

PRODUCT DATA SHEET

APRIL 2014

GENERAL PURPOSE HIGH-PRESSURE DECORATIVE LAMINATE

PRODUCT DESCRIPTION

Lamin-Art® brand general purpose high-pressure decorative laminate. It is suitable for both horizontal and vertical surfaces requiring superior wear, impact, and stain resistance.

The Pearlescence®, Burlap, and Abacá high-pressure decorative laminates have different product specifications than general purpose high-pressure decorative laminate. Please refer to the specific product data sheets for Pearlescence, Burlap, and Abacá high-pressure decorative laminates available online at www.laminart.com.

RECOMMENDED APPLICATIONS

Lamin-Art® general purpose decorative laminate is suitable for both horizontal and vertical interior applications in commercial interiors where the surface must be both functional and durable. Typical horizontal applications include counter and table tops, contract furniture and casework, as well as store fixtures. Typical vertical applications can include wall paneling, interior doors, elevator cab interiors, cabinetry, casino slot bases, and bar fronts. **Lamin-Art brand high-pressure decorative laminate is for interior use only and is not recommended for direct application to plywood, steel, aluminum, fiber reinforced plastic, plaster, gypsum board or concrete. Do not use in areas exposed to temperatures in excess of 275°F (135°C) or high humidity.**

PRODUCT COMPOSITION

Lamin-Art® general purpose high-pressure decorative laminate is manufactured by laminating phenolic resin-impregnated kraft sheets with melamine resin-impregnated decorative and overlay sheets. The lamination is performed under a minimum pressure of 1,000 psi (2,068 kPa) at a temperature of approximately 300°F (149°C).

CONDITIONING

Lamin-Art® general purpose laminate panels may be sensitive to changes in temperature and humidity conditions. If adhered with excess moisture present, there is a risk of cracking and open seams due to shrinkage, particularly in winter conditions or when relative humidity is low. Prior to adhesive application to a suitable substrate, Lamin-Art panels should be carefully conditioned. (The recommended method of conditioning is to store panels and substrates together in the same room for a period of at least 72 hours with adequate air movement, under stable temperature and humidity conditions as close as possible to actual conditions at the installation site.) **Recommended conditioning for all panels is at approximately 75° F (24° C), with 45-55% relative humidity.**

STORAGE AND HANDLING

Lamin-Art® general purpose high-pressure decorative laminate sheets should be stored horizontally, back-to-back and face-to-face, with the top sheet turned face down and a caul board placed on top to preserve the material. Storing the panels in an atmospherically stabilized room is recommended to avoid extreme fluctuations of moisture.

Lamin-Art recommends that full-sized sheets be carried by two people with the decorative facing upward whenever possible.

INSTALLATION

All surfaces to be laminated should be inspected prior to installation to ensure that they are clean and free of surface defects. The protective coating (peel coat) should be removed prior to inspection. All defects should be corrected before application. Material, equipment, and workmanship should conform to industry-standard practices, conditions, procedures, and recommendations specified by National Electrical Manufacturers Association (NEMA) LD3-2005 Annex A, Architectural Woodworking Institute (AWI) Quality Standards, and the American National Standards Institute (ANSI) 161.2-1979 standards.

SUBSTRATES

Lamin-Art® general purpose high-pressure laminate should be adhesively bonded to a substrate, or to a sheet substrate forming a new composite component which will be used in other assemblies. Suitable substrates may include but are not limited to particleboard (minimum density 45 pounds/cubic foot), medium-density fiberboard (MDF) or high density fiberboard (HDF). Materials with insufficient dimensional stability or internal bond strength such as plywood, steel, aluminum, fiber reinforced plastic, plaster, gypsum board, and similar materials are not recommended for use as substrates. Concrete is not a recommended substrate.

ADHESIVES

Surfaces to be adhered must be sound, thoroughly dry, clean, free of dust, wood chips, oil and other types of surface contamination. When a laminating press is not available, such as an on-site installation, contact adhesives may be used, however this method should be restricted to small areas only. Ensure full adhesive coverage of both surfaces to be bonded and apply a pressure of at least 50-75 pounds per square inch until full bonding is achieved. Spot bonding should never be used. In all cases with all types of adhesives comply with the adhesive manufacturer's usage recommendations.

