



## Gillfab™ 4004A Panel

March 2001

### Description

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Gillfab 4004A is a low smoke sandwich panel made from unidirectional reinforced phenolic facings bonded to aramid honeycomb core.

### Applications

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4004A is designed for use as passenger flooring in highly loaded areas such as entries, galleys and lavatories of commercial aircraft.

### Features

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- High impact, corrosion resistant facing.
- Low smoke emission in a fire.
- Light weight.
- Service temperature range: to 180°F.

### Specifications

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- British Aerospace BAER 3232
- FAR 25.853 and 25.855. Fire resistance.

### Construction

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Thickness:	Per customer specification, from .375" and up.
Core:	1/8" cell, 9 pcf aramid honeycomb.
Facings:	.030"/.015" unidirectional glass reinforced phenolic.

### Availability

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Thickness:	Per customer specification.
Size:	Standard size is 48" x 144". Sizes up to 72" x 168" are available on special order.
Facings:	Thickness from .015" in multiples of .005".



### Standard Tolerances

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Thickness:	$\pm .01$ "
Length:	+ 0.5", - 0"
Width:	+ 0.5", - 0"
Warpage:	.025 in/ft., max.

### Alternative Gill Products

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Product Number	Difference
Gillfab 4004A	Has .015"/.015" facings. Qualified to Douglas Drawing 7954401.
Gillfab 4004B, Ty 1, 2, and 3	Qualified to British Aerospace MAT 006. All types have .015"/.015" facings and each type is available in .280" or .405" overall thicknesses. Type 1 has 9 pcf Nomex® core Type 2 has 5 pcf Nomex core Type 3 has 3 pcf Nomex core
Gillfab 4017T	Epoxy resin in facings makes 4017T higher in strength, but higher in smoke evolution.



**Properties of Gillfab 4004A**  
Based on .41" thick panel with .030"/.015"  
facings and .360" thick core at 9 pcf

Property	Test Method	Typical Values	
		English	(Metric)
<b>Mechanical</b>			
Long beam flexural strength, 20" span	MIL-STD 401B		
Long beam flexural strength, 20" span	BAER 3239		
Ultimate load,lbs(kg)		400	(181)
Ultimate Bending Moment lb-in/in		340	(38.41)
Facing stress,ksi(MPa)		42	(290)
Deflection at 100 lb,in(mm)		.73	(18.5)
Sandwich peel,in-lbs(N-m)/3" width	AMS-STD 401		
At room temperature		21	(3.0)
After 30 day water soak		21	(3.0)
Panel core shear,psi (kPa)	BAER 3239		
Ribbon(L) direction		300	(2070)
Flatwise compressive strength,psi(kPa)	AMS-STD 401	1500	(10,340)
<b>Physical</b>			
Weight, psf(kg/m <sup>2</sup> ), max.		.81	(3.95)
Max. Service Temperature, °F(°C)		180	(82)
<b>Flammability</b>			
60 sec. vertical exposure	FAR 25.853a		
self-extinguishing time(sec)		6	(6)
burn length (inches) (mm)		2	(50.8)
Smoke Density, (D <sub>s</sub> ) (max.)			
Flaming, 4 min.		100	

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