

# Magnetic Marker Board Laminate



Test	Test Type	Result
Hardness:	ASTM D-785	85 HDE(Rockwell)
Light Fastness:	EN 438	5
Wear Resistance:	EN 438	553 Revolutions
Staining:	EN 438	No marks, rating 5 in groups 1 -3
Gloss:	Gardner 60	112
Colors:	White is stocked Other colors available upon request	
Sizes:	4'x 8' currently	

Decotone Surfaces  
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[www.decotonesurfaces.com](http://www.decotonesurfaces.com)



Excellent Erasable Surface

Excellent Magnetic Strength

Easy to Fabricate

Great for Offices, Schools, & Residential use





Specification Information

## **Decotone Magnetic Marker Board Laminate**

Phenolic Backed Decorative Laminates

2011

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### **Decotone Magnetic Marker Board Laminate**

#### **1. Product Identification:**

Decotone Magnetic Marker Board High Pressure Laminate (HPL)

**2. General Description:** **Decotone Magnetic Marker Board Laminates** are composed of a layer of Melamine Saturated decorative paper, a layer of thin iron foil bonded to several layers of phenolic impregnated Kraft paper. The backside of the laminate is sanded to ensure uniform bonding and consistent thickness.

- **Sheet sizes:** 4' x 8'
- **Thickness Available:** 1.0mm thickness (.040")
- **Recommended Uses:** **Decotone Magnetic Marker Board Laminates** are recommended for interior vertical applications. Possible uses are wall coverings, class rooms, office furniture, children's furniture or any area that needs a high quality writable surface with magnetic properties.
- **Not recommended for:** Areas exposed to high temperatures, or exterior use.

**4. Installation:** **Decotone Magnetic Marker Board Laminates** can be bonded to the following substrate material. Plywood, MDF Board, or Particle Board. Typical contact adhesives or white wood glue can be used. Contact adhesive is recommended. Material should be installed in conformance with basic techniques outlined by NEMA LD-3 for high pressure laminate; or as recommended by your adhesive manufacture.

**5. Balancing:** We recommend that all **Decotone Magnetic Marker Board Laminates** adhered to a substrate should be balanced with a 1.0mm to 1.2mm thick Decotone Phenolic backer on the opposite side of the substrate to help ensure a proper balance to keep finished boards flat.



# Decotone Surfaces

**Cutting and Tooling:** Please note that safety precautions must be taken during cutting and tooling when cutting Magnetic Marker Board Laminate. Sparking can occur during cutting and edge tooling of Decotone Magnetic Marker Board Laminates. Cutting Magnetic Marker Board Laminate adhered to a substrate, or cutting with the laminate face down or sandwiched between 2 carrier boards will reduce the chance for sparks.

## **Cutting Specifications:**

Circular Saw

Blade Diameter      203.2 to 355.6 mm (8 to 14 in.)

Speed per min.      2438 to 4572 m (8000 to 15000 ft.)

Carbide Tip blades are recommended for cutting Magnetic Laminates. Specific Blades for cutting thin sheet metal can also be used.

Material should be supported near the point of blade contact to avoid vibration that causes chipping. Feeding the laminate into the blade at a rate only as fast as it will cut without forcing the saw. Teeth should be kept sharp at all times.

## **6. Routing:**

Routing may be done with electric or air powered routers. Cutters should be carbide tipped. The speeds recommended are similar to those used in standard laminate cutting practices.

Router speed should be 16000 to 22000 rpm. It is important to use a router having adequate horsepower to maintain cutting speeds (based on the type and amount of material to be cut). For unique edge trimming, very high speed routers are available which produce smooth-edge chip-free work.

Sharpness of the router cutters should always be maintained.

**7. Safety and Proper Handling:** Safety precautions should be considered with proper handling and machining in regards to dust extraction, dust collection and fire precautions.

Protective gloves and safety goggles should be used during machining in order to protect eyes and hands from sparks or sharp edges.



