

ABET LAMINATI

TECHNICAL DATA STRATIFICATO SELF-SUPPORTING LAMINATE R605

Manufacturer

ABET Inc.

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PRODUCT DESCRIPTION

Basic Uses: ABET LAMINATI Stratificato is a high-pressure, decorative, self-supporting laminate available in thicknesses from 2 mm (1/12") to 30 mm (1 1/4") thicknesses. Typical applications include flat applications such as toilet and dressing room partitions, work tables, shelving, instrumentation panels, desktops, bumper rails, and vehicle interior panels.

ABET LAMINATI Stratificato laminates have the following outstanding properties compared to woodcore products:

- Outstanding self-supporting properties compared to counter tops, other laminated covered wood cores, MDF, and particleboard
- Good dimensional stability and flatness
- High surface and edge impact resistance
- Excellent moisture and water resistance
- Excellent hygiene characteristics
- High resistance to chemicals and organic solvents
- Excellent resistance to termites
- Excellent resistance to fire
- Simple and quick assembly without the need for edging and adhesives
- High resistance to stress cracking

The outstanding surface and strength characteristics of Stratificato laminates make them ideal to use in clean rooms, damp areas where moisture is a concern, and rooms where sanitary issues are a concern. The surface is not adversely affected by moisture and is easy to clean with mild disinfectants. The laminate is not susceptible to mold, corrosion, rust, or rot.

Composition: ABET LAMINATI Stratificato laminates are manufactured by pressing melamine impregnated print and solid color surface papers over phenolic impregnated kraft sheets at pressures over 1000 psi pressure and temperatures of approximately 300 degrees F (149 degrees C). The decorative surface is the same on both surfaces to provide a flat and dimensionally stable laminate.

Limitations: ABET LAMINATI Stratificato laminates are not recommended for exterior applications. Do not use in areas with temperatures higher than 150 degrees F (65 degrees C) for extended periods of time. This product is not to be exposed to continuous direct sunlight. Iridescent colors, fiber patterns, and metallic products do not meet regular wear resistance requirements and should not be used in high wear areas. While instruments may be mounted on ABET Laminati Stratificato laminates, ABET does not warrant any electrical properties.

Colors and Patterns: ABET LAMINATI Stratificato compact laminates are stocked in selected patterns, solid colors, finishes, sizes, and core color. Additional colors, finishes, sizes, and core color are available on special order. Check the actual sample for color before specifying. In order to provide a flat panel the colors are identical on both surfaces.

Finishes: Stratificato is offered in a selection of finishes.

Sheet Size: 215 cm (85 in) x 90 cm (35.7 in), 225 cm (89 in) x 100 cm (39.7 in)
244 cm (96.8 in) x 122 cm (48.4 in), 280 cm (111 in) x 130 cm (51.6 in)
305 cm (121 in) x 130 cm (51.6 in)
The following sizes are limited to a maximum 18 mm (0.70 in) thickness:
420 cm (166 in) x 130 cm (51.6 in), 420 cm (166 in) x 161 cm (63.9 in),
366 cm (145 in) x 161 cm (63.9 in), 420 (166 in) x 186 (73.8 in)

Thickness: 6 mm (1/4") to 30 mm (1 1/4") thickness

Core Color: The core is available in black or brown colors.

Weight: 88 lb/cu.ft.

FABRICATION AND ASSEMBLY

Conditioning, Cutting, and Drilling

ABET LAMANATI Stratificato laminates should be allowed to acclimate for 72 hours before fabrication and assembly. Optimum conditions are approximately 23 degrees C (73 degrees F) and a relative humidity of 45 % to 55 %. When cutting, the rate of feed will depend on the thickness of the panel and the required quality of the cut. Chipping of the lower surface may be avoided by altering the angle at which the blade emerges. The use of scoring blade avoids this problem altogether. The saw blade marks may be eliminated on the edge by using a router with a 2-flute straight bit or a solid carbide spiral bit.

Carbide-tipped saw and router blades should be used for cutting. Cutting blades should be kept very sharp and a hold down used to prevent vibration.

The edges may be polished with a lemon oil furniture polish to obtain a semi-gloss finish.

Drill oversize holes for screws or bolts. The drill diameter should be at least 0.05 mm (0.002") larger than the specified diameter of the hole. Secure objects to the surface of the laminate with self-tapping screws in predrilled holes. With self-tapping screws, the hole must always be predrilled with the diameter of the hole being smaller than the external diameter of the screw. The depth of the hole must be at least 1 mm greater than the depth of penetration of the screw. The finer the thread, the firmer the screw holding.

Joinery Techniques and Hardware

Request copies of Stratificato Self-Supporting Laminate Brochure or Stratificato Toilet Partition Brochure for different fabrication and joinery techniques.

Inspection:

All laminates are to be inspected prior to fabrication or installation to ensure they are clean and free of surface defects. Protective peel coat should be removed prior to inspection.

