

**ARBORITE FIRE RATED 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 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**

<b>30PL (0.032")</b>	<b>GPPL (0.048")</b>	<b>B3PL (0.028")</b>	<b>BKPL (0.048")</b>	<b>COMPACT LAMINATE (1/4" – 1")</b>
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")
<b>UL 723 Unbonded</b> - flame spread - smoke developed	10 100-150	20 125	40 15	35 15	25 200
<b>UL 723 Bonded *</b> - flame spread - smoke developed	0 30	0 40	5 0	5 5	- -
<b>CAN/ULC S-102 Unbonded</b> - Flame spread - Smoke developed	25 60	20 90	45 5	40 5	

\* bonded with Borden chemical RS-224 adhesive in accordance with instructions accompanying the adhesive. Bonded to an Inorganic Reinforced Cement Board.

### 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 ▪ Reagents 11-15	No effect Moderate effect	No effect Moderate effect
Light Resistance	Slight effect (min.)	Slight effect (min.)
Dimensional Change / Room Temperature Dimensional Stability ▪ Machine Direction ▪ Cross Direction	0.50% (max.) 0.90% (max.)	0.70% (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**

<b>Product Type</b>	<b>Imperial Measure (in.)</b>	<b>Metric measure (mm)</b>	<b>Thickness Tolerance</b>
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**

<b>Imperial Measure (in.)</b>	<b>Metric measure (mm)</b>
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**

<b>Texture availability</b>	<b>Surface Gloss Level *</b>
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
Velvutex – a smooth furniture finish texture	12-16

\* NEMA LD 3-2005

### **Arborite Fire Rated Color Availability**

Complete 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**

1530	1531	1538	1539	1541	P124	P202	P203	P222	P223
P229	P231	P238	P254	P255	P256	P257	P258	P259	P260
P267	P271	P272	P273	P276	P277	P278	P279	P282	P283
P284	P285	P288	P290	P297	P298	P299	P300	P301	P302
P304	P305	P309	P310	P311	P312	P313	P314	P315	P316
P317	P318	P319	P320	P321	P322	P323	P324	P325	P326
P327	P328	P329	P330	P331	P332	P333	P334	P335	P336
P340	P341	P342	P343	P344	P345	P346	P347	P348	P349
P350	P351	P352	P353	P354	P355	P356	P357	P362	P363
P364	P365	P366	P367	P368	P369	P370	P371	P372	P373
P374	P375	P376	P377	P378	P500	P623	P885	P886	P887
P948	P951	P952	P954	P955	P959	P962	P971	P993	P999
S405	S406	S407	S417	S431	S436	S444	S445	S463	S466
S486	S513	S542	S548	S550	S573	W134	W138	W230	W305
W372	W373	W403	W404	W405	W407	W411	W412	W413	W414
W415	W416	W417	W418	W420	W421	W423	W424	W425	W426
W427	W428	W429	W430	W431	W432	W433	W434	W435	W436
W437	W443	W444	W445	W446	W447	W448	W449	W450	W451
W452	W453	W454	W455	W456	W457	W458			

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

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

\*"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**

<b>B3PL (0.028"± 0.004")</b>	<b>BKPL (0.048" ± 0.005")</b>
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**

	<b>B3PL</b> <b>(0.028" ± 0.004")</b>	<b>BKPL</b> <b>(0.048" ± 0.005")</b>
UL 723 - Unbonded		
• Flame spread	40	35
• Smoke developed	15	15
UL 723 - Bonded*		
• Flame spread	5	5
• Smoke developed	0	5
CAN/ULC S-102 - Unbonded		
• Flame spread	45	40
• Smoke developed	5	5

\* Bonded to an Inorganic Reinforced Cement Board with Borden chemical RS-224 adhesive in accordance with instructions accompanying the adhesive.

## **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](http://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")