# Decotone Surfaces

**8. Care and Maintenance: Decorative Laminates** should be cleaned with a particle free, clean, non-abrasive, damp cloth. Mild soap and water or mild liquid detergent can be used. **Do not use:** Solvents, abrasive cleaners, steel wool, powder soap, harsh chemicals, acids or alkaline cleaners. These products may cause scratching and/or surface discoloration.

**9. Ghosting:** Decotone's Magnetic Marker Board Laminates and Decotone's regular Marker Board Laminates are produced using Decotone's unique Marker Board formulation which Makes Decotone's Marker Boards the highest quality erasable non ghosting marker board surfaces on the market.

**10. Material Warranty:** Decotone LTD warrants that its products are reasonably free of defects, when properly used in accordance to the standards set forth by NEMA LD-3. This warranty is valid for a period of one year from purchase date and is limited to the value of the material purchased. This warranty is extended to the original buyer, and shall not be transferable to any person or entity. Decotone does not assume liabilities arising from the sale, installation, furnishing or repair of finished goods. This warranty does not include damages resulting from accidents, abuse, lack of care, or improper use and installation.

**Decotone Magnetic Marker Board Laminate (Page 1) – October 2011**

<b>Characteristics</b>	<b>Test method</b>	<b>Tested Value</b>	<b>Required Value</b>
Thickness	EN 438-2 section 5	0.95 mm	1.0 ≤ t ≤ 2.0 mm : ± 0.15 mm For thickness above 3 mm : according to customer demmand
Density	ISO 1183 - 1	1.4	Min. 1.35 ± 0.05 Kg/m <sup>3</sup>
Wear Resistance	EN 438-2 section 10		
	HGS	289 553	Initial Point ≥ 150 Rev. Wear Value ≥ 350 Rev.
	VGS	73 183	Initial Point ≥ 50 Rev. Wear Value ≥ 150 Rev.
Scratch Resistance	EN 438-2 section 25		
	VGS	3 N	Min. 2 N
	HGS	3.5 N	Min. 3 N
Impact Resistance	EN 438-2		
	Small Ball section 20		
	VGS	20 N	Min. 15 N
	HGS	25 N	Min. 20 N
	Big Ball section 21		
	VGS	3.8 mm	Drop Height Min 600 mm Indent Diameter Max 10 mm
	HGS	4.6 mm	Drop Height Min 800 mm Indent Diameter Max 10 mm
Surface Crack @ 80°c 20 Hours	EN 438-2 section 23		
	HGS , VGS	Rating 4	Min. Rating 4
Resistance to Dry Heat at 180°c	EN 438-2 section 16		
	HGS , VGS		
	Glossy Surface Finish	Level 4	Min. level 3
	Other Surface Finish	Level 5	Min. level 4
Resistance to Water Vapor	EN 438-2 section 14		
	HGS , VGS		
	Glossy Surface Finish	Level 4	Min. Level 3
	Other Surface Finish	Level 5	Min. Level 4
Resistance to Boiling Water	EN 438-2 section 12		
	Glossy Surface Finish	Level 4	Min. Level 3
	Other Surface Finish	Level 5	Min. Level 4
Resistance to Cigarette Burn	EN 438-2 section 30		
	HGS , VGS	Level 4	Min. Level 3
Resistance to Staining	EN 438-2 section 26		
	HGS , VGS		
	Group 1 + 2	Level 5	Min. level 5
	Group 3	Level 5	Min. level 4

