

## 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

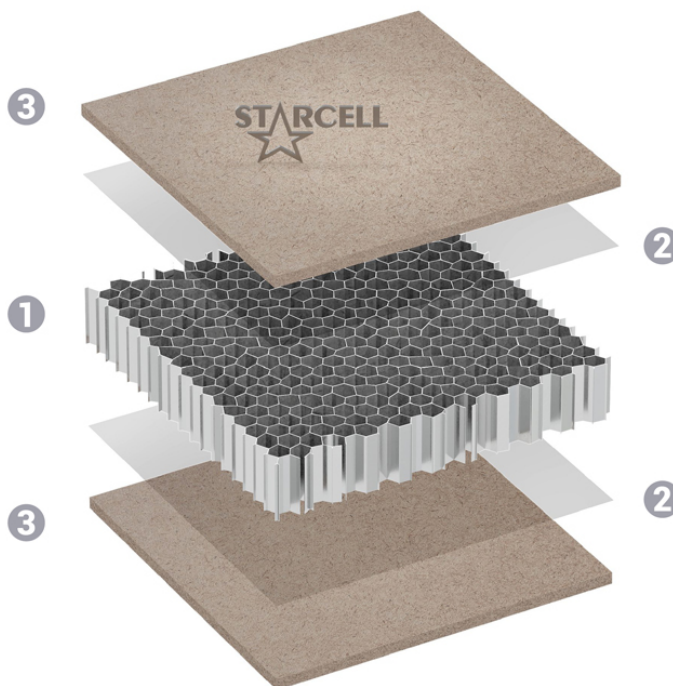
aluminium honeycomb  
(Starcell production)  
aluminium alloy: 3000 series  
density: 29 - 40 - 56 kg/m<sup>3</sup>  
cell diameter:  
10 - 12.7 - 19 mm

##### 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

## 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

### MECHANICAL CHARACTERISTICS OF THE PANEL

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

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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.

### 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](http://www.starcellspa.com).

*Scheda tecnica aggiornata al 20-09-2019*