release 4.2 eng reviewed on 05.2021

PRODUCT CLASS

CPL plastic laminate.

DESCRIPTION

EOS_{laminato} is obtained by laminating a special acrylic film with various layers of Kraft impregnated paper as a support, according to the required thickness.

Thanks to Electron Beam Curing technology (EBC), the acrylic surface of EOS _{laminato} agains 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 Laminato a cutting-edge product in the world of interior design appreciated by architects and designers.

Last but not least, EOS_{laminato} is a Phenol Free product, an additional choice for environment protections and consumers health confirming Neodecortech spa commitment toward the green chemistry.

ADVANTAGES

- Surface with higher chemical and mechanical resistance;
- Applicability with all kind of plants used in the lamination buisness (however the customer is recommended to test in advance).

APPLICATIONS

EOS_{laminato} is a product particularly suitable for coating vertical and horizontal flat surfaces;

Supports

Chipboard, MDF and Plywood are particularly suitable surfaces because, like EOS laminato they are cellulose based and therefore have similar dimensional swelling.

Bonding:

EOS Laminate can be glued to these surfaces, mainly through:

Thermoplastics: PVAc - Polyvinyl acetate (especially in industrial bonding), Neoprene, Hot Melt;

<u>Thermosetting agents:</u> Urea-formaldehyde, PUR, resorcinol or epoxy resin.

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.

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.

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 laminato 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.

EOS laminato in the MED version is suitable for naval use. It is certified by LAPI S.p.A; certificates 0987 / MED-B / 546 (module B) and 0987 / MED-D / 466 (module D). EOS laminato is suitable for all common uses in interior design.





SIZES

Supplied in sheets of size: length 1.300 mm and width up to max 6.100 mm.

TECHNICAL CHARACTERISTICS

The technical characteristics are shown up in the table n° 1.

PACKAGING AND STORAGE

EOS $_{laminato}$ is supplied in sheets on pallets, which are wrapped with polyethylene and a shock-proof packaging. The stability of the laminate is assured for twelve months, if kept in its original packaging and in proper environmental conditions (temperature 10 – 25°C and relative humidity 50 – 60 %).

NOTES

The information contained in this document is based on our current knowledge and experience. However, it 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.

TECHNICAL DATA

EOS laminato

PROPERTIES		Test method	Unit/class/ level	Value
1	Thickness tollerance	Acc. EN 438-2 / 16 § 5	mm	±0,10 mm for thickness 0,5 ≤ t ≤1,0 ±0,15 mm for thickness 1,0 < t ≤ 1,0
2	Light resistance	Acc. EN 438-2/16 § 27	grey wool scale	4
3	Stains resistance	Acc. EN 438-2/16 § 26	class	≥ 4
4	Scratch resistance	Acc. EN 438-2/16 § 25	class	≥ 4
5	Abrasion resistance	Acc. EN 438-2/16 § 10	WR cycles	200
6	Steam resistance	Acc. EN 438-2/16 § 14	class	5
7	Dry heat resistance (160 °c)	Acc. EN 438-2 / 16 § 16	class	≥ 4
8	Wet heat resistance (100 °c)	Acc. EN 438-2/16 § 18	class	≥ 4
8	Crash resistance to small diameter ball	Acc. EN 438-2/16 § 20	N	28
9	Crash resistance to small diameter ball ⁽²⁾	Acc. EN 438-2/16 § 21	mm	9,3
10	Formaldehyde emission	Acc. ISO 12460-3:2015	mg/m² x h	0,3

⁽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