

Pionite®

Markerboard Laminate

Product Identification

Pionite Markerboard Laminate provides a nonabsorbent, dry erase compatible surface suitable for a variety of applications for boardrooms, schools, clinics and hospitals. Type MB1 (.048”) and MB2 (.028”) are vertical grade laminates intended for non-postforming, low abrasion applications. Markerboard laminate should not be used in horizontal applications.

Product Composition

Pionite Markerboard Laminate is manufactured in a flat press by combining decorative papers saturated in melamine resin with phenolic-impregnated kraft layers at pressures exceeding NEMA specifications of 750 psi (5.17 MPa) and temperatures approaching 300° F (150 °C). The panels are trimmed to size and the backs are sanded to facilitate bonding. The thickness of the laminate is determined by the number of kraft layers used. The Markerboard surface layer has been designed to be non-absorbent and dry erase compatible.

Product Description

Standard Nominal Sizes*

Type	Thickness	Width	Length	Colors
MB1 (in)	0.048	36, 48, 60	96, 120, 144	Black, Gray, Frosty White,
	(mm)	1.2	914, 1219, 1324	3438, 3648, 3658
MB2 (in)	0.028	36, 48, 60	96, 120, 144	Black, Gray, Frosty White,
	(mm)	0.7	914, 1219, 1324	3438, 3648, 3658

*Additional light colors available upon request. Please consult your Pionite representative for details.

Finish

Pionite Markerboard Laminate is stocked in a Gloss (G) finish. This is a high gloss finish with a 60 degree gloss meter reading of 100 ± 10 gloss units.

Fabrication and Assembly Tips

When working with Markerboard laminate, these techniques will produce a quality application.

1. Proper conditioning of the laminate, substrate, and backing sheet minimizes possible warping, shrinking, or expansion of assembled panels. Ideally, all components should be conditioned at 70° F to 75° F (21 °C to 25 °C) and 45 to 50 percent relative humidity for 48 hours prior to assembly.
2. The substrate must be smooth and free of irregularities and loose particles.
3. Always bond laminate to a suitable substrate such as medium to high density fiberboard, particleboard, or metals. It should not be glued directly to plaster walls, gypsum wallboard, or concrete.
4. Recommended adhesives include solvent or water-based contact cement, white glue (PVA), and epoxy. Consult your adhesive supplier for specific application requirements.
5. The use of a backing sheet is recommended to minimize warpage. The thickness of the backing sheet should be equal to the thickness of the decorative laminate on the face of the assembly.
6. All saw blades and router bits used for cutting should be carbide tipped. Feed rate should be slow and tool speed should be high. To minimize the development of surface scratches caused by router bits, lubricating the laminate edge with a wax stick is recommended prior to tooling..
7. All edges of laminate should be filed smooth with file direction towards substrate to help prevent stress cracks and to minimize chipping.
8. When nails or screws must be used, it is advisable to first drill an oversized hole through the laminate. This reduces the likelihood of stress cracks.
9. All laminate is intended for interior use only and should not be exposed to extreme humidity, continuous sunlight, or temperatures above 275° F (135 °C) for extended periods of time.

Technical Information

Physical Properties

TEST		NEMA LD 3-1995 Test Method	Typical Pionite Values MB1	NEMA STD. HGS	Typical Pionite Values MB2	NEMA STD. VGS
Thickness	(in.) (mm)		0.048 +or- 0.003 <i>1.2 +or- 0.080</i>	0.048 +or- 0.005 <i>1.2 +or- 0.12</i>	0.028 ± 0.003 <i>0.7 +or- 0.10</i>	0.028 ± 0.004 <i>0.7 +or- 0.10</i>
Appearance		3.1	Complies		Complies	
Light Resistance		3.3	Slight effect	Slight effect	Slight effect	Slight effect
Cleanability		3.4	13	20 (max)	13	20 (max)
Stain 1-10			No Effect	No Effect	No Effect	No Effect
Stain 11-15			No Effect	Moderate Effect	No Effect	Moderate Effect
Boiling Water Resistance		3.5	No Effect	No Effect	No Effect	No Effect
High Temperature Resistance		3.6	Slight Effect	Slight Effect	Slight Effect	Slight Effect
Ball Impact Resistance	(in) (mm)	3.8	55 <i>1397</i>	50 (min.) <i>1270 (min.)</i>	30 <i>762</i>	20 (min.) <i>508 (min.)</i>
Radiant Heat Resistance	(sec.)	3.10	150	125 (min)	75	80 (min.)
Dimensional Change		3.11				
Machine Direction	%		0.25	0.50 (max)	0.40	0.70 (max.)
Cross Direction	%		0.70	0.90 (max)	0.80	1.20 (max.)
Room Temperature		3.12				
Dimensional Stability						
Machine Direction	%		0.15	0.5 (max)	0.18	0.6 (max.)
Cross Direction	%		0.40	0.8 (max)	0.37	1.1 (max.)
Wear Resistance	(cycles)	3.13	700	400 (min.)	700	400 (min)

