

**ARBORITE POSTFORMING & GENERAL PURPOSE LAMINATES  
TECHNICAL DATA**

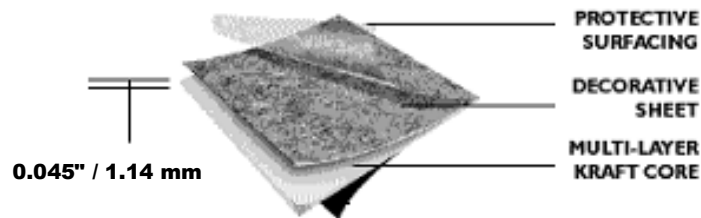


**Manufacturer**

Arborite  
385 Lafleur, Lasalle (Québec), H8R 3H7  
Web site : [www.arborite.com](http://www.arborite.com) - Phone: 1-800-996-0366  
Alternate manufacturing facility – Fletcher, NC

**Product Description**

Arborite decorative laminates are a high pressure thermoset plastic surfacing material. It consists of multi layers of kraft (core) papers impregnated with phenolic resins, covered by a melamine impregnated decorative surface. These layers are then consolidated into a solid sheet under the effect of high temperature and pressure.



**Basic Decorative High Pressure Laminates – for horizontal and vertical applications**

Arborite decorative laminates are engineered to improve the product life cycle for wear, chemical and stain resistance under normal use and conditions. Available in 3 grades, Arborite laminates offer 4 exceptional performance features, and are available in Arborite's expressive range of colors.

Arborite Flex 4 grades:

- 0.028" / (0.7 mm) - Arborite laminate type **A3**
- 0.039" / (1.0 mm) - Arborite laminate type **A4**
- 0.045" / (1.14 mm) - Arborite laminate type **A5**

**Usage**

For all types of flatwork applications:

- work surfaces, counters, cabinets, furniture, equipment, food service, displays, caseworks, doors, walls, ceilings, window sills and frames, partition systems, enclosures, shelving and trims.
- suitable for most commercial, institutional and residential applications.

Typical uses by grade:

A3 (0.028") for light duty applications - most vertical surfaces such as interior doors, cabinet fronts, wall paneling and similar surfaces.

A4 (0.039") & A5 (0.045") for heavier duty applications – work surfaces, counters, table tops, cabinets, furniture, wall paneling, doors, window sills and similar surfaces.

## **Arborite – Features**

- **Postforming Feature** – is the operation of forming decorative laminate into simple bends or shapes; Arborite decorative laminates provide flexibility as an attributed characteristic of our decorative high pressure laminate. This is done by uniformly heating the laminate to a temperature of approximately 150-165°C (300-325°F) and pressing or bending it into the required shape before cooling. This requires rigidly controlled conditions and special equipment. Practically any shape consisting of simple bends can be fabricated.

**A3** -0.028"/0.7mm will typically postform to a minimum radius of 5/16" face (outside bend)

**A4** -0.039"/1.0mm will typically postform to a minimum radius of 8/16" face (outside bend)

**A5** -0.045"/1.14mm will typically postform to a minimum radius of 10/16" face (outside bend)

- **Superior Wear Resistance** – provides a tough, durable barrier against abrasion. Exceeds NEMA wear standards by up to 400% (color/pattern dependant).
- **Superior Stain Resistance** – a unique formulation which provides protection against :  
Staining agents such as : alcohol, vegetable cooking oil, yellow mustard, gasoline (naphta), coffee, vinegar, household ammonia solution (10%), milk, blue ink, tomato ketchup, citric acid solution (10%), povidone iodine (10%).  
Superficial staining agents such as: wax crayon, black shoe polish paste, black permanent marker and #2 pencil.
- **Superior Chemical Resistance** – provides added resistance against the potentially damaging effects of chemical agents. Please refer to the chart below for a summary of test results for the most commonly used chemicals and staining agents.

