



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 as 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

| Thickness (mm) | SGL | | | | | | | |
|------------------|----------------|-------------|-------------|--------------|-------------|-------------|--------------|-------------|
| | 10.0 | 12.5 | | | | | | 16** |
| Sheet sizes (mm) | 3660 x 1530 | 2440 x 1220 | 2445 x 1530 | 2445 x 1850* | 3060 x 1220 | 3660 x 1530 | 4900 x 1850* | 3060 x 1220 |
| 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.

** A few decors are supplied in a thickness of 16mm and sheet size 3060 x 1220, 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/cm ³ | ≥ 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 3060 x 1220mm difference between diagonals ≤ 5 3660 x 1530mm difference between diagonals ≤ 6 4900 x 1850mm* difference between diagonals ≤ 7.5 | | |
| 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 | mm ² /m ² | ≤ 1 | | |
| | | Fibers, hairs and stripes | mm/m ² | ≤ 20 | | |
| Thickness | EN 438 2-5 | 5 ≤ e < 8 | | tol +/- 0.4 | | |
| | | 8 ≤ e < 12 | mm | tol +/- 0.5 | | |
| | | 12 ≤ e < 13 | | tol +/- 0.6 | | |
| Flatness | EN 438 2-9 | 2 ≤ e < 6 | | 5 | | |
| | | 6 ≤ e < 10 | mm/m | 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 | | Appearance of edges | Grade | ≥ 3 | | |
| | | Electric resistance | EN 613140 4-1 | RV (23°C / 50% RH) | Ohm | 1 x 10 ⁹ - 1 x 10 ¹¹ |
| | | 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 ⁻¹ | L = 1.6 x 10 ⁻⁵ T = 3.4 x 10 ⁻⁵ | | |
| 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 | | 5 | | |
| | | Appearance group 3 | Grade | ≥ 4 | | |