BACKING SHEETS

To avoid warping of a panel assembly faced with Lamin-Art® general purpose high-pressure laminates, stresses resulting from thermal and hygroscopic forces on both sides of the assembly must be balanced. The best results are obtained when a backing sheet, with characteristics comparable to the face sheet, is laminated to it. Alternatively, balance may be achieved using an ordinary high pressure laminate of the same thickness on the back side of the assembly. Narrow panels for wall applications, held rigidly in place by a securing system can have just a face side if the back side is protected from excess humidity and covered with a suitable sealant such as paint, lacquer, or a vapor-retarding varnish.

MAINTENANCE

Lamin-Art® general purpose high-pressure decorative laminate may be cleaned with a damp cloth, warm water, and a mild soap or household cleaning products. Cleansers that contain abrasives, acids, or alkalis may damage the decorative surface and are not recommended. Stubborn stains may require the use of hypochlorite bleach followed by a clean water rinse.

WARRANTY

Lamin-Art®, Inc. expressly warrants that its products are free of defects in material and workmanship, are of merchantable quality, and meet or exceed performance standards for high-pressure decorative laminates as established by NEMA, LD 3-2005. Please note that some of our products contain special pearlescent inks and do not meet NEMA standards for abrasion/scratch resistance in all finishes. Inasmuch as Lamin-Art has no control over the end products fabricated with the materials sold, no warranty or guarantee is expressed or implied, other than those set forth above, and is limited to the replacement cost of the material alone.

Questions? Call Customer Service at 800.323.7624.

SPECIFICATIONS

SIZES	
48" X 96"	THESE ARE THE NOMINAL DIMENSIONS OF REGULARLY STOCKED ITEMS.
48" X 120"	OTHER SIZES MAY BE AVAILABLE UPON REQUEST.
FINISHES	
CATALYST™ (B)	A GENTLY-ETCHED DIMENSIONAL FINISH CHARACTERIZED BY RANDOM SPIRALS REMINISCENT OF BURNISHED METAL (LRV 18.0).
CHRYSALIS® (A)	A GENTLY-ETCHED PATTERN WHICH CREATES A BRILLIANCE AND TEXTURE SIMILAR TO THAT OF BRUSHED METAL (LRV 10.0). RECOMMENDED FOR VERTICAL / LOW-WEAR APPLICATIONS ONLY.
CORRUGATED (C)	A DIMENSIONAL SURFACE OF ALTERNATING FURROWS AND RIDGES RUNNING LENGTHWISE ALONG THE SHEET, FEATURING A SOFT FINISH WITH LOW REFLECTIVE PROPERTIES (LRV 3.0). RECOMMENDED FOR VERTICAL / LIGHT-DUTY APPLICATIONS ONLY.
CRISSCROSS (L)	A SUBTLE TACTILE GRID OF FINE INTERSECTING LINES RUNNING LENGTHWISE AND WIDTHWISE ALONG THE SHEET (LRV15.0). RECOMMENDED FOR VERTICAL / LOW-WEAR APPLICATIONS ONLY.
FINE GRAIN (I)	THIS SUBDUED WOOD FINISH WITH LOW REFLECTIVE PROPERTIES ACHIEVES ITS UNIQUE EFFECT BY BLENDING A MORE REALISTIC, VERTICAL GRAINING WITH A SUBTLE PORE STRUCTURE (LRV 9.0).
GLOSS (G)	A SMOOTH MIRROR-LIKE FINISH SUITABLE FOR APPLICATIONS WHERE HIGH REFLECTIVITY IS DESIRED (LRV 100.00).
SUPERMATTE (SM)	A SOFT TEXTURED SURFACE WITH LOW REFLECTIVE PROPERTIES (LRV 2.0).
RELIEF (FU)	THE TACTILE RELIEF OF THE ACTUAL MATERIALS EMBEDDED IN THE LAMINATE SHEET (ABACA LRV 10.0, BURLAP LRV 6.0).
TEXTURED (T)	A NON-DIRECTIONAL MATTE FINISH WITH MODERATE REFLECTIVE QUALITIES (LRV 10.0).
VELVA-TEX (VT)	A SOFT FINISH SIMILAR TO HAND-RUBBED OILED HARDWOOD (LRV 16.0).
GRADES	
STANDARD GRADE GP48 HSG (.048"/1.2 MM)	THE MOST COMMONLY USED. RECOMMENDED FOR HORIZONTAL AND VERTICAL APPLICATIONS WHERE MAXIMUM IMPACT-RESISTANCE AND DURABILITY ARE REQUIRED. STANDARD GRADE GP48 MATERIAL CAN BE COLD BENT TO A RADIUS NO SMALLER THAN 12" (304.8 MM). WE DO NOT RECOMMEND USING HEAT TO FORM PEARLESCENCE® ITEMS TO A SMALLER RADIUS.
VERTICAL GRADE GP28 VSG (.028"/0.7 MM)	SUITABLE FOR APPLICATIONS WHERE THE ECONOMIES OF A THINNER MATERIAL ARE DESIRABLE AND IMPACT-RESISTANCE IS NOT CRITICAL. OFFERS THE SAME SURFACE DURABILITY AS THICKER GRADES. VERTICAL GRADE GP28 MATERIAL CAN BE COLD BENT TO A RADIUS NO SMALLER THAN 7" (177.8 MM). WE DO NOT RECOMMEND USING HEAT TO FORM PEARLESCENCE® ITEMS TO A SMALLER RADIUS.
POSTFORM GRADE (.028"/0.7MM)	THIS SPECIALIZED GRADE IS MANUFACTURED SPECIALLY FOR THOSE APPLICATIONS THAT REQUIRE THE MATERIAL TO BEND TO A RADIUS SMALLER THAN 5/8" WITH THE APPLICATION OF HEAT.