## Arborite - Chemical Reagent Staining Effects

Acetic Acid (all concentrations)	SL/E
Acetone	SL/E
Ag Eosin Bluish 5% in Alcohol	NE
Alconox	NE
Aluminon	NE
Ammonium Hydroxide (all concentrations)	NE
Ammonium Phosphate	NE
Amyl Acetate	SL/E
Amyl Alcohol	SL/E
Aqua Regia	SE
Aromatic Ammonia	NE
Benedict's Solution	NE
Bromothymol Blue	NE
Butyl Alcohol	SL/E
Calcium Hypochlorite (concentrated)	NE
Camphorated para-chlorophenol	NE
Carbon Disulfide	SL/E
Carbon Tetrachloride	SL/E
Cellosolve	NE
Chlorobenzene	SL/E
Chloroform	NE
Chromic Trioxide	SE
Copper Sulfate	NE
Cresol	NE
Cresol Red	NE
Crystal Violet	ME
Dimethyl Formamide	NE
Dioxane	SL/E
EDTA	NE
Ethyl Acetate	SL/E
Ethyl Alcohol	NE
Ethylene Glycol	NE
Eucalyptol	NE
Formaldehyde	SL/E
Formalin	SL/E
Formic Acid (all concentrations)	ME
Gasoline	NE
Gentian Violet	ME
Glacial Acetic Acid, 99% (concentrated)	SL/E
Gram Stains	NE
Hydrofluoric Acid 48% (concentrated)	ME
Hydrochloric Acid (all concentrations)	SE
Hydrogen Peroxide 3%	NE
Iodine	NE
Karl Fischer Reagent	NE
Kerosene	NE
Lactated Ringers Solution	NE
Lysol™	NE
Malachite Green	NE
Methanol	SL/E
Methylene Blue	ME
Methylene Chloride	NE
Methyl Ethyl Ketone	NE
<b>EXPLANATION OF TEST RESULTS:</b> NE: No Effect SL/E: Slight Effect ME: Moderate Effect SE: Severe Effect	

Methyl Methacrylate	NE
Methyl Orange	NE
Methyl Red	NE
Mineral Oil	NE
Monse's Solution	NE
Naphtha	NE
NaphtHalene	NE
n-Hexane	NE
Nigrosine	NE
Nitric Acid (all concentrations)	SE
Perchloric Acid (concentrated)	SE
Petroleum Jelly	NE
Phenol (all concentrations)	NE
Phenolphthalein	NE
Phosphate Buffered Saline	NE
Phosphoric Acid (all concentrations)	ME
Picric Acid 1.2% (0.05M)	SE
Pine Oil	NE
Potassium Permanganate	ME
Povidone Iodine	NE
Procaine	NE
Quaternary Ammonia Compounds	NE
Safranin O	NE
Silver Nitrate	ME
Sodium Azide	NE
Sodium Chromate	NE
Sodium Hydroxide (all concentrations)	ME
Sodium Hypochlorite 5%	SE
Sodium Sulfide 15%	NE
Sulfuric Acid (all concentrations)	SE
Sodium Thiocyanate	NE
Sucrose 50%	NE
Sudan III	NE
Tannic Acid (sat.)	SL/E
Tetrahydrofuran	NE
Thymol & Alcohol	NE
Thymol Blue	NE
Tincture of Iodine	NE
Tincture of Mercurochrome	NE
Tincture of Merthiolate	NE
Toluene	NE
Trichlorethane	SL/E
Trisodium Phosphate 30%	NE
Urea	NE
Uric Acid (sat.)	SL/E
Vegetable Oils	NE
Water	NE
Wright's Blood Stain	ME
Xylene	NE
Zephiran Chloride	NE
Zinc Chloride	NE
Zinc Oxide Ointment	NE

*Results may vary slightly by color. Request a sample for evaluation and chemical resistance testing. It is recommended that chemical spills be cleaned immediately to prevent or greatly reduce the effects caused by longer exposure*

## **Arborite Surface Textures**

Arborite laminates are available in 12 standard surface textures:

