



Engineered Structural Fibreboard

ACHIEVES UP TO 6kN/m RACKING PERFORMANCE





Nailing Alpine Braceboard into place.

Alpine Braceboard

ENGINEERED STRUCTURAL FIBREBOARD

What is Alpine Braceboard?

Alpine Braceboard is a highly engineered structural fibreboard made in Australia, for Australian conditions.

Building Code of Australia (BCA) Compliance

Alpine Braceboard is engineered to comply with the bracing requirements of the Building Code of Australia (BCA). All Alpine Braceboard is manufactured in accordance with AS/NZS1859.2 specifically for Australian building and construction. Alpine Braceboard is designed to resist horizontal racking forces applied to buildings with cavity bracing in external wall frames and to resist uplift in braced wall systems. Alpine Braceboard is engineered with Moisture Resistant resin for enhanced durability and strength.

Termite Protected

Alpine Braceboard is available with H2 treatment that provides protection against all termite species throughout Australia and New Zealand.

Key Features

- Complies with BCA
- Tested and certified by the Engineered Wood Products Association of Australasia (EWPA)
- Performs in all weather conditions
- Strong and durable
- No cracking and splitting
- No splinters
- Surfaces are smooth and flush
- Easy to handle
- Uniform density
- Easy to cut
- FSC® Certified
- Australian Made
- Full range of sizes available with H2 treatment option

Design & Installation

Alpine Braceboard is a strong and durable, engineered wood panel with tightly controlled structural properties. Alpine Braceboard has uniform density, is free of knots and splinters and can be cut, drilled and sawn like regular solid wood.

Alpine Braceboard is suitable for use in humid conditions where the panel in-service moisture content does not exceed 20%. It is suitable for use within the cavity of a brick veneer building or under cladding throughout Australia. Do not butt joint Alpine Braceboard panels tightly together. Allow for hygroscopic movement with a minimum 2mm expansion gap around the full perimeter of the panel.

Timber framed walls should comply with government building regulations and AS1684. Framing members should be a minimum of MGP10 stress grade and joint strength group JD5. Stud spacing should not exceed 600mm centres for 1200mm sheets and 450mm centres for 900mm sheets.

For more details regarding technical or further installation information, please download manufacturers Technical Data Sheet available at www.gunneresen.com.au

For Alpine Braceboard systems detailed in this manual, use 2.8mm x 30/40mm flat head galvanised or corrosion resistant nails (or their gun nail equivalent) as specified in AS1684. Fastener edge distances along the top and bottom plates and edge studs should be to a minimum of 15mm and 8mm respectively where panels are fixed to internal framing.

Board Sizes

HEIGHT	WIDTH	
	900MM	1200MM
3050mm	•	•
2745mm	•	•
2440mm	•	•

Alpine Braceboard is 4.75mm thick and available with H2 Treatment in all sizes.

Quick Guide

SYSTEM	RACKING PERFORMANCE		NAIL SYSTEM		
	Stud Centres		Nails	Nail Spacings	
	450mm	600mm		Top/Bottom Plates	Studs
1	3.0 kN/m	3.0 kN/m	2.8 x 30mm	100mm	100mm
2	4.5 kN/m	4.0 kN/m	2.8 x 30mm	50mm	100mm
3	6.0 kN/m	-	2.8 x 40mm	40mm	100mm

The diagram illustrates the installation of Alpine Braceboard in System 1. It shows a cross-section of the board being fixed to a timber frame. Key details include: studs with a maximum center-to-center spacing of 600mm; top and bottom plates with a 100mm nail spacing; a 100mm nail spacing along the studs; a 2mm expansion gap around the full perimeter of the board; and a note that horizontal butt joints are permitted when the board is fixed to nogging at the same nail spacing as the top and bottom plates.

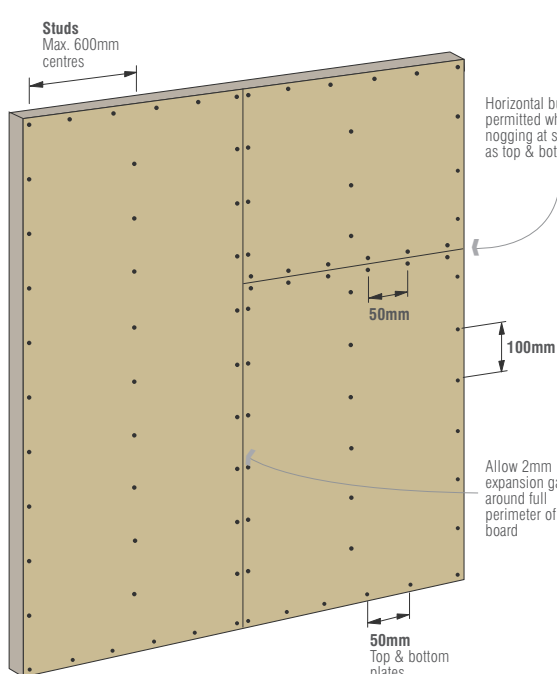
System 1

PERFORMANCE
Stud Centres
450mm - 3.0 kN/m
600mm - 3.0 kN/m

NAILS
Type
2.8 x 30mm (or gun equivalent)

Spacing
100mm - Top/Bottom plate
100mm - Along studs

Minimum section of Alpine Braceboard is 900mm. Allow 2mm expansion gap around full perimeter of board



Studs
Max. 600mm centres

Horizontal butt joints are permitted when board is fixed to nogging at same nail spacing as top & bottom plates

