

lamitech marker board lam

TECHNICAL DATA SHEET

to ill^aminate

The desire to inspire



Lamitech®
High Pressure Decorative Laminates.

product description

▶ product composition

Lamitech Marker Board Lam is manufactured with special decorative papers saturated with melamine resin modified with special additives – to add the erasing properties to the laminate –, also Kraft paper with phenolic resin that supports the laminate. All of them are subjected to a high specific pressure (100 kg/cm²) and 135°C (275°F). Once the press cycle is finished, the laminate is trimmed following established nominal dimensions and sanded to provide more adherence when the adhesive is applied over the wooden surface.



▶ recommended applications

Lamitech Marker Board Lam is designed for application to interior standard vertical surfaces where a durable, high gloss, decorative surface, nonabsorbent, dry erase marker board panel is required. *Lamitech Marker Board Lam* is ideal for applications where liquid chalk, is to be used as conference rooms, schools, universities, presentation areas and offices.

▶ basic limitations

Lamitech Marker Board Lam is designed for interior uses only, it is not meant to be structural material; it does not withstand high humidity or temperatures exceeding 135°C (275°F). *Lamitech Marker Board Lam* should not be exposed to intense and continue sunlight. *Lamitech Marker Board Lam* must be subjected to periodical maintenance, it must be cleaned with an alcohol moisted cloth – considering that dry markers are oil based and they leave accumulative residual material on the laminate –. *Lamitech Marker Board Lam* its only use for standard, non post-formable applications. Please contact our sales representatives for further assistance.

product identification

TYPE OF LAMINATE	LAMITECH® GRADE	NOMINAL THICKNESS	SIZES				FINISHES	
		mm (inch)	feet (ft)				Gloss	Matte
			4 x 8	4 x 10	5 x 8	5 x 12		
			meters (mt)					
			1.22 x 2.44	1.22 x 3.06	1.53 x 2.44	1.53 x 3.66		
Horizontal Standard Marker Board Lam	70	1.20 (0.048)	X	X	X	X	X	-
Horizontal Standard Marker Board Lam	50	1.00 (0.039)	X	X	X	X	X	-
Vertical Standard Marker Board Lam	30	0.70 (0.028)	X	X	X	X	X	-

► useful information

1. Conditioning and storing conditions of *Lamitech Marker Board Lam* are very important, it should be stored horizontally, at a regular temperature (max. 86°F 30°C) and relative humidity (max. 60%), in a dry and drafty place.

2. For manual, low press applications of *Lamitech Marker Board Lam*, use contact adhesive in a solvent/neoprene base. When it comes to industrial applications, we strongly recommend the use of PVA adhesive (Polyvinyl Acetate), it does not react with heat and also has a high humidity resistance. To get a good adherence, we suggest you to use 80-140 g/m² of adhesive and a 7-9 k/cm² pressure. In case of having any waste of adhesive in the laminate while finishing the application, remove it with a soft cloth and organic solvent or a mixture of 50:50 alcohol-organic solvents.

3. To avoid warping in the surface laminated a with *Lamitech High Pressure Lamitech Marker Board Lam*, we recommend the use of backer laminate on the back side of the surface, in order to get the maximum humidity absorbed balance in the wooden substrate.

4. *Lamitech Marker Board Lam* should be cut with circular saws at a 8-2 m/min. and 3.000-5.500 r.p.m. speed, the tooth of the saw must be done in plane trapezoidal diamond with

alternating geometry. For routed jobs, a cylindrical miller of minimum 12,000 r.p.m. must be used.

5. To perforate *Lamitech Marker Board Lam* use a tungsten-carbide drill bit with biangular end at 10.000 r.p.m.. The selected drill bit must be 0.002 in (0.05 mm.) bigger than the specific diameter of the hole to be made.

6. For stain cleaning or maintenance of *Lamitech Marker Board Lam*, use water, soft non-abrasive detergents and nylon brushes. Stubborn stains may require the use of hypochlorite bleach dissolved in water. Avoid the use of strong bleachers, organic detergents and abrasive brushes, these could discolor and scratch the surface. Grease stain should be cleaned with a soft cloth and organic solvent or a mixture of 50:50 alcohol-organic solvent, the laminate shall be free of stain without any deterioration of its colortone or its original design.

