

FENIX^{NTM}

MATERIAL PROPERTIES DATA SHEET | THIN

Italian design since 2013

FENIX NTM[®] is a material produced by simultaneous application of heat and pressure, in order to obtain a homogeneous non-porous high density product. The core structure is composed of paper, impregnated with thermosetting resins. The outer surface is made of a paper substrate treated with next generation acrylic resins applied to the substrate as a multilayer coating and subsequently, cured via an electron beam process.

Bloom, a new core technology where lignin has been introduced to significantly reduce the amount of phenol included in the resin by 50%.

fenixforinteriors.com
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PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	UNIT	VALUES			
				0.7 mm BLOOM BLACK CORE ¹	0.8 mm STANDARD ¹	0.9 mm STANDARD ¹	1.2 mm MATCHED COLOUR CORE ¹
GENERAL PROPERTIES							
Surface quality	EN 438-2:2019 cl.4	Spots, dirt and similar surface defects	mm ² /m ²	≤ 1			
		Fibres, hair and scratches	mm/m ²	≤ 10			
Dimensional tolerances	EN 438-2:2019 cl.5	Thickness tolerance	mm	0.7 ± 0.10	0.8 ± 0.10	0.9 ± 0.10	1.2 ± 0.18
	EN 438-2:2019 cl.6	Length and width	mm	+ 10 / - 0			
	EN 438-2:2019 cl.7	Straightness of edges	mm/m	≤ 1.5			
	EN 438-2:2019 cl.8	Squareness	mm/m	≤ 1.5			
	EN 438-2:2019 cl.9	Flatness (measured on full-size sheet)	mm/m	≤ 60			≤ 100
SURFACE PROPERTIES							
Resistance to surface wear	EN 438-2:2019 cl.10	Initial Point	Revolutions	≥ 200			
Resistance to water vapour	EN 438-2:2019 cl.14	Appearance	Rating	5			
Resistance to dry heat (160 °C/20')	EN 438-2:2019 cl.16	Appearance	Rating	5			
Resistance to wet heat (100 °C/20')	EN 438-2:2019 cl.18	Appearance	Rating	5			n.a.
Resistance to scratching	EN 438-2:2019 cl.25	Appearance	Rating	≥ 4			
Resistance to staining	EN 438-2:2019 cl.26	Appearance - Groups 1 and 2	Rating	5			
		Appearance - Group 3	Rating	≥ 4			
Light fastness (Xenon-arc)	EN 438-2:2019 cl.27	Contrast	Grey scale	≥ 4			
Surface specular reflectance	ISO 2813	Surface specular reflectance	Gloss unit	8 + 16 at 85°			
Acids resistance	SEFA 8-PL-2010 method 8.1	Chemical Spot Test	Suitability	Compliant			
PHYSICAL PROPERTIES							
Density	EN ISO 1183	Density	g/cm ³	≥ 1.35			
Resistance to immersion in boiling water	EN 438-2:2019 cl.12	Appearance	Rating	5			
Dimensional stability at high temperatures	EN 438-2:2019 cl.17	Cumulative dimensional change	Longitudinal %	≤ 0.55			≤ 0.8
		Cumulative dimensional change	Transversal %	≤ 1.05			≤ 1.4
Resistance to impact with small diameter ball	EN 438-2:2019 cl.20	Spring force	N	≥ 20			n.a.
Resistance to cracking	EN 438-2:2019 cl.23	Appearance	Rating	≥ 4			
Electrostatic property	EN 61340-4-1	Point to point resistance	Ω	1 × 10 ¹⁰ ÷ 1 × 10 ¹²			
		Vertical resistance	Ω	1 × 10 ¹⁰ ÷ 1 × 10 ¹²			
OTHER PROPERTIES							
ENVIRONMENTAL PROPERTIES							
Formaldehyde emission	EN 13986	Formaldehyde emissions	Rating	E1			
Volatile Organic Chemical Emissions	Greenguard Gold Certification Low Chemical Emission UL 2818	Volatile Organic Chemical emissions	Suitability	Greenguard Gold certified			
FOOD AND HYGIENE PROPERTIES							
Hygiene	NSF/ANSI 35	Suitability for use as work and nonwork surfaces of food service equipment on which direct food contact during normal preparation or holding operations is not intended, expected, or reasonable	Suitability	NSF certified			
Food contact	Regulation EU n° 10/2011 and following amendments	Food Contact Materials performance	Suitability	Compliant - conditions of use reported in the Declaration of conformity			
¹ For the current and up to date FENIX [®] delivery program in North America, visit www.fenixforinteriors-na.com . For the delivery program in the rest of the world, visit www.fenixforinteriors.com . Please contact your sales representative for more information.							
Note to FENIX sheets with adhesive protective film The protective film is designed to temporary protect the surface from dust, scratches and marks left by handling equipment; it does not protect from corrosion, dampness or chemical agents. Sheets covered with protective film should be stored in a clean dry atmosphere at room temperature (ideally 20 °C), avoiding exposure to atmospheric agents and UVA rays. The protective film should be removed from the sheets surface after application and before the final item. In case of thick sheets with protective film on both sides, the film should always be removed from both sides at the same time. In any case, the removal should take place within 6 months from the date of shipping by the Manufacturer(s) of the FENIX sheets. The Manufacturer(s) of the FENIX sheets shall not accept liability for improper use of sheets covered with a protective film, nor for any consequences of an incorrect application.							
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