

Metal Laminate

Technical Bulletin



Product Description

Composition

The Metal Laminate is manufactured with aluminum sheets and kraft paper impregnated with phenolic resin as the core of the laminate. This set is subjected to a specific pressure of 90kg/cm² and a temperature of 135°C (275°F). Once pressed the Metal Laminate is cut in nominal dimensions and sanded on its back to provide greater adhesion when applied with adhesive on the wood substrate

Recommended Uses

Metal Laminate combines the advantages of our high pressure decorative laminates (HPL) with the purity of metal. Metal Laminate is designed for vertical applications and horizontal in light work applications, in interior spaces where a unique decorative touch is required, such as: restaurants, jewelry stores, hotel counters, boutiques, theaters, offices and department stores, among others.

Product identification							
LAMINATE TYPE	LAMITECH GRADE	NOMINAL THICKNESS	SIZES			FINISHES	
		mm. Inch	4 x 8 pies / ft (1.22 x 2.44m)	4 x 10 pies / ft (1.22 x 3.06m)	5 x 12 pies / ft (1.53 x 3.66m)	BRUSH	MATTE
Horizontal Standard Lamitech Metallic Lam	70	1.20 (0.048)	X	X	-	X	X
Horizontal Standard Lamitech Metallic Lam	50	1.00 (0.039)	X	X	-	X	X
Horizontal Standard Lamitech Metallic Lam	30	0.70 (0.028)	X	X	-	X	X

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* Available in various textures. Without Oversize Please consult current mosaic.

References Stainless Steel Mirror 2027, Aluminum Mirror 2025, Brass Mirror 2026 and Copper Mirror 2036 only available in 1.00mm (0.39 inch) thick.

Basic Limitations

The Metal Laminate is a surface for indoor use, it is not structural material, it does not admit extreme humidity or continuous temperatures above 70°C (158°F), it should not be exposed to direct and continuous sunlight. It must not be post-formed, it must be used in normal or straight applications. Due to the low surface hardness of ductile metals such as aluminum tends to scratch, therefore, we recommend its use for vertical or horizontal applications of light work. The Metal Laminate is always marketed with a protective film, which should only be removed at the end of the application to avoid deterioration of the surface during handling. Please check our collection for a better selection of approved designs and finishes. Any additional guidance please consult our commercial representative.

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Useful Information

1. The Metal Laminate must be conditioned and stored in a dry and ventilated place, never outdoors, It must be stowed horizontally and stored as far as possible at room temperature below 30°C and relative humidity less than 60%.
2. In the selection of the adhesive to be used there are several alternatives, the most common is solvent-neoprene based contact cement, which is recommended for manual applications where the pressure exerted is low. When it comes to industrial applications, we recommend PVA (polyvinyl acetate) adhesives, which are not reactivable with heat and have high resistance to moisture. For a good adhesion of the Metal Laminate, we recommend using between 80 and 140gr/m² of PVA adhesive and exerting a pressure of 2 to 3kg/cm². At the end of the application, if adhesive residue remains on the laminate, clean the surface with a soft cloth dampened with organic solvent varsol or with a 50:50 mixture of alcohol-organic solvent. It should be rinsed with warm water by completely removing the solvent.
3. To prevent the plating surface with Metal Laminate from buckling or deforming, we suggest applying the backer or balance laminate on the back side of the veneer, in order to obtain the optimum balance in the moisture absorbed by the wood layer. It is recommended that the Metal Laminate and its backer be the same thickness.
4. The cutting of the Metal Laminate should be done with disc saws with speeds between 8-12m / min. and 3000 to 5500r.p.m., with flat trapezoidal alternating geometry. For routing work you must use cylindrical drills of 12000r.p.m., Minimum.
5. To drill the Metal Laminate, use 10000r.p.m drills. With tungsten-carbide bits with a biangular tip, the selected bit should be 0.002 inches (0.05mm.) larger than the diameter of the hole to be made.
6. To ensure the maintenance in good condition of the surface of the Metal Laminate we recommend requesting the product coated with protective film, which ensures that the surface is free of scratches and dirty during transport, handling and application, factors that seriously affect the quality laminate finish
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Maintaining & Cleaning Instructions

Daily Maintaining

As many other interiors design materials the Metal Laminate should be cleaned regularly.

Clean out only by using a wet soft cloth, with mild temperature water and, if necessary, use soft detergent. Almost all common non-abrasive household cleaning and disinfection products can be used. For common blemishes, simply clean the surface with mild temperature water by using a non- abrasive cloth, harder stains can be eliminated aided with non-abrasives domestic solvents and cleaners. When old stains, dry and accumulate, use a magic sponge or soft cloth to take them out. After using any solvent it is mandatory to rinse the surface with warm water and a mild detergent and repeat the rinse with water.

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Useful Cleaning Tips

To obtain the best results when clean the Metal Laminate, it is very important to remind the following tips:

A Metal Laminate should NEVER be cleaned with products containing abrasives, metal sponges, sanding paper or Steel wool. Avoid strong acid or alkaline substances because the surface can be irreversibly stained.

Chlorinated substances can degrade and discolor the surface. Sodium hypochlorite must be used at concentrations under 5% allowing continuous contact not more than 5 minutes and, after cleaning, surfaces must be rinsed by using enough mild temperature water and soft clothes.

Hydrogen peroxide must be used at concentrations under 3% allowing continuous contact not more than 10 minutes and, after cleaning, surfaces must be rinsed by using enough mild temperature water and soft clothes.

When solvents are used, cloth should be very clean to avoid residual marks on the Metal Laminate. It is recommended to wash out and rinse with mild temperature water.

Do not use furniture restoration products or oil-based cleaning products because they tend to leave residual grease on the surface that traps dirty particles. Do not use metallic scrapers, metallic brushes or any other metallic tool to remove residuals from the Metal Laminate, like gypsum or dry paint because surface can irreversibly damage.

Cleaning Tips

At the beginning, use a dry cloth or paper towel, then use water between 35-40°C (95-105°F) with domestic soft soap or detergent, allowing to act until dirt starts to soften.

If dirty and blemishes remain, use a solvent like white spirit and, then use water between 35-40°C (95-105°F) with domestic soft soap or detergent, permitting to act until dirt starts to soften. If dirty and blemishes remain, clean the surface with a soft cloth or use a 50:50 mixture of alcohol and organic solvent, so as not to affect its original tone and design. The resistance to staining is high however we DO NOT recommend its use on lab type work surfaces where they use oxidizing chemicals, alkalis and strong acids in their daily work.

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Instructions For Removing Difficult Stains

Acetone or nail remover, alcohol, gasoline, turpentine, White spirit, trichloroethylene, perchloroethylene and trichloroethane are suitable to remove neoprene residues.

3M Graffiti Remover, paint diluent or Hauser Vandal are some commercial substances that can be used. Remember to always rinse by using enough water.

Note: Product Brand names are only suggestions and its effectivity is not guaranteed.

It is the responsibility of the distributor / installer to verify the updated technical documents updated on the respective website. Visit us at www.surfacematerials.com for more information.

VERSION DEC2108 This document supersedes all printed and electronic technical and installation guides previously distributed by LAMITECH.