



## TECHNICAL DATASHEET SOLID GRADE LAMINATES

### PROPERTIES

- A Carbon Neutral product
- The security of an Anti-Bacterial and Anti-Microbial surface
- Fire Retardant as standard to B-s1,d0 for  $\geq 10\text{mm}$
- Ease of maintenance
- Decorative on both sides
- Exceptional resistance to impact in high traffic areas and potential vandalism
- Good resistance to surface wear and staining etc
- Surface impervious to water
- Self-Supporting
- Information on Light Reflective Values and colour references can be provided and are available for most solid decors
- Available in a wide range of decors in colours, minerals, woods etc

### Key features



Carbon Neutral



Fire Performance



Anti-Bacterial and  
Anti-Microbial  
Protection



Easy to Clean



High Resistance  
to Impact



Moisture Resistant

### APPLICATIONS

- BioCarbon Solid Grade Laminates provide the security of Anti-Microbial protection for Hygiene sensitive areas in industries and applications such Healthcare, Hospitality, Washrooms and Lockers, Commercial interiors, Leisure facilities, Retail, and Educational, are environments where such protection would be essential.
- High Traffic area such as Mass Transit hubs i.e. Airports etc
- Areas where Fire Retardancy is required
- Suitable for freestanding applications in vertical such as Cubicles and Storage as well as horizontal applications in Work Surfaces and Office Furniture.

### AVAILABILITY

	SGL						
Thickness (mm)	10.0	12.5					
Sheet sizes (mm)	3660 x 1530	2440 x 1220	2445 x 1530	2445 x 1850*	3060 x 1220	3660 x 1530	4900 x 1850*
Grade	FR as standard						
Finish	ES						

\*A few decors are supplied with an 1830mm width due to current available paper size, please contact us for clarification.

Other sheet sizes and thicknesses are available to order. When ordering FSC® certified materials please ensure this is requested on your purchase order as availability on FSC® certified material may vary.

### SAMPLES

To order samples please contact our UK Distributor  
Performance Panels Ltd.

+44 (0) 1422 310319

info@performance-panels.co.uk

www.performance-panels.co.uk

www.biocarbonlaminates.com

# BIOCARBON LAMINATES

## SGL TECHNICAL SPECIFICATIONS

TEST	STANDARD	FIELD	UNIT	BIOCARBON LAMINATES
Density	ISO 1183	Mass	g/cm³	≥ 1.35
Length and width	EN 438 2-6	Size	mm	+5/-0
Straightness of edges	EN 438 2-7	Plate	mm/m	≤ 1.5
Squareness	EN 438 2-8	Size	mm/m	≤ 1.5
	In-house Test	Size	mm	2440 x 1220mm difference between diagonals ≤ 4.0
				2445 x 1850mm* difference between diagonals ≤ 4.5
				1530 x 2440mm difference between diagonals ≤ 4.5
Resistance to surface wear	EN 438 2-10	Initial point	Cycles	300
		Final Wear	Cycles	600
		Appearance	Grade	≥ 4
Scratch resistance	EN 438 2-25	Unit	Grade/N	3/4N
Surface quality	EN 438 2-4	Stains, dirt, similar defects on the surface	mm²/m²	≤ 1
		Fibers, hairs and stripes	mm/m²	≤ 20
Thickness	EN 438 2-5	5 ≤ e < 8	mm	tol +/- 0.4
		8 ≤ e < 12		tol +/- 0.5
		12 ≤ e < 13		tol +/- 0.6
Flatness	EN 438 2-9	2 ≤ e < 6	mm/m	5
		6 ≤ e < 10		5
		10 ≤ e		3
Resistance to boiling water immersion	EN 438 2-5	Increase gain	% e < 5.0mm	< 2
		Increase gain	% e > 5.0mm	< 2
		Thickness increase	% e < 5.0mm	< 2
		Thickness increase	% e > 5.0mm	< 2
		Bright finished appearance	Grade	≥ 3
		Appearance other finishes	Grade	≥ 4
		Appearance of edges	Grade	≥ 3
Electric resistance	EN 613140 4-1	RV (23°C / 50% RH)	Ohm	1 x 10⁹ - 1 x 10¹¹
High temperature dimensional stability	EN 438 2-17	Longitudinal	%	≤ 0.25
		Transversal	%	≤ 0.25
Impact Resistance (Large diameter ball)	EN 438 2-21	Indentation diameter	mm	≤ 8
Moisture resistance	EN 438 2-15	Increase gain	%	≤ 3
		Appearance	Grade	≥ 4
Screw retention	ISO 13894-1	6mm thickness	N	≥ 3000
		8mm thickness	N	≥ 3000
		10mm thickness	N	≥ 3000
		12.5mm thickness	N	≥ 3000
Resistance to the climatic shock	EN 438 2-19	Flexural strength index	Index	1.02
		Flexion module index	Index	0.97
		Appearance	Grade	5
Lineal thermal expansion	ASTM D 696	Dimensional Variation	°K <sup>-1</sup>	L = 1.6 x 10 <sup>-5</sup> T = 3.4 x 10 <sup>-5</sup>
Cracking susceptibility	EN 438 2-24	Appearance	Grade	≥ 4
Resistance to light (Xenon arch lamp)	EN 438 2-27	Contrast (Grayscale)	Grade	≥ 4
Modulus of elasticity	EN ISO178	Longitudinal	Mpa	≥ 12000
		Transversal	Mpa	≥ 12000
Flexural strength	EN ISO178	Longitudinal	Mpa	≥ 133
		Transversal	Mpa	≥ 133
Tensile strength	EN ISO527-2	Longitudinal	Mpa	> 70
		Transversal	Mpa	> 70
Reaction to fire	ASTM E84 EN 13501-1	Rating	Class - thickness ≥ 10mm	Fire Rated Compact A Fire Rated Compact B-s1, d0
Formaldehyde emissions	EN 438-7:2015 EN 717-2	Rating	Class	E1
Thermal conductivity	EN 12664 : 2001	Thermal conductivity	W/mK	0.3≤
Resistance to dry heat (160°C/320 °F)	EN 438 2-16	Appearance	Grade	≥ 4
Moist heat resistance (100°C/212 °F)	EN 438 2-18	Appearance	Grade	≥ 4
Resistance to stains	EN 438 2-26	Appearance group 1-2	Grade	5
		Appearance group 3		≥ 4