



Technical Data Sheet

G-Lam[®]

G-Lam[®] is produced in two different technologies:

HPL is produced in multi-opening presses under high pressure and temperature. By using different types of resins, it can be either postforming or standard quality. Thanks to this technology, HPL laminates offer high wear & scratch resistance and hygienic surface properties. Wide selection of high-quality colour and finish options are available which in conjunction with our state-of-art production techniques allow us to offer the highest global laminate technology and quality. Laminate is ideal for use in the retail environment, interior decoration, home and office furnitures, kitchen and bathroom worktops, hotels, schools, public buildings and public transportation, in fact almost any application where increased surface characteristics are required.

CPL is produced in continuous presses under high pressure and temperature. Other than having similar characteristics of HPL, CPL offers flexible sizes and thicknesses where the customers can attain their customised requirements.

EN Classification		HGS, HGP, VGS, VGP
EN 438 3	Thickness Range	0,20mm - 1,20mm
	Dimensions	940x2140mm / 1220x2440mm / 1300x2800mm 1300x3050mm / 1400x3660mm / 1540x3050mm 1540x3660mm / 1860x4200mm
	Available widths of CPL	950mm / 1220mm / 1300mm / 1400mm



Characteristics	Test Method	Test Value	Required Value
Thickness	EN 438-2 section 5	According to the required thickness	$0.5 \leq t \leq 1.0 \text{ mm} : \pm 0.10 \text{ mm}$ $1.0 < t < 2.0 \text{ mm} : \pm 0.15 \text{ mm}$
Density	ISO 1183 - 1	1.4 gr/cm ³	Min. 1.35 gr/cm ³
Flatness	EN 438-2 section 9 HGS ⁽¹⁾ , HGP ⁽²⁾ VGS ⁽³⁾ , VGP ⁽⁴⁾	35 mm 40 mm	60 mm/m max. deviation
Wear Resistance	EN 438-2 section 10 HGS, HGP VGS, VGP	 IP = 185 Rev. Wear Value = 485 Rev. IP = 76 Rev. Wear Value = 198 Rev.	 Initial Point $\geq$ 150 Rev. Wear Value $\geq$ 350 Rev. Initial Point $\geq$ 50 Rev. Wear Value $\geq$ 150 Rev.
Scratch Resistance	EN 438-2 section 25 VGS, VGP HGS, HGP	 3 N 4 N	 Flat Surface Min. 2 N Textured Surface Min. 3 N
Impact Resistance	EN 438-2 Small Ball section 20 VGS, VGP HGS, HGP Big Ball section 21 VGS, VGP HGS, HGP	 18 N 22 N No Crack, 4.5 mm No Crack, 3.5 mm	 Min. 15 N Min. 20 N 600 mm height: no crack, 10 mm Max. 800 mm height: no crack, 10 mm Max.
Dimensional Stability at elevated temp.	EN 438-2 section 17 VGS, VGP HGS, HGP	 %L = 0.45 ; %T = 1.08 %L = 0.38 ; %T = 0.92	 Max. values %L = 0.75 ; %T = 1.25 %L = 0.55 ; %T = 1.05
Resistance to immersion in Boiling Water	EN 438-2 section 12 VGS, VGP Glossy Surface Finish Other Surface Finish HGS, HGP Glossy Surface Finish Other Surface Finish	 4 5 4 5	 Rating Min. 3 4 3 4

Characteristics	Test Method	Test Value	Required Value
Resistance to Dry Heat (@ 180°C)	EN 438-2 section 16 VGS , VGP Glossy Surface Finish Other Surface Finish HGS , HGP Glossy Surface Finish Other Surface Finish	 4 5 4 5	 Rating Min. 3 4 3 4
Resistance to Wet Heat (@ 100°C)	EN 12721:1997 VGS , VGP Glossy Surface Finish Other Surface Finish HGS , HGP Glossy Surface Finish Other Surface Finish	 4 5 4 5	 Rating Min. 3 4 3 4
Resistance to water vapor	EN 438-2 section 14 VGS , VGP Glossy Surface Finish Other Surface Finish HGS , HGP Glossy Surface Finish Other Surface Finish	 4 5 4 5	 Rating Min. 3 4 3 4
Resistance to Cigarette Burn	EN 438-2 section 30 VGS , VGP HGS , HGP	 4 4	Min. Level 3 3
Resistance to Staining	EN 438-2 section 26 VGS , VGP Group 1 & 2 Group 3 HGS , HGP Group 1 & 2 Group 3	 5 4 5 4	 Rating Min. 5 4 5 4
Flatness	EN 438-2 section 9 CGS 2.0 ≤ t < 6.0 mm 6.0 ≤ t < 10.0 mm t ≥ 10.0 mm	 1.23 mm 1.46 mm 1.87 mm	 Max. 8 mm / 1 M length Max. 5 mm / 1 M length Max. 3 mm / 1 M length

Characteristics	Test Method	Test Value	Required Value
Determination of Formaldehyde Release			
HPL 0.7 mm HGP	EN 717-2:1999 Gas Analysis	0.191 mg/m ² h	≤ 3.5 mg/m ² h
Light fastness (Xenon Arc)	EN 438-2 section 27 VGS , VGP HGS , HGP	 5 5	Contrast Grey Scale Rating 4 – 5 4 - 5
Formability Radius	EN 438-2 section 31 / 32 HGP , VGP L (Machine Direction) T (Cross Direction)	 R5 R6	 ≤ 10 x laminate nominal thickness ≤ 20 x laminate nominal thickness
Resistance To Blister	EN 438-2 section 33 / 34 HGP , VGP t ₂ – t ₁ (Sec) Nominal Thickness < 0.8 mm Nominal Thickness ≥ 0.8 mm	 15 18	 ≥ 10 ≥ 15
Contact With Food Overall Migration ⁽⁶⁾	EN 1186-3 ⁽⁵⁾ Acetic Acid 3% w/w EN 1186-14 ⁽⁵⁾ Ethanol 10% w/w EN 1186-14 ⁽⁵⁾ Ethanol 95% w/w	9.6 mg/dm ² 4.3 mg/dm ² < 2 mg/dm ²	< 10 mg/dm ² < 10 mg/dm ² < 10 mg/dm ²

Remarks :

- (1) HGS = Horizontal Grade Standard Laminate
(2) HGP = Horizontal Grade Post Forming Laminate
(3) VGS = Vertical Grade Standard Laminate
(4) VGP = Vertical Grade Post Forming Laminate
(5) Migration test conducted at 40°C for 24 hours
(6) CoC available upon request (ISEGA 37314 U 14)