

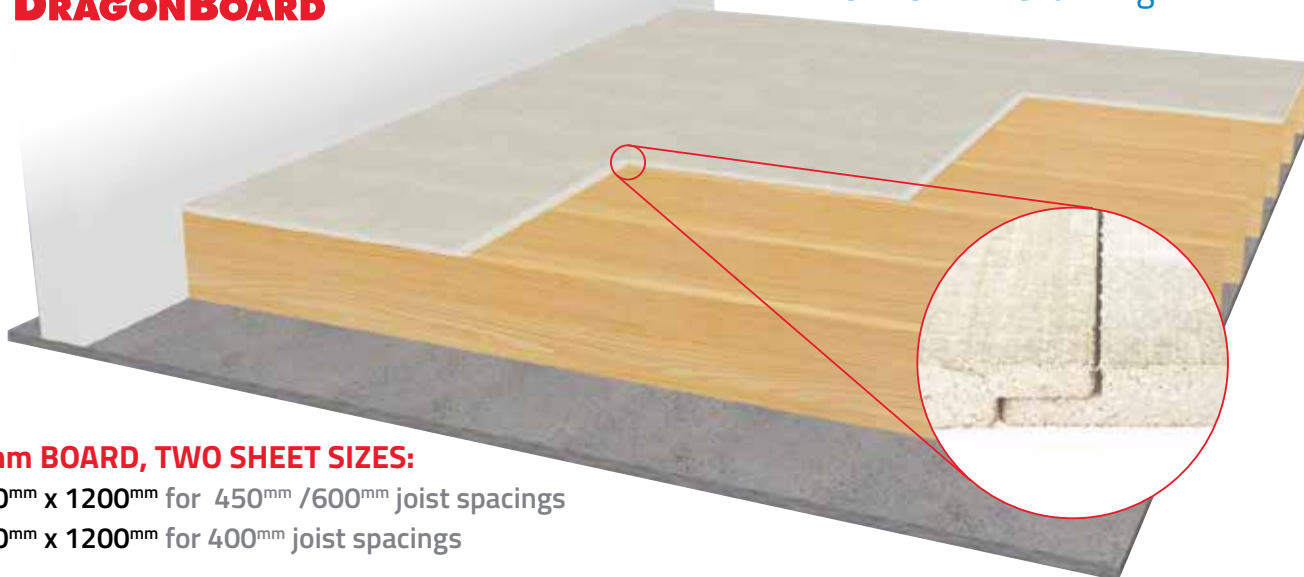
# MAGLOK™ DRAGONBOARD®

is an engineered "fit for purpose" fibre reinforced Magnesium (MgSo4) flooring board substrate.



**MAGLOK™**  
**DRAGONBOARD®**

- × NO MORE 400mm Joist spacings
- × NO MORE Nogs at 400mm centres
- × NO MORE Tile Underlay
- × NO MORE Pre-drilling



## 20mm BOARD, TWO SHEET SIZES:

1800mm x 1200mm for 450mm /600mm joist spacings

2000mm x 1200mm for 400mm joist spacings

## HANDS DOWN The best flooring substrate for wet areas



### NZ & AU CodeMark certified

Our product *Codemark CM40231-101-R01* has been classed as compliant for the following NZBC clauses: (1.) B1.3.1, B1.3.2 & B1.3.3 (a),(b),(f),& (H) - (2.) B2.3.1 (b) & B2.3.2 (a) – Durability (3.) F2.3.1 - Hazardous Building Materials



### No tile underlay required

Ready to finish



### Cost effective

Less than fibre cement, similar to treated structural ply



### Easy to lift, carry and install

Manageable sheets in two sizes:

- 20mm x 1800mm x 1200mm
- 20mm x 2000mm x 1200mm

Screw gun, shiplap edge = no noggings



### No hazardous materials\*

Calcium silica free, formaldehyde free, asbestos free. (\*Does contain fibreglass mesh for reinforcing.)



### Squeak-free

Possible screw and sheet friction does not result in a squeak as it can with wood substrates.\*



### Water resistant

Repels water and will breathe moisture out without losing any structural integrity



### Fire proof

Non-combustible, zero flame and smoke spread, 120/120 rated



### Mould and insect proof

Inert, inedible, non-toxic and hypoallergenic



### Greener

Very environmentally friendly to produce



### Diaphragm bracing capacity



### Accoustic Rated

Part of the Sound Down rated Accoustic Floor System. IIC 63db. STD 65db.

\*Creaking from nog/joist movement may not be eliminated by the installation of Maglok or wood substrates.

For sales and technical support, visit [www.maglok.co.nz](http://www.maglok.co.nz) or contact:

Lester Haycock ▪ 021 969 905 ▪ [lester@ljmarketing.co.nz](mailto:lester@ljmarketing.co.nz)

Maglok™ is a New Zealand trademark brand. Global Procurement Supplied Ltd is the New Zealand agent. Trade Innovations Ltd is the sole marketing agent. [www.tradeinnovations.co.nz](http://www.tradeinnovations.co.nz)

Dragonboard® is a US patented, UL approved fire resistant, water resistant, mould resistant, high impact interior and exterior construction panel. For further reference please visit :

[www.dragonboard.com](http://www.dragonboard.com)  
[www.dragonboards.ca](http://www.dragonboards.ca)

**SHEET SIZES AND COLOUR**

Color: Cream/white

**1800 x 1200 x 20mm**

Suitable for 600mm & 450mm joist spacings

**2000x 1200 x 20mm**

Suitable for 400mm joist spacings

**FRAMING GUIDELINES**

Maglok™ Dragonboard® to be installed on construction is accordance with the below NZS standards.

