



STYLAM COMPACT LAMINATES - FIRE RETARDENT

Compact High Pressure Laminates (HPL) as per EN 438-4 : 2016, flame retardant CGF

SR. NO.	PROPERTIES	TEST METHOD	ATTRIBUTES OF PERFORMANCE	UNIT OF MEASUREMENT	RESULTS (AS PER EN 438-4)
			EN-438 Laminate Classification		CGF/EDF
1	SURFACE QUALITY				
1.1	Surface quality	EN 438-2.4	Spots, dirt and similar surface defects	mm²/m²	≤ 1
			Fibres, hairs and scratches	mm/m²	≤ 10
2	DIMENSIONAL PROPERTIES				
2.1	Thickness	EN 438-2.5	Thickness tolerance	mm	1 ≤ T < 2 : ± 0.15
				mm	2 ≤ T < 3 : ± 0.2
				mm	3 ≤ T < 5 : ± 0.3
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	Max, 8,0
3	PHYSICAL PROPERTIES				
3.1	Resistance to surface wear	EN 438-2.10	Wear Resistance	Revolutions	≥ 350
3.2	Resistance to immersion in boiling water	EN 438-2.12	Mass increase	%	CGF - ≤ 7
			Thickness increase	%	CGF - ≤ 9
			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
3.6	Resistance to impact with large diameter ball	EN 438-2.21	Indent. dia. 10mm - Drop Height	mm	≥ 1400
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/cm³	≥ 1,35
4	FIRE PERFORMANCES				
			Test as per EN 13823 (SBI test) and EN ISO 11925-2 (Small-burner test)		
4.1	Fire Reaction Classification, EGF-EDF	EN 135 01	Classification - 3 ≤ T < 6 mm	Rating	B - s2, d0
			Classification - T ≥ 6 mm	Rating	B - s1, d0
4.2	Fire Reaction Classification, EGS-EDS	EN 135 01	Classification - T ≥ 10 mm	Rating	B - s1, d0
5	OTHER PROPERTIES				
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.