

Characteristic	Method	Unit of Measure	CGS	
Nominal Thickness		mm	2-25	
Surface Defects	Dirt/Spots Fibres/Hairs/Scratches	EN438:2016-2-4	mm/m2 ≤ 1	
			mm/m2 ≤ 10	
Thickness	EN438:2016-2-5	mm	# 1	
Length & Width	EN438:2016-2-6	mm	-0 / +10	
Squareness	EN438:2016-2-7	mm/m	≤ 1.5	
Edge Straightness	EN438:2016-2-8	mm/m	≤ 1.5	
Flatness	EN438:2016-2-9	mm/m	# 2	
Surface Wear Resistance	EN438:2016-2-10	revolutions	≥ 150	
Immersion in Boiling Water	EN438:2016-2-12	Class	Gloss	3
			Other	4
			Mass Increase (2mm ≤ thickness < 5mm)	% 5.0
			Mass Increase (thickness ≥ 5mm)	% 2.0
			Thickness Increase (2mm ≤ thickness < 5mm)	% 6.0
			Thickness Increase (thickness ≥ 5mm)	% 2.0
Edge rating	%	3		
Resistance to Water Vapour	EN438:2016-2-14	Class	Gloss	3
			Other	4
Resistance to Wet Conditions	EN438:2016-2-15	Class	Appearance	/
			Mass Increase (2mm ≤ thickness < 5mm) Mass Increase (thickness ≥ 5mm)	/
Resistance to Dry Heat (160°C)	EN438:2016-2-16	Class	Gloss	3
			Other	4
Resistance to Wet Heat (100°C)		Class	Gloss	3
			Other	4
Dimensional Stability	EN438:2016-2-17	%	Longitudinal (2mm ≤ thickness < 5mm)	/
			(Thickness ≥ 5mm)	0.4
			Transverse (2mm ≤ thickness < 5mm)	0.3
			(Thickness ≥ 5mm)	/
				0.8
Resistance to Climatic Shock	EN438:2016-2-19	Class Ds Dm	Appearance	/
			Flexural Strength Index	/
			Flexural Modulus Index	/
Impact Resistance (Small Ball)	EN438:2016-2-20	N	/	
Impact Resistance (Large Ball)	EN438:2016-2-21	Height of Fall (2mm ≤ thickness < 6mm)	mm 1400	
		Height of Fall (thickness ≥ 5mm)	mm 1600	
Resistance to Cracking	EN438:2016-2-23	Class	/	
Resistance to Crazeing	EN438:2016-2-24	Class	4	
Scratch Resistance	EN438:2016-2-25	Class	Smooth	2
			Textured	3
Stain Resistance	EN438:2016-2-26	Class	Group 1 & 2	5
			Group 3	4
Light Fastness	EN438:2016-2-27	Grey Scale	4 to 5	
Resistance to UV	EN438:2016-2-28	Grey Scale Class	Contrast (1500hr)	/
			Appearance (1500hr)	/
Resistance to Artificial Weathering	EN438:2016-2-29	Class	Contrast (335 MJ/m <sup>2</sup> )	/
			Contrast (650 MJ/m <sup>2</sup> )	/
			Appearance (325 MJ/m <sup>2</sup> )	/
			Appearance (650 MJ/m <sup>2</sup> )	/
Flexural Modulus	EN ISO 178	MPa (min)	9000	
Flexural Strength	EN ISO 178	MPa (min)	80	
Postforming Radius	EN438:2016-2-31	Minimum Radius mm	/	
Resistance to Blistering	EN438:2016-2-33	Class	/	
Density		g/cm <sup>3</sup>	≥ 1.35	
Fire Rating			D-s2, d0	

#1 Compact Tolerance -	Nominal Thickness	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0
	Tolerance ± mm	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8

#2 Compact Flatness -	Nominal Thickness	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0
	Compact Flatness	8	8	8	8	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3

EN438 Class Definitions - Class 5 No visible change  
 Class 2 Marked loss of gloss and or colour  
 Class 4 Slight loss of gloss and or colour  
 Class 1 Blisters and or delamination  
 Class 3 Moderate loss of gloss and or colour