

Technical Manual

International

PRIMA^{alpha} *Groove*

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PRIMA^α Groove

Designed to Attain Pure Luxury

Aesthetic Cladding | External Wall Cladding

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1 Product Description

PRIMA^{alpha}Groove is a fibre cement lining product, manufactured from Portland cement, finely ground sand, premium virgin Kraft softwood cellulose fibres, additives and water. The products are cured under high steam pressure autoclave to create durable, dimensionally stable properties.

PRIMA^{alpha}Groove lining is manufactured to conform to the requirements of AS/NZS 2908.2 Cellulose-Cement Products and is classified as Type B Category 3 for internal applications.

2 Product Applications

PRIMA^{alpha}Groove is used for internal wall, soffit and internal linings. It can be used on either timber or light gauge steel framed houses or buildings. It is ideal as a feature wall.



3 Product Features

PRIMA^{alpha}Groove lining has decorative v-shaped grooves carved into the sanded surface of the 7.5mm board as per Figure 1.

PRIMA^{alpha}Groove lining is tough and beautiful, with its superior durability, low maintenance, fire resistance and design flexibility, it is ideal as a feature wall.

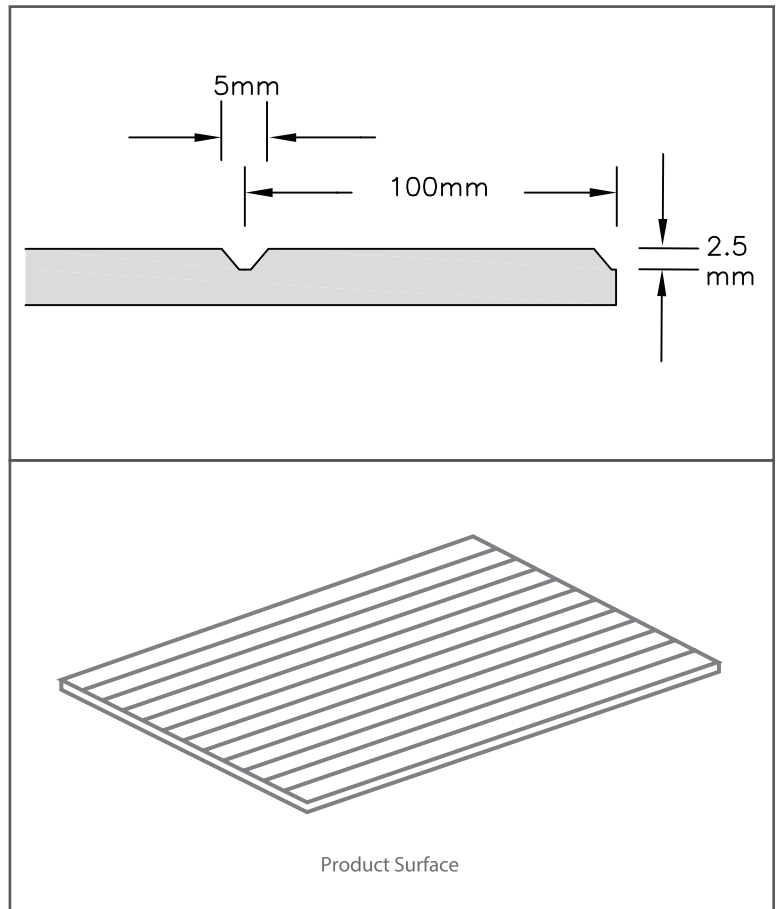


Figure 1: Product Details

4 Product Benefits

- Unique recipe for withstand harsh condition
- Aesthetic v-shaped grooves replicate traditional tongue and groove style
- Stronger and durable
- Light weight and nailability
- Ease workability and handle-ability
- Pre-primed boards, ready to paint
- Can be painted in any colour, even the darker shades
- Resistance to damage from moisture and rot
- Fire, Water, Weather and Termite Resistance
- Low maintenance
- Sheet edges have a half groove to achieve concealed sheet joints