**Decotone Magnetic Marker Board Laminate Page ( 2 )**

<b>Characteristics</b>	<b>Test method</b>	<b>Tested Value</b>	<b>Required Value</b>
<b>Flatness</b>	<b>EN 438-2 section 9 HGS , VGS</b>	<b>34 mm / 1 m Length</b>	<b>Max. 60 mm / 1 m Length</b>
<b>Light fastness</b>	<b>EN 438-2 section 27<sup>(1)</sup> HGS , VGS  Grey Scale<sup>(4)</sup></b>	<b>Level 5</b>	<b>Min. level 4</b>
<b>Dimensional stability at elevated temperature ( 70°c ; 90% RH )</b>	<b>EN 438-2 section 17 HGS  VGS</b>	<b>L = 0.18% T = 0.36%  L = 0.28% T = 0.78%</b>	<b>L : Max. 0.55% T : Max. 1.05%  L : Max. 0.75% T : Max. 1.25%</b>
<b>Flexural Strength</b>	<b>EN ISO 178 EDS , EDF</b>	<b>114 MPa</b>	<b>Min. 80 MPa</b>
<b>Flexural Modulus</b>	<b>EN ISO 178 EDS , EDF</b>	<b>16,522 MPa</b>	<b>Min. 9000 MPa</b>
<b>Tensile Strength</b>	<b>EN ISO 527 – 2 EDS , EDF</b>	<b>85 MPa</b>	<b>Min. 60 MPa</b>
<b>Coefficient Of Linear Thermal Expansion ( COTE )</b>	<b>ASTM D696-08<sup>(3)</sup></b>	<b>6.0 x 10<sup>-6</sup> mm / mm °c</b>	<b>---</b>
<b>Rockwell Hardness</b>	<b>ASTM D785-08</b>	<b>HRE 85</b>	<b>---</b>
<b>Gloss Level Gerdner 60°</b>	<b>---</b>	<b>112</b>	<b>---</b>

**Remarks :**

@ HGS = Horizontal Grade Standard Laminate

@ VGS = Vertical Grade Standard Laminate

@ During Handling , processing and fabrication all safety precautions should be taken .  
For more information please refer to Decotone HPL MSDS .

# MSDS - MATERIAL SAFETY DATA SHEET

Jan-11

## SECTION I - CHEMICAL PRODUCT AND COMPANY INFORMATION

**Specific Name** High Pressure Decorative Laminate (HPL)  
**Trade Name** Decotone Surfaces High Pressure Decorative Laminates / Magnetic Marker Board Laminates  
**Material Uses** Decorative Laminates for Vertical and Horizontal Indoor use.  
**Company Name** Decotone Surfaces 544 South Ave. Garwood, NJ 07027  
**Emergency Telephone Number** (800)424-9300( USA )

## SECTION II - HAZARDS IDENTIFICATION

**Physical State** Solid (Sheet)  
**ROUTES OF ENTRY :** The potential routes of entry are eye and skin contact, inhalation and ingestion.  
**Eyes** Dust may cause mechanical irritation to the eye.  
**Skin** Dust may cause mechanical irritation, any sharp edges will cut or abrade the skin.  
**Inhalation** Inhalation of dust will produce irritation to the respiratory tract, characterized by sneezing and coughing.  
**Ingestion** Not an expected route of entry.  
**HEALTH HAZARDS ( Acute and Chronic ) :** This product is not hazardous in normal use , During fabrication operations ( such as sawing , drilling , routing, sanding ) dust, consisting of cured resin and cellulose , and minute amounts of Formaldehyde are generated at cutting face .

## SECTION III - FIRST AID MEASURES

**Eye contact** DUST PARTICLES : In case of eye contact , rinse immediatly with plenty of water , If irritation persists , seek medical attention .  
**Skin contact** DUST PARTICLES : May cause skin sensitization . Wash contaminated skin with soap and water .  
**Inhalation** Repeated or prolonged dust inhalation may lead to chronic respiratory irritation. Allow the victim to rest in a well ventilated area. If irritation persists, seek medical attention.  
**Ingestion** Not applicable

## SECTION IV - FIRE AND EXPLOSION DATE

### FLASH POINT ( Not Applicable )

**EXTINGUISHING MEDIA** : This material is considered a " **CLASS B (II)** " type combustible material, use water spray, carbon dioxide or dry chemical foam to extinguish flames. Use water to keep cool and prevent rekinding, wear self - contained positive pressure breathing apparatus and full fire fighting protective clothing .