50mm

100mm

Allow 2mm expansion gap around full perimeter of board

50mm
Top & bottom plates

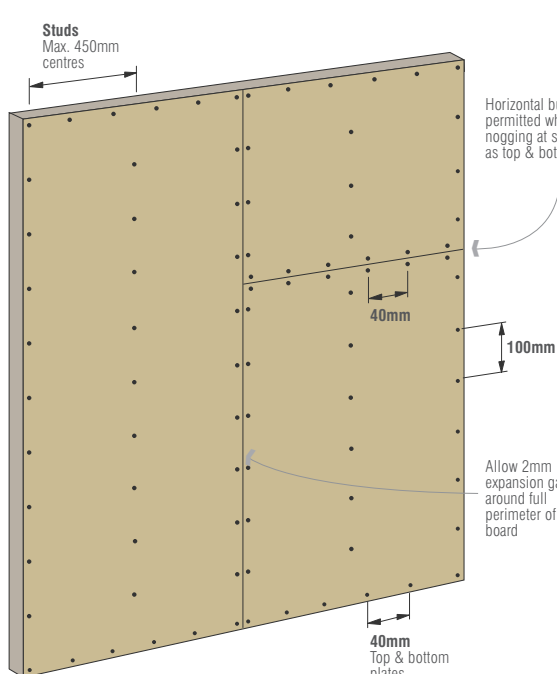
System 2

PERFORMANCE
Stud Centres
450mm - 4.5 kN/m
600mm - 4.0 kN/m

NAILS
Type
2.8 x 30mm (or gun equivalent)

Spacing
50mm - Top/Bottom plate
100mm - Along studs

Minimum section of Alpine Braceboard is 900mm. Allow 2mm expansion gap around full perimeter of board



Studs
Max. 450mm centres

Horizontal butt joints are permitted when board is fixed to nogging at same nail spacing as top & bottom plates

40mm

100mm

Allow 2mm expansion gap around full perimeter of board

40mm
Top & bottom plates

System 3

PERFORMANCE
Stud Centres
450mm - 6.0 kN/m

NAILS
Type
2.8 x 40mm (or gun equivalent)

Spacing
40mm - Top/Bottom plate
100mm - Along studs

Minimum section of Alpine Braceboard is 900mm. Allow 2mm expansion gap around full perimeter of board

Short Walls: All Alpine Braceboard systems can be used in a short wall application without any reduction in racking performances when M12 Rods are used at each end of the short wall section.

Short wall racking performance without the use of M12 Rods will achieve the following kN/m performances of each Alpine Braceboard system: $\geq 600\text{mm}$ to $< 900\text{mm}$ \rightarrow 40%
 $\geq 400\text{mm}$ to $< 600\text{mm}$ \rightarrow 20%



Cutting, Drilling, Shaping

Alpine Braceboard can be sawn and shaped in the same way as solid wood with standard wood working tools. Alpine Braceboard possesses similar shear carrying capacity to other sheet bracing materials and therefore holes of up to 100x100mm, not closer than 300mm from corners are allowable. Up to 4 small circular service holes are allowable within the envelope but their centres must not be closer than 600mm. No nogging is required for full height sheets unless being used for internal wall bracing to enhance the overlay of plasterboard lining.

Anchoring of bottom plates shall be in accordance with AS1684 or designed in accordance with AS1720.1

Storage & Handling

Correct storage and handling of Alpine Braceboard is essential to ensure problem free installation and to guarantee bracing resistance for each panel as specified in this design guide.

- Store Alpine Braceboard horizontally on square, equal height bearers spaced at a maximum of 800mm. The sheets must not be stored directly on the ground.
- Pack strapping should be removed immediately upon arrival at building site.
- Alpine Braceboard should be stored protected from direct exposure to the weather in a well ventilated area.
- 48 hours of acclimatisation to humidity conditions at the building site should be provided, particularly if the panels are used as internal bracing covered by plasterboard lining.

Structural Compliance Detail

The Building Code of Australia (BCA) is a performance-based code allowing innovation in building products and building systems. There are a number of defined methods of satisfying the

performance requirements of the BCA. The most common method of satisfying the BCA is to meet an Australian standard such as AS1720.1 Timber Structure – Design Methods and AS1684 Timber Framing. An alternative method allowed is an assessment method referred to as a comparison with the ‘deemed to satisfy’ standard.

Alpine Braceboard Equivalent to Structural Plywood

The Alpine Braceboard system, at specified nail patterns detailed in this literature, has been proven to have a racking strength at least equivalent to the 3.4kN/m structural plywood system detailed in the ‘deemed to satisfy’ standard in AS1684. The technical basis for this equivalency is as follows:

Alpine Braceboard racking resistance values have been derived from independent testing of full scale weathered and unweathered panels at the Engineered Wood Products Association of Australasia (EWPA) and the Central Queensland University.

Certification



Certification of structural performance and Approval of Preservative treatment for Alpine Braceboard

Pack Details

THICKNESS (mm)	LENGTH (mm)	WIDTH (mm)	PIECES PER PACK	AREA PER PACK (m ²)	WEIGHT / PANEL (kg)	WEIGHT / PACK (kg)
4.75	2440	900	110	242	9.2	1010
4.75	2440	1200	110	322	12.2	1339
4.75	2745	900	110	272	10.3	1135
4.75	2745	1200	110	362	13.7	1509
4.75	3050	900	110	302	11.5	1260
4.75	3050	1200	110	403	15.3	1679

For full manufacturers Technical Data Sheet (TDS), please visit www.gunnensen.com.au



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