

Certification



FSC Chain of Custody Certificate, Ref: FSC-STD-40-004 V3-1

Additional FSC standard: FSC CoC Certificate for multiple sites (FSC-STD-40-003 V2.1). FSC stands for Forest Stewardship Council and ensures that wood products originate from responsibly managed forests.



A+ Certification in terms of VOC emissions

Low emission of Volatile Organic Compounds: $\leq 0.2 \text{ mg/m}^3$, according to:

- ISO 16000-9:2006 - measures VOC emissions from building materials.
- ISO 16000-6:2021 - measures VOCs present in indoor air.



**PHENOL
FREE**

Formaldehyde class E1

Phenol emission $< 0.002 \text{ mg/m}^3$. Using ecological thermosetting resins instead of phenol in the production process.



**ANTI
BACTERIAL**

Strong anti bacterial surface

According to JIS Z 2801:2012W

- Suitable for applications in healthcare, hospitality, education
- Tested according to international standard



**EN
CERTIFIED**

CPR Certification (EN 438-7:2005)

Formaldehyde class: E1

- Moisture resistance: class 5
- Climate resistance: class 5
- Tensile strength: $\geq 3000 \text{ N}$ (6 mm), $\geq 4000 \text{ N}$ (10 mm)
- Fire classification: B-s1, d0 (EN 13501-1)



**REACH
COMPLIANT**

REACH Compliance (EU 1907/2006)

No intentional release of chemicals

- No SVHC substances ($> 0.1\%$) present
- No registration or notification required with ECHA
- No SDS required under Article 31 of REACH



**CHEMICAL
RESISTANCE**

Chemical Resistance (EN 438-2)

Fully resistant (16 hours): Alcohols, acids (citric, acetic), sugars, disinfectants

- Limited resistance (max. 15 min): Hydrogen peroxide 3–30%, iron salts, strong acids/bases $< 10\%$
- Not resistant (even short contact): Chromic acid, picric acid, silver nitrate, methylene blue, etc.
- Gases that affect appearance: Cl_2 , Br_2 , SO_2 , NO_x , vaporized H_2O_2

Conclusion

- International certifications (FSC, ISO, JIS, EN, REACH)
- Low emissions, high hygiene standards, strong chemical and mechanical resistance

Properties Data Sheet

NoviPanel is a high pressure decorative laminates (HPL), having thickness 2 mm or greater, according to **EN 438-1:2016**, **EN 438-2:2016** and **EN 438-4:2016**. The core is composed of layers of kraft paper impregnated with thermosetting resins. The decorative surface in both sides is made of paper impregnated with aminoplastic thermosetting resins. All the layers are bonded together by a high pressure and high temperature process to obtain a high density homogeneous non-porous material. NoviPanel is available in standard CGS type and flame retardant CGF type according to **EN 438-4:2016**.

PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	VALUES CGS-CGF	UNIT			
General Properties							
Surface quality	EN 438-2:2016 Par. 4	Spots, dirt and similar surface defects Fibers, hair and scratches	≤ 1 ≤ 10	mm²/m² mm/m²			
Dimensional tolerances	EN 438-2:2016 Par. 5	Thickness (t)	± 0,20 2,0 ≤ t < 3,0 ± 0,30 3,0 ≤ t < 5,0 ± 0,40 5,0 ≤ t < 8,0 ± 0,50 8,0 ≤ t < 12,0 ± 0,60 12,0 ≤ t < 16,0	mm			
			EN 438-2:2016 Par. 6		Length and width	+ 10 / - 0	mm
			EN 438-2:2016 Par. 7		Straightness of edges	≤ 1,5	mm/m
			EN 438-2:2016 Par. 8		Squareness	≤ 1,5	mm/m
			EN 438-2:2016 Par. 9		Flatness (measured on full-size sheet)	≤ 8,0 2,0 ≤ t < 6,0 ≤ 5,0 6,0 ≤ t < 10,0 ≤ 3,0 t ≥ 10,0	mm/m
	Physical Properties						
Resistance to immersion in boiling water	EN 438-2:2016 Par. 12	Mass increase	≤ 5 2,0 ≤ t < 5,0 ≤ 2 t ≥ 5,0	%			
		Thickness increase	≤ 6 2,0 ≤ t < 5,0 ≤ 2 t ≥ 5,0	%			
		Surface appearance	≥ 3 gloss finish ≥ 4 other finishes	Rating			
		Edge appearance	≥ 3	Rating			
Dimensional stability at elevated temperatures	EN 438-2:2016 Par. 17	Cumulative dimensional change	≥ 0,4 2,0 ≤ t < 5,0 ≥ 0,3 t ≥ 5,0	Longitudinal % (?)			
			≥ 0,8 2,0 ≤ t < 5,0 ≥ 0,6 t ≥ 5,0	Transversal % (?)			
Resistance to impact by large diameter ball	EN 438-2:2016 Par. 21	Drop height Indent diameter	≥ 1400 2,0 ≤ t < 6,0 ≥ 1800 t ≥ 6,0 ≤ 10	mm			
Resistance to crazing	EN 438-2:2016 Par. 24	Appearance	≥ 4	Rating			
Density	EN ISO 1183	Density	≥ 1,35	g/cm³			
Flexural modulus	EN ISO 178	Stress	≥ 9000	MPa			
Flexural strength	EN ISO 178	Stress	≥ 80	Mpa			
Surface Properties							
Resistance to surface wear	EN 438-2:2016 Par. 10	Initial point	≥ 50	Revolutions			
Resistance to water vapour	EN 438-2:2016 Par. 14	Appearance	≥ 3 gloss finish ≥ 4 other finishes	Rating			
Resistance to dry heat (160°C)	EN 438-2:2016 Par. 16	Appearance	≥ 3 gloss finish ≥ 4 other finishes	Rating			
Resistance to wet heat (100°C)	EN 438-2:2016 Par. 18	Appearance	≥ 3 gloss finish ≥ 4 other finishes	Rating			
Resistance to scratching	EN 438-2:2016 Par. 25	Force	≥ 2 for smooth finishes ≥ 3 for textured finishes	Rating			
Resistance to staining	EN 438-2:2016 Par. 26	Appearance	5 groups 1 & 2 ≥ 4 group 3	Rating			
Light Fastness (Xenon-arc)	EN 438-2:2016 Par. 27	Contrast	≥ 4	Grey scale rating			

Properties Data Sheet

PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	VALUES CGS-CGF	UNIT
Fire Performances				
Reaction to fire ⁽³⁾	EN 13501	Classification - CGS wood frame Classification - CGF metal frame	D-s2,d0 B-s1,d0	class
Physical Properties				
Contact with food - overall migration	EN 1186	Acetic acid 3 % Ethanol 50 % Ethanol 95 % Isooctane	≤ 10 ≤ 10 ≤ 10 ≤ 10	mg/dm ²
Environmental Properties				
Formaldehyde emission	EN 13986	Formaldehyde emission rating	E1	Rating
Volatile organic chemical emission	AFNOR NF EN ISO 16000-9	Classification TVOC emission	A+ ≤ 0,2	Rating mg/m ³
Phenol Free ⁽⁴⁾	AFNOR NF EN ISO 16000-9	Phenol emission	≤ 0,002	mg/m ³
Notes: (1) t: nominal thickness [mm] (2) Longitudinal: parallel to the fiber direction (usually parallel to the direction of sanding). Transversal: at right angles to the fiber direction (3) Please contact the manufacturer for more details on the fire tests performed and the certificates held (4) Phenol is not used as raw material in NoviPanel production. 0,002 mg/m ³ is the detection limit (DL) value of the test.				
Note to NoviPanel sheets with adhesive protective film The protective films are designed for temporary surface protection against dirt, scratches and tool marks; they are not designed for protection against corrosion, humidity or chemicals. The laminates covered with the protective film shall be stored in a clean, dry place (40 to 60 RH%), avoiding weathering and UV exposure. In any case, the removal must be made within four months from the date of shipment. Bouwimpex cannot be responsible for the misuse of the laminates covered with the protective film, nor for the consequences for non-recommended applications.				