5 Product Profiles

PRIMA^{alpha} Groove is available in sheet sizes as below:

Standard Sizes and Mass Per Sheet

Thickness (mm)	Width (mm)	Length (mm)	Mass, kg/m (est. at EMC)
7.5	1200	2400 2700	10.4

6 Material Properties & Composition

Properties	Values
Product Composition	Top Grade Cellulose Fiber Finely Ground Sand Portland Cement Water
Bending Strength (Saturation)	> 7 MPa (AS/NZS 2908.2)
Category	3
Type	A
Average Density (Oven Dry)	1300 kg/m ³ (AS/NZS 2908.2)
Dimensional & Geometrical Conformance	Passed (AS/NZS 2908.2)
Water Permeability	Passed (AS/NZS 2908.2)
Moisture Movement 30-90% relative humidity	0.05% (ISO 8336: 2009)
Heat-Rain Resistance	Passed (AS/NZS 2908.2)
Frost Resistance	Passed (AS/NZS 2908.2)
Warm Water Resistance	Passed (AS/NZS 2908.2)
Soak-Dry Performance	Passed (AS/NZS 2908.2)
Combustibility	Deem to comply with BCA
Early Fire Hazard Test	Passed (AS 1530.3)
Thermal Conductivity	~ 0.20W/mK (ASTM C518)

7 Installation Methods

7.1 Framing & Fastening

PRIMA^{alpha}Groove lining can be installed either on timber or steel framing. A 35mm minimum stud width is required for both timber and steel frames. Only seasoned timber frame is used. The steel frame must be in the BMT (base metal thickness) range 0.55 to 1.6mm. Stud spacing is at maximum of 600mm.

PRIMA^{alpha}Groove lining can be fixed with screw or nail fastening. The fasteners used for timber and steel framing are as Table 1 below:

Timber Frame	Steel Frame
Galvanised Fiber Cement Nail 30 x 2.8mm	Self-Embedded Self Drilling Wing Tek Screw 8 x 32mm

Table 1

Nails must be finished flush (Figure 2). Screws can be driven 0.5mm below the sheet surface to achieve the required finish level.

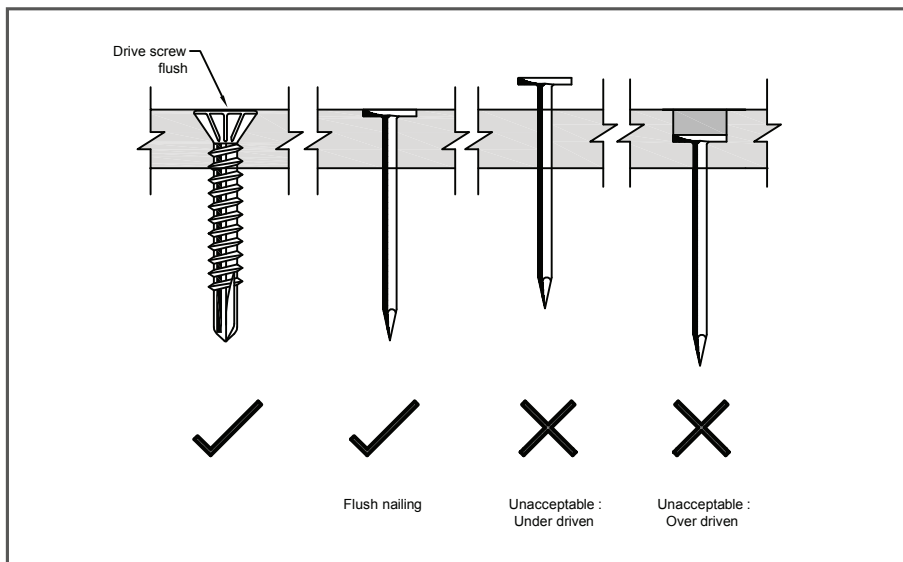


Figure 2: Fastener / Nailing Depth

For fastening to timber, the minimum edge distance to the end of the board is 12mm and 50mm for hand and gun nailing respectively.



