

TECHNICAL DATA SHEET

1. PRODUCT CLASS

CPL plastic laminate.

2. DESCRIPTION

EOS laminate is obtained by laminating a special acrylic film on several layers of phenolic free support depending on the required thickness. Thanks to Electron Beam Curing technology (EBC), the acrylic surface of EOS laminate gains extraordinary properties such as: anti fingerprint, high scratch resistance, light fastness, no bacterial proliferation, high resistance to solvents and chemical reagents. Any small traces of grease can be eliminated very easily thanks to the oleophobic properties of EOS laminate. These technical features, joined with its Soft and Supermatt surfaces, make EOS laminate a cutting-edge product in the world of interior design appreciated by architects and designers. Last but not least, EOS laminate is a Phenol Free product, an additional choice for environment protections and consumers health confirming Neodecortech spa commitment toward the green chemistry.

3. PROPERTIES

- a) Surface with higher chemical and mechanical resistance.
- b) Possibility to produce all the range of thicknesses from 0,4 to 1,8 mm.
- c) Applicability with all kinds of plants used in the lamination business (however the customer is recommended to test in advance).

4. RECOMMENDATIONS

- a) EOS laminate doesn't have postforming property; is **not post-formable**.
- b) 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 EOS laminate, it is advisable to require the application of a protective film.
- c) 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.
- d) It is recommended to use glues that have the necessary moisture resistance, preferring polyurethane glue (PUR).
- e) Before bonding, both laminates and substrates must be cleaned and free from any traces of dust, grease, particles or other impurities that could cause defects, bubbles or stains on the surface of the finished panel.
- f) Pre-conditioning the laminate at the temperature and humidity conditions of the place where the gluing process will be performed. However, it is not advisable to paste the laminate if the temperature is < 15 ° C.

5. APPLICATIONS

- a) EOS laminate is a product particularly suitable for coating plain, vertical and horizontal surfaces, it can be applied on chipboard, MDF and plywood using all standard gluing processes.
- b) EOS laminate is suitable for the use in the naval field certified by LAPI S.p.A.; certificates 0987/MED-B/546 (form B) and 0987/MED-D/466 (form D).
- c) EOS laminate can be applied with standard glue processes used in the lamination business. However, the customer is recommended to test in advance.

Gluing process with cold presses

A limited pressure of 2-5 kg / cm² on the surface of the panel is applied. The laminate bonding times are long enough to allow the glue to complete its hardening cycle. Ex: PVac D3 (waterproof) 40-60 min + 20 ° C.

Gluing process with hot presses

Typically, a pressure of 2-5 kg / cm² and a temperature of 40-60 ° C is applied. The laminate bonding times are shorter in the order of a few minutes.

Ex.: PVac D3 (waterproof) 12 - 25 min + 40 ° C; 6 - 15 min + 60 ° C. However, the panels should be cooled before proceeding with the cutting work. These indications are provided for general information purposes. It is the responsibility of the user to find the most appropriate process conditions.

Therefore, a preventive test is recommended, regardless of the type of glue and pressing plant used. If in the backside it is not used a EOS acrylic laminate but a melamine laminate or another product, preventive tests are compulsory for testing and verifying the flatness of the finished panel. EOS laminate can be used for the coating of furniture items that frequently come into contact with hands or with products containing oils and greases such as kitchen tables, desks, doors and kitchen doors, chest of drawers, etc.

The product is suitable for all common use in interior design.

6. SIZES

Supplied in sheets of size: length 1.300 mm and width up to max 4.200 mm.

7. TECHNICAL CHARACTERISTICS

The technical characteristics are shown up in the table below.

8. PACKAGING AND STORAGE

EOS laminate is supplied in sheets on pallets, which are 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%).

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 EOS LAMINATO

EOS laminate has been produced according to EN 438-2:2019 only in those cases where it is specifically declared: see table below. Other areas of this standard not expressly referred to, are not applicable/guaranteed.

PROPERTY	Test method	Property or attribute	Unit / Rating (max or min)	VALUES
10. SURFACES QUALITY				
Surface Quality	EN 438-3	Spots, dirt and similar surface defects	mm ² /m ²	≤ 1
		Fibers, hairs and scratches	mm/m ²	≤ 10
11. DIMENSIONAL TOLERANCES				
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 ⁽¹⁾	mm/m	60
GENERAL PROPERTIES				
Resistance to surface wear	EN 438-2.10	Initial Point	Revolutions	200
Resistance to water vapor	EN 438-2.14	Appearance - Gloss Finish	Rating (min)	4
Resistance to dry heat (180°C)	EN 438-2.16	Appearance - Gloss Finish	Rating (min)	4
Resistance to wet heat (100 °C)	EN 438-2.18	Appearance - Gloss Finish	Rating (min)	4
Dimensional stability at elevated temperature	EN 438-2.17	Cumulative dimensional change	Longitudinal %	0,60
		Cumulative dimensional change	Transversal %	1,20
Resistance to impact with small diameter ball ⁽²⁾	EN 438-2.20	Spring Force	N(min)	15
Resistance to scratching	EN 438-2.25	Appearance	Rating (min)	3
Resistance to staining	EN 438-2.26	Appearance - Group 1&2	Rating (min)	5
		Appearance - Group 3	Rating (min)	4

⁽¹⁾ The checked data applying the methods established by the regulation UNI EN 438-2 can be different from the minimum requisites set by UNI en 438-3 for HPL laminates;

⁽²⁾ Height fall of the ball = 1000 mm