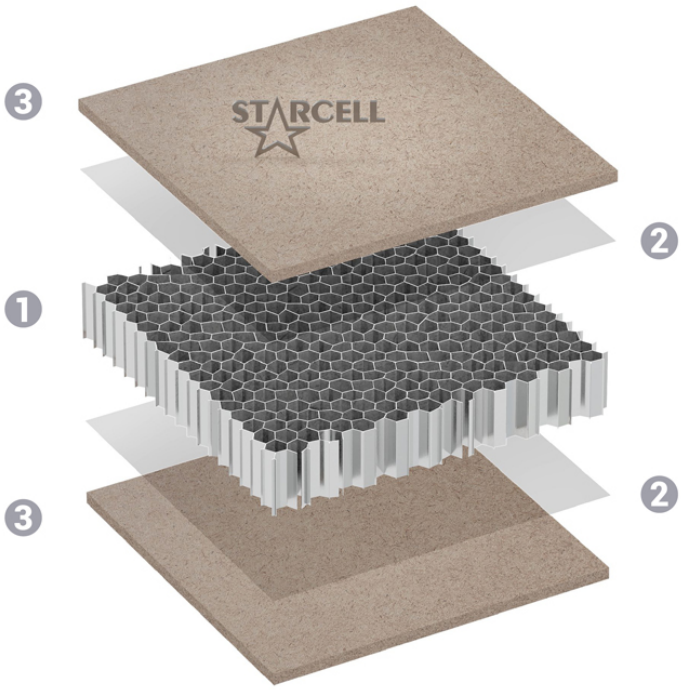
MDF is a sandwich panel without a cosmetic finish, with an aluminium honeycomb core and skins made of an MDF (medium density wood fibre) sheet. Main fields of application: furniture, shipbuilding, railway, road.

Layers

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

2) ADHESIVE
thermosetting
(Starcell formula)

3) EXTERNAL SKINS
MDF sheet (medium density wood fibre)
skin thicknesses:
3 mm (standard)
2 - 4 mm (on request)



Technical sheet of the panel

PRODUCT ID CODE		
Code structure	*Value in this sheet*	*Meaning*
RAWCELL®		family to which the product belongs
Wood		subfamily to which the product belongs
MDF (n/n)(n-n)		panel type
MDF (n/)( )	10/ =	size (mm) of the hexagonal honeycomb cell
MDF (/n)( )	/19 =	panel thickness (mm)
MDF (/)(n-n)	3,0-3,0	thickness (mm) of the two skins
S(n)	13=	standard dimensions (mm) - S(13) = 1.550 X 3.050

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CHARACTERISTICS OF MATERIALS AND COMPONENTS

Structural skins

material:	medium-density wood fibreboard
standard thicknesses (mm):	3,0 - (on request: 2 - 4)
surface appearance:	smooth
standard adhesive:	thermosetting system (Starcell formula)

Hexagonal cell honeycomb

material:	aluminium foil
type:	3000 series alloy
foil thicknesses (µm):	50 - 60 - 70
density (kg/m³):	29 - 40 - 56
standard cell sizes (mm):	10 - 12,7 - 19

PHYSICAL AND DIMENSIONAL CHARACTERISTICS OF THE PANEL

Dimensions

standard (mm):	S(13) = 1.550 X 3.050
special (mm):	1.550 - maximum length: 3.050
tolerance (mm):	± 1 (squared panels)

Thicknesses

standard (mm):	18	20	25	30	40	50	60
special (mm):	other thicknesses on request						
tolerance (mm):	± 0,3						

Weights*

weights referred to standard thicknesses (kg/m²):	5,65	5,76	6,03	6,30	6,84	7,38	7,92
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): 3,0

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MECHANICAL CHARACTERISTICS OF THE PANEL

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

RAWCELL® Wood - MDF (10/19)(3,0-3,0)S(13)

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

Type	Standard	Characteristic value						
standard thicknesses	-	18	20	25	30	40	50	60
maximum load* (N):	DIN 53293; EN 14125		1.949					
deflection at Max* load (mm):	DIN 53293; EN 14125		13,55					
resistance to peeling* (N):	DIN 53295	> 100 (min.) - >80 (after ageing)						
elasticity modulus (E)* (N/mm²):	DIN 53293		2.191					
stiffness modulus (R)* (N/m²):	DIN 53293	80						
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 honeycomb	ISO 1182		M1 F0

PROPERTIES

- High rigidity combined with a very low overall weight.
- Excellent dimensional stability, also in terms of flatness over time.
- Very good compressive strength (due to aluminium honeycomb).
- 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.

FIELDS OF APPLICATION

The RAWCELL® Wood - MDF panel is used in the field of interior fittings, transportation (motor homes, trains, yachts) and design (furniture, doors, wings); Worthy of note are two particular applications: the production of loudspeakers and that of large overhead doors, with fine finishes.

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STORAGE

The RAWCELL® Wood - MDF 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