7.2 Sheet Layout

PRIMA^{alpha}Groove lining is vertically fixed as common and sheet joints must match with the centre line of the framing layout. The half groove along sheet edges can create an aesthetic concealed joint.



7.3 Full Sheet Fixing

When fixing full sheets of **PRIMAalpha^αGroove**, fasten sheets as per following layout and sheet butt joints must coincide with the center line of framing.

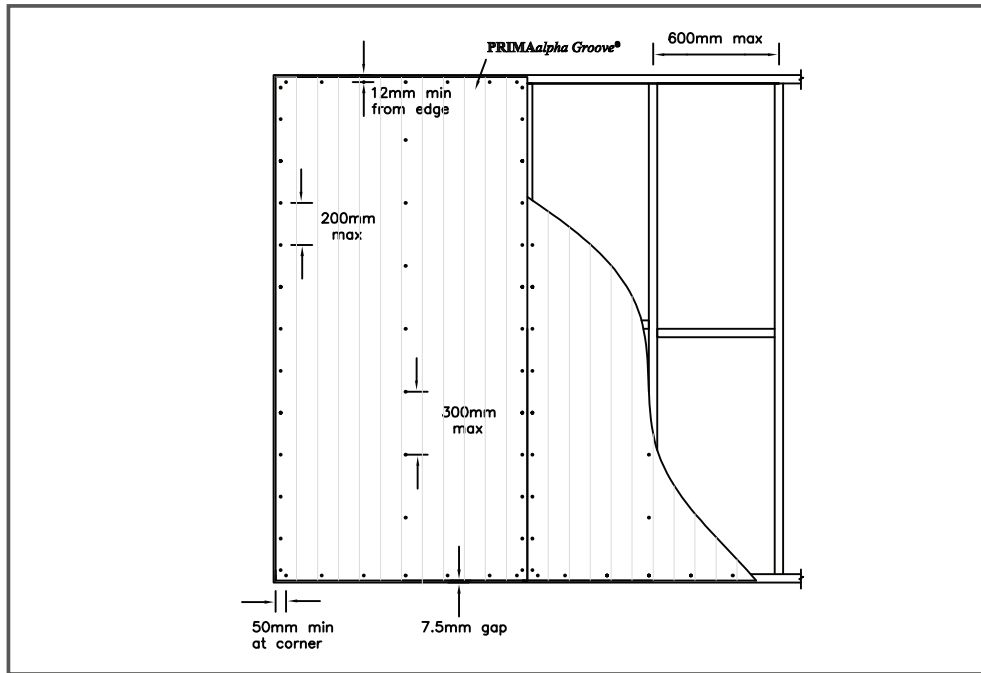


Figure 3: Full Sheet Fixing

7.3 Fixing To Ceilings

PRIMAalpha^αGroove can be fixed either parallel or perpendicular to framing in ceiling applications. Below Figure 4 show Along Joists and Across Joists accordingly.

