



## Gillfloor™ 4017T Panel

March 2001

### Description

Gillfloor 4017T is a light weight aircraft flooring panel made from unidirectional S-2 glass® reinforced epoxy facings bonded to aramid honeycomb core.

### Applications

- Type 1: Heavy traffic areas, such as aisles
- Type 2: Light traffic areas, such as under seats.
- Type 3: Heavy traffic areas; freighter aircraft - upper and lower deck.

### Features

- Fatigue and corrosion resistant - proven service life.
- Very high impact facings.
- High strength-to-weight ratio.
- Service temperature range: to 180°F.

### Specifications

- McDonnell Douglas specification BZZ 7002 Types 1 thru 3.
- Embraer MEP 15-031.
- BAe MAT 003.
- FAR 25.853a - fire resistance.

### Construction

	Type 1	Type 2	Type 3
Adhesive:	Epoxy	Epoxy	Epoxy
Core:	9 pcf	5 pcf	9 pcf
Facings:	.015/.015	.015/.015	.030/.015

### Availability

Thickness:	.400".
Length:	144" (to 168" on special order).
Width:	36", 42", 48", 60", 72".



### Standard Tolerances

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Thickness:	$\pm .010$ "
Length:	+0.5", -.062"
Width:	+0.5", -.062"
Warpage:	<.025"/ft. @ 0.4" thickness

### Alternative Gill Products

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Product Number	Difference
Gillfab 4017L	Qualified to Lockheed LAC-C-28-1386. Total panel thickness is .375".
Gillfab 4017, Ty 1 and 2	Qualified to BAe MAT 003. Both types have .015"/.015" facings. Ty 1 has 9 pcf Nomex® core. Ty 2 has 5 pcf Nomex core. Note: The last three numbers of the drawing call-up indicate overall panel thickness, e.g., MAT 003-1-280 is .280" thick and MAT 003-2-655 is .655" thick.
Gillfab 4509	Unidirectional carbon, reinforced phenolic facings for reduced weight, lower smoke generation, and greater rigidity. Qualified to McDonnell Douglas Dwg. 7954400.



**Properties of Gillfab 4017T**  
Typical Average Values

Property	Test Method	Unit	Type I	Type II	Type III
Weight	BZZ 7002	lb/sq ft (kg/sq m)	0.655 (3.20)	0.505 (2.47)	0.771 (3.76)
Thickness	BZZ 7002	inches (mm)	0.400 (10.2)	0.392 (10.0)	0.397 (10.1)
Sandwich Peel	AMS-STD 401	in-lb(N-m)/3 in width	60 (6.8)	42 (4.8)	57 (6.4)
Sandwich Peel, Humidity Aged	AMS-STD 401	in-lb (N-m)/3 in width	52 (5.9)	36 (4.1)	103 (11.6)
Long Beam Flexural Ultimate Load Facing Stress Deflection	AMS-STD 401	lbs (N) ksi (MPa) inches (mm)	271 (1,205) 39.1 (270) 0.768 (19.5)	247 (1,099) 32.7 (225) 0.815 (20.7)	612 (2,722) 38.8 (268) 0.436 (11.07)
Flatwise Compressive Strength	AMS-STD 401	lb/sq ft (kPa)	2,030 (13,996)	961 (6,626)	2,150 (14,824)
Insert Shear	BZZ 7002	lbs (N)	1,875 (8,340)	1,680 (7,473)	2,061 (9,168)
Impact Strength	BZZ 7002	in-lb (N-m)	>320 (36.2)	>320 (36.2)	138 (15.59)
Flatwise Tensile	BZZ 7002	lb/sq in (kPa)	1,781 (12,280)	1,509 (10,404)	N/R
In-Plane Shear	BZZ 7002	lb/in (kg/m)	415 (7,411)	385 (6,875)	631 (11,268)
Flammability - 60 Second Self-Extinguishing Time Burn Length Drip Time	FAR 25.853	seconds inches (mm) seconds	0 2.1 (53.0) 0	0 1.3 (33.0) 0	3.66 1.50 (38.1) 0
Flammability - 45 Degree, 30 Second Self-Extinguishing Time Afterglow Penetration	FAR 25.853	seconds seconds ----	0 0 None	0 0 None	0 0 None
Smoke Density Flaming	DMS 1500	D <sub>s</sub>	187	153	193

N/R = Not Required

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