

POSTFORMING LAMINATE TECHNICAL DATA SHEET

1. PRODUCT CLASS

Postforming CPL plastic laminate.

2. DESCRIPTION

Thin Top is obtained by laminating a decorative paper on several layers of phenolic free support depending on the required thickness; the decorative paper is impregnated with amino plastic resins. Thin Top antistatic is characterized by an higher capacity to eliminate electrostatic charges, that is obtained by activating the melamine resin with specific additives. Thin Top antibacterial has been obtained using specific additives with an authentic antibacterial action. Thin Top MED grade is suitable to be used in the naval field; it comes with the necessary certification.

3. PROPERTIES

- a) Melamine impregnation with good chemical and mechanical resistance.
- b) Possibility to produce in thicknesses ranging from 0,4 to 1,8 mm.
- c) Post-formable according to EN 438-2:2019 (see table below).
- d) Possibility to reproduce all the decors, with initial grammage between 60 e 90 gr/sqm, with all the finishing of the melamine-laminated chipboard.
- e) Applicability with all kinds of plants (prior testing is recommended).

4. RECOMMENDATIONS

- a) When handling or moving decorative laminates, it is important that the sheets be lifted above adjacent sheets to avoid damage that can occur if the sheets are pulled or slid against each other. For laminates with very smooth and opaque finishes, the application of a protective film must be foreseen.
- b) Some finishes, such as but not limited to Velvet and Peach, are susceptible to polishing if subjected to friction and rubbing. An adequate check as to whether these finishes are suitable for the intended use is highly recommended.
- c) The use of higher weight decors significantly worsens the post-formability performance of the laminate, which may not meet the limit values given in the table below. For this reason, it is advisable to use decors having a maximum grammage of 90 g/sqm.
- d) The product is not waterproof so it must be stored in places that are not in direct and constant contact with moisture; the same applies to laminate-coated items.
- e) It is recommended to use glues that have the necessary moisture resistance, preferring polyurethane glue (PUR).
- f) Laminates made with smooth finishes and some plain colors may feature abrasion resistance values higher than the values reported in the table below. For textured finishes with dark printed colors, performances may prove lower than these values.

5. APPLICATIONS

- a) Thin Top is a product particularly suitable for coating plain, vertical and horizontal surfaces, thanks to its post-forming properties, it can be used for kitchen work-tops production. It can be applied on chipboard, MDF and plywood using all standard gluing processes.
- b) Thin Top can be used with a décor printed with a digital technology. Thin Top antistatic is used in all rooms in which electrostatic charges must be dispersed.
- c) Thin Top antibacterial is ideal for communities furnishing like hospitals, laboratories, public toilets, etc. The product is suitable for all standard uses in interior furnishings.
- d) Thin Top is suitable for the use in the naval field as-certified by LAPI S.p.A.; certificates 0987/MED-B/546 (form B) and 0987/MED-D/466 (form D)
- e) Thin Top can be applied with all the standard glue processes used in the lamination business. However, tests in advance are highly recommended.

6. SIZES

Supplied in sheets of size: width from 1.300 to 1.420 mm and length from 2.000 to 4.200 mm.

7. TECHNICAL CHARACTERISTICS

The technical characteristics are shown in the table below.

8. PACKAGING AND STORAGE

Thin Top laminates are supplied in sheets on pallets, wrapped with polyethylene and a shock-proof packaging. The stability of the laminate is assured for six months, if kept in its original packaging and in proper environmental conditions (temperature 10 – 25°C and relative humidity 50%). Considering that laminate sheets might slightly change their postforming properties depending on the warehouse conditions, we advise customers to postform the sheets within six months from the date of production.

9. NOTES

Information contained in this document are based on our current knowledge and experience. However, they cannot be considered exhaustive, but purely indicative. It is recommended to test the products at your premises in advance and to report any non-conformities before proceeding with the production. Neodecortech S.p.A. cannot be considered liable for any damage deriving from the use of the abovementioned product.

