



## Gillfab™ 4205 Panel

March 1997

### Description

---

Gillfab 4205 is a low smoke sandwich panel with facings of phenolic resin reinforced with woven glass cloth/unidirectional carbon bonded to a Nomex® honeycomb core.

### Applications

---

Flooring panel for passenger and cockpit compartment for Airbus Industrie A320 and A321 aircraft.

### Features

---

- All phenolic resin - low smoke and low toxic emissions in a fire.
- High strength and rigidity; corrosion resistant facings.
- Lightweight.
- Service temperature: to 180°F.

### Specifications

---

- Airbus Industrie Tech. Spec. No. 5360 M1B 000100.
- FAR 25.853 - fire resistant.
- ATS 1000.001 - Smoke density and toxicity.

### Construction

---

Adhesive:	Modified epoxy.
Core:	Aramid honeycomb.
Facings:	Woven fiberglass cloth/unidirectional carbon fiber reinforced phenolic resin.

### Availability

---

Thickness:	0.375"
Length and Width:	Per customer specification, 48"w x 144"l maximum (one core splice maximum)
Facing thickness:	Top: .025", Bottom: .025"
Core:	6.0 pcf density, 3/16" cell size



### **Standard Tolerances**

---

Thickness:	± .02"
Length and Width:	-0, +0.5; core: 48" x 144"
Warpage:	.036 in/ft

### **Alternative Gill Products**

---

<b>Product Number</b>	<b>Difference</b>
Gillfab 4522	Thinner facings and lower density core.
Gillfab 4223	Thicker top facing; panel thickness greater.



## Properties of Gillfab 4205

Based on a panel 0.374" thick with 0.025"/0.025" thick facings  
and a 0.324" thick core at 6.0 Nominal Density - Typical Property Values

Property	Test Method	Unit	Value
Weight	ASTM C29	lb/sq ft (kg/sq m)	0.705 (3.44)
Thickness	ASTM C366	inch (mm)	0.374 (9.5)
Distributed Surface Load Permanent Set	Airbus Industrie 5360	lb (N)	>1,800 (>8,007)
Ultimate Load	M1B 000100	lb (N)	4,500 (20,000)
Concentrated Load	Airbus Industrie 5360 M1B 000100	lb (N)	>192 (>353)
Insert Pull Out Before Aging	Airbus Industrie 5360	lb (N)	2,300 (10,230)
After Aging	M1B 000100	lb (N)	2,100 (9,340)
Full Scale Shear	Airbus Industrie 5360 M1B 000100	lb (kN)	24,100 (107.2)
Flammability - vertical Note 1	Airbus Industrie		
Extinguishing Time	ATS 1000.001	second	5
Burn Length		inch (mm)	1.14 (29)
Flaming Drops Time		second	0
Smoke Density Note 2	Airbus Industrie		
Non-Flaming - 4 minute	ATS 1000.001	D <sub>s</sub>	2
Flaming - 4 minute		D <sub>s</sub>	34
OSU Heat Release Note 3	Airbus Industrie		
Peak HHR	ATS 1000.001	kw/m <sup>2</sup>	44.4
Total HHR		kw-in/m <sup>2</sup>	44.3
Note 1 - Equivalent to FAR 25, Appendix F, Part I			
Note 2 - Equivalent to FAR 25, Appendix F, Part V			
Note 3 - Equivalent to FAR 25, Appendix F, Part IV			

M.C. Gill Corporation gives no warranties, expressed, implied or statutory, or otherwise, as to the description, quality, fitness, capacity, or any other matter, of the properties described. The data given represents minimum values to be expected. Through additional testing of each lot it is possible to verify that the product exceeds the tabulated values. It is recommended, however, that prospective users evaluate the materials to determine their suitability for the users' specific requirements. Values are given on the condition that the user assumes all risk and that responsibility for any loss or damage caused by or resulting from the use of such information is disclaimed by M.C. Gill Corporation.

M.C. Gill Corp.  
4056 Easy Street  
El Monte, CA 91731-1087 USA  
626-443-4022 info@mcgillcorp.com

M.C. Gill Europe Ltd. - Insoleq  
23 Enterprise Road, Balloo Industrial Estate South  
Bangor Co-Down BT19 7TA, Northern Ireland  
+44 (0) 2891 470073 sales@mcgillcorp.com

[www.mcgillcorp.com](http://www.mcgillcorp.com)

© M.C. Gill Corporation. All rights reserved.

