

Characteristic	Method	Unit of Measure	EDF
Nominal Thickness		mm	2-20
Surface Defects	EN438:2005-2-4 Dirt/Spots Fibres/Hairs/Scratches	mm ² /m ² mm/m ²	≤ 1 ≤ 10
Thickness	EN438:2005-2-5	mm	# 1
Length & Width	EN438:2005-2-6	mm	-0 / +10
Squareness	EN438:2005-2-7	mm/m	≤ 1.5
Edge Straightness	EN438:2005-2-8	mm/m	≤ 1.5
Flatness	EN438:2005-2-9	mm/m	# 2
Surface Wear Resistance	EN438:2005-2-10	revolutions	/
Immersion in Boiling Water	EN438:2005-2-12 Gloss Other Mass Increase (2mm ≤ thickness < 5mm) Mass Increase (thickness ≥ 5mm) Mass Increase (2mm ≤ thickness < 5mm) Mass Increase (thickness ≥ 5mm)	Class % % % %	3 4 7 3 9 6
Resistance to Water Vapour	EN438:2005-2-14 Gloss Other	Class	3 4
Resistance to Wet Conditions	EN438:2005-2-15 Appearance Mass Increase (2mm ≤ thickness < 5mm) Mass Increase (thickness ≥ 5mm)	Class	4 10 8
Resistance to Dry Heat (180°C)	EN438:2005-2-16 Gloss Other	Class	3 4
Dimensional Stability	EN438:2005-2-17 Longitudinal (2mm ≤ thickness < 5mm) (Thickness ≥ 5mm) Transverse (2mm ≤ thickness < 5mm) (Thickness ≥ 5mm)	%	/ 0.4 0.1 (#3) / 0.8 0.2 (#3)
Resistance to Climatic Shock	EN438:2005-2-19 Appearance Flexural Strength Index Flexural Modulus Index	Class Ds Dm	4 0.95 0.95
Impact Resistance (Small Ball)	EN438:2005-2-20	N	/
Impact Resistance (Large Ball)	EN438:2005-2-21 Height of Fall (2mm ≤ thickness < 6mm) Height of Fall (thickness ≥ 5mm) Diameter of Imprint	mm mm mm	1400 1800 ≤ 10
Resistance to Cracking	EN438:2005-2-23	Class	/
Resistance to Crazeing	EN438:2005-2-24	Class	/
Scratch Resistance	EN438:2005-2-25 Gloss Other	Class	/ /
Stain Resistance	EN438:2005-2-26 Group 1 & 2 Group 3	Class	/ /
Light Fastness	EN438:2005-2-27	Grey Scale	4 to 5
Resistance to UV	EN438:2005-2-28 Contrast (1500hr) Appearance (1500hr)	Grey Scale Class	3 4
Resistance to Artificial Weathering	EN438:2005-2-29 Contrast (335 MJ/m ²) Contrast (650 MJ/m ²) Appearance (325 MJ/m ²) Appearance (650 MJ/m ²)	Class	/ 3 / 4
Resistance to Cigarette Burns	EN438:2005-2-30	Class	/
Postforming Radius	EN438:2005-2-31	Minimum Radius mm	/
Resistance to Blistering	EN438:2005-2-33	Class	/
Density		g/cm ³	≥ 1.35
R-Value (Thermal Resistance)		m ² K/W	6mm = 0.02 8mm = 0.027 10mm = 0.03
Fire Rating	(4mm ≤ thickness < 6mm) (thickness ≥ 6mm)		/ B-s2, d0 B-s1, 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

#3 As tested by SP Technical Research Institute in July 2014. Test report 4P04521

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
Formica® Products technical properties 19