

BCS (white and grey core)

Characteristic	Method	Unit of Measure	BCS
Nominal Thickness		mm	2 - 25
Surface Defects	EN438:2016-2-4 Dirt/Spots Fibres/Hairs/Scratches	mm ² /m ² mm/m ²	≤ 1 ≤ 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	3 4 5.0 3.0 6.0 4.0
Resistance to Water Vapour	EN438:2016-2-14 Gloss Other	Class	3 4
Resistance to Wet Conditions	EN438:2016-2-15 Appearance Mass Increase (2mm ≤ thickness < 5mm) Mass Increase (thickness ≥ 5mm)	Class	/ / /
Resistance to Dry Heat (160°C)	EN438:2016-2-16 Gloss Other	Class	3 4
Resistance to Wet Heat (100°C)	EN438:2016-2-16 Gloss Other	Class	/
Dimensional Stability	EN438:2016-2-17 Longitudinal (2mm ≤ thickness < 5mm) (Thickness ≥ 5mm) Transverse (2mm ≤ thickness < 5mm) (Thickness ≥ 5mm)	%	≤0.6 ≤0.5 ≤1.0 ≤0.8
Flexural Strength Flexural Modulus	EN ISO 178:2003	Stress Stress (MPa)	80 9000
Impact Resistance (Small Ball)	EN438:2016-2-20	N	/
Impact Resistance (Large Ball)	EN438:2016-2-21 Height of Fall (2mm ≤ thickness < 6mm) Height of Fall (thickness ≥ 5mm)	mm mm	/
Resistance to Cracking	EN438:2016-2-23	Class	/
Resistance to Crazing	EN438:2016-2-24	Class	3
Scratch Resistance	EN438:2016-2-25 Smooth Textured	Class	2 3
Stain Resistance	EN438:2016-2-26 Group 1 & 2 Group 3	Class	5 4
Light Fastness	EN438:2016-2-27	Grey Scale	4
Resistance to UV	EN438:2016-2-28 Contrast (1500hr) Appearance (1500hr)	Grey Scale Class	/ /
Resistance to Artificial Weathering	EN438:2016-2-29 Contrast (335 MJ/m ²) Contrast (650 MJ/m ²) Appearance (325 MJ/m ²) Appearance (650 MJ/m ²)	Class	/ / / /
Postforming Radius	EN438:2016-2-31	Minimum Radius mm	/
Resistance to Blistering	EN438:2016-2-33	Seconds	/
Density		g/cm ³	≥ 1.4
Fire Rating		6 - 25 mm 2 ≤ X < 6 mm	B-s2, d0 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 0.25 0.4 0.4 0.5 0.5 0.5 0.7 0.7 0.7 0.7 0.8 0.8 0.8 0.8 0.9 0.9 0.9 0.9 1.0

#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 12 12 12 8 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5

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

#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	0.25	0.4	0.4	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
#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