

**Gillfab™ 5042 Panel**

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Description

Gillfab 5042 is an aircraft grade sandwich panel made from aluminum alloy facings bonded to end grain balsa wood core.

Applications

Designed for use as flooring in cabin and cargo compartments of commercial aircraft. Also used for applications in galleys, containers and bulkheads.

Features

- Low cost, high performance flooring.
- Service temperature range: -50°F to 160°F.

Specifications

- Boeing BMS 4-10 Type 1.
- FAR 25.853 - fire resistance.

Construction

Adhesive: Modified epoxy film adhesive.
Core: 9 pcf (avg.) end-grain balsa wood.
Facings: 2024T3 or 7075T6 (per specification grade).

Availability

Thickness: .410"-1.0" per specification.
Size: Standard size is 48" x 144". Up to 72" x 168" on request, (with splices)
Facings: .012" - .063" per specification.

Standard Tolerances

Thickness: $\pm .020$ "
Length: + 0.5", - 0.125"
Width: + 0.5", - 0.125"
Warpage: $<.004 L^2/t$ where L = length (ft.) and t = thickness (in.)



Alternative Gill Products

Product Number	Difference
Gillfab 5007A & B	FRP facings in place of aluminum.
Gillfab 5040	Uses elastomer adhesive.
Gillfab 5041	6 pcf end grain balsa for non-structural (galley) panels, lower core shear strength..

Properties of Gillfloor 5042

Based on 0.41" Nominal Thickness with 0.020"/0.012"
Aluminum Facings and 9 pcf Balsa Core
Typical Average Property Values

Property	Test Method	Unit	Value
Weight		lb/sq ft (kg/sqm)	0.809 (3.948)
Thickness	ASTM C366	inch (mm)	0.405 (10.29)
Balsa Core Density, average		lb/ft ³ (kg/m ³)	9.75 (156)
Sandwich Peel - Dry, average Longitudinal (Weaker Direction) Transverse (Stronger Direction)	ASTM D1781	in-lb (N-m)/3 inch width in-lb (N-m)/3 inch width	63 (7.119) 70 (7.91)
Sandwich Peel - Wet, average Longitudinal (Weaker Direction)	ASTM D1781	in-lb (N-m)/3 inch width	59 (6.667)
Panel Warpage, maximum	BMS 4-10	in/ft (mm/m)	0.019 (1.58)
Core Shear Strength, (average, Longitudinal Direction) Minimum Individual Average	ASTM C393	lb/sq in (kPa)	235 (1,642) 263 (1,837)
Flammability - 60 seconds Vertical Longitudinal Direction Extinguishing Time Burn Length Drip Time Transverse Direction Extinguishing Time Burn Length Drip Time	BSS 7230	seconds in (mm) seconds seconds in (mm) seconds	0.40 0.72 (18.29) 0 0.33 0.52 (13.21) 0
Property	Test Method	Unit	Value
Weight		lb/sq ft (kg/sqm)	0.809 (3.948)
Thickness	ASTM C366	inch (mm)	0.405 (10.29)
Balsa Core Density, average			

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