

ARBORITE® METAL LAMINATES

TECHNICAL DATA

1. Product Description

Recommended Uses: Arborite® Metal Laminates are designed for vertical interior applications where a special accent is required or a special mood is desired. The surface of Arborite® Metal Laminates is that of fine finished metal. These materials are appropriate for vertical areas in hotel and office lobbies, theaters, retail facilities and restaurants, where its special eye-catching properties add a definite prestigious appeal. These materials also can add a bright touch when used in combination with other Arborite designs and surface textures.

Product Composition: Arborite® Metal Laminates are composed of a colored metallic decorative layer pressed over kraft paper core sheets impregnated with phenolic resin. These sheets are bonded at pressures greater than 1000 pounds per square inch and temperatures approaching 300°F (149°C). The decorative metallic layer is coated with a protective finish to resist tarnishing. Finished sheets are trimmed and the backs sanded to facilitate bonding. Note: All Arborite® Metal Laminates are supplied with a protective peel coat to prevent surface damage.

Basic Limitations: Arborite® Metal Laminates are intended for interior use only and are not recommended for application to plaster, concrete walls, or gypsum wallboard. It is not a structural material and must be bonded to a suitable substrate. Some Arborite® Metal Laminates can be postformed or coldformed adding the decorative capability of a soft edge detail. Do not subject Arborite® Metal Laminates to extremes in humidity, temperatures over 282°F (139°C) for sustained periods of time, or intense continuous direct sunlight.

Patterns, Colors, and Finishes:

Patterns	Colors	Finish Treatment
MT201	Brushed Silver Metal	Anodized
MT202	Brushed Gold Metal	Anodized

Sheet Dimensions:

Sheet Width	48" (-0 + 1/4")	1219.2 mm (-0 + 6.4 mm)
Sheet Lengths	96" (-0 + 1/2")	2438mm (-0 + 12.7 mm)
	120" (-0 + 1/2") (*)	3048mm (-0 + 12.7 mm)
Sheet Thickness	Nominal 0.032"	0.8 mm
Weight PSF	0.032" Brushed	0.245#psf

(*) 10' lengths available with extended lead times.

2. Technical Data

Codes and Certifications: Currently there are no National Electrical Manufacturers Association (NEMA) standards for decorative metal surfacing.

Fire Test Data:

Arborite® Metal Laminates have been tested in accordance with ASTM-E84, Steiner Tunnel Test. Test results are Class A or Class I (flame spread index ≤ 25 , smoke developed index approx. 0).

3. Postforming temperatures and radius limitations

- 282°F (139°C) in 20 +/- 5 sec.
- Minimum radius is 5/16"

4. Installation: Fabrication and Assembly Recommendations

Fabrication and installation of Arborite® Metal Laminates is easy with tools and machinery normally associated with laminate fabrication. Also, American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA), LD3-2000, Annex A, should be consulted for basic fabrication and handling techniques.

Some points to keep in mind when using Arborite Metal Laminates include:

1. Use on vertical surfaces only. **Horizontal work surfaces are not recommended.**
2. The protective film should be removed as soon as the application is complete. If the film is left in place after fabrication, exposure to direct sunlight for a prolonged period may cause a paste residue and difficulty in removing the protective film.
3. Take care to ensure an appropriate moisture balance between the metallic laminate, the substrate and the phenolic backer prior to fabrication. The panel components (metallic, substrate and phenolic backer) should be conditioned in the same environment for 48 hours before fabrication. For best results, the room where fabrication takes place, as well as all materials, should be preconditioned to 65°F (18°C) or above. The ideal climate is 75°F (24°C) at 50% relative humidity.

Materials: Desirable substrate materials include ¾" 45 lb. medium-density particleboard. Any substrate material should have a density of at least 45 pounds per cubic foot.

Typically backer sheets are applied to panels to ensure balance. Arborite® Backer grade LB30 (0.028" +/- 0.003") is recommended. Apply it first to the substrate and then apply the face material. Edges can be applied before or after the backer and decorative sheet.

Proper adhesive selection is critical to achieving a correct bond for all Arborite Metal Laminates. Rigid-set, permanent-type adhesives, such as white glue (PVAc), and contact adhesives are recommended.

Methods: Fabrication of components should only be performed according to approved methods as detailed in the Arborite® Metal Laminates Fabrication Manual. Assembled pieces should meet specifications of KCMA (Kitchen Cabinet Manufacturers Association), ANSI-A161.2-1998, and

“Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program” guidelines of the Architectural Woodwork Institute where applicable.

Note: Metal Laminates conduct electricity. To prevent electrical shock and shorting, do not make electrical contact with Metal Laminates.

5. Maintenance

It is recommended that metallic laminate surfaces be cleaned with warm water and mild soaps such as those used for hands or dishes. Do not use cleaners that contain abrasives, acids or alkalis, as they will mar the surface. After washing, rinse thoroughly and always wipe the surface completely dry with a soft, clean cloth. Household cleaners, non-ammoniated detergents, or glass cleaners may be used to clean metallic laminate surfaces. Ammoniated detergents or petroleum-based cleaners should not be used to clean Metal Laminates surfaces.

6. Warranty

Arborite, division of ITW Canada, warrants that, under normal use and service, the material and workmanship of its products shall conform to the standards set forth on the applicable technical data sheets for a period of twelve (12) months from the date of sale to the first consumer purchaser. Dealers and distributors are provided with the technical data sheets which contain specific standards of performance for the products. In the event that an **Arborite®** product does not perform as warranted, the first purchaser’s sole remedy shall be limited to repair or replacement of all or any part of the product which is defective, at the manufacturer’s sole discretion.

This warranty applies only to product :

1. In its original installation; and
2. Purchased by the first consumer purchaser.

This warranty is not transferable, and expires upon resale or transfer by the first consumer purchaser.

This warranty shall not apply to defects or damage arising from any of the following :

1. Accidents, abuse or misuse;
2. Exposure to extreme temperature;
3. Improper fabrication or installation; or
4. Improper maintenance.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE MADE. UNDER NO CIRCUMSTANCES SHALL THE MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. NO FABRICATOR, INSTALLER, DEALER, AGENT OR EMPLOYEE OF ARBORITE, A DIVISION OF ITW CANADA , HAS THE AUTHORITY TO MODIFY THE OBLIGATIONS OR LIMITATION OF THIS WARRANTY.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state; therefore, some of the limitations stated above may not apply to you. It is to your benefit to save your documentation upon purchase of a product.