

SURFORMA® LAMINATES

HPL Standard, Post-Forming and Fire Retardant

DESCRIPTION

SURFORMA® decorative laminates, according to EN 438, are an excellent material for indoor surfaces, either horizontal or vertical. SURFORMA® decorative laminates meet the stringent requirements for hygiene, fire resistance, humidity resistance and mechanical properties. The surface of the laminate is antibacterial, validated accordingly to Japanese regulation JIS Z 2801.

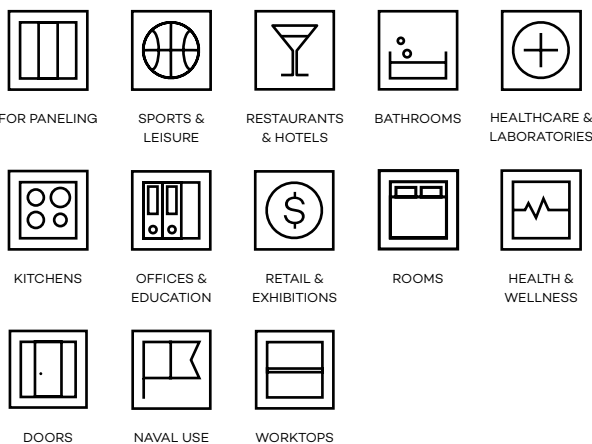
SURFORMA® decorative laminates are available in a variety of colors, patterns and surface textures, providing extensive options for architects and designers.

Please check offer & service brochure for information on sizes and thicknesses available.

APPLICATIONS

SURFORMA® decorative laminates are meant to be used in interior applications where design, appearance, quality, durability, resistance to stain and resistance to heat from ordinary sources are important features.

SURFORMA® laminates are the best choice for residential, public and commercial areas, and healthcare applications.



PROPERTIES



RECOMMENDATIONS

SURFORMA® Laminates should be stored so that they are protected from moisture, humidity and direct sunlight. When handling or moving decorative laminates it is important that the sheets be lifted above adjacent sheets to avoid damage that can occur if the sheets are pulled or slid against each other. For larger sizes, it is recommended that sheets be carried arched along the longitudinal axis to prevent sagging. Individual sheets can also be rolled up for easier handling (roll with the decorative side to the inside, making sure to avoid any side-to-side sliding motions).

SURFORMA® Laminates require no special maintenance because of their durable, hygienic and waterproof surface. Their surface can be cleaned with warm water followed by wiping with a paper towel or soft cloth. Persistent contamination can usually be eliminated with non-abrasive household cleaners. They are resistant to most solvents and chemicals used daily at home.

Laminates materials are classified as non-hazardous, no additional product description labels are needed. They are cured materials and chemically inert. REACH classification does not apply to them.

SURFORMA® Laminates can be brought to controlled waste disposal sites according to current national and/or regional regulations.

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GENERAL FEATURES

PROPERTIES	TEST METHOD	UNIT (MAX OR MIN)	HGS, HGP, HGF	VGS, VGP, VGF	
Dimensional tolerance requirements (EN 438-2:2016, Clause No.)					
Thickness	EN 438-2:5	mm (max. variation)	$0,5 \leq t \leq 0,8$	± 0,10	
			$0,8 \leq t \leq 2,0$	± 0,15	
Length and with	EN 438-2:6	mm		+ 10 / - 0	
Edges straightness	EN 438-2:7	mm/m (max. deviation)		1,5	
Edges squareness	EN 438-2:8	mm/m (max. deviation)		1,5	
Flatness	EN 438-2:9	mm/m (max. deviation)		60	
General Requirements					
Resistance to surface wear	EN 438-2:10	Revolutions (min.)	Initial Point	150	50
Resistance to immersion in boiling water	EN 438-2:12	Appearance, rating (min.)	Gloss/other finishes		3 / 4
Resistance to water vapour	EN 438-2:14	Appearance, rating (min.)	Gloss/other finishes		3 / 4
Resistance to dry heat (160 °C)	EN 438-2:16	Appearance, rating (min.)	Gloss/other finishes		3 / 4
Dimensional stability at elevated temperature	EN 438-2:17	Cumulative dimensional change % (max.)	Longitudinal	0,55	0,75
			Transversal	1,05	1,25
Resistance to wet heat (100 °C)	EN 438-2:18	Appearance, rating (min.)	Gloss/other finishes		3 / 4
Resistance to impact by small diameter ball	EN 438-2:20	Spring force, N (min.)		20	15
Resistance to scratching	EN 438-2:25	Force (min.)	Smooth/ Textured finishes	2 / 3	1 / 2
Resistance to staining	EN 438-2:26	Appearance, rating (min.)	Group 1 e 2 / Group 3		5 / 4
Light fastness (xenon arc)	EN 438-2:27	Contrast	Grey scale rating		4 a 5
Density	EN ISO 1183-1	Density, g/cm ³ (min.)			1,35

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Additional requirements for postformable - Type P laminates					
Formability	EN 438-2:31 o 32	Radius, mm	Longitudinal	≤ 10 x laminate nominal thickness	
			Transversal	≤ 20 x laminate nominal thickness	
Resistance to blistering	EN 438-2:33 o 34	Time to blister, seconds (t2 - t1)	Thickness <0,8 mm	≥ 10	
			Thickness <0,8 mm	≥ 15	
Additional requirements for reaction to fire - Type F laminates					
Reaction to fire	NFP 92-501		Clase M	M1	
Brandschacht	DIN 4102-1		Clase B	B1	
Propagation of fire	BS 476 - 7		Clase	Class 1	
Heat release	IMO Res. A653 (16)			Approved	
Calorific Power	EN ISO 1716		mJ / kg	18 - 20	
Typical EN 13501-1 classifications of HPL composite panels in the field of building construction					
In Europe, laminate panels intended for construction applications are tested in accordance with EN 13823 (1) (SBI test) and EN ISO 11925-2 (2) (Small-burner test), and the resulting reaction-to-fire performance is expressed in accordance with EN 13501-1.					
Composite panels comprising HPL type F bonded to non-combustible substrates				B-s2,d0	
Composite panels comprising HPL type F bonded to FR wood-based substrates				C-s2,d0	
Composite panels comprising HPL type S or P bonded to non-FR wood-based substrates				D-s2,d0	

SURFORMA® Laminates are classified in accordance with EN 438 – Sheets based on thermosetting resins (Usually called Laminates) – Part 4: Classification and specifications for compact laminates of thickness 2 mm and greater. For more information about these properties, please refer to the corresponding Technical Datasheet.

The use of SURFORMA® laminates can contribute to the achievement of up to 2 LEED claims:

- The product contains recycled materials and can contribute to obtain LEED credits under MR Credit 4.
- Depending on the location of the construction project, the product can meet the requirements for materials extracted and manufactured regionally and contribute to obtaining LEED credits under MR Credit 5.

The information given in this TDS is correct at the time of publication (0519 EN)
The Company reserves the right to change specifications at any time without prior notification.

CERTIFICATIONS

