

SM'art Compact HPL technical data sheet EN 438

Solid colors CGS	Printed CGS
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property	test procedure	measure unit	results
specific weight	weight in kg of a dm ³ of laminate or of 1 m ² in thickness 1mm	kg/dm ³	1.35
thickness tolerance	measures the difference between the nominal thickness and the actual laminate thickness	mm	2.0 ≤ t ≤ 3.0 mm : ± 0.20 mm 3.0 ≤ t ≤ 5.0 mm : ± 0.30 mm 5.0 ≤ t ≤ 8.0 mm : ± 0.40 mm 8.0 ≤ t ≤ 12.0 mm : ± 0.50 mm
surface wear resistance	the taber test measures the number of cycles necessary to abrade the laminate surface with sand paper. IP is initial point, when colour begins disappearing	Taber cycles IP initial point	≥ 150 ≥ 100
resistance to immersion in boiling water	measures the mass and thickness increase of a laminate after a two hour immersion in boiling water	% mass % thickness % mass % thickness appearance gloss appearance non-gloss	2.0 ≤ t ≤ 5.0 mm Max. 5% 2.0 ≤ t ≤ 5.0 mm Max. 6% t ≥ 5.0 mm Max. 2% t ≥ 5.0 mm Max. 2% 3 4
resistance to water vapour	measures the appearance of a laminate exposed to water vapour for 1 hour	appearance gloss appearance non-gloss	4 5
resistance to dry heat at 160° C	measures the aesthetic properties of a laminate bonded onto an 18 - 20 mm chipboard upon which a metal block at the initial temperature of 160° C is placed and left to cool for 20 minutes.	appearance gloss appearance non-gloss	3 4
resistance to humid heat at 100° C/20'	aspect	appearance gloss appearance non-gloss	3 4
dimensional stability at high temperature	measures the changing in lenght and width after 24 hours at 70°C and 96 hours at 40°C and 90 - 95 % relative humidity	max mm longitudinal max mm transversal max mm longitudinal max mm transversal	2.0 ≤ t ≤ 5.0 mm 0,4 mm 2.0 ≤ t ≤ 5.0 mm 0,8 mm t > 5.0 mm 0,3 mm t > 5.0 mm 0,6 mm
resistance to impact by big ball	measures the maximum damage caused by a steel ball dropped from a set height	mm mm mm	2.0 ≤ t ≤ 6.0 mm, 1400 mm altezza, max 10 mm t > 6.0 mm, 1800 mm altezza, max 10 mm
resistance to scratching	measures the minimum strength necessary to a diamond point to scratch the laminate surface	rating	3
resistance to cracking	surface aspect core aspect	rating rating	4 3
resistenza to scuffing	aspect	smooth surfaces embossed surfaces	2 3
stains and dirt	measures the maximum area of stains and dirt admitted per sqm of lamnate. Such an area can be concentrated in a single point or subdivided in numerous number of small faults.	min. level Group 1 + 2 min. level Group 3	5 4
flatness tolerance	measures the maximum curvature of a Compact laminate layed flat with the concave side up	max mm / linear meter max mm / linear meter max mm / linear meter	2.0 ≤ t < 6.0 mm 8mm 6.0 ≤ t < 10.0 mm 5 mm t ≥ 10.0 mm 3mm
flexural modulus	stress	Mpa	>9000
flexural strength	stress	Mpa	> 80
formaldehyde emission	EN717-1 EN717-1	mg/m ³ ppm classification	required actual < 0,062 0.008 < 0,050 0.006 E05