

**ARBORITE FIRE RATED LAMINATES
TECHNICAL DATA**



Manufacturer

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

Product Description

Arborite high pressure laminate with fire rated properties are suitable for applications where fire retardant properties are required by building codes, i.e., elevator cabs, stairwells, public areas, and hospitals. This laminate is also suitable for segments within the transportation industry.

Arborite fire rated laminates incorporate 3 additional performance features:

- Superior wear resistance
- Superior chemical resistance
- Superior stain resistance

Limitations: Arborite fire rated laminates are non-postforming.

Certifications

30PL (0.032")	GPPL (0.048")	B3PL (0.028")	BKPL (0.048")	COMPACT LAMINATE (1/4" – 1")
Underwriters Laboratories UL 723 (ASTM E84) - Class 1 / A	Underwriters Laboratories UL 723 (ASTM E84) - Class 1 / A	Underwriters Laboratories UL 723 (ASTM E84) - Class 1 / A	Underwriters Laboratories UL 723 (ASTM E84) - Class 1 / A	Underwriters Laboratories UL 723 (ASTM E84) - Class 1 / A
Underwriters Laboratories of Canada CAN/ULC S-102	Underwriters Laboratories of Canada CAN/ULC S-102	Underwriters Laboratories of Canada CAN/ULC S-102	Underwriters Laboratories of Canada CAN/ULC S-102	
U.S. Department of Homeland Security United States Coast Guard - Interior Finish (IMO)	U.S. Department of Homeland Security United States Coast Guard - Interior Finish (IMO)	U.S. Department of Homeland Security United States Coast Guard - Interior Finish (IMO)	U.S. Department of Homeland Security United States Coast Guard - Interior Finish (IMO)	

Performance Properties

	30PL (0.032")	GPPL (0.048")	B3PL (0.028")	BKPL (0.048")	COMPACT LAMINATE (1/4" – 1")
UL 723 Unbonded					
- flame spread	15	15	15	20	25
- smoke developed	15	15	0	0	200
UL 723 Bonded *					
- flame spread	15	15	15	15	n/a
- smoke developed	0	0	0	0	n/a
CAN/ULC S-102 Unbonded					
- Flame spread	15	15	15	20	n/a
- Smoke developed	15	15	0	0	n/a
CAN/ULC S-102 Bonded*					
- flame spread	15	15	15	15	n/a
- smoke developed	0	0	0	0	n/a

* bonded with Borden System II, Borden System III or Wilsonart Type II adhesives in accordance with the instructions accompanying the laminated plastic.

NEMA Performance Properties for Fire-Rated Laminate (Arborite meets or exceeds these values)

NEMA Property	HGF (GPPL)	VGF (30PL)
Thickness tolerance	0.048" ± 0.005" (1.2mm ± 0.12mm)	0.032" ± 0.005" (0.8mm ± 0.12mm)
Surface Wear Resistance (cycles)	400 (min.)	400 (min.)
Boiling Water Resistance	No effect	No effect
High Temperature Resistance	Slight effect	Slight effect
Radiant Heat Resistance	75 sec. (min.)	50 sec. (min.)
Stain Resistance:		
▪ Reagents 1-10	No effect	No effect
▪ Reagents 11-15	Moderate effect	Moderate effect
Light Resistance	Slight effect (min.)	Slight effect (min.)
Dimensional Change / Room Temperature Dimensional Stability		
▪ Machine Direction	0.50% (max.)	0.70% (max.)
▪ Cross Direction	0.90% (max.)	1.20% (max.)
Ball Impact Resistance	45" (1150 mm)	20" (500 mm)
Dart Impact Resistance	18" (450 mm)	8" (200 mm)
Cleanability	20 (max.)	20 (max.)

The testing was conducted according to the standard test methods set by the “American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA) LD3-2005,” for high pressure laminate. Since Fire-Rated backer sheets are not intended to be exposed to light, wear or everyday use, no physical property tests are in current use.

Fire Rated Laminates Thickness

Product Type	Imperial Measure (in.)	Metric measure (mm)	Thickness Tolerance
30PL	0.032"	0.8 mm	±0.005"/0.12 mm
GPPL	0.048"	1.2 mm	±0.005"/0.12 mm

Fire Rated Laminate Standard Panel Size

Imperial Measure (in.)	Metric measure (mm)
4' x 8'	1220 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

Arborite Surface Textures

Texture availability	Surface Gloss Level *
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
Gloss – a flat texture with a high sheen	90-110
Laqwood – a slightly embossed woodgrain texture	20-30
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	8-13
Velvatex – a smooth furniture finish texture	12-16

* NEMA LD 3-2005

Arborite Fire Rated Color Availability

Complete standard color collection is available on thin FR grade laminate.

