

# *Lamitech thick lam*

## TECHNICAL DATA SHEET

to ill<sup>a</sup>minate

The desire to inspire



**Lamitech**®  
High Pressure Decorative Laminates.

# product description

## ▶ product composition



*Lamitech Thick Lam* is manufactured with melamine resin, special decorative papers – which provide its surface properties – and Kraft papers with phenolic resin – the core support of the laminate –. All of them are subjected to a high specific pressure (100 kg/cm<sup>2</sup>) and temperature 275°F (135°C). Once the press cycle is finished, the laminate is trimmed following the established nominal dimensions, packed and distributed to our clients. Due to its thickness *Lamitech Thick Lam* is not sanded on its back. *Lamitech Thick Lam* has been classified as a fire retardant material, certified under the the Docket 90-A US Department of Transportation normativity, to be used in the covering of vehicle bodies. *Lamitech Thick Lam* offers excellent resistnace to humidity and moderate resistance to chemical substances. *Lamitech Thick Lam* can be ordered with one or both faces with decorative paper, or just the phenolic body – brown or black – without any covering.

## ▶ recommended applications

*Lamitech Thick Lam* is available in thicknesses up to 3/4" (19 mm), adequate to preclude the use of a substrate. Its exceptional strength allows the surface to be used as a structural material; useful where flat freestanding panel is required for functional and/or decorative purposes.

Uses include toilet and dressing room partitions, shelving and tabletops, instrumentation panel, work benches, convector covers and other assemblies that require high strength and resistance to impact, water and humidity.

## ▶ basic limitations

*Lamitech Thick Lam* is designed for interior uses only, it does not withstand high humidity or high temperature, exceeding 275°F (135°C). *Lamitech Thick Lam* should not be exposed to intense and continue sunlight. *Lamitech Thick Lam* is available in thicknesses varying from 20mm to 19mm in any color of our line and exclusively for standard applications, not for postformable desgins. Please contact our sales representatives for further assistance.

## product identification

TYPE OF LAMINATE	LAMITECH® GRADE	NOMINAL THICKNES	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		
Thick Lam Laminate F70 - F250	100	Ordered thickness +/- 5%	X	X	X	X		
Thick Lam Laminate F20 - F60	90	2.0 - 6.0 (0.079 - 0.236)	X	X	X	X	X	X

useful information

1. Conditioning and storing conditions of *Lamitech Thick 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. In vehicles interior applications *Lamitech Thick Lam* must be secured by using rivets and/or bevels. The back of the laminate shall be protected by acoustic tapes to prevent the noise produced by friction. Due to its compact composition, that provides air tightness and greater water resistance, *Lamitech Thick Lam* does not need additional protection such as sealers or asphalt products.
3. To avoid warping in the surface laminated a with *Lamitech High Pressure Lamitech Thick 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 Thick 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. *Lamitech Thick Lam* is only available in Matte finish. We recommend the use of matte laminates in horizontal surfaces such as laboratories counters, work surfaces, etc. To avoid damages on the laminate surface, a protection element as a wooden or ceramic piece must be used before doing any kind of cut process over it. Also use a similar protection element on the surface to put hot objects with temperature exceeding 275°F(135°C).
6. For stain cleaning or maintenance of *Lamitech Thick 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 Thick Lam* provides a long-life surface and easy maintenance. It is not suited for laboratory surfaces, where corrosive material, alkalis and strong acids are used in its daily work.

technical specifications						
* NEMA LD.3/ EN-438 TEST METHOD	PROPERTY	UNITS	LAMITECH® F70 - F250	NEMA CGS	LAMITECH® F20 - F60	NEMA CGS
	NOMINAL THICKNESS	In (mm.)	> 6.0 (> 0.236)	> 6.0 (> 0.236)	> 6.0 (> 0.236)	2.0 - 6.0 (0.079 - 0.236)
	THICKNESS TOLERANCE	In (mm.)	+/- 5 % thickness	+/- 5 % thickness	+/- 0.30 (+/-0.012)	+/- 0.30 (+/-0.012)
3.1	APPEARANCE	defects	No A,B,C defects	No A,B,C defects	No A,B,C defects	No A,B,C defects
3.3	LIGHT RESISTANCE	effect/gray scale	SL	SL	SL	SL
	CLEANABILITY	raiting max.	12	20	12	20
3.4	STAIN RESISTANCE					
	Stain 1-10	raiting min.	NE	NE	NE	NE
	Stain 11-15	raiting min.	SL	M	SL	M
3.5	BOILING WATER RESISTANCE	effect	NE	NE	NE	NE
3.6	HIGH TEMPERATURE RESISTANCE	effect	SL	SL	SL	SL
3.7	SCRATCH RESISTANCE	grade (min.)	3	3	3	3
3.8	BALL IMPACT RESISTANCE	In (mm.)	78 (2,000)	75 (1,900)	78 (2,000)	75 (1,900)
3.10	RESISTENCIA AL CALOR RADIANTE	seg (min.)	250	200	250	200
	DIMENSIONAL CHANGE					
	Direction Machine	% max.	0.2	0.3	0.2	0.3
	Cross Machine	% max.	0.4	0.7	0.4	0.7
3.13	WEAR RESISTANCE	Cycles (min.)	600	400	600	400

SL=Slight Effect=4 ,No Effect=5 ,M=Moderate Effect=3 ,NA=Not Applicable, S=Standard  
Density = 1.43 g/cc  
Method# 14: Fire retardant properties Certificate # 173777 US testing Company Inc. ASTM E662 Norm Smoke Density and Certificate173777-001 US Testing Company Inc. ASTM E162-95 Norm Flame Spread where the nom Docket 90-A from the United Status Transportation Department, is fulfilled to determine the degree of fire retardation of the material used in car interiors. Certificates available upon client request.  
\*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 manufacturing 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 Pressure Laminates. Lamitech offers this information solely to provide suggestions for your application. Since it's impossible to anticipate all variations in actual end use conditions, no warranties or liabilities can be assumed by Lamitech in connection to the use of this information. Lamitech believed the information and recommendations provided herein to be accurate at the time of preparation or obtained from sources believed to be generally reliable. Lamitech can modify it without prior notice.



mechanical properties							
MÉTHOD OF ANALYSIS	PROPERTIES	DIRECTION FEBER	UNITS	LAMITECH® F20 - F60	NEMA LD.3 CGS	LAMITECH® F70 - F250	NEMA LD.3 CGS
ASTM D 790	FLEXION FORCE	Longitudinal	PSI max.	41317	18000	30759	18000
		Transverse	PSI max.	39194	12000	28945	12000
ASTM D 790	ESLASTICITY MODULE	Longitudinal	PSI max.	2.04 X 10 <sup>6</sup>	1.6 x 10 <sup>6</sup>	2.0 x 10 <sup>6</sup>	1.6 x 10 <sup>6</sup>
		Transverse	PSI max.	1.72 X 10 <sup>6</sup>	1.4 x 10 <sup>6</sup>	1.87 x 10 <sup>6</sup>	1.4 x 10 <sup>6</sup>
ASTM D 638	TENSION RESISTANCE	Longitudinal	PSI max.	20062	18000	25598	18000
		Transverse	PSI max.	17084	12000	24216	12000

\*Analysis Certificated #4227-729830