### EXPLOSION HAZARDS:

Machine sawing , routing , and / or sanding of this product produces a CLASS ST-1 dust, Safety precautions ( and proper ventilation ) as recommended by NFPA-68 for CLASS ST-1 dust should be followed to prevent this or any Class ST-1 dust from presenting an explosion hazard.

### FIRE :

Fire Rated laminate is recommended for interior application where fire codes specify or the environment suggests a fire - resistant and smoke-resistant surface , This laminate was tested in accordance with ASTM E-84 " Standard Test Method for Surface Burning Characteristics of Building Materials " The 25 - foot tunnel method is also described by NFPA 255 ( National Fire Protection Agency) .

The results of flame spread 26 ( 26-76) and smoke developed 80 (0-400) Compliance fire codes of the NFPA , **meets Class B ( Class II )** . Class A,B,C Correspond to I,II, and III respectively in other codes such as BBC ( Basic Building Code ) , UBC ( Uniform Building Code ) , SSBC ( Southern Standards Building Code ) . this results T-10718 was certificaded by HPVA ( Harwood Plywood and Veneer Association , P.O. Box 2789, Reston , Virginia 20195 U.S.A ) - **Class A (Class 1) is available upon request**

## SECTION VI - PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>molecular weight</b>	Not Available
<b>Boiling Point</b>	Not Available
<b>Melting point</b>	Not Available
<b>specific gravity</b>	Not Applicable
<b>vapor pressure</b>	Not Applicable
<b>vapor density</b>	Not Applicable
<b>volatility</b>	Not Applicable
<b>odor</b>	Odorless
<b>color</b>	Varies
<b>Taste</b>	Not Available

## SECTION VII - STABILITY AND REACTIVITY

<b>Stability and Reactivity</b>	The product is stable
<b>Conditions of Inestability</b>	None
<b>Incompatibility with various substances</b>	Not considered to be reactive
<b>Hazardous Decomposition Products</b>	Products of combustion include: Carbon Oxides (CO;CO2)
<b>Hazardous Polymerization</b>	Will not occur

## SECTION VIII - TOXICOLOGICAL AND ECOLOGICAL INFORMATION .

<b>Toxicity to Animals</b>	This product has not been tested for animals effects
<b>Chronic Effects on Humans</b>	No additional information.
<b>Other Toxic Effects on Humans</b>	No additional information
<b>Special Remarks on Other Toxic Effects on Humans</b>	Asthmatic conditions may be agravated by uncontrolled airborne dust exposures.
<b>Ecotoxicity</b>	Not available
<b>DBO5 and COD</b>	Not available
<b>Mobility</b>	Not available
<b>Toxicity of the Products of biodegradation.</b>	Not available .



## SECTION IX - PRECAUTIONS FOR SAFE HANDLING AND USE .

**IN CASE MATERIAL IS RELEASED OR SPILLED** : This material is non - Hazardous. Sweep up / pick up scrap material and place disposal containers, dust may be burned for energy recovery or disposed in an approved sanitary landfill, This product is non - hazardous under RCRA ( Resource Conservation and Recovery Act ) .

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE** : Laminates may have sharp edges , Safety glasses, gloves and safety shoes be worn when handling or machining laminates to prevent cuts and abrasions .

**OTHER PRECAUTIONS** : Maintain adequate ventilation to keep airborne concentrations of dust below the exposure limits .

## SECTION X - TRANSPORT INFORMATION .

**DOT ( department of transportation )** Not a DOT controlled material ( United States ) .

**Marine Pollutant** Not a Marine Pollutant.

**Special Provisions for Transport** Not applicable.

## SECTION XI - OTHER REGULATIONS .

**HCS ( Hazard Communication system )** . Not controlled under the HCS ( United States ) .

**State Regulations** California Prop . 65 : **WARNING** : This product contains formaldehyde , a Substance known to the state of California to cause cancer .

## NOTICE TO READER .

To the best of our knowledge, the information contained herein is accurate , but is not constructed as a warranty.