Fire Rated Compact Thickness Availability

Product Type	Imperial Measure (In.)	Metric Measure (Mm)	Thickness Tolerance	Lbs/ Sq.Ft	Description
SF25 (1/4")	0.250"	6.4 mm	± 0.0125"	1.8	Double Faced
SF50 (1/2")	0.500"	12.7 mm	± 0.025"	3.6	Double Faced
SF75 (3/4")	0.750"	19.0 mm	± 0.037"	5.4	Double Faced
F100 (1")	1.00"	25.4 mm	± 0.050"	7.2	Double Faced

* thickness tolerance according to NEMA LD 3-2005 for Compact Laminate grade (CGS)

Fire Rated Compact Laminate Standard Panel Size

Imperial Measure (feet)	Metric measure (mm)
4' x 8'	1220 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

Texture Availability	Surface Gloss Level
CA Finish – a fine, matte texture with a slight sheen	8-12

Arborite Fire Rated Compact Laminate Color Availability

Complete standard color collection is available in fire rated compact grade laminates.

Certifications – Fire Rated Compact Laminate (1/4" – 1")

Underwriters Laboratories	Class 1	
UL &23 (ASTM E84)*		
- Performance Properties:	Flame Spread	25
	Smoke Developed:	200

*"Test for Surface Burning Characteristics of Building Materials"

Fire Rated Backing Laminate

Product Code	Imperial Measure (in.)	Metric Measure (mm)	Thickness Tolerance
B3PL	0.028"	0.71 mm	±0.004" (± 0.10 mm)
BKPL	0.048"	1.22 mm	±0.005" (± 0.13 mm)

Fire Rated Backing laminate Size

Imperial Measure (in.)	Metric measure (mm)
4' x 8'	1220 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

NEMA performance Properties Backing Laminate – Arborite meets or exceeds these values

Certifications – Fire Rated Backing Laminate

B3PL (0.028"± 0.004")	BKPL (0.048" ± 0.005")
Underwriters Laboratories • UL 723 (ASTM E84) - Class 1 / A	Underwriters Laboratories • UL 723 (ASTM E84) - Class 1 / A
Underwriters Laboratories of Canada • CAN/ULC S-102	Underwriters Laboratories of Canada • CAN/ULC S-102
U.S. Department of Homeland Security United States Coast Guard • Interior Finish (IMO)	U.S. Department of Homeland Security United States Coast Guard • Interior Finish (IMO)

Performance Properties – Fire Rated Backing Laminate

	B3PL (0.028”)	BKPL (0.048”)
UL 723 Unbonded - flame spread - smoke developed	15 0	20 0
UL 723 Bonded * - flame spread - smoke developed	15 0	15 0
CAN/ULC S-102 Unbonded - Flame spread - Smoke developed	15 0	20 0
CAN/ULC S-102 Bonded* - flame spread - smoke developed	15 0	15 0

** bonded with Borden System II, Borden System III or Wilsonart Type II adhesives in accordance with the instructions accompanying the laminated plastic.*

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.

The purpose of this Standards Publication is to provide standard test methods and performance values for high-pressure decorative laminates.

- NSF International (NSF) #35, “Laminated Plastic for Surfacing for Food Service Equipment.” All Arborite surface textures in grades 30PL and GPPL 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.
- Arborite is certified ISO 9001:2008 Quality Management System.
- Arborite is a member of the USGBC (US Green Building Council).
- Arborite is a member of the CaGBC (Canada Green Building Council).

Building Codes

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

Antimicrobial Activity and Efficacy

Arborite decorative laminates have a non porous surface that does not promote bacterial growth. Tested under method JIS Z2801:2000 (E) for antimicrobial activity and efficacy, our laminate surface exhibited strong biocidal properties, with a reduction of 99.99% of the tested bacteria (S.aureus).

FSC® Certification

Arborite products are available as FSC® Mix Credit (please contact our customer service department for availability).

FSC® trademark license code: FSC-C102327

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. For additional care and maintenance tips, please visit our web site at <http://www.arborite.com/us/HPL-Technical-Information>, HPL Care & Maintenance.

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 Fire Rated Laminate

Produced by Arborite,

Type: 30PL (0.032"), GPPL (0.048"), SF25 (1/4"), SF50 (1/2"), SF75 (3/4"), F100 (1")

Surface

Color Number: _____ Color Name: _____

Finish

Code: _____ Name: _____

Specification Form:

Surface shall be Arborite Fire Rated Backing Laminate

Produced by Arborite,

Type: B3PL (0.028") BKPL (0.048")