

Technical Data HPL

Properties	Value	Unit	Standard
Specification, Dimensional Tolerances			
Thickness (mm/max)	2.0 ≤t< 3.0mm :±0.20 mm 5.0 ≤t< 8.0mm :±0.40mm 12.0≤t< 16.0mm :±0.60mm 20.0≤t< 25.0mm:±0.80mm	3.0 ≤t< 5.0mm :±0.30mm 8.0≤t< 12.0mm : ±0.50 16.0 ≤t< 20.0mm: ±0.70mm 25.0mm≤t : to be agreed between supplier and customer. (T=nominal thickness)	Test method (EN 438-2:2005 Clause no.5)
Flatness (mm/m<max>)	2.0≤t< 6.0mm 8.0mm/m 10.0mm≤ t 3.0mm/m (T=nominal thickness)	6.0≤t< 10.0mm 5.0mm/m	Test method (EN 438-2:2005 Clause no.9)
Physical Properties			
Density weight	≥1350	kg/m3	ISO 1183
>Thickness 6mm	8.7	kg/m2	ISO 1183
>Thickness 8mm	11.6	kg/m2	ISO 1183
>Thickness 10mm	14.5	kg/m2	ISO 1183
>Thickness 12mm	17.5	kg/m2	ISO 1183
Optical Properties			
Immersion in boiling water (100 °C water for 2 hours)			
>Mass increase	0.3	%	EN 438-2
>Thickness increase	0.5	%	EN 438-2
>Appearance	4	Rating	EN 438-2
Thermal conductivity	=0.23	W/(mk)	EN 438-2
Mechanical Properties			
Modulus of elasticity	>10000	Mpa	ISO 178
Flexural strength	≥100	Mpa	IOS 178
Tensile strength	≥70	Mpa	ISO 527-2
Scratch resistance	≥3	Rating	EN 438-2
Resistance to crazing	≥4	Rating	EN 428-2
Face screw-holding	>5000	N	ISO 13894-1:2000
Water vapour permeability	Wet cup:110,dry cup:250	μ	ISO 12572
Resistance to sigarette burns	≥3	Rating	EN 438-2
Abrasion Testing	144.5	mg	EN 438-2:10
Impact Resistance	90.4J	MBFE	ASTMD 256-06a
Linear expansion with change in moisture content	0.0065%	/	ASTMD 1307-06a section 24
Safe Properties			
Reaction to fire (on request)	Type FR=12mm Euroclass B-s1,d0		EN 13501-1
Release of formaldehyde	Class E1		EN 717-1
Factory Production Control (FPC)	ISO 9001 / ISO 14004 / OHSAS 18000		