

SURFORMA® FLAME RETARDANT

High-Pressure Decorative Laminates NEMA-LD3

DESCRIPTION

SURFORMA® decorative laminates are a high-pressure thermosetting plastic surfacing material, consisting of fibrous multilayer core material (kraft paper) impregnated with thermosetting phenolic resin, covered by a fibrous material decorative layer impregnated with thermosetting melamine resin. The layers are bonded together by high pressure and temperature process.

LIMITATIONS

SURFORMA® fire rated laminates are non-postforming.

PROPERTIES



LOW
EMISSIONS



ANTI-STATIC



ABRASION
RESISTANT



SCRATCH
RESISTANT



STAIN
RESISTANT



LIGHT
RESISTANT



EASY TO CLEAN



DIMENSIONAL
STABILITY



EASY TO MILL



FIRE
RETARDANT

RECOMMENDATIONS

Transportation

SURFORMA® laminates are a cured material and are chemically inert and are therefore classified as a non-hazardous product, thus not requiring any specific labeling. REACH classification does not apply.

Storage

SURFORMA® laminates should be stored to protect them from moisture, humidity, and direct sunlight. The laminates should preferably be stored face to face or decorative side facing up, flat in fully horizontal and level racks.

Handling

To handling or moving SURFORMA® decorative laminates, the sheets must be lifted above adjacent sheets, to avoid damage that can happen if they are pulled or slid against each other. For larger sizes, it is recommended to carry them arched along the longitudinal axis to prevent sagging. Individual sheets can also be rolled up for easier handling (roll with the decorative face inwards, making sure to avoid any sideways sliding motion).

Maintenance and Cleaning

Because SURFORMA® laminates have a durable, hygienic and waterproof surface, they do not require special maintenance. The surface can be clean with warm water and wipe 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.

Waste Disposal

SURFORMA® laminates may be taken to controlled waste disposal sites according to current national and/or regional regulations. Burning is permitted in approved industrial incinerators. Each organization is subject to its own statutory and local laws.

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FLAME SPREAD AND SMOKE DEVELOPMENT

GRADE	FLAME SPREAD RATING CAN/ULC S-102	SMOKE DEVELOPMENT CLASSIFICATION CAN/ULC S-102	FLAME SPREAD INDEX ASTM E84 (UL723)	SMOKE DEVELOPMENT INDEX ASTM E84 (UL723)
Fire Retardant*	20	25	15	25

* Laminate bonded to an inorganic substrate (GRC glass reinforced cement board)
ASTM E84 (UL 723, NFPA 255) – Results Classification: Class 1 or Class A

PHYSICAL PROPERTIES OF FIRE RETARDANT GRADE

SURFORMA® laminates meet or exceed all the requirements of the NEMA LD3 standard.

NEMA	TEST METHOD	GRADE/ UNITS	NEMA STANDARD	TYPICAL SURFORMA® PERFORMANCE
3.3	Light Resistance	Rating; Min.	Slight effect	No effect
3.4	Cleanability (cycles)	Rating; Max.	20	15
	Stain 1-10	Rating; Min.	No effect	No effect
	Stain 11-15	Rating; Min.	Moderate effect	Slight effect
3.5	Boiling water resistance	Rating; Min.	Slight effect	No effect
3.6	High temperature resistance	Rating ; Min.	Slight effect	No effect
3.7	Scratch resistance	Linear Glass	To be determined	< 50 gr
		Diamond	To be determined	rating 3
3.8	Ball impact resistance	mm; Min.	500	800
3.9	Dart impact	mm; Min.	200	600
3.10	Radiant heat/coil	Sec; Min.	80	120
	Radiant heat/strip	Sec; Min.	To be determined	180
3.11	Dimensional change	% MD; Max.	0.7	0.4
		% CD; Max.	1.2	0.9
3.12	Dimensional stability	% MD; Max.	0.7	0.1
		% CD; Max.	1.2	0.6
3.13	Wear resistance	Cycles; Min.	400	600

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STANDARDS AND APPROVALS

SURFORMA® laminates meet or exceed standard tests set by:

- The National Electrical Manufacturers Association “ANSI/NEMA LD-3:2005” for high-pressure decorative laminates. The purpose of this Standards Publication is to provide standard test methods and performance for high-pressure decorative laminates. The compliance of SURFORMA® laminates was tested and validated by the Laboratory of North Carolina State University, a member of ANSI.
- SURFORMA is certified under the EN ISO 9001:2015 Quality Management System.
- SURFORMA is certified under the EN ISO 14001:2004 Environmental Management System.
- SURFORMA is certified under the OHSAS 18001:2007 Occupational Health and Safety Management System.
- The GREENGUARD Environmental Institute has awarded its Indoor Air Quality Certification for Sonae - Indústria de Revestimentos, S.A. All Sonae - Indústria de Revestimentos, S.A laminate product types were tested under the stringent GREENGUARD Standard for low-emitting products. All GREENGUARD Indoor Air Quality Certified products ensure minimal impact on the indoor environment. For a copy of the certificate, visit the site www.greenguard.org

FSC® CERTIFICATION

SURFORMA® products are available as FSC® Mix Credit and FSC® Controlled Wood, under FSC® License number FSC C111655.

PEFC CERTIFICATION

SURFORMA® products are available as % PEFC Certified and PEFC Controlled Sources, under PEFC™ License number PEFC/13-31-051.

ANTIMICROBIAL ACTIVITY AND EFFICACY

SURFORMA® decorative laminates have a non-porous surface that does not promote bacterial growth. Tested according to the method ISO 22196:2011 and verification of the compliance with the Japanese criteria defined in JIS Z2801:2012 for antimicrobial activity and efficacy, our laminate surface exhibits strong biocidal properties, with a reduction of 99.9% of the tested bacteria (Escherichia coli ATCC 8739, Staphylococcus aureus ATCC 6538).

SURFORMA® STANDARD COLLECTION

We offer a wide array of colors ranging from pearlescent to exotic woodgrains, to subtly enhanced patterns and well blended solid colors.

Please refer to our standard color collection for all colors and patterns.

This document makes no claim of completion in respect of the listing of the full details of standards referred to in the text.

All information is based on the current state of technical knowledge, but it does not constitute any form of liability. It is the personal responsibility of the user of the products described in this information leaflet to comply with the appropriate laws and regulations.

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CERTIFICATIONS

