

**ASD FR GRADE LAMINATE** ; less than 2 mm thick, according to EN 438-3, consisting of the surface layer on one side, having decorative colours are impregnated with melamine based resins with special fire retardant additive and core made of layers of kraft paper impregnated with phenolic based resins. The back of the sheets is made suitable for adhesive bonding to substrates. They are available the types HGS and VGS.

PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	UNIT ( max or min )	VALUES	
				HGS	VGS
<b>HGS</b>	Horizontal Grade Standard Laminate	<b>EXAMPLES OF TYPICAL APPLICATIONS</b>			
		Kitchen and office working surfaces, restaurant and hotel tables, doors and wall coverings in public areas, interior walls of public transport vehicles			
<b>VGS</b>	Vertical Grade Standard Laminate	<b>EXAMPLES OF TYPICAL APPLICATIONS</b>			
		Front panels for kitchen, office and bathroom furniture, wall coverings, ceiling panels, shelves and furniture elements			
<b>SURFACE QUALITY</b>					
Surface Quality	EN 438-3	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>DIMENSIONAL TOLERANCES</b>					
Dimensional Tolerances	EN 438-2.5	Thickness tolerance (t: nominal thickness )	mm	0,8≤t<1,0mm:±0,10 mm	
	EN 438-2.6	Lenght and width	mm	+10/-0	
	EN 438-2.7	Straightness of edges	mm/m	≤1,5	
	EN 438-2.8	Squareness	mm/m	≤1,5	
	EN 438-2.9	Flatness	mm/m	≤ 60	
<b>GENERAL PROPERTIES</b>					
Resistance to surface wear	EN 438-2.10	Initial point	Revolutions	≥150	≥50
		Wear value	Revolutions	≥350	≥150
Resistance to immersion in boiling water	EN 438-2.12	Appearance-Gloss Finish	Rating (min)	3	
		Appearance-Other Finish	Rating (min)	4	
Resistance to water vapour	EN 438-2.14	Appearance-Gloss Finish	Rating (min)	3	
		Appearance-Other Finish	Rating (min)	4	
Resistance to dry heat (180 °C)	EN 438-2.16	Appearance-Gloss Finish	Rating (min)	3	
		Appearance-Other Finish	Rating (min)	4	
Resistance to weat heat (100 °C)	EN 12721	Appearance-Gloss Finish	Rating (min)	3	
		Appearance-Other Finish	Rating (min)	4	
Dimensional stability at elevated temperature	EN 438-2.17	Cumulative dimensional change	Longitudinal %	≤ 0,55	≤ 0,75
		Cumulative dimensional change	Transversal %	≤ 1,05	≤ 1,25
Resistance to impact with small diameter ball	EN 438-2.20	Spring Force	N	≥ 20	≥ 15
Resistance to impact with large diameter ball	EN 438-2.21	Drop height	mm	≥ 800	≥ 600
		Indentation diameter	mm	≤ 10	≤ 10
Resistance to cracking under stress	EN 438-2.23	Appearance	Rating (min)	4	
Resistance to scratching	EN 438-2.25	Appearance	Rating (min)	3	2
Resistance to staining	EN 438-2.26	Appearance-Group 1&2	Rating (min)	5	
		Appearance-Group 3	Rating (min)	4	
Light fastness (Xenon-arc)	EN 438-2.27	Contrast	Grey scale rating	4	
Density	EN ISO 1183	Density	g/cm <sup>3</sup>	≥1,35	
Fire Classification	EN 13501	Fire		C S2 d 0	