THE GILL CORPORATION

PRODUCT DATA SHEET

Gillfab® 4117A

DESCRIPTION

Gillfab® 4117A is a sandwich panel made with facings of fiberglass cloth reinforced epoxy laminate and Gillcore® HD honeycomb core.

APPLICATIONS

The panel is designed for use in commercial aircraft nonstructural interiors and galley areas.

FEATURES

- Lightweight, high strength construction
- Good self-extinguishing characteristics
- Good corrosion resistance

AVAILABILITY

	For 0.010/0.010 Facings	For 0.020/0.020 Facings
Thickness inch (mm)	0.140 (3.56) 0.205 (5.21) 0.260 (6.60) 0.390 (9.91) 0.520 (13.21) 0.640 (16.26) 0.770 (19.56) 1.020 (25.91)	0.280 (7.11) 0.400 (10.16) 0.530 (13.46) 0.660 (16.76) 0.780 (19.81) 1.030 (26.16)
Facing, Face/back, inch (mm)	0.010/0.010 (0.254/0.254) 0.020/0.020 (0.508/0.508)	
Length, inch (mm)	Typical 96 (2,438), Maximum 144 (3,658)	
Width, inch (mm)	Typical 48 (1,219), Maximum 68 (1,727)	

CONSTRUCTION

Adhesive: Epoxy film
Core: Gillcore® HD honeycomb
Facings Reinforcement Fiberglass cloth
Facings Resin System: Epoxy

SPECIFICATIONS

- FAR Part 25.853, 60 second vertical flammability test

ALTERNATIVE GILL PRODUCTS

TGC Product No.	Difference
Gillfab® 5071	Panel made from Gillcore® HD core and fiberglass cloth reinforced with phenolic resin with low smoke generation. The panel has superior strength to weight ratio for aircraft interior applications.
Gillfab® 4122A	Panel made from Gillcore® HD core and fiberglass cloth reinforced with phenolic resin with low smoke generation. Good strength to weight ratio for aircraft interior application.

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HEALTH PRECAUTIONS

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. A SDS is available at https://www.thegillcorp.com/msds.php.

For industrial use only. Keep away from children. Additional information can be found at: www.thegillcorp.com. For sales and order inginformation call 1-626-443-6094.

PERFORMANCE PROPERTIES, TYPICAL

Below values are typical of 4117A panels and should NOT be used as design values.

TGC Part Number			4117A Type III	4117A Type VI	4117A Type VIII	4117A Type IX	4117A Type X	4117A Type XI	4117A Type XII
Nominal Facing Thickness, inch (mm)			0.010/0.010 (0.254/0.254)			0.020/0.020 (0.508/0.508)		0.010/0.010 (0.254/0.254)	
Panel Thickness, inch (mm)			0.260 (6.60)	0.520 (13.21)	0.140 (3.56)	0.280 (7.11)	0.400 (10.16)	0.770 (19.56)	1.020 (25.91)
Areal Weight, PSF (kg/m²)			0.360 (1.76)	0.410 (2.00)	0.310 (1.51)	0.540 (2.64)	0.575 (2.81)	0.480 (2.35)	0.550 (2.69)
Long Beam Bending[1]	Ultimate Load, lbf (N)	Ribbon	220 (1000)	190 (850)	135 (605)	345 (1535)	325 (1455)	290 (1295)	410 (1825)
		Transverse	155 (695)	210 (950)	110 (495)	175 (795)	235 (1055)	310 (1385)	410 (1845)
Panel Shear[2]	Ultimate Load, lbf (N)	Ribbon	320 (1430)	490 (2190)	200 (905)	375 (1680)	455 (2040)	705 (3150)	855 (3805)
		Transverse	165 (740)	275 (1235)	110 (510)	190 (865)	230 (1040)	385 (1715)	495 (2210)
Climbing Drum Peel[3]	Torque, in-lbf/ 3 in width- (Nm/76 mm width)	Ribbon	40 (5.00)						
Flatwise Compression[4], PSI (MPa)			330 (2.95)						
Flammability			Meets FAR 25.853 App. F Part I (a)(1)(i)						

[1] Long Beam Bending was tested per ASTM D7249 using 4-point bending configuration. For Types III, VIII, and IX, 12" length specimens were tested using 5" loading span and 10" support span. For Types VI, X, XI, and XII, 24" length specimens were tested using 10" loading span and 20" support span.
[2] Panel Shear was tested per ASTM C393 using 3-point bending configuration. For Types III, VIII, and IX, 5" length specimens were tested using 3" support span. For Types VI, X, XI, and XII, 6" in length specimens were tested using 4" support span.
[3] Climbing Drum Peel was tested per ASTM D1781.
[4] Flatwise Compression was tested per ASTM C365.

Updated: 06/02/23

PERFORMANCE PROPERTIES, TYPICAL

Below values are typical of 4117A panels and should NOT be used as design values.

TGC Part Number			4117A Type XIII	4117A Type XVI	4117A Type XVII	4117A Type XVIII	4117A Type XIX	4117A Type XX	4117A Type XXI
Nominal Facing Thickness, inch (mm)			0.020/0.020 (0.508/0.508)	0.010/0.010 (0.254/0.254)	0.020/0.020 (0.508/0.508)	0.020/0.020 (0.508/0.508)	0.010/0.010 (0.254/0.254)	0.020/0.020 (0.508/0.508)	0.010/0.010 (0.254/0.254)
Panel Thickness, inch (mm)			0.780 (19.81)	0.390 (9.91)	0.530 (13.46)	0.660 (16.76)	0.640 (16.26)	1.030 (26.16)	0.205 (5.21)
Areal Weight, PSF (kg/m^2)			0.680 (3.32)	0.375 (1.83)	0.610 (2.98)	0.645 (3.15)	0.445 (2.17)	0.740 (3.62)	0.360 (1.76)
Long Beam Bending[1]	Ultimate Load, lbf (N)	Ribbon	575 (2560)	140 (635)	410 (1840)	506 (2265)	230 (1040)	740 (3295)	200 (905)
		Transverse	400 (1790)	160 (720)	300 (1350)	340 (1520)	260 (1165)	490 (2180)	125 (565)
Panel Shear[2]	Ultimate Load, lbf (N)	Ribbon	770 (3435)	400 (1780)	585 (2610)	665 (2975)	600 (2680)	935 (4165)	270 (1200
		Transverse	410 (1840)	215 (965)	305 (1360)	345 (1550)	340 (1515)	495 (2220)	140 (625)
Climbing Drum Peel[3]	Torque, in-lbf/ 3 in width- (Nm/76 mm width)	Ribbon	40 (5.00)						
Flatwise Compression[4], PSI (MPa)			330 (2.25)						
Flammability			Meets FAR 25.853 App. F Part I (a)(1)(i)						

[1] Long Beam Bending was tested per ASTM D7249 using 4-point bending configuration. For Type XXI, 12" length specimens were tested using 5" loading span and 10" support span. For Types XIII, XVI, XVII, XVIII, XIX, and XX, 24" length specimens were tested using 10" loading span and 20" support span.

[2] Panel Shear was tested per ASTM C393 using 3-point bending configuration. For Type XXI, 5" length specimens were tested using 3" support span. For Types XIII, XVI, XVII, XVIII, XIX, and XX, 6” in length specimens were tested using 4" support span.

[3] Climbing Drum Peel was tested per ASTM D1781.

[4] Flatwise Compression was tested per ASTM C365.

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