PERFORMANCE

Lamin-Art® products have been subjected to trials by independent, nationally recognized laboratories in accordance with National Electrical Manufacturers Association (NEMA) standardized testing procedures (Pub. LD 3-2005, Section 2). The following test results were obtained.

NEMA TEST	TEST RESULTS FOR LAMIN-ART	NEMA STANDARD FOR GENERAL PURPOSE HPL
THICKNESS STANDARD GRADE VERTICAL GRADE	0.048" (1.2 MM) 0.028" (0.7 MM)	0.048" +/- 0.005" (1.2 MM +/- 0.13 MM) 0.028" +/- 0.004" (0.7 MM +/- 0.10 MM)
APPEARANCE	No ABC DEFECTS	No ABC DEFECTS
LIGHT RESISTANCE	SLIGHT EFFECT	SLIGHT EFFECT
CLEANABILITY (CYCLES)	7	20 MAX.
STAIN RESISTANCE REAGENTS 1-10 REAGENTS 11-15	No EFFECT No EFFECT	No EFFECT SLIGHT EFFECT
BOILING WATER RESISTANCE	No EFFECT	No EFFECT
HIGH TEMPERATURE RESISTANCE	No EFFECT	SLIGHT EFFECT
BALL IMPACT RESISTANCE STANDARD GRADE VERTICAL GRADE	50" (1270 MM) 20" (500 MM)	50" (1270 MM) 20" (500 MM)
DART IMPACT RESISTANCE STANDARD GRADE VERTICAL GRADE	20" (500 MM) 8" (200 MM)	20" (500 MM) 8" (200 MM)
DIMENSIONAL STABILITY STANDARD GRADE MACHINE DIRECTION CROSS DIRECTION VERTICAL GRADE MACHINE DIRECTION CROSS DIRECTION	.33% .9% .7% 1.2%	.5% MAX. .9% MAX. .7% MAX. 1.2% MAX.
SURFACE WEAR RESISTANCE (CYCLES)	GREATER THAN 400 CYCLES *PLEASE SEE EXCEPTIONS.	400 CYCLES MIN.