

lamitech *high wear lam*

TECHNICAL DATA SHEET

to ill*a*minate

TO ILLUMINATE The desire to inspire



Lamitech[®]

High Pressure Decorative Laminates.

product description

▶ product composition

Lamitech High Wear Lam is manufactured with melamine resin, special decorative papers – which provide design and wear resistance – and Kraft papers with phenolic resin – the core of the laminate –. All of them are subjected to a high specific pressure (100 kg/cm²) and temperature 275°F (135°C). Once the press cycle is over, the laminate is trimmed following the established nominal dimensions and sanded to provide a greater adherence when the adhesive is applied over the wooden surface.



▶ recommended applications

Lamitech High Wear Lam is manufactured for contract, institutional and commercial standard and postforming applications, where a decorative surface must exceed the normal wear.

Lamitech High Wear Lam offers up to six times the abrasion and scuff resistance of conventional laminate. Traditional applications include restaurant and fast food fixtures and casework, change counters, tabletops, checkout counters and retail stores, bank counters and tellers' desks, wall panels and institutional furniture.

▶ basic limitations

Lamitech High Wear Lam is designed for interior uses only, it is not ment to be structural material; it does not admit high humidity or high temperature, exceeding 275°F (135°C). *Lamitech High Wear Lam* should not be exposed to intense and continue sunlight. Due to the chemist used in these laminates for their special chemical resistance, colors may vary slightly from the standard Lamitech laminates. Ask for actual samples, for color selections and specifications purpose.

▶ limited warranty

LAMITECH 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 decorative laminates. LAMITECH offers this information solely to provide suggestions for your application. Since it is 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.

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 (m)					
		1.20 (0.048)	1.22 x 2.44	1.22 x 3.06	1.53 x 2.44	1.53 x 3.66	X	X
Horizontal Standard High Wear Lam	70	1.20 (0.048)	X	X	X	X	X	X
Horizontal Postforming High Wear Lam	50	1.00 (0.039)	X	X	X	X	X	X
Vertical Postforming High Wear Lam	30	0.70 (0.028)	X	X	X	X	X	X

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Electrical Properties Floor Tile		
Surface to Ground resistance	less than 1 x 10 E6 ohms	EOS/ESD-S4.1 , DIN 53 278
Surface resistance	less than 1 x 10E7 ohm	ASTM F-150-88
Volumen resistance	less than 1 x 10E7 ohm	ASTM D257-91
Charge Decay occurs	within .005 seconds	FIMS 101C METHOD 4046

useful information

1. Conditioning and storing conditions of *Lamitech Metallic 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 High Wear 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 High Wear 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 High Wear 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 High Wear 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. *Lamitech High Pressure Lamitech High Wear Lam* is available in two finishes: Gloss and Matte. 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).

7. When postforming *Lamitech High Wear Lam* is required, first check the instruction in our manual for postforming.

8. For stain cleaning or maintenance of *Lamitech High Wear 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.

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

technical specifications

* NEMA LD.3/ EN-438 TEST METHOD	PROPERTY	UNITS	LAMITECH® S Grade 70	NEMA LD.3 HDS	EN-438 HDS
	NOMINAL THICKNESS	In (mm.)	0.048 (1.20)	0.048 (1.20)	-
	THICKNESS TOLERANCE	In (mm.)	+/- 0.005 (+/- 0.12)	+/- 0.005 (+/- 0.12)	-
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	-
3.4/26	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	effect/grade	SL	SL	4
3.7/25	SCRATCH RESISTANCE	grade (min.)	4	4	4
3.8/21	BALL IMPACT RESISTANCE	In (mm.) min.	59 (1.500)	50 (1.250)	32 (800)
	DIMENSIONAL CHANGE				
3.11/17	Direction Machine	% máx.	0.30	0.5	0.45
	Cross Machine	% máx.	0.50	0.9	0.90.
3.13/10	WEAR RESISTANCE	Cycles (min.)	4.500	3.000	1.000
3.14/32	POST-FORMABILITY	In (mm.) Radio, min.	NA	NA	NA
3.15/34	BLISTER RESISTANCE	Sec. (min.)	NA	NA	NA

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

* Nema LD.3 America and EN-438 Europe