



TOUCH
THE DESIGN

MOREMATT HR | LAM
MATERIAL PROPERTIES DATA SHEET

MOREMATT HR | LAM is a non-porous homogeneous high-density material produced by simultaneous application of heat and pressure. The core is composed of paper impregnated with aminoplastic thermosetting resins. The decorative surface is made of impregnated paper coated with special acrylic resins cured through an electron beam process.

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	≤ 1 ≤ 10	mm ² /m ² mm/m ²
Dimensional tolerances	EN 438-2:2016 Par. 5	Thickness ⁽¹⁾	$\pm 0,10$ $0,5 \leq t < 1,0$ $\pm 0,15$ $1,0 \leq t < 2,0$	mm
	EN 438-2:2016 Par. 6	Length and width	+ 10 / - 0	mm
	EN 438-2:2016 Par. 7	Straightness of edges	$\leq 1,5$	mm/m
	EN 438-2:2016 Par. 8	Squareness	$\leq 1,5$	mm/m
	EN 438-2:2016 Par. 9	Flatness (measured on full-size sheet)	60	mm/m
PHYSICAL PROPERTIES				
Resistance to immersion in boiling water	EN 438-2:2016 Par. 12	Surface appearance	≥ 4	Rating
Dimensional stability at elevated temperatures	EN 438-2:2016 Par. 17	Cumulative dimensional change	$\leq 0,55$ $\leq 1,05$	Longitudinal % ⁽²⁾ Transversal % ⁽²⁾
Resistance to impact by small diameter ball	EN 438-2:2016 Par. 20	Spring force	≥ 20	N
Resistance to impact by large diameter ball	EN 438-2:2016 Par. 21	Drop height Indent diameter	≥ 1000 ≤ 10	mm
Resistance to cracking under stress	EN 438-2:2016 Par. 23	Appearance	≥ 4	Rating
Density	EN ISO 1183	Density	$\geq 1,35$	g/cm ³
Electrostatic property	EN 61340-4-1	Point to point resistance Vertical resistance	$1 \times 10^{10} \div 1 \times 10^{12}$ $1 \times 10^{10} \div 1 \times 10^{12}$	Ω
SURFACE PROPERTIES				
Resistance to surface wear	EN 438-2:2016 Par. 10	Initial point	≥ 200 Plain colours ≥ 150 Printed decors	Revolutions
Resistance to water vapour	EN 438-2:2016 Par. 14	Appearance	5	Rating
Resistance to dry heat (160°C)	EN 438-2:2016 Par. 16	Appearance	5	Rating
Resistance to wet heat (100°C)	EN 438-2:2016 Par. 18	Appearance	5	Rating
Resistance to scratching	EN 438-2:2016 Par. 25	Force	≥ 4	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
Surface specular reflectance	ISO 2813	Surface specular reflectance	5 ÷ 15 measured at 85°	Gloss unit
Acids resistance	SEFA 8-PL-2016 Section 8.1	Chemical spot test	Compliant	Suitability
FIRE PERFORMANCES				
Reaction to fire	The reaction to fire of MOREMATT HR LAM is related to the final composite panel where the laminate is bonded to a substrate. The composite manufacturer is responsible for the correct execution of the test in accordance with the applicable standards and test methods required for the specific application field as the test results also depend on the substrate, the adhesive and the bonding technique applied.			
FOOD & HYGIENE PROPERTIES				
Contact with food - overall migration	EN 1186	Acetic acid 3 % Ethanol 50 % Ethanol 95 % Isooctane	≤ 10 ≤ 10 ≤ 10 ≤ 10	mg/dm ²
Evaluation of micro-organisms action	JIS Z 2801:2012	Antimicrobial activity after 24h	> 3 > 99,9	Bacterial viability: Log reduction % Reduction



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ENVIRONMENTAL PROPERTIES				
Formaldehyde emission	EN 13986	Formaldehyde emission rating	E1	Rating
Volatile organic chemical emission	AFNOR NF EN ISO 16000-9	Classification	A+	Rating
		TVOC emission	≤ 0,2	mg/m ³
Phenol Free ⁽³⁾	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) Phenol is not used as raw material in MOREMATT HR production. 0,002 mg/m³ is the detection limit (DL) value of the test.

Note to MOREMATT HR 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.