



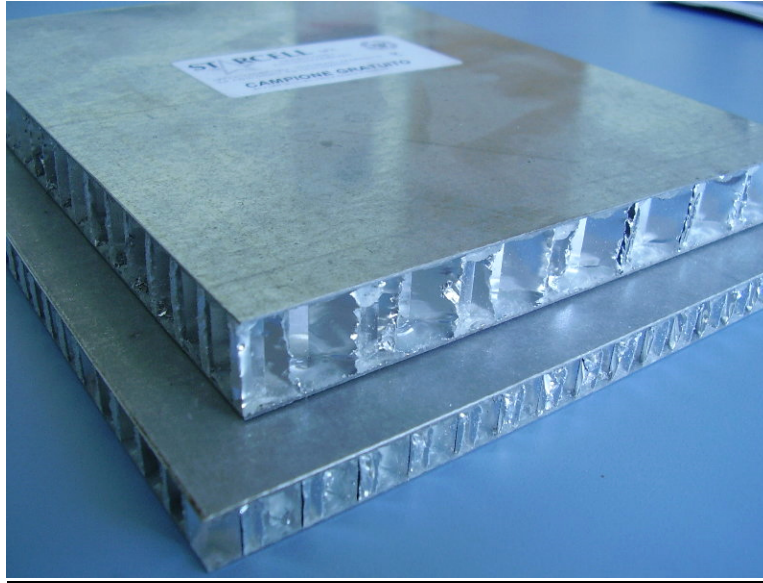
**STARCELL S.p.A. - Honeycomb & Composite Panels**

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## METALCELL® FPA Panel



FPA Panel

PANEL THICKNESS: from 4 to 150 mm.

EXTERNAL COATINGS: Rough/ Zinc-coated/ Inox steel.

ADHESIVE: Thermoplastic film or polyurethane adhesive system.

CORE: Aluminium honeycomb (cell sizes: 6.35mm; 10mm ;18mm).

### Technical Specifications

**METALCELL® FPA** is a panel made with an aluminium honeycomb core manufactured by STARCELL. The FPA panel has the following distinguishing features: extremely high rigidity and flatness, excellent mechanical performance, fire resistance, absence of toxic fumes emissions, dimensional stability over time. This performance permits a widespread use of the FPA panel in different markets and application typologies.



The **FPA** panel has the following configuration:

- “Standard” face sheets in zinc-coated steel (rough finishing like Aluzinc). Resistant to atmospheric agents and corrosion. Thickness ranging from 0.35mm up to 1.5mm.
- “Special” face sheets in pre-painted steel (RAL or NCS colours), inox or PVC finishing
- Panel core is an aluminium honeycomb manufactured by STARCELL in its own manufacturing plants. Honeycomb manufactured by STARCELL complies with the most important international specifications regarding material safety and durability
- A system of gluing based on the use foreseen by the client: two different types of gluing can be used to meet the needs of most applications (thermoplastic or thermosetting, both STARCELL formulations). All panel components are assembled and glued using particular manufacturing processes which may employ, in order to obtain the highest level of mechanical and dimensional performance, both ‘hot’ and room temperature processes.

The use of metallic material for 100% of its configuration guarantees a total recycling of the **FPA** panel in compliance with the latest international legislation in its regard.

### Features

- Excellent dimensional stability, particularly regarding flatness.
- Excellent resistance to compression loads (honeycomb).
- Excellent resistance over time to both atmospheric (moisture) and chemical agents.
- Easy to work: finishing operations can be carried out using conventional manual equipment or any CNC machine provided it is appropriate for working on steel.
- High interval of operating temperatures (from - 40°C to + 80°C).

### Physical Characteristics

Width (mm) – uncut	1.000 – 1.250 – 1.500 (Std)
Length (mm) - uncut	2.150 – 2.550 – 3.050– 4.250 (Std)
Dimension tolerances (mm)	+/- 1
Thickness tolerances (mm)	+ /- 0,3
Skins	Zinc-coated steel – prepainted – primerized Thickness from 0,30 mm up to 1,5 mm
Honeycomb	Aluminium type 3003 H19 (60 µ); Cell (mm) 6,35(1/4”) – 10(3/8”) 18(3/4”) Density: 65 Kg/m <sup>3</sup> ;



## Mechanical Characteristics

Feature	Results	Reference
Fire properties	Class 0 (honeycomb) <i>Low flame spread</i> <i>M &amp; F class</i> <i>A2-S1d0</i>	ISO 1182 MED 96/98 Res. IMO 653 UNI 11170-3 EN 13501-1
Peeling (N)	>130 (min) medium 380	DIN 53295
Compression* (Kg/cm <sup>2</sup> )	27	UNI 4913
Max load* (N)	3.900	UNI EN 14125; DIN 53293
Bending max load* (mm)	3,58	UNI EN 14125; DIN 53293
E modulus* (N/mm <sup>2</sup> )	130.000	UNI EN 14125; DIN 53293
Rigidity* R (Nm <sup>2</sup> )	1.000	UNI EN 14125; DIN 53293

\* Tests carried out in internal laboratory. Values referred to FPA 6006/19 0505

## Product Code

The **FPA** panel code uses the following standard:

**FPA 6006/20 035035**

**FPA:** Type of panel.

**60:** Thickness of the aluminium foil used for the honeycomb (micron).

**06:** Cell size (6,35 mm).

**20:** Thickness of the panel (mm).

**035:** Thickness of the lower skin (1/10 mm).

**035:** Thickness of upper skin (1/10 mm).

## Storage

The **FPA** panel is a semi-worked product and therefore subject to further working. Should the panels be stored in a warehouse, we suggest to store them horizontally and supported along their perimeter.

## Safety Data Sheets

The product safety details are available in either Italian or English upon request. For further information please go to [www.starcellspa.com](http://www.starcellspa.com).

N.B.- The information herein is believed to be correct to the best of Starcell S.p.A's knowledge; we do not warrant the accuracy and completeness of the property features and their particular applications. Starcell S.p.A reserves the right to make any modifications.

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