<b>Textures</b>	<b>Surface Gloss Value *</b>
Breccia – an embossed finish offering sheen levels ranging from matte to glossy	10-50
Cashmere – a fine, matte texture with a slight sheen	8-12
Diamond – a fine beaded texture which minimizes smudges, finger marks and offers optimum scratch resistance.	10-16
Evergrain - a fine woodgrain texture with slight sheen	6-7
French Polish – a rich gloss and deep sheen that replicates the effects of the finest wood finish	36
Gloss – a flat texture with a high sheen	90-110
Laqwood – a slightly embossed woodgrain texture	20-30
Luminous – a softly polished stone texture that displays the effects of gentle weathering	55
Metalux – a dimensional texture whose finely abraded directional lines convey the luster and feel of brushed metal	24-28
Refined Matte – a smooth non-gloss finish resembling actual wood veneer	3
Structured - a highly embossed linear texture suitable for woodgrains, solids and linear patterns	7-8
Velvutex – a smooth furniture finish texture	12-16

\* CAN3-A172-M79

## **Arborite Standard Sheet Sizes**

Arborite laminate are available in the following standard sheet sizes.

Manufacturing tolerance is +13 mm, -0 mm (+ ½". -0").

Metric sizes are rounded to nearest 5 mm (3/32").

<b>Imperial Measure (feet)</b>	<b>Metric measure (mm)</b>
4' x 8'	1220 mm x 2440 mm
4' x 10'	1220 mm x 3050 mm
5' x 8'	1525 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm
30" x 8'	762 mm x 2440 mm
30" x 10'	762 mm x 3050 mm
30" x 12'	762 mm x 3660 mm

- *Gloss Surface Texture is only available in 4' x 8', 4' x 10', 5' x 12'*
- *French Polish Surface Texture is only available in 4' x 8', 5' x 12'*
- *Luminous Surface Texture is only available in 4' x 8', 5' x 12'*
- *Metalux Surface Texture is only available in 4' x 8', 5' x 12'*

**Arborite Standard Decorative Laminates vs. NEMA**

**Thickness and Weight**

<b>Description</b>	<b>A5</b>	<b>A3</b>	<b>A4</b>
Thickness	0.045" ± 0.005"	0.028" ± 0.005"	0.039" ± 0.005"
Weight per square foot	0.324#	0.180#	0.245#

**Physical Properties of General Purpose Laminates – Arborite A5 grade**

<b>NEMA Test</b>	<b>Typical Arborite Product type A5</b>	<b>NEMA Standard HGS</b>
Thickness	0.045" ± 0.005"	0.048" ± 0.005"
Appearance	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect
Cleanability (cycles)	10	20 (max.)
Stain Resistance Reagents 1-10 Reagents 11-15	No effect Slight effect	No effect Moderate effect
Boiling Water Resistance	No effect	No effect
High Temperature Resistance	Slight effect	Slight effect
Impact Resistance	55"	50" (1270mm)
Radiant Heat Resistance	126 seconds	125 sec. (min.)
Dimensional Stability Machine Direction Cross Direction	0.25% 0.6%	0.5% 0.9%
Surface Wear Resistance (cycles)	800 cycles	400 cycles (min.)
Formability	Not applicable	Not applicable
Blistering	100 seconds	Not applicable

**Physical Properties of Vertical Surface Laminates – Arborite A3 grade**

<b>NEMA Test</b>	<b>Typical Arborite Product type A3</b>	<b>NEMA Standard VGP</b>
Thickness	0.028" + 0.001 - 0.004"	0.028" ± 0.004" (0.7mm ± 0.10mm)
Appearance	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect
Cleanability (cycles)	10	20 (max.)
Stain Resistance Reagents 1-10 Reagents 11-15	No effect Slight effect	No effect Moderate effect
Boiling Water Resistance	No effect	Slight effect
High Temperature Resistance	Slight effect	Slight effect
Impact Resistance	30"	20" (508mm)
Radiant Heat Resistance	90 seconds	80 sec. (min.)
Dimensional Stability Machine Direction Cross Direction	0.3% 0.75%	1.1% (max.) 1.4% (max.)
Surface Wear Resistance (cycles)	800 cycles	400 cycles (min.)
Formability	6/16" radius	1/2" radius (13mm)
Blistering	55 seconds	40 seconds

*\*Radius for face is actually the radius of the form around which the laminate is postformed. The radius for back is actually the radius to which the decorative face is postformed.*

