



Gillfab™ 4405 A/B Panel

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Description

Gillfab 4405A (Ty 1) is a sandwich panel made with facings of fiberglass cloth reinforced epoxy laminate bonded to an aramid honeycomb core. 4405B (Ty 2) is identical except a sheet of aluminum foil is bonded to the bottom facing.

Applications

Designed for use as flooring in passenger, cockpit, and cargo compartments in Airbus Industrie's A300/A310 aircraft.

Features

- High impact, corrosion resistant facing.
- Good burn through resistance.
- Service temperature: to 158°F.

Specifications

- AI TL 53/5000/79, Issue 8, Annex A, Types 1 and 2 (PC3).
- FAR 25.853 - fire resistant.

Construction

Adhesive:	Epoxy, fire resistant.
Core:	Aramid honeycomb.
Facings:	Woven fiberglass cloth/epoxy.

Availability

Thickness:	0.374"
Length and Width:	Per customer specification, up to 60"x144"
Facing thickness:	Top: 0.030"; Bottom: 0.024"
Core:	8.0 pcf density, 3/16" cell size



Standard Tolerances

Thickness:	+ 0.020", -0.010"
Length and Width:	-0, +0.5"
Warpage:	0.03937"

Alternative Gill Products

Product Number	Difference
Gillfab 4105	Panel designation originally qualified for use in passenger cockpit and containerized cargo flooring for A300, A310, A330, and A340 aircraft. Thinner top facing and lower density core.

Properties of Gillfab 4405

Based on a panel 0.374" thick with 0.030"/0.024" epoxy facings and a 8 pcf 0.320" thick core
 Typical Values - English (Metric)
 Specification: AI TL53/5000/79, Issue 8, Annex A Types 1 and 2* (PC3)
 (Property values for Types 1 and 2 are identical
 except for flammability which is reported on this Product Data Sheet.)

Property	Test Method	Typical English (Metric)
Weight, psf (kg/m ²)	ASTM C 29	0.762 (3.72)
Long Beam Flexural Strength, lbs (N)	ASTM C 393	
Ultimate Load		
Ribbon (L) Direction		
RT		442 (1,966)
HA + 40°C		408 (1,814)
Transverse (W) Direction		
RT		526 (2,340)
HA + 40°C		472 (2,099)
Long Beam Deflection @		
445N (100 lbs), in (mm)		
Ribbon (L) Direction		
RT		0.639 (16.23)
HA + 40°C		0.588 (14.93)
Transverse (W) Direction		
RT		0.607 (15.42)
HA + 40°C		0.548 (13.91)
Hard Point Shear		
Ultimate Load, lbs (N)	Chapter 5.5*	
RT		7,241 (32,209)
HA + 40°C		6,960 (30,958)
Food Cart Roller, cycles	Chapter 9.5	
@ 125.7 lbs/wheel (57 KG)		Pass (No Damage)
@ 165.3 lbs/wheel (75 KG)		Pass (No Damage)
Indentation,, lbs (N)	Chapter 5.4	323 (1,437)
Stabilized Core Compression, psi(N/mm ²)	ASTM C 365	1,820 (12.55)



Property	Test Method	Typical
Flammability - Type 1	ABD 0031	
60 Second Vertical	AITM 2.0002A	
Extinguishing Time, sec		3.9
Burn Length, in (mm)		0.5 (12.7)
Drip Extinguishing Time, sec		0.0
12 Second Vertical	AITM 2.0002B	
Extinguishing Time, sec		0.0
Burn Length, in (mm)		0.1 (2.54)
Drip Extinguishing Time, sec		0.0
Flammability - Type 2	ABD 0031	
60 Second Vertical	AITM 2.0002A	
Extinguishing Time, sec		0.0
Burn Length, in (mm)		0.6 (15.24)
Drip Extinguishing Time, sec		0.0
12 Second Vertical	AITM 2.0002B	
Extinguishing Time, sec		0.0
Burn Length, in (mm)		0.1 (2.54)
Drip Extinguishing Time, sec		0.0
Meets smoke and toxicity requirements of ABD 0031.		
*Chapter numbers in "Test Method" column refer to section in Airbus specification.		
NOTE: "Reported" means no Specification requirement for that property.		

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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

