

ABET LAMINATI

TECHNICAL DATA MAGNETICO MARKER BOARD LAMINATE 1.3 mm (0.051") PLASTIC LAMINATE R510

Manufacturer

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PRODUCT DESCRIPTION

Basic Use: ABET LAMINATI Magnetico holds magnets. In a Lucida (gloss) finish it can be used as a dry erase marker board. In the Soft finish it can be used as a chalk board. It has also been successfully used as a projector screen. We advise client testing to decide suitability in each application.

ABET LAMINATI Magnetico Laminate applications include schools, conference rooms and offices.

Composition: ABET LAMINATI high pressure decorative laminates are manufactured by pressing melamine resin impregnated solid color surface sheet over a phenolic resin impregnated kraft paper core at pressures over 1000 psi and temperatures of approximately 300 degrees F (149 degrees C). The backs are sanded to facilitate bonding to a substrate. Beyond this, Magnetico uses a ferrous sheet for magnetic attraction.

Limitations: ABET LAMINATI Magnetico laminates are not recommended for exterior applications or for bonding to gypsum wallboard, plaster, concrete or plywood. This product is not a structural material and is to be used bonded to a suitable substrate. Do not use in areas with extreme humidity. This product is not to be exposed to continuous, direct sunlight. This product is available in dozens of colors.

Colors: ABET LAMINATI Magnetico in a Lucida finish has ≥ 95 gloss reading at 60 degree angle of incidence.

Finish: Lucida (gloss) and Soft (dull matte)

Sheet Size: 51" (130 cm) x 120" (305 cm)

Thickness: 0.051" (1.3 mm)

FABRICATION AND ASSEMBLY

ABET laminates should be bonded to suitable substrates such as particleboard and medium density fiberboard (MDF) with suitable semi-rigid (PVAc) or rigid (urea or resorcinol) adhesives. The choice of adhesives is based upon the service for which the assembly is intended and the bonding facilities available. In all cases, the adhesive manufacturer's instructions for use should be followed closely. Pressures in excess of 45 psi should not be used since this could cause a starved glue line or telegraphing of the core.

When fabricating panels of Magnetico the following balancing guidelines must be followed. Substrates should be at least 20 mm (0.79") thick. The balancing sheet should be the same thickness as the

Magnetico. Magnetico is best balanced with Magnetico. To reduce costs ABET Inc. can also offer an alternative balancing sheet. Contact your ABET LAMINATI representative for pricing and availability. Cold pressing is recommended.

All laminates are to be inspected prior to bonding to ensure they are sound, clean, and free of surface defects. Protective peel coat should be removed prior to inspection.

High-pressure decorative laminates and substrates should be allowed to acclimate for at least 48 hours at the same ambient conditions. Optimum conditions are approximately 23 degrees C (73 degrees F) and a relative humidity of 45% to 55%.

Avoid stress cracking - never use square-cut inside corners. All cutouts should be routed or filed to ensure smooth edges. A radius of 3.175 mm (1/8") or larger in the corners is recommended to minimize stress cracking.

Drill oversize holes (at least 0.05 mm or 0.002" larger in diameter) for screws and bolts.

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".

ADVICE FOR MACHINING: before cutting or engraving operations, preliminary tests should be made for checking the most suitable equipment. As an example, we briefly describe the type of equipment which until now has given good results in cutting:

- Wydia blade
- blade diameter: 300 mm
- Z 96 (number of teeth)
- rotation speed: 2400-2800 revs
- speed of advance: low, max 3 m / minute
- alternate tooth
- if possible, air cooling of the blade

The use of diamond blades is not recommended.

For engraving equipment we have no data yet, therefore we advise performing preliminary tests

NOTE: to avoid problems in application and machining of the panels, cutting and machining must be done with perfectly sharp blades to avoid splintering, considering that during these processes sparks may occur. The powder produced by machining must not be mixed with the powder developed in air line, because it can contain metal particles. Provide suitable electrical and lighting equipment against explosion hazard. For further information on safety please refer to PDS-01.

After squaring operations, we advise to protect the edges of the sheets, which may show rusty areas after time if exposed to humidity.

TECHNICAL DATA

ABET LAMINATI Magnetico Laminate is a 1.3 mm high pressure decorative laminate manufactured to conform to the requirements of ANSI/NEMA Standard LD-3-2005, Standard for High Pressure Decorative Laminates; ISO 4586, High Pressure Decorative Laminates; and EN-438, High Pressure Decorative Laminates.

PHYSICAL PROPERTIES OF ABET LAMINATI MAGNETICO MARKER BOARD LAMINATE

NEMA TEST	ABET TYPICAL	NEMA LD3 - 2005 HGS
Thickness	0.048" + - 0.005" (1.3 mm + - .18 mm)	0.048" + - 0.005" (1.2 mm + - .12 mm)
Light Resistance	No effect	Slight effect
Cleanability (cycles)	9	20 max.
Stain Resistance Reagents 1 – 10 Reagents 11 – 15	No effect No effect	No effect Moderate effect
Boiling Water Resistance	No effect	No effect
High Temperature Resistance	No effect	Slight effect
Linear Glass Scratch Resistance	< 200 grams	No Requirement
Ball Impact Resistance	925 mm (36 inches)	900 mm minimum (35 inches)
Dart Impact Resistance	375 mm (15 inches)	300 mm minimum (12 inches)
Dimensional MD Change CD	0.22% 0.60%	0.6 % maximum 1.0 % maximum
Room MD Temperature CD Dimensional Stability	0.12% 0.34%	0.6 % maximum 1.0 % maximum
Wear Resistance	750 cycles	400 cycles minimum

Note: ABET LAMINATI MAGNETICO can be considered as belonging to group 1.3.9 of NEMA LD-3: 2005 because it has special structural properties compared to HGS. For this reason we can declare a different thickness tolerance.

FIRE TEST DATA

Test data to determine compliance with the International Building Code and the NFPA 101 Life Safety Code are obtained according to ASTM E- 84 Standard Test Method for Surface Burning Characteristics of Building Materials (UL Standard 723 "Test for Surface Burning Characteristics of Building Materials" or NFPA 255 "Method of Test of Burning Characteristics of Building Materials").

TYPICAL FLAME SPREAD AND SMOKE DEVELOPED VALUES

Product Type	Test Condition	Flame Spread	Smoke Developed
1.3 mm General Purpose	Unbonded	40	140
1.3 mm General Purpose	Bonded to incombustible Core with W-104 Adhesive	55	85
1.3 mm General Purpose	Bonded to FR Particleboard Core with W-104 Adhesive	45	130

CLEANING: For Lucida finish use a felt marker board eraser to clean the ABET LAMINATI Marker Board. Clean periodically with a soft cloth wet with a mild dishwasher detergent and warm water. Other cleaners such as EXPO(R), Quartet(R), or Windex(R) may be used. For hard to clean marks and streaks, try acetone.

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

TECHNICAL SERVICE

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