

ARBORITE® FIRE RETARDANT LAMINATES

General

Arborite® high pressure laminate with fire retardant 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 retardant laminates incorporate 3 additional performance features:

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

Limitations: Arborite® fire retardant laminates are non-postforming.

Certifications

30PL (0.032" ± 0.005")	GPPL (0.048" ± 0.005")	B3PL (0.028" ± 0.004")	BKPL (0.048" ± 0.005")	SOLID PHENOLIC (1/4" – 1 1/4")
<ul style="list-style-type: none"> ▪ UL/ULC ▪ Class 1/Class A 	<ul style="list-style-type: none"> ▪ UL/ULC ▪ Class 1/Class A 	<ul style="list-style-type: none"> ▪ UL/ULC ▪ Class 1/Class A 	<ul style="list-style-type: none"> ▪ UL/ULC ▪ Class 1/Class A 	<ul style="list-style-type: none"> ▪ UL ▪ Class 1
CAN/ULC S-102 The basic standard to investigate products in this category is UL723, "Test for Surface Burning Characteristics of Building Materials"	CAN/ULC S-102 The basic standard to investigate products in this category is UL723, "Test for Surface Burning Characteristics of Building Materials"	CAN/ULC S-102 The basic standard to investigate products in this category is UL723, "Test for Surface Burning Characteristics of Building Materials"	CAN/ULC S-102 The basic standard to investigate products in this category is UL723, "Test for Surface Burning Characteristics of Building Materials"	CAN/ULC S-102 The basic standard to investigate products in this category is UL723, "Test for Surface Burning Characteristics of Building Materials"
Transport Canada Board of Steamship Inspection. Certificate of Approval T.C.192.G1.174	Transport Canada Board of Steamship Inspection. Certificate of Approval T.C.192.G1.173	Transport Canada Board of Steamship Inspection. Certificate of Approval T.C.192.G1.176	Transport Canada Board of Steamship Inspection. Certificate of Approval T.C.192.G1.175	-
<ul style="list-style-type: none"> ▪ U.S. Department of Transportation United States Coast Guard 	<ul style="list-style-type: none"> ▪ U.S. Department of Transportation United States Coast Guard 	<ul style="list-style-type: none"> ▪ U.S. Department of Transportation United States Coast Guard 	<ul style="list-style-type: none"> ▪ U.S. Department of Transportation United States Coast Guard 	-

Performance Properties

	30PL (0.032" ± 0.005")	GPPL (0.048" ± 0.005")	B3PL (0.028" ± 0.005")	BKPL (0.048" ± 0.005")	SOLID PHENOLIC (1/4" - 1 1/4")
1. Unbonded					
▪ flame spread	10	20	40	35	-
▪ smoke developed	100-150	125	15	15	-
2. Bonded *					
▪ flame spread	0	0	5	5	-
▪ smoke developed	30	40	0	5	-
▪ flame spread	-	-	-	-	25
▪ smoke developed (not bonded or unbonded)	-	-	-	-	200
3. Bonded + ** to wood particleboard					
▪ flame spread	15	15	-	-	-
▪ smoke developed	20	25	-	-	-

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

*** bonded with Borden System II, Borden System III or Wilsonart Type II adhesives in accordance with the instructions accompanying the laminated plastic. #Nominal 3/8 in. thick or greater integrally treated wood particleboard bearing the Classification Marking of Underwriters Laboratories Inc. reading "Wood Particleboard" with Surface Burning Characteristics not in excess of 25 for flame spread and 25 for smoke developed.*

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 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) LD3-2000,” 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.

Available Surface Textures for Arborite® Fire Retardant Laminates

- 1) *Cashmere* - fine, matte texture with a slight sheen
- 2) *Diamond* – a fine beaded texture which minimizes smudges, finger marks and offers optimum scratch resistance.
- 3) *Gloss* – a flat texture with a high sheen
- 4) *Laqwood* – a slightly embossed woodgrain texture
- 5) *Velvatex* – a smooth furniture finish texture

TEXTURES	SURFACE GLOSS VALUE *
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
Gloss – a flat texture with a high sheen	90-110
Laqwood – a slightly embossed woodgrain texture	20-30
Velvatex – a smooth furniture finish texture	10-20

* CAN3-A172-M79

Standard Nominal Panel Thickness for Fire Retardant laminates:

<i>Decorative Laminate - Imperial Measure (in.)</i>	<i>Product Code</i>	<i>Metric measure (mm)</i>	<i>Thickness Tolerance</i>
0.048"	GPPL	1.2 mm	±0.005"/0.12 mm
0.032"	30PL	0.8 mm	±0.005"/0.12 mm

<i>Backing Grade Laminate – Imperial Measure (in.)</i>	<i>Product Code</i>	<i>Metric Measure (Mm)</i>	<i>Thickness Tolerance</i>
0.048"	BKPL	1.2 mm	±0.005"/0.12 mm
0.028"	B3PL	0.7 mm	±0.004"/0.12 mm

Standard Nominal Panel Thickness for Fire Retardant laminates:

<i>Solid Phenolic Core Panel</i> <i>Imperial Measure(in.)</i>	<i>Product Code</i>	<i>Metric Measure (Mm)</i>	<i>Thickness Tolerance</i>
1/4"	SF25	6.4 mm	±5% of thickness
3/8"	SF38	9.6 mm	±5% of thickness
1/2"	SF50	12.7 mm	±5% of thickness
5/8"	SF63	15.9 mm	±5% of thickness
3/4"	SF75	19.0 mm	±5% of thickness
1"	F100	25.4 mm	±5% of thickness
1 ¼ "	F125	32.0 mm	±5% of thickness

Standard Panel Sizes for Fire Retardant laminates:

<i>DECORATIVE LAMINATE</i>	
<i>Imperial Measure (in.)</i>	<i>Metric measure (mm)</i>
4' x 8'	1220 mm x 2440 mm
5' x 12'	1525 mm x 3660 mm

<i>BACKING GRADE LAMINATE</i>	
<i>Imperial Measure (in.)</i>	<i>Metric measure (mm)</i>
4' x 8'	1220 mm x 2440 mm
5' x 12'	1525 mm x 3660 mm

<i>SOLID PHENOLIC CORE PANEL</i>	
<i>Imperial Measure (in.)</i>	<i>Metric measure (mm)</i>
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

Care and 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.

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.