Cutouts:

To avoid stress cracking, do not use square-cut inside corners. All cutouts should be routed or filed to ensure smooth edges. A radius of 6.35 mm (1/4") or larger in the corners is recommended to minimize stress cracking for an inner side of 10" or less. This radius must gradually be increased for openings with a longer inner side.

Industry Practices:

Material, equipment, and workmanship should conform to industry standard practices, conditions, procedures and recommendations as specified by ANSI/NEMA LD-3-2005, Standard for High-Pressure Decorative Laminates, Annex A, Application, Fabrication, and Installation or Architectural Woodworking Institute (AWI) "Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program".

TECHNICAL DATA

SURFACE PROPERTIES OF STRATIFICATO LAMINATES

NEMA TEST	Typical Test Results	NEMA REQUIREMENTS CGS
Light Resistance	No effect	Slight effect
Cleanability (cycle)	9	20 max
Stain Resistance Reagents 1 – 10 Reagents 11 – 15	No effect No effect	No effect Moderate effect
Boiling Water Resistance	No effect	Slight effect
High Temperature Resistance	No effect	Slight effect
Linear Glass Scratch Resistance	< 50 grams	No requirement
Ball Impact Resistance	>3000 mm >120"	1900 mm minimum 75" minimum
Dart Impact Resistance	>1000 mm >40"	No requirement
Radiant Heat Resistance	> 200 seconds	200 seconds min
Wear Resistance	400 cycles	400 cycles min.

OTHER PROPERTIES OF STRATIFICATO LAMINATES

TEST METHOD	PROPERTY UNITS	STRATIFICATO SPECIFICATIONS
EN 438.2.4	Thickness Tolerance	± 5%
DIN 53479 ASTM D-1037	Density Kg/m ³ Density lb/cu.ft	1.420 ± 0.030 88
EN 438.26	Abrasion Resistance Revolutions	IP => 150 A => 350
EN 438-2.24	Steam Resistance	Grade=>4
EN 438-2.15	Stain Resistance Group 1 - 2 Group 3 - 4	Min. Grade 5 Min. Grade 4
EN 438-2.16	Color Fastness Blue Wool Scale Xenon Arc Lamp Tones of Grey	Scale=>6 Tones=>4
EN 438-2.10	Dimensional Stability %	L<=0.2 % T<=0.3 %
ISO 527	Tensile Strength N/mm ²	L=>100 T=>70
ISO 178	Flexural Strength N/mm ²	L=>100 T=>90
ISO 178	Modulus of Elasticity N/mm ²	L=>1000 T=>8000
DIN 53454	Resistance to Compression N/mm ²	>200
ASTM D-785	Rockwell Hardness HRE	> 78
ASTM D-696	Coefficient of Linear Expansion per degree C	0.0005

TRANSPORTATION AND STORAGE

Stratificato laminates should always be transported on flat, stable pallets. Secure the panels so that they do not slip. Make sure panels do not slide over each other during loading and unloading operations. Lift them by hand or with means of a suction cup hoisting device. Dirt, foreign bodies and sharp edges rubbing against the surface can cause damage. Store the panels in a closed place where normal climatic conditions are guaranteed. Stack the panels on top of each other on a flat base. Never stand the panels on edge. The protective film, if applied, must be removed simultaneously from both surfaces.

MAINTENANCE AND CARE

Stratificato Laminates have a hard, durable melamine surface and will maintain their attractive appearance longer than most other decorative surfacing materials and requires minimal maintenance. The decorative surface may be cleaned with warm water and a mild soap or detergent using a damp cloth or sponge. Difficult stains such as coffee and tea can be removed using a mild household and a soft bristle brush, cleaner/detergent repeating as necessary.

Do not use abrasive pads, scouring powders or cleaners as they may permanently dull or scratch the laminate surface making it susceptible to staining. Harsh chemicals such as oven cleaners, toilet cleaner, drain cleaner, and acids and strong alkalis chemicals will etch and discolor the decorative surface. Free copies of our "Care and Cleaning of Laminates Guide" is available.

WARRANTY

ABET LAMINATI warranties Stratificato Laminates against swelling, delamination, or warpage caused by humidity or proper maintenance. Should the above occur, a claim must be filed in writing to ABET, Inc. Claims must be approved by an authorized ABET representative and proof of purchase must be provided. Swelling must be more than 10 % of nominal panel thickness. Warpage must be more than 3 mm per every linear meter, and not due to an installation that has limited the panel's expansion. Delamination must not be caused by damage or chipping to the panel's edge. In the case of a valid claim ABET, Inc. is responsible only for the replacement of defective panels of equal value. ABET, Inc. is not responsible for any labor costs associated with the replacement.

TECHNICAL SERVICE

For samples, literature, and technical assistance, call our toll-free line 800-228-2238 from 8:30AM to 5 PM, Monday thru Friday, or visit our web site www.abetlaminati.com.