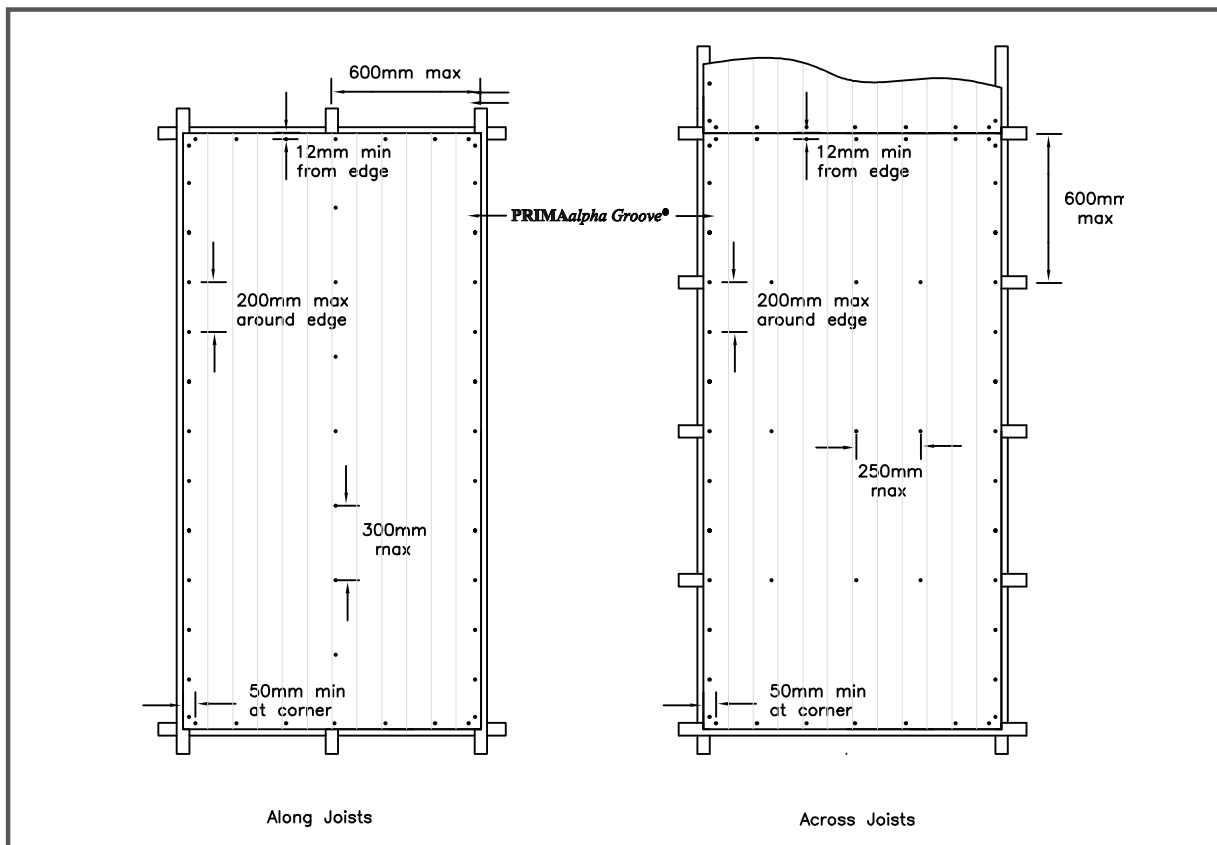


Figure 4: Along Joists & Across Joists

Note: In ceiling applications it is recommended to fix to timber battens or metal furring channels and do not fix sheets to the bottom chord of roof trusses.

8 Jointing & Corners

8.1 Butt Joints

PRIMA^{alpha} Groove is butt jointed by joining two factory finished half groove sheet edges on stud as per following Figure 5.

