

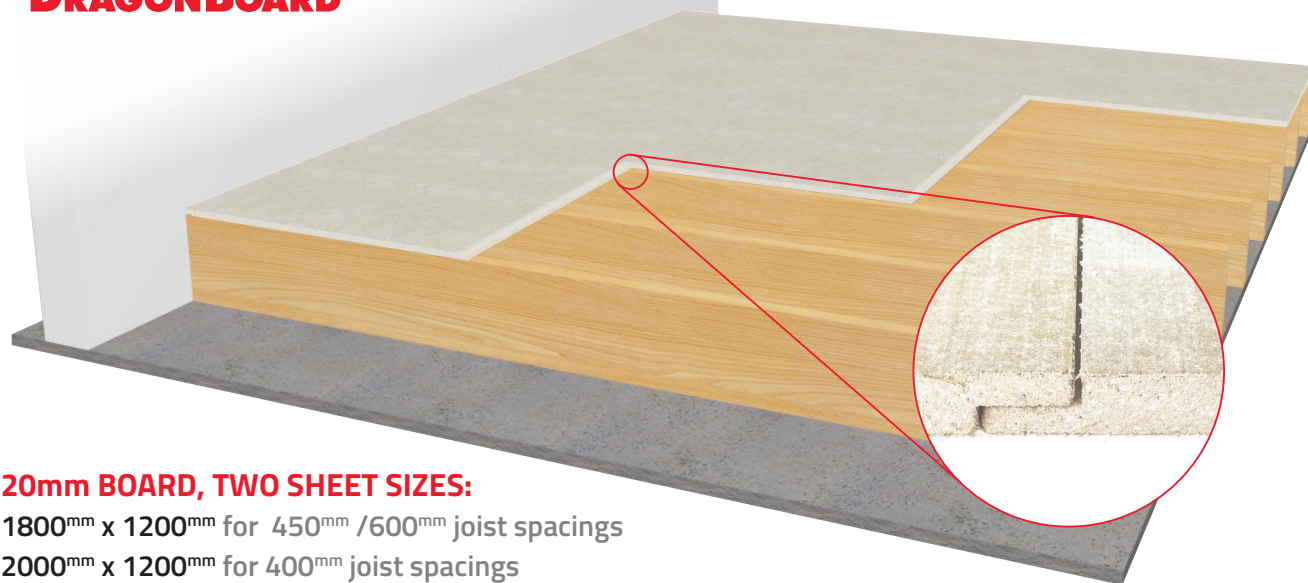
MAGLOK DRAGONBOARD®

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:


1800^{mm} x 1200^{mm} for 450^{mm} /600^{mm} joist spacings

2000^{mm} x 1200^{mm} for 400^{mm} joist spacings

HANDS DOWN The best flooring substrate for wet areas



NZ & AU CodeMark certified

Our product *Codemark CM40231-I01-R01* has been replaced by a  assured [assessment](#), no 19115. Having achieved both Code Mark and a PASS assessment to become NZ & AU code compliant, having both is deemed not necessary.



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:

- 20^{mm} x 1800^{mm} x 1200^{mm}
- 20^{mm} x 2000^{mm} x 1200^{mm}

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



Acoustic Rated

Part of the Sound Down rated Acoustic 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 or contact:
Lester Haycock ▪ 021 969 905 ▪ lester@ljmarketing.co.nz

Over 3 million m² of Dragonboard® has been installed globally since 2004

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

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
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^{mm} and 2000^{mm} 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 1 hour expanding polyurethane or Sika SuperGrip® 30 Minute expanding polyurethane. When gluing to STEEL joists, glue ship laps with Gorilla Grip 1 hour and also glue sheets to all joists using a 10mm bead of Gorilla 940FC

The 1200^{mm} ends of the sheets must be joined on the center of the joist.

Sheets can be fitted Smooth or Sanded Side Up. This way to avoid waste to complete the floor, the sheets 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

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.

Ensure Fixings are located:

12mm min from all butt edges
 50mm 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 ⁶ KPa	ASTM D6109
Flexural strength	7.205 X 10 ³ KPa	ASTM D6109
Compressive strength	2.07 X10 ⁴ KPa	ASTM C684
Shear strength	2.7 X 10 ³ 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 ^{mm} oc	406 ^{mm} oc	610 ^{mm} 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 ^{mm}	406 ^{mm}	488 ^{mm}	610 ^{mm}
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.