

# HGS

Characteristic	Method	Unit of Measure	HGS
Nominal Thickness		mm	0.7-2mm
Surface Defects	EN438:2016-2-4 Dirt/Spots Fibres/Hairs/Scratches	mm <sup>2</sup> /m <sup>2</sup> mm/m <sup>2</sup>	≤ 1 ≤ 10
Thickness	EN438:2016-2-5	mm	± 0.1
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	≤ 60
Surface Wear Resistance	EN438:2016-2-10	revolutions	≥ 150
Immersion in Boiling Water	EN438:2016-2-12	Class	3 4 / / / / / /
Resistance to Water Vapour	EN438:2016-2-14	Class	3 4
Resistance to Wet Conditions	EN438:2016-2-15	Class	/ / /
Resistance to Dry Heat (160°C)	EN438:2016-2-16	Class	3 4
Resistance to Wet Heat (100°C)		Class	3 4
Dimensional Stability	EN438:2016-2-17	%	≤ 0.55 / / ≤ 1.05 / /
Resistance to Climatic Shock	EN438:2016-2-19	Class Ds Dm	/ / /
Impact Resistance (Small Ball)	EN438:2016-2-20	N	≥ 20
Impact Resistance (Large Ball)	EN438:2016-2-21	mm mm	/ /
Resistance to Cracking	EN438:2016-2-23	Class	4
Resistance to Crazing	EN438:2016-2-24	Class	/
Scratch Resistance	EN438:2016-2-25	Class	2 3
Stain Resistance	EN438:2016-2-26	Class	5 4
Light Fastness	EN438:2016-2-27	Grey Scale	4 to 5
Resistance to UV	EN438:2016-2-28	Grey Scale Class	/ /
Resistance to Artificial Weathering	EN438:2016-2-29	Class	/ / / /
Postforming Radius	EN438:2016-2-31	Minimum Radius mm	/
Resistance to Blistering	EN438:2016-2-33	Seconds	/
Density		g/cm <sup>3</sup>	≥ 1.35
Fire Rating			D-s2, d0

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