7. *Lamitech Marker Board Lam* offers a long lasting and an easy cleaning surface. For High Pressure applications we suggest you orderit *Lamitech Marker Board Lam* with a protective film to prevent any scratch or stain on the surface of the laminate during transportation, handling and application - that can seriously affect erasing properties on the surface of the laminate -.

technical specifications

* NEMA LD.3/ EN-438 TEST METHOD	PROPERTY	UNITS	LAMITECH® S Grade 30	NEMA LD3 VGS	EN-438 VGS
	NOMINAL THICKNESS	In (mm.)	0.028 (0.70)	0.028 (0.70)	-
	THICKNESS TOLERANCE	In (mm.)	+/- 0.004 (+/- 0.10)	+/- 0.004 (+/- 0.10)	-
3.1 / 4.0	APPEARANCE	defects	No A,B,C defects	No A,B,C defects	-
3.3 / 27	LIGHT RESISTANCE	effect/gray scale	5	SL	4- 5
	CLEANABILITY	rating (max.)	12	20	-
	STAIN RESISTANCE				
	Stain 1-10	rating (min.)	NE	NE	-
	Stain 11-15	rating (min.)	SL	M	-
	Group 1	grade	5	-	5
	Group 2	grade	5	-	5
	Group 3	grade	4	-	4
3.5	BOILING WATER RESISTANCE	effect	NE	NE	-
3.6 / 16	HIGH TEMPERATURE RESISTANCE	grade (min.)	3	3	3
3.7 / 25	SCRATCH RESISTANCE	grade (min.)	2	2	2
3.8 / 21	BALL IMPACT RESISTANCE	In (mm.) min.	39 (1,000)	20 (500)	24 (600)
	DIMENSIONAL CHANGE				
	Direction Machine	% máx.	0.50	0.70	0.75
	Cross Machine	% máx.	0.80	1.20	1.25
3.13 / 10	WEAR RESISTANCE	Cycles (min.)	600	400	350

SL=Slight Effect=4, NE=No Effect=5, M=Moderate=3, NA=Not Applicable, S=Standard, PF=Post-Formable

* Nema LD.3 America and EN-438 Europe

► limited warranty

Lamitech S.A., warrants that its products are reasonably free of defects and when properly used will comply, with normal deviations, to related manufacturing specifications. This warranty will be extended only to the original buyers for a period of one (1) year from the purchase date. It excludes damage resulting from accidents, abuse or lack of care, improper use and/or any alteration.

Since Lamitech laminates have a wide range of applications, without the possibility of control over the manipulation of the end product, Lamitech does not assume obligations or liabilities arising from the furnishing, sale, installation or repair, use or subsequent sale of any product, to any person or entity.

The contents of this brief correspond to common knowledge of High Wear Lam High Pressure Laminates. Lamitech offers this information solely to provide suggestions for your application. Since it's impossible to anticipate every variation in actual end use conditions, no warranties or liabilities can be assumed by Lamitech in terms of the use of this information. Lamitech believed the information and recommendations provided herein to be accurate at the time of preparation or to have been obtained from sources perceived to be generally reliable. Lamitech reserves the right to modify this brief without prior notice.



▶ erasure test

As long as an erasure test is subjective, and many times its results depend on variables such as the type of marker, the type of eraser, temperature and relative humidity of the environment in which the *Marker Board Lam* is installed; it has been established as an international normativity to certify erasing quality and performance for this type of products, the following erasure tests:

- Test 1: Write on the laminate with a commercial dry marker and erase it immediately with a dry cloth – this may, sometimes – leave some slight shadows. Clean them with commercial alcohol and if these do not erase, then the laminate does not comply with quality standards.
- Test 2: Write on the laminate with a commercial dry marker and erase it after 24 hours with a dry cloth – this may, sometimes – leave some slight shadows. Clean them with commercial alcohol and if these do not erase, then the laminate does not comply with quality standards.
- Test 3: Write on the laminate with a commercial dry marker and erase it after 7 days with a dry cloth – this may, sometimes – leave some slight shadows. Clean them with commercial alcohol and if these do not erase, then the laminate does not comply with quality standards.
- Test 4: Write on the laminate with a commercial dry marker and put the laminate for 7 days in a laboratory oven at 103°F (40°C). Erase it with a dry cloth – this may, sometimes – leave some slight shadows. Clean them with commercial alcohol and if these do not erase, then the laminate does not comply with quality standards.
- *Lamitech Marker Board Lam* of Lamitech S.A. complies the 4 tests.

