



Magnetic Laminates Technical Data Sheet

Laminex™ magnetic laminates are high pressure laminates with a decorative face and an embedded metal foil layer that ensures magnetic objects will hold strongly to the laminate surface.

This feature provides a unique product that delivers a large scale magnetic surface. It can also provide a surface that can be written on and easily cleaned to serve a variety of vertical wall and panel installations.

Applications

Laminex™ magnetic laminates are ideal for a range of vertical surfacing options where magnetic surfaces are required, writeable and cleanable surfaces are sought, or a combination of both.

Specific applications based on the surface finishes are:

- Glossy White - whiteboards, meeting room, writeable walls, classroom walls for displaying drawings, pictures and/or writing on the wall, residential applications for writeable splashbacks, such as laundries.

Product Characteristics	
Size	2440 x 1220mm, 3050 x 1220mm
Nominal thickness	1.0mm
Weight	2.8kg/m ² approx

Properties

Notes

- Only recommended writing materials and cleaning procedures should be used (see Care & Maintenance section of this document).
- Laminex™ magnetic laminates are only suitable for vertical applications. They are not recommended for heavy usage applications, such as worktops, bars and tables.

Warning: Due to the embedded metal foil that ensures a magnetic capability, fabricating of the laminates will most likely create sparks. Please take necessary safety precautions as set out within the Fabrication Guidelines section of this document. Due to the metallic inclusion all electrical fittings/attached appliances need to meet electrical industry earthing standards.

Fire performance

The Group Number Classifications are generated from tests carried out and data recorded in accordance with the test procedure described in ISO 5660 2002 - Reaction to Fire test - Part 1: Heat Release & Part 2: Smoke Production Rate, for the purpose of determination of the Group Classification in accordance with the New Zealand Building Code Verification Method C/VM2 Appendix A. Group Number Classification - 3

(Typical physical properties when tested to AS/NZS 2924.1 - VGS grade)

Resistance to surface wear	>550	Revolutions
Resistance to impact (small ball)	>35	N
Resistance to scratching	>1.5	N
Resistance to staining	No effect	Visual appraisal (Groups 1-4)
Resistance to colour change - Glossy White - Matt Black	Very slight effect No effect	Grey scale Grey scale
Dimensional stability at elevated temperature	0.08 0.12	% (longitudinal direction) % (transverse direction)
(Typical physical properties when tested to EN 717-1): Formaldehyde Emissions	0.02	mg/m ³
(Typical emissions when tested to AS™ D5116): VOC Emissions	0.024*	mg/m ² /hr

*Conforms to NZ Green Building Council Green Star Office Interiors 2009 IEQ-3 limit of <0.5mg/m²/hr.

Laminex™ Laminate Magnetics

When specifying

“Vertical surfacing shall be Laminex™ magnetic laminates as supplied by Laminex New Zealand®. Colour/Finish shall be

Care and maintenance

Laminex™ magnetic laminates can be cleaned with non-abrasive or non-harsh alkaline cleaning agents. Do not use abrasive scourers and cleaners, even those in liquid form, as these may permanently reduce the stain resistance of the surface.

These laminates should only be cleaned using a soft, moist cloth or moist chamois and then dried with a soft dry cloth. Before the first use, peel off the protective plastic film and clean the surface with IPA to remove any adhesive residue.

Glossy finish

Suitable for marking with whiteboard markers (not permanent markers). Once dry, these markings can be wiped off using a clean soft dryboard eraser or soft cloth, such as a microfibre cloth.

There is no guarantee that Laminex™ magnetic laminates can always be cleaned so that they are completely free of residue or markings, because the use and quality of marker pen is beyond our control. The age, operating time and storage of board markers have a big impact on the cleaning result. Please check the recommendations by the manufacturers of the marker pen before use.)

For a thorough cleaning, we recommend the use of Isopropyl Alcohol (IPA) and a soft cloth or microfibre cloth.

Storage

Laminex™ magnetic laminates must be stored in an area closed off from external conditions, kept dry at room temperature and with a relative humidity around 50–60%. Sheets must be stored horizontally and well supported with evenly spaced supports, at a distance of at least 200mm from the floor.

Protect the stored sheets from:

- Moisture or water
- Exposure to direct sunlight
- Hot air currents
- Direct exposure to heat, e.g. light bulbs or other heat sources. The surface temperature of the laminate sheet should not exceed 70°C.

Fabrication guidelines

Laminex™ magnetic laminates should be bonded to high quality substrates using cross linked PVA or contact adhesive and balanced by a laminate of the same thickness to the rear of the panel to minimise bowing.

DO NOT BOND DIRECTLY TO PLASTER, PLASTERBOARD OR CONCRETE

If using the glossy finish laminate take care to keep the glue line as smooth as possible to minimise any ‘telegraphing’ of uneven underlying surfaces through to the gloss surface. When using hot glues or adhesives the temperature should not exceed 60°C (140°F).

When pressing the laminate to a substrate, a thin protective soft layer (e.g. paper) should be placed on top of the decorative surface to protect it from damage.

Avoid excess glue coming into contact with the unprotected laminate surface. Use only sufficient pressure to ensure a good bond. Laminex™ magnetic laminates can be sawn, milled and drilled using good quality sharp carbide-tipped tools. Circular saws with a trapezoidal saw tooth pattern are suitable and the following guidelines are recommended:

- Minimum speed of 5,000rpm
- Feed rate of 4–5 metres/minute
- Avoid break out of the reverse side by using a pre-scoring blade to score the underside and avoid metal splinters and burrs
- When such scoring equipment is not available, a smooth fibreboard should be laid underneath the laminate during the cutting process.
- Typically blades suitable for cutting aluminium work well with Laminex™ magnetic laminates.

Warning: Fabricating this laminate material may create sparks. Please take care by using appropriate personal protective equipment, especially protective glasses or goggles. Please ensure that processing takes place with the disconnection of any dust extraction or exhaust system to avoid sparks entering these systems.

During cutting and machining a slight burring may occur on the new edge (Please take care and use personal protective equipment when handling cut sheets to avoid any chance of personal injury from sharp or burred edges.). This can be removed by careful use of a fine metal file. For best results finish filing with a downwards stroke.

Take care not to get any metal burrs on the surface of the laminate sheet and do not drag or slide sheets or boards over the laminate surface, so that any surface damage can be avoided.

Jointing

Where more than one panel is required the individual pre-fabricated panels will need to be installed over existing linings or direct to timber or steel framing with an expressed joint between. Jointing options include; negative detail, chamfered butt edge, aluminium jointers, and timber mouldings. Proprietary jointing systems.

Concluding statements

- Appropriate OH&S techniques and work practices are the responsibility of the fabricator.
- This information is intended as a guide and may not apply to all situations.
- The data in this TDS is believed to be accurate to the best of our knowledge, but users should carry out their own assessment of the product to satisfy themselves that it is suitable for their requirements.