**Physical Properties of Postforming Laminate - Arborite A4 grade**

<b>NEMA Test</b>	<b>Typical Arborite Product type A4</b>	<b>NEMA Standard HGP</b>
Thickness	0.039" ± 0.005"	0.039" ± 0.005" (1mm ± 0.12mm)
Appearance	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect
Cleanability (cycles)	10	20 (max.)
Stain Resistance Reagents 1-10 Reagents 11-15	No effect Slight effect	No effect Moderate effect
Boiling Water Resistance	No effect	Slight effect
High Temperature Resistance	Slight effect	Slight effect
Impact Resistance	40"	30" (762mm) (min.)
Radiant Heat Resistance	110 seconds	100 sec. (min.)
Dimensional Stability Machine Direction Cross Direction	0.25% 0.65%	1.1% (max.) 1.4% (max.)
Surface Wear Resistance (cycles)	800	400 (min.)
Formability*	*8/16" face *3/16" back	*5/8" face (16.00mm)
Blistering	70 seconds	55 seconds

## **Standards & Approvals**

Arborite laminates meet or exceed standard tests set by:

- The National Electrical Manufacturers Association “ANSI/NEMA LD3-2005”, for high pressure decorative laminates.
- National Standard of Canada “CAN3-A172-M79” High Pressure, Paper Base, Decorative Laminates.

These standards establish the minimum criteria for resistance to wear, boiling water, high temperature, fading, dimensional stability, staining, appearance and formability.

NSF International (NSF) #35, “Laminated Plastic for Surfacing for Food Service Equipment.” All Arborite designs in grades A3, A4 and A5, comply.

The GREENGUARD Environmental Institute™ has awarded its GREENGUARD Indoor Air Quality Certification to Arborite. All Arborite laminate product types were tested under the stringent GREENGUARD Standards for low-emitting products. All GREENGUARD Indoor Air Quality Certified® products ensure minimal impact on the indoor environment. For a copy of the certificate, visit [www.greenguard.org](http://www.greenguard.org).

Arborite laminates also comply to MEA – Materials & Equipment Acceptance.

Arborite is certified ISO 9001:2000 Quality Management System for quality assurance in design, development, and production.

Arborite is a member of the USGBC (US Green Building Council).

## **Arborite standard color collection**

Arborite offers a wide palette of colors ranging from pearlescent patterns to exotic woodgrains, to subtly enhanced patterns and well blended solid colors. Please refer to our standard color collection for all colors and patterns.

*Arborite features do not apply to pearlescent pattern (1403 White Pearl Wood) without a protective overlay. This pattern are recommended for vertical application only.*

## **Building Codes**

Arborite laminates meet the general requirements for the Canadian and US building codes.

## **Product Availability**

Arborite high pressure laminates are manufactured in Canada and distributed throughout North America through a network of distributors.

As a result of our state-of-the-art manufacturing procedure, Arborite is able to offer quick delivery service to its distributors for all materials regardless of product grade, color, surface texture or size. Contact an Arborite distributor in your respective area.

## **Care & Maintenance**

To clean Arborite laminate surfaces, simply wipe with a soft damp cloth and mild detergent; then rinse thoroughly with warm water and wipe dry. For stubborn stains, use an all-purpose cleaner, with a damp cloth; then rinse thoroughly with warm water and wipe dry.

For really tough stains, create a paste composed of baking soda and water. Using a soft brush, scrub gently in a circular motion – 10 to 20 strokes should remove most stains; then rinse thoroughly with warm water and wipe dry. Keep in mind that excessive scrubbing can dull or damage the finish. Click here [http://www.arborite.com/pdf/guides\\_en/care\\_en.pdf](http://www.arborite.com/pdf/guides_en/care_en.pdf) for additional care and maintenance tips.

## **Warranty**

Arborite, division of Wilsonart Canada ULC, 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 WILSONART CANADA ULC, 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.



Specification Form:

Surface shall be Arborite Postforming & General Purpose Laminate

Produced by Arborite

Type: A3 (0.028"), A4 (0.039"), or A5 (0.045")

Surface

Color Number: \_\_\_\_\_

Color Name: \_\_\_\_\_

Finish

Code: \_\_\_\_\_

Name: \_\_\_\_\_