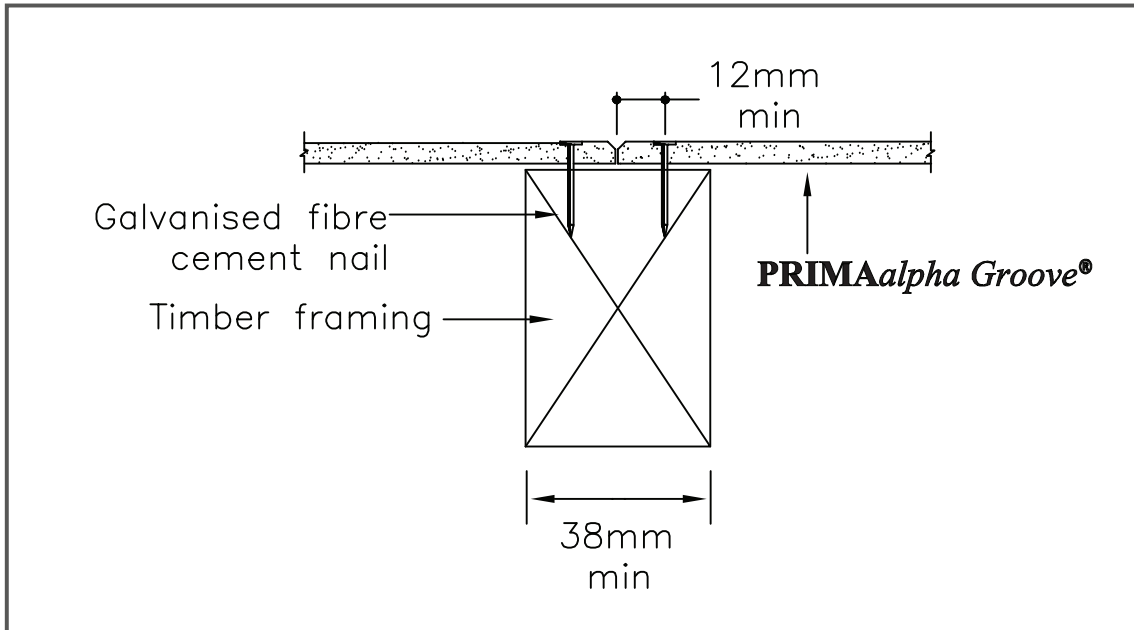


Figure 5: Butt Joint

8.2 Corners

External and internal corners are created by factory finished half groove sheet edges as shown in Figure 6 to 7. For trimmed sheet best appearance, the cut sheet edge can place into corner first to ensure it is concealed by the overlapping sheet. A suitable timber molding can be an alternative solution for both external and internal corner.

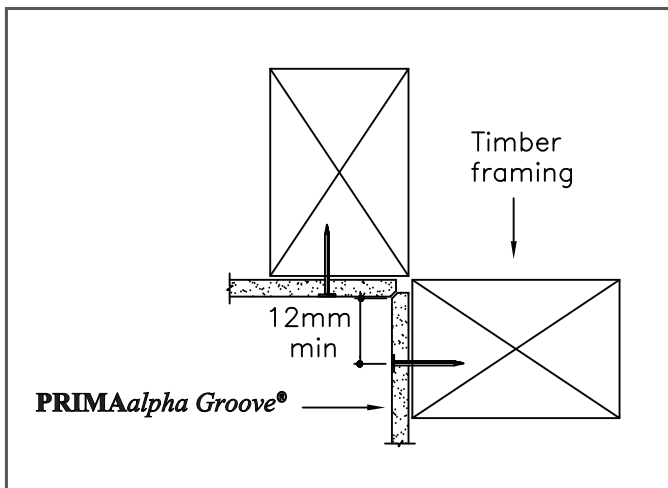


Figure 6: Internal Corner

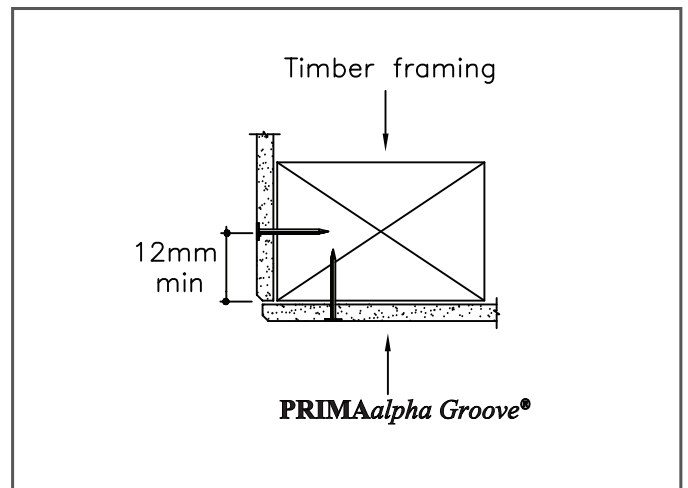


Figure 7: External Corner



Termite Resistant



Fire Resistant



Water Resistant



Weather Resistant



Environmentally
Friendly



Superior Paint
Adhesion



