

N.EXT | COMPACT

MATERIAL PROPERTIES DATA SHEET

N.EXT Compact is a high pressure decorative laminates (HPL), suitable for exterior use, according to EN 438-1:2016, EN 438-2:2016 and EN 438-6:2016. The core is composed of layers of kraft paper impregnated with thermosetting resins. The decorative surface, in one or both sides, is made of paper impregnated with aminoplastic thermosetting resins, covered with a special layer for UV and weather protection. All the layers are bonded together by a high pressure and high temperature process to obtain a high density homogeneous non-porous material.

N.EXT Compact is suitable for severe outdoor conditions as applications involving long term exposure to strong sunlight and weather. N.EXT Compact is available in severe use EDS grade and in its flame retardant version EDF grade according to EN 438-6:2016.

			EDS-EDF		
PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	VALUES		UNIT
GENERAL PROPERTIES					
Surface quality	EN 438-2:2016 Par. 4	Spots, dirt and similar surface defects Fibers, hair and scratches	≤ 2 ≤ 20		mm ² /m ² mm/m ²
Dimensional tolerances	EN 438-2:2016 Par. 5	Thickness ⁽¹⁾	± 0,20	2,0 ≤ t < 3,0	mm
			± 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	
	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)	≤ 5,0 ≤ 3,0	6,0 ≤ t < 10,0 t ≥ 10,0	mm/m
PHYSICAL PROPERTIES					
Resistance to wet conditions	EN 438-2:2016 Par. 15	Mass increase	≤ 7 ≤ 5	2,0 ≤ t < 5,0 t ≥ 5,0	%
		Surface appearance Edge appearance	≥ 4 ≥ 3		Rating
Dimensional stability at elevated temperatures	EN 438-2:2016 Par. 17	Cumulative dimensional change	≤ 0,4 ≤ 0,3	2,0 ≤ t < 5,0 t ≥ 5,0	Longitudinal % ⁽²⁾
			≤ 0,8 ≤ 0,6	2,0 ≤ t < 5,0 t ≥ 5,0	Transversal % ⁽²⁾
Resistance to impact by large diameter ball	EN 438-2:2016 Par. 21	Drop height	≥ 1400	2,0 ≤ t < 6,0	mm
		Indent diameter	≥ 1800 ≤ 10	t ≥ 6,0	
Density	EN ISO 1183	Density	≥ 1,35		g/cm ³
Flexural modulus	EN ISO 178	Stress	≥ 9000		MPa
Flexural strength	EN ISO 178	Stress	≥ 80		Mpa
WEATHER RESISTANCE PROPERTIES					
Resistance to climatic shock	EN 438-2:2016 Par. 19	Appearance Flexural strength index Ds Flexural modulus index Dm	≥ 4 ≥ 0,8 ≥ 0,8		Rating - -
Resistance to UV light	EN 438 -2:2016 Par. 28	Contrast Appearance	≥ 3 ≥ 4	after 1500 hours exposure after 1500 hours exposure	Grey scale rating Rating
Resistance to artificial weathering (including light fastness)	EN 438 -2:2016 Par. 29	Contrast Appearance	≥ 3 ≥ 4	after 650 MJ/m ² radiant exposure after 650 MJ/m ² radiant exposure	Grey scale rating Rating
FIRE PERFORMANCES					
Reaction to fire ⁽³⁾	EN 13501	Classification – EDF metal frame	B-s1,d0	t ≥ 6,0 mm	class
ENVIRONMENTAL PROPERTIES					
Formaldehyde emission	EN 13986	Formaldehyde emission rating	E1		Rating

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

N.EXT | COMPACT

MATERIAL PROPERTIES DATA SHEET

Note to N.EXT 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%) at room temperature (20 to 25 °C), avoiding weathering and UV exposure. In any case, the removal must be made within four months from the date of shipment by Puricelli. Puricelli cannot be responsible for the misuse of the laminates covered with the protective film, nor for the consequences for non-recommended applications.