

SURFORMA® Laminates

High Pressure Decorative Laminates Fire Retardant

| Distributor | Manufacturer |
|-------------------------------|---------------------------------------|
| Tafisa Canada Inc | SURFORMA, S.A. |
| 4660 Rue Villeneuve | Production sites : Portugal and Italy |
| Lac-Mégantic (Québec) G6B 2C3 | |
| Canada | |

Product 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 an high pressure and temperature process.

Decorative high-pressure laminates fire retardant for horizontal and vertical applications

HPL, a homogeneous and non-porous material, is highly resistant to wear, chemicals and stains under normal use and conditions. Available in FR grade, thickness 0.80 mm (0.032 in) the product is suitable for applications where fire retardant properties are required by building codes, i.e., elevator cabs, stairwells, public areas, and hospitals. Typical usages include wall paneling, doors, ceilings, partition systems and similar surfaces.

Limitations: Surforma® fire rated laminates are non-postforming

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

Surface textures

SURFORMA® laminates are available in ten surface textures:

| Series | Texture code | Texture name | Texture description | Gloss level at 60° |
|----------------------|--------------|--------------|--|--------------------|
| Sommet [®] | VA | VIVA | Synchronized texture - the true touch of wood, butternut pattern | 5 - 10 |
| | FE | FERIA | Synchronized texture - the true touch of wood, hickory pattern | 4 - 9 |
| | BV | BRAVA | Synchronized texture - the true touch of wood, teak pattern | 5 - 10 |
| Prélude [®] | KA | Karisma | Natural brushed linear texture | 3 - 6 |
| | AT | Alto | Alternating Linear gloss-matte texture | 6 - 11 |
| | UR | Urbania | Deeper wood-ticking texture | 10 - 16 |
| | IS | Isola | Low gloss, smooth texture | 13 - 19 |
| | SN | Smoothwood | Smooth, fine-grain veneer-like texture | 10 - 16 |
| | CR | Crystalite | Traditional medium gloss grain texture | 13 - 19 |

| Serie | Texture code | Texture name | Texture description | Gloss level at 20° |
|---------|--------------|--------------|------------------------------|--------------------|
| LUMMIA™ | HG | High Gloss | Smooth and high sheen finish | 90 - 110 |

Sheet size, thickness and weight SURFORMA® laminates are available in the following standard offer:

| System of measurement | SUPPLIES SUP | | Weight |
|-----------------------|--|-------------------|-------------------|
| Metric | 1 530 x 2 743 mm | 0,80 ± 0,10 mm | 4,70 kg per sheet |
| Imperial | 5 x 9 in | 0,0310 ± 0,004 in | 10,4 lb per sheet |

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 |
| | Cleanability (cycles) | Rating; Max. | 20 | 15 |
| 3.4 | 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 |
| 2.7 | Caratah masiatan as | Linear glass | To be determined | < 50 gr |
| 3.7 | Scratch resistance | Diamond | To be determined | Rating 3 |
| 3.8 | Ball impact resistance | mm; Min. | 500 | 800 |
| 3.9 | Dart impact resistance | mm; Min. | 200 | 600 |
| 3.10 | Radiant heat/coil | Sec; Min. | 80 | 120 |
| | Radiant heat/strip | Sec; Min. | To be determined | 180 |
| 3.11 | BiiI-I | % MD; Max. | 0.7 | 0.4 |
| | Dimensional change | % CD; Max. | 1.2 | 0.9 |
| 3.12 | Disconnigued of the life. | % MD; Max. | 0.7 | 0.1 |
| | Dimensional stability | % CD; Max. | 1.2 | 0.6 |
| 3.13 | Wear resistance | Cycles; Min. | 400 | 600 |

Standards

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, S.A is certified under ISO 9001 Quality Management System.

SURFORMA, S.A is certified under ISO 14001 Environmental Management System.

SURFROMA, S.A is certified under ISO 45001 Occupational Health and Safety Management System

The GREENGUARD Environmental institute has awarded its Indoor Air Quality Certification for SURFORMA, S.A. All SURFORMA, 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 (Ongoing)

FSC® certification

All SURFORMA® colours in the Sommet® Series and several Prélude® colours are available as FSC® certified.



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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 verified for its 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).

Recommendations

The advice and recommendations are of advisory nature only

Handling and Storage - SURFORMA[®] laminates should be stored so they are protected 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.

When handling or moving SURFORMA® decorative laminates it is important that the sheets are 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 are carried 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).

The SURFORMA® HIGH GLOSS laminates are supplied with a protective peel coat. It's recommended to leave it for protection during handling, transport and panel fabrication. Remove it after the finished product is installed and ready for use.

Maintenance and Cleaning - SURFORMA[®] laminates, with their durable, hygienic and waterproof surface, require no special maintenance. The 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.

Waste Disposal - SURFORMA[®] laminates are a cured material chemically inert and are therefore classified as a non-hazardous product, thus not requiring any specific labelling. They can be brought 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.

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

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