

## RAWCELL® Wood - OKU (10/19)(3,0-3,0)S(6)

### Description of the product

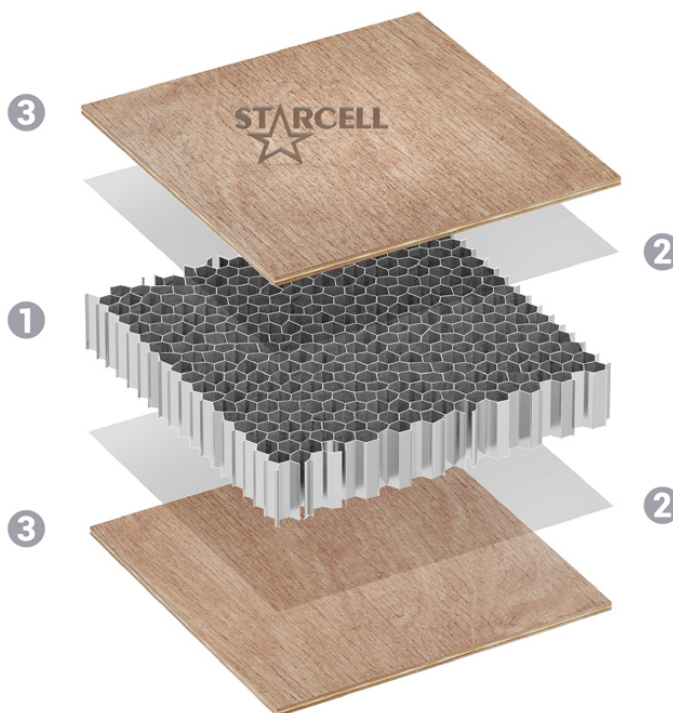
OKU is a sandwich panel without a cosmetic finish, with an aluminium honeycomb core and skins made of an Okoumé plywood sheet. Main fields of application: furniture, shipbuilding, railway, road.

#### 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 SKIN  
Okoumé plywood sheet  
skin thickness:  
3 mm (standard)  
2 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          |
| OKU (n/n)(n-n)  |                     | panel type                                      |
| OKU (n/ )( )    | 10/ =               | size (mm) of the hexagonal honeycomb cell       |
| OKU ( /n)( )    | /19 =               | panel thickness (mm)                            |
| OKU ( / )(n-n)  | 3,0-3,0             | thickness (mm) of the two skins                 |
| S(n)            | 6=                  | standard dimensions (mm) - S(6) = 1.250 X 2.500 |

## CHARACTERISTICS OF MATERIALS AND COMPONENTS

### Structural skins

|                            |   |
|----------------------------|---|
| material:                  | multilayer plywood sheeting             |
| type:                      | Okoumé                                  |
| standard thicknesses (mm): | 3,0 - (on request: 2)                   |
| surface appearance:        | natural                                 |
| 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(6) = 1.250 X 2.500          |
| special (mm):   | 1.240 - maximum length: 2.520 |
| tolerance (mm): | ± 1 (squared panels)          |

### Thicknesses

|                 |                              |    |    |    |    |    |    |
|-----------------|------------------------------|----|----|----|----|----|----|
| standard (mm):  | 13                           | 19 | 22 | 25 | 30 | 40 | 50 |
| special (mm):   | other thicknesses on request |    |    |    |    |    |    |
| tolerance (mm): | ± 0,3                        |    |    |    |    |    |    |

### Weights\*

|   |       |      |      |      |      |      |      |
|---|-------|------|------|------|------|------|------|
| weights referred to standard thicknesses (kg/m²): | 4,18  | 4,50 | 4,66 | 4,83 | 5,10 | 5,64 | 6,18 |
| 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             | -                   | 13                                | 19    | 22 | 25 | 30 | 40 | 50 |
| maximum load* (N):               | DIN 53293; EN 14125 |                                   | 1.715 |    |    |    |    |    |
| deflection at Max* load (mm):    | DIN 53293; EN 14125 |                                   | 12,20 |    |    |    |    |    |
| resistance to peeling* (N):      | DIN 53295           | > 100 (min.) - >80 (after ageing) |       |    |    |    |    |    |
| elasticity modulus (E)* (N/mm²): | DIN 53293           |                                   | 3.290 |    |    |    |    |    |
| stiffness modulus (R)* (N/m²):   | DIN 53293           | 120                               |       |    |    |    |    |    |
| 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 - OKU panel is used in the field of interior fittings, transportation (motor homes) and design (furniture, doors, wings); it is often used as a cladding material (walls, ceilings).

### STORAGE

The RAWCELL® Wood - OKU 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).

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