Care and Maintenance

Pionite Markerboard laminate can be cleaned using a felt or multi-purpose board eraser. When additional cleaning is needed the laminate can be cleaned using over the counter markerboard cleaning solutions or a solution of alcohol and water. Markerboard has a high gloss finish so abrasive cleaners that may scratch the surface are not recommended.

After extended use solvents from dry erase markers may form a film on the Markerboard surface creating a ghosting effect. A similar effect may occur if the marker is erased before it is completely dry. Additional causes of ghosting may be adhesive residue left behind by protective peelcoat, tapes and post papers. Ghosting caused by the mentioned conditions can be removed with proper cleaning procedures.

Marks left by inadvertent use of a permanent marker can often be removed by tracing over the mark with a dry erase marker then immediately wiping off both inks. Permanent marker can also be removed using nail polish remover.

Many commercially available products contain substances that may damage or discolor a laminate surface. **ABRASIVE CLEANERS SHOULD NOT BE USED.** Particular care should be used with any products labelled CAUTION or WARNING. Any questions or concerns should be referred to the product's manufacturer or call 1-800-PIONITE. Do not allow harsh materials to remain in contact with the laminate surface. Examples of these are as follows:

Toilet bowl cleaners	Chlorine bleach
Hydrogen Peroxide	Coffee pot cleaners
Oven cleaners	Hard water stain removers
Drain cleaners	Fruit and berry juice
Metal cleaners and polishes	Tub and tile cleaners

Limited Warranty

Subject to the limitations set forth below, Pionite® Decorative Surfaces expressly warrants that our products are reasonably free of defects in material and workmanship, and when properly handled and fabricated will conform, within accepted tolerances, to applicable manufacturing specifications as set forth in our technical brochure. This warranty shall extend to the original buyer for a period of twelve (12) months from the date of shipment of this product by Pionite® Decorative Surfaces, and shall not be assignable by the original buyer. This warranty does not cover damage resulting from accident, misuse, alteration, abuse or lack of reasonable care.

Due to the variety of uses and applications to which this product may be put, and because the manufacturer has no control over the end products fabricated, the warranty set forth above is exclusive and in lieu of all other warranties, express or implied, in fact or by operation of law or otherwise, or arising by course of dealing or performance, custom or usage in the trade, including, without limitation, the implied warranties of fitness for a particular purpose and merchantability, and Pionite® Decorative Surfaces shall have no obligation or liability to any person or entity in connection with or arising from the furnishing, sale, installation or repair, use or subsequent sale of any product supplied by it.

The buyer's sole and exclusive remedy for any noncompliance with the express warranty set forth above shall be limited to repair or replacement of the defective product, or, in the event that repair or replacement is not feasible, return of the product and refund of the purchase price.

Under no circumstances shall the manufacturer be liable in excess of the purchase price of this product, in either tort or contract or otherwise, for any loss, damage or injury in connection with or arising from the purchase, use, or inability to use this product, or for any special, indirect, collateral, incidental, consequential or exemplary damages such as, but not limited to, loss of anticipated profits or other economic loss. Because some states do not allow the exclusion or limitation of incidental or consequential damages, this limitation may not apply to you.

Retaining all documentation after purchasing laminate will significantly expedite claim resolution.