- **Construction of timber framing** must be in accordance with NZS 3604 – Timber-framed buildings
- **Construction of steel framing** must be in accordance with NZ standards

It is always advised that the level of supporting framing be checked prior to installation for accuracy to ensure a level platform to install the flooring.

Ensure nogs are firmly connected to the joists and are dry as this can cause floors to creak under load.

**INSTALLATION OF SHEETS**

Glue is only required on the shiplap joint, however to support joists and nogs constructed from solid timber that can be damp or wet during construction, it is suggested that the sheets are glued to the joists and any nogs to assist in reducing possible movement between the joist and nog that could result in a creak caused by fixings or tension between the joist and nog.

The 1800<sup>mm</sup> and 2000<sup>mm</sup> long sides of the sheets are ship lapped to avoid the use of nogs.

The ship lap is to be glued. Recommended glue is Gorilla Grip expanding polyurethane or Sika SuperGrip® 30 Minute expanding polyurethane.

The 1200<sup>mm</sup> ends of the sheets must be joined on the center of the joist.

Sheets are fitted SANDED SIDE UP. However, to save waste, to complete the floor the sheet can be reversed to accept the ship lap.

Sheets can be fitted to a square or staggered (brick pattern) layout, but must be staggered for tiled or vinyl finishes.

Where waterproofing is required, ensure butt joints have a 2mm cap between them. These are filled by the waterproofing system prior to the application of the primer and waterproofing membrane.

**DETAILED INSTALLATION SPECS FOR:**

- Water proofing and tile installation
- Vinyl sheeting installation
- Vinyl planks, cushion backed vinyl, timber flooring
- Carpet

Are available online: [www.maglok.co.nz](http://www.maglok.co.nz)

**FIXINGS & LOCATIONS**

Maglok™ Dragonboard® (MgSo4) does NOT require stainless fixings. Use corrosion protected cement board type fixings (grade3 galv).

**Fixing to timber** – Recommended Simpson Strong-Tie 8G x50mm WSNTLG2SA collated screws or single screws.

**Fixing to steel** – Recommended Simpson Strong-Tie 10G x50mm CBSDGL158SA collated screws

**Fixing for fire rated floors** – refer to technical information online at [www.maglok.co.nz](http://www.maglok.co.nz).

**Ensure Fixings are located:**

- 12mm min from all butt edges
- 50mm min min from corners and shiplap joint
- 200mm centers along all joists

**SITE STORAGE OF SHEETS**

Sheets should be kept under a cover if long periods between delivery and installation. Dry sheets are easier to lay and weigh less.

Like many materials, Maglok™ Dragonboard® will absorb moisture during construction. This will have no effect on the performance of the board and it will dry to its normal weight.

**SPAN & LOADING GUIDELINES**

**PHYSICAL CHARACTERISTICS**

Flexural modulus	7.51 X 10 <sup>6</sup> KPa	ASTM D6109
Flexural strength	7.205 X 10 <sup>3</sup> KPa	ASTM D6109
Compressive strength	2.07 X10 <sup>4</sup> KPa	ASTM C684
Shear strength	2.7 X 10 <sup>3</sup> KPa	ASTM D6109
Flamespread	0	ASTM E84
Smoke developed	0	ASTM E84
Smoke density	None	ASTM E662 not req.
Moisture content	8%	GB/T 160-1997 (China)
Impact resistance	2.237Nm	GB/T 7019-1997 (China)
Thermal insulation	R-value - 1.2/inch	GB/T 7019-1997 (China)
Fungus/mold	Non-nutrient	ASTM G21
Smoke	Nontoxic	ASTM E662

**LOAD FOR MAXIMUM ALLOWABLE STRESS**

Panel	305 <sup>mm</sup> oc	406 <sup>mm</sup> oc	610 <sup>mm</sup> oc
11.1 mm	65.404KPa	35.958KPa	16.088KPa
14.3 mm	124.920KPa	70.384KPa	70.384KPa

Above recommendations based on a maximum allowable flexural stress of 1000 psi.

**IMPACT TESTING**

Drop height	Unclamped edges	Clamped edges
12" (305 mm)	Hairline cracking	Hairline cracking
6" (152 mm)	Superficial cracking	Superficial cracking

**DISTRIBUTED LIVE LOADS**

Deflection	Joist Spacing			
	305 <sup>mm</sup>	406 <sup>mm</sup>	488 <sup>mm</sup>	610 <sup>mm</sup>
L/240	44.24KPa	18.817KPa	10.773KPa	5.267KPa
L/360	29.159KPa	12.305KPa	7.134KPa	3.878KPa
L/480	22.121KPa	9.241KPa	5.363KPa	2.969KPa

**PANEL SHEAR**

7/16" (11.1 mm) panel	461/foot
9/16" (14.3 mm) panel	646/foot
3/4" (19.1 mm) panel	1200/foot

Above recommendations based on a safety factor of 4. The use of a T-shaped spline 1/2" (12.7 mm) high with 1" (25.4 mm) wings on both sides is recommended for panels 9/16" (14.3 mm) thick, or heavier, used for subflooring. Contact Dragonboard® for suggested materials.

**RESPIRATORY AND EYE PROTECTION:** Wearing of dust masks, eye protection, and ear protection is recommended when cutting or drilling Maglok™ Dragonboard®. These should be used in compliance with the BCA and ASTM standards. **HAZARD:** Maglok™ contains fiberglass reinforcing mesh.