

## LAMCO HPL FORM (HGP-VGP)

Material consisting of layers of kraft paper impregnated with thermosetting resins and a surface layer of decorative paper impregnated with aminoplastic resins, all bonded together by means of high pressure (9 Mpa) and high temperature (125-130 °C). It is ideal to produce rounded edges for doors, shelves, sides, working surfaces and any other furniture components, reducing the dangers posed by sharp edges.

This material is produced in conformity to EN 438-3:2005.

PROPERTY	TEST METHOD (EN 438: 2005)	PROPERTY OR ATTRIBUTE	UNIT	VALUES HGP	VALUES VGP
Thickness ± tolerance	EN 438-2.5	thickness (t)	mm	0,5 ≤ t ≤ 1,0 ±0,10 1,0 < t < 2,0 ±0,15	0,5 ≤ t ≤ 1,0 ±0,10 1,0 < t ≤ 1,2 ±0,15
Flatness	EN 438-2.9	maximum deviation	mm/mtl	60	60
Resistance to surface wear	EN 438-2.10	wear resistance	revs	IP ≥ 150 A ≥ 350	IP ≥ 50 A ≥ 150
Resistance to immersion in boiling water	EN 438-2.12	appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to dry heat (180 °C)	EN 438-2.16	appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Resistance to wet heat (100 °C)	EN 12721	appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Dimensional stability at elevated temperature	EN 438-2.17	cumulative dimensional change	% long. % transv.	≤ 0,55 ≤ 1,05	≤ 0,75 ≤ 1,25
Resistance to impact by small diameter ball	EN 438-2.20	spring force	N	≥ 20	≥ 15
Resistance to cracking	EN 438-2.23	appearance	rating	≥ 4	≥ 4
Resistance to scratching <sup>(1)</sup>	EN 438-2.25	force	rating	≥ 3	≥ 2
Resistance to staining	EN 438-2.26	app. groups 1-2 appear. groups 3	rating	5 ≥ 4	5 ≥ 4
Lightfastness	EN 438-2.27	contrast	grey scale rating	≥ 4	≥ 4
Resistance to cigarette burns	EN 438-2.30	appearance	rating	≥ 3	≥ 3
Resistance to water vapour	EN 438-2.14	appearance gloss finish appearance other finishes	rating	≥ 3 ≥ 4	≥ 3 ≥ 4
Formability	EN 438-2.32	radius	mm	≤ t x 10 long. ≤ t x 20 trasv.	≤ t x 10 long. ≤ t x 20 trasv.
Resistance to blistering	EN 438-2.34	time	sec.	t < 0,8 mm: ≥ 10 t ≥ 0,8 mm: ≥ 15	t < 0,8 mm: ≥ 10 t ≥ 0,8 mm: ≥ 15
Electrical resistance	NF PA 99	-	Ohm	10 <sup>8</sup> - 10 <sup>11</sup>	10 <sup>8</sup> - 10 <sup>11</sup>
Density	ISO 1183	density	gr/cm <sup>3</sup>	≥ 1,40	≥ 1,40

(1) Resistance to scratching is depending from finish and colour.

Note: The colour of individual lots may vary as a result of the technology and type of pigment used. Pay attention to the direction of the texture.

### FIRE PERFORMANCE

TEST METHOD	STANDARD	CLASSIFICATION	
		HGP/VGP flame retardant	HGP/VGP
Small flame and radiant panel	UNI 8457 UNI 9174 UNI 9177	class 1	class 2
	UNI CEI 11170-3	class 1A	—
Spread of flame	BS 476-7	class 1	class 2
Smoke density and toxicity	NF F 16-101 UNI CEI 11170-3	min F2	min F2

Note: Fire test performance will depend on laminate thickness and construction, substrate type and thickness, and adhesive used.