

**Gilliner™ 1076D Laminate**

October 2010

Description

Gilliner 1076D is a high wear resistant fiberglass cloth reinforced polyester laminate.

Applications

Aircraft cargo compartment liner; designed for lower sidewalls where in-service conditions may result in wear through over frame sections, impact damage and/or fastener hole tear out at attach points.

Features

- High abrasion and wear resistance
- Outstanding mechanical strength, including high edge bearing strength for reduced hole elongation and tear out.
- Superior impact strength - typical values exceed Boeing requirements by 65 - 70%.
- Corrosion resistant.
- Service temperature: To 180°F.

Availability

Thickness:	.020", .045".
Length:	Sheets up to 168". Rolls up to 150' long.
Width:	Sheet width is 72" maximum. Roll stock available up to 60" width.
Color:	Natural.

Construction

Resin: Fire resistant polyester.
Reinforcement: Satin weave fiberglass cloth.
Surface: Glossy

Standard Tolerances

Thickness:	+/- 10%
Length:	+ 0.5", -0"
Width:	+ 0.5", -0"



Specifications

BMS 8-2, Class 3, Grade A
FAR Part 25 Appendix F Parts I and III (burn through)

Alternative Gill Products

Product Number	Difference
Gilliner 1076C	General purpose cargo liner qualified to Boeing Specification BMS 8-2, CI 1, Gr A.
Gilliner 1366C	High impact resistant cargo liner. Qualified to Boeing Specification BMS 8-2, CI 2, Gr A
Gilliner 1367 / 1367A	High impact resistant, low smoke and toxicity, cargo liner qualified to Boeing Specification BMS 8-223, CI 2, Gr B
Gilliner 1376B	Similar to 1367/1367A but lighter weight. Qualified to Boeing Specification BMS 8-223, CI 4, Gr B



Properties of Gilliner 1076D

Typical Average Property Values

Property	Test Method	Unit	Type 20		Type 45	
			Typical	Req.	Typical	Req.
Weight	BMS8-2	lb/sq ft	0.21	0.21 max	0.46	0.50 max
Thickness	BMS8-2	inch	0.022	0.020 +/- .002	0.047	0.045 +/- .004
Impact	BMS8-2	ft-lb	16	9	30	18
Edge Bearing Strength	BMS8-2	ksi	30.0	17 min	34.9	27 min
Warp Fill		ksi	33.4	17 min	33.9	27 min
Flexural Strength	ASTM D790	ksi	NR	NR	31.0	24 min
Warp Fill		ksi	NR	NR	32.3	24 min
Flexural Modulus	ASTM D790	msi	NR	NR	2.5	1.4 min
Warp Fill		msi	NR	NR	2.1	1.4 min
Tensile Strength	BMS8-2	ksi	62.3	47 min	66.7	47 min
Warp Fill		ksi	57.0	47 min	53.8	47 min
Bond Strength	ASTM D638	lb	842	750 min	807	750 min
Warp Fill		lb	909	750 min	813	750 min
Flammability - Vertical	BSS 7230	second	0	15 max	0	15 max
Extinguishing Time		inch	1.97	6 max	1.6	6 max
Burn Length Dripping Flame Time		second	None	3 max	None	3 max
Flammability - 45 Degree	BSS 7230	second	0	15 max	0	15 max
Extinguishing Time		second	0	10 max	0	10 max
Afterglow Penetration		---	None	None	None	None
Oil Burner Note 1	FAR 25.855	---	Pass		Pass	
Abrasion Resistance, Weight loss/1000 cycles		Grams	0.016	NR	0.018	NR
Note 1 - Test performed by U. S. Testing in accordance to the procedure outlined in Appendix F, Part III of FAR 25.855, "Oil Burner - Burn through Resistance".						
NR = No Requirement						

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