



## STYLAM COMPACT LAMINATES - CGS/CGF

Compact High Pressure Laminates (HPL) as per EN 438-4 : 2016, are available in the standard CGS and in the flame retardant CGF types on demand. When these laminates are self-supporting they are ready for installation.

SR. NO.	PROPERTIES	TEST METHOD	ATTRIBUTES OF PERFORMANCE	UNIT OF MEASUREMENT	RESULTS (AS PER EN 438-4)
			EN-438 Laminate Classification		CGS/CGF
<b>1</b>	<b>SURFACE QUALITY</b>				
1.1	Surface quality	EN 438-2.4	Spots, dirt and similar surface defects	mm <sup>2</sup> /m <sup>2</sup>	≤ 1
			Fibres, hairs and scratches	mm/m <sup>2</sup>	≤ 10
<b>2</b>	<b>DIMENSIONAL PROPERTIES</b>				
2.1	Thickness	EN 438-2.5	Thickness tolerance	mm	2 ≤ T < 3 : ± 0,2
				mm	3 ≤ T < 5 : ± 0,3
				mm	5 ≤ T < 8 : ± 0,4
				mm	8 ≤ T < 12 : ± 0,5
				mm	12 ≤ T < 16 : ± 0,6
				mm	16 ≤ T < 20 : ± 0,7
				mm	20 ≤ T < 25 : ± 0,8
				mm	25 ≤ T : ± 1,3
2.2	Size	EN 438-2.6	Length and width	mm	+ 10 / - 0
2.3	Straightness of edges	EN 438-2.7	Straightness of edges	mm/m	≤ 1,5
2.4	Squareness	EN 438-2.8	Squareness	mm/m	≤ 1,5
2.5	Flatness	EN 438-2.9	Flatness (measured on full-size sheet)	mm/m	2,0 ≤ T < 6,0 : 8
				mm/m	6,0 ≤ T < 10,0 : 5
				mm/m	10,0 ≤ T : 3
<b>3</b>	<b>PHYSICAL PROPERTIES</b>				
3.1	Resistance to surface wear	EN 438-2.10	Wear Resistance - Initial Point	Revolutions	Unicolours - ≥ 150 Printed Décor - ≥ 125
3.2	Resistance to immersion in boiling water	EN 438-2.12	Mass increase - 2 ≤ T < 5 mm	%	CGS - ≤ 5 , CGF - ≤ 7
			Mass increase - T ≥ 5 mm	%	CGS - ≤ 2 , CGF - ≤ 3
			Thickness increase - 2 ≤ T < 5 mm	Rating	CGS - ≤ 6 , CGF - ≤ 9
			Thickness increase - T ≥ 5 mm	Rating	CGS - ≤ 2 , CGF - ≤ 6
			Appearance - Gloss Finish	Rating	≥ 3
			Appearance - Other Finishes	Rating	≥ 4
3.3	Resistance to water vapour	EN 438-2.14	Appearance - Gloss Finish	Rating	≥ 3
			Appearance - Other Finishes	Rating	≥ 4
3.4	Resistance to dry heat (160°C)	EN 438-2.16	Appearance - Gloss Finish	Rating	≥ 3
			Appearance - Other Finishes	Rating	≥ 4
3.5	Dimensional stability at elevated temperatures	EN 438-2.17	Cumulative dimensional change - 2 ≤ T < 5mm	L %	≤ 0,40
				T %	≤ 0,80
			Cumulative dimensional change - T ≥ 5mm	L %	≤ 0,30
				T %	≤ 0,60
3.6	Resistance to impact with large diameter ball	EN 438-2.21	Indent. dia. 10mm 2 ≤ T < 6 mm - Drop	mm	≥ 1400
			Indent. dia. 10mm T ≥ 6mm - Drop Height	mm	≥ 1800
3.7	Resistance to crazing	EN 438-2.24	Appearance	Rating	≥ 4
3.8	Resistance to scratching	EN 438-2.25	Appearance - Smooth Finishes	Rating	≥ 2
			Appearance - Textured Finishes	Rating	≥ 3
3.9	Resistance to staining	EN 438-2.26	Appearance - Group 1 & 2	Rating	≥ 5
			Appearance - Group 3	Rating	≥ 4
3.10	Light fastness (Xenon arc)	EN 438-2.27	Contrast	Grey scale rating	4 to 5
3.11	Flexural modulus	EN ISO 178	Stress	Mpa	≥ 9000
3.12	Flexural strength	EN ISO 178	Stress	Mpa	≥ 80
3.13	Density	EN ISO 1183	Density	gm/cm <sup>3</sup>	≥ 1,35
<b>4</b>	<b>FIRE PERFORMANCES</b>				
			Test as per EN 13823 (SBI test) and EN ISO 11925-2 (Small-burner test)		
4.1	Fire Reaction Classification, CGF	EN 13501	Classification - 3 ≤ T < 6 mm	Rating	B - s2, d0
			Classification - T ≥ 6 mm	Rating	B - s1, d0
4.2	Fire Reaction Classification, CGS	EN 13501	Classification - 6 ≤ T < 10 mm	Rating	D - s1, d0
			Classification - T ≥ 10 mm	Rating	B - s1, d0
<b>5</b>	<b>OTHER PROPERTIES</b>				
5.1	Release of Formaldehyde	EN 438-7.4.11.1	Classification	Rating	E1

**Disclaimer :**

This Product Technical Sheet gives technical information relevant to the performance of product as tested by STYLAM and External Certified testing agencies. STYLAM reserves the right to change product composition and characteristics at any time.