

Technical Datasheet

HPL massief reclameplaat S



Compact Laminate panels of thickness more than or equal to 2 mm as per EN 438-4 : 2016, are available in the standard CGS and in the flame retardant CGF type.

		TEST METHOD	ATTRIBUTES OF PERFORMANCE	UNIT OF MEASUREMENT	RESULTS (AS PER EN 438-4)
		EN-438	Laminate Classification		
1	SURFACE QUALITY				
1.1	Surface quality	EN 438-2.4	Spots, dirt and similar surface defects	mm ² /m ²	≤ 1
			Fibres, hairs and scratches	mm ² /m ²	≤ 10
2	DIMENSIONAL PROPERTIES				
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
3	PHYSICAL PROPERTIES				
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	%	CGS - ≤ 6, CGF - ≤ 9
			Thickness increase - T ≥ 5 mm	%	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 Finishes	Rating	≥ 3
			Appearance - Other Finishes	Rating	≥ 4
3.4	Resistance to dry heat (160°C)	EN 438-2.16	Appearance - Gloss Finishes	Rating	≥ 3
			Appearance - Other Finishes	Rating	≥ 4

3 PHYSICAL PROPERTIES

3.5	Dimensional stability at elevated temperatures	EN 438-2.17	Cumulative dimensional change - $2 \leq T < 5\text{mm}$	L %	≤ 0.40
				T %	≤ 0.80
			Cumulative dimensional change - $T \geq 5\text{mm}$	L %	≤ 0.30
				T %	≤ 0.60
3.6	Resistance to impact with large diameter ball	EN 438-2.21	Indent. dia. 10mm $2 \leq T < 6\text{ mm}$ - Drop Ht	mm	≥ 1400
			Indent. dia. 10mm $T \geq 6\text{mm}$ - 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/cmt	≥ 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, CGF	EN 13501	Classification - $3 \leq T < 6\text{ mm}$	Rating	B - s2, d0
			Classification - $T \geq 6\text{ mm}$	Rating	B - s1, d0
4.2	Fire Reaction Classification, CGS	EN 13501	Classification - $6 \leq T < 10\text{ mm}$	Rating	D - s1, d0
			Classification - $T \geq 10\text{ mm}$	Rating	B - s1, d0

5 OTHER PROPERTIES

5.1	Release of Formaldehyde	EN 438-7.4.11.1	Classification	Rating	E1
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