

**Gillfab™ 5030 Panel**

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**Description**

Gillfab 5030 is a sandwich panel composed of aluminum facings and aluminum honeycomb. Normally used in industrial or nonstructural aircraft applications.

**Applications**

In areas where high strength and low weight are required, but cost considerations make using commercial grade honeycomb more desirable than expensive aircraft grade, such as: light weight shelves and boxes, light weight table tops, tooling panels and other secondary structures.

**Features**

- High strength-to-weight ratio.
- Very flat with excellent rigidity.
- Lower in cost than 5052 alloy aluminum honeycomb.
- Service temperature range: -65°F to 160°F.

**Construction**

Adhesive: Nitrile modified epoxy film.  
Core: 3003 aluminum foil honeycomb (commercial grade).  
Facings: Aluminum alloy per customer specification.

**Availability**

Thickness: Per customer specification, from .125".  
Size: Standard size is 48" x 144" without splices in facing.  
Facings: Standard aluminum thickness (.01", .016", .02", .025", .03" and up).  
Core: Density and cell size per customer specification.  
Density range from 3.1 to 6.2 pcf; cell sizes of 1/4", 3/16", 3/8", or 1".

**Standard Tolerances**

Thickness:  $\pm .010$ "  
Length:  $+ .25$ ",  $- .125$ "  
Width:  $+ .25$ ",  $- .125$ "  
Warpage:  $<.004 L^2/t$  where L = length (ft.) and t = thickness (in.)



## Alternative Gill Products

Product Number	Difference
Gillfab 4030	5052 alloy aluminum honeycomb (aircraft grade), which has slightly higher core strength and higher cost.

### Properties of Gillfloor 5030

Based on 0.5" thick panel with .020"/.020" facings and .46" thick core at 3.6 pcf

Property	Test Method	Minimum Specific Value	
		English	(Metric)
<b>Mechanical</b>			
Long beam flexural strength, 20" span	MILSTD 401B		
Ultimate load, lbs (kg)		484	(220)
Facing stress, ksi (MPa)		42	(290)
Deflection at 100 lb-in (mm)		.15	( 3.8)
Sandwich peel, in-lbs (N-m)/3" width	MILSTD 401B		
At room temperature		35	(3.95)
After 30 day water soak		32	(3.62)
Panel core shear, psi (kPa)	MILSTD 401B		
Ribbon (L) direction		210	(1,448)
Transverse (W) direction		130	( 896)
Flatwise compressive strength, psi (kPa)	MILSTD 401B	340	(2,344)
Flatwise tensile strength, psi (kPa)	MILSTD 401B	650	(4,478)
<b>Physical</b>			
Weight, psf (kg/m <sup>2</sup> )		.87	(4.26)
Impact strength, Gardner Model 11K3	ASTM D3029		
2 lb. dart, in-lbs (N-m)		40	(4.52)
Max. Service Temperature, oF(°C)		180	( 82)
Thermal Conductivity, BTU-Ft/Ft <sup>2</sup> .hr. °F(W/cm. °C)	ASTM C177	1.0	(.144)
<b>Flammability</b>			
60 second vertical exposure self-extinguishing time, sec	FAR 25.853a		
burn length, inches (mm)		0	(0)
45 degree test self-extinguishing time, sec	FAR 25.855		
penetration		0	(0)
glow time, sec		None	(None)
		0	(0)

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