TEXTE POSTFORMING LAMINATES

CPL laminates are produced according to EN 438-2:2019 only in those cases where it is specifically declared so: see table below. Other areas of this Norm not expressly referred to, are not applicable/guaranteed. CPL available types are for Horizontal Grade Postforming Laminate and Vertical Grade Postforming Laminate.

HGP	Horizontal Grade Postforming Laminate				
VGP	Vertical Grade Postforming Laminate				
PROPERTY	Test method	Property or attribute	Unit / Rating (max or min)	VALUES	
				HGP	VGP
<b>SURFACES QUALITY</b>					
Surface Quality	EN 438-3	Spots, dirt and similar surface defects	mm <sup>2</sup> /m <sup>2</sup>	≤ 1	
		Fibers, hairs and scratches	mm/m <sup>2</sup>	≤ 10	
<b>DIMENSIONAL TOLERANCES</b>					
Dimensional Tolerances	EN 438-2.5	Thickness tolerance	mm	0,5 ≤ t ≤ 1,0 ± 0,10	
			mm	1,0 ≤ t ≤ 2,0 ± 0,15	
	EN 438-2.6	Length and width	mm	+ 10 - 0	
	EN 438-2.7	Straightness of edges	mm/m	≤ 1,5	
	EN 438-2.8	Squareness	mm/m	≤ 1,5	
EN 438-2.9	Flatness <sup>(1)</sup>	mm/m	≤ 60		
<b>GENERAL PROPERTIES</b>					
Antibacterial activity	ISO 22196:2011	Reduction in cell count	%	99,9 %	
Volumetric resistance	IEC 61340-4-1	R <sub>v</sub> (23 °C / 50% RH)	Ohms	10 <sup>8</sup> - 10 <sup>11</sup>	
Resistance to surface wear	EN 438-2.10	Initial Point <sup>(2)</sup>	Revolutions	≥ 150	≥ 50
Resistance to water vapor	EN 438-2.14	Appearance - Gloss Finish	Rating (min)	3	
		Appearance - Other Finish	Rating (min)	4	
Resistance to dry heat (180°C)	EN 438-2.16	Appearance - Gloss Finish	Rating (min)	3	
		Appearance - Other Finish	Rating (min)	4	
Resistance to wet heat (100 °C)	EN 438-2.18	Appearance - Gloss Finish	Rating (min)	3	
		Appearance - Other Finish	Rating (min)	4	
Dimensional stability at elevated temperature	EN 438-2.17	Cumulative dimensional change	Longitudinal %	≤ 0,55	≤ 0,75
		Cumulative dimensional change	Transversal %	≤ 1,05	≤ 1,25
Resistance to impact with small diameter ball	EN 438-2.20	Spring Force	N(min)	≥ 20	≥ 15
Resistance to scratching	EN 438-2.25	Appearance	Rating (min)	3	2
Resistance to staining	EN 438-2.26	Appearance - Group 1&2	Rating (min)	5	
		Appearance - Group 3	Rating (min)	4	
Light fastness (Xenon-arc)	EN 438-2.27	Contrast	Blue wool scale	6	
Formability	EN 438-2.31-32	Radius	Longitudinal	10 × nominal thickness	
		Radius	Transversal	20 × nominal thickness	
Resistance to blistering	EN 438-2.33-34	Time to blister	Second - nominal thickness < 0,8 mm	≥ 10	
		Time to blister	Second - nominal thickness ≥ 0,8 mm	≥ 15	
Density	EN 1S01183	Density	g/cm <sup>3</sup>	≥ 1,35	

<sup>(1)</sup> Provided that laminates are stored under the conditions recommended by the manufacturer.

<sup>(2)</sup> For smooth finishes and some plain color performances may be higher than the values reported in the table. For structured finishes with dark printed colors performances may be lower than the values reported in the table

SPECIFIC USE

The Thin top MED version is suitable for use in the naval field as certified by LAPI SpA with reference to PRODUCTION QUALITY ASSURANCE CERTIFICATE (Module D) N° 0987/MED-D/936 and EC TYPE-EXAMINATION CERTIFICATE (Module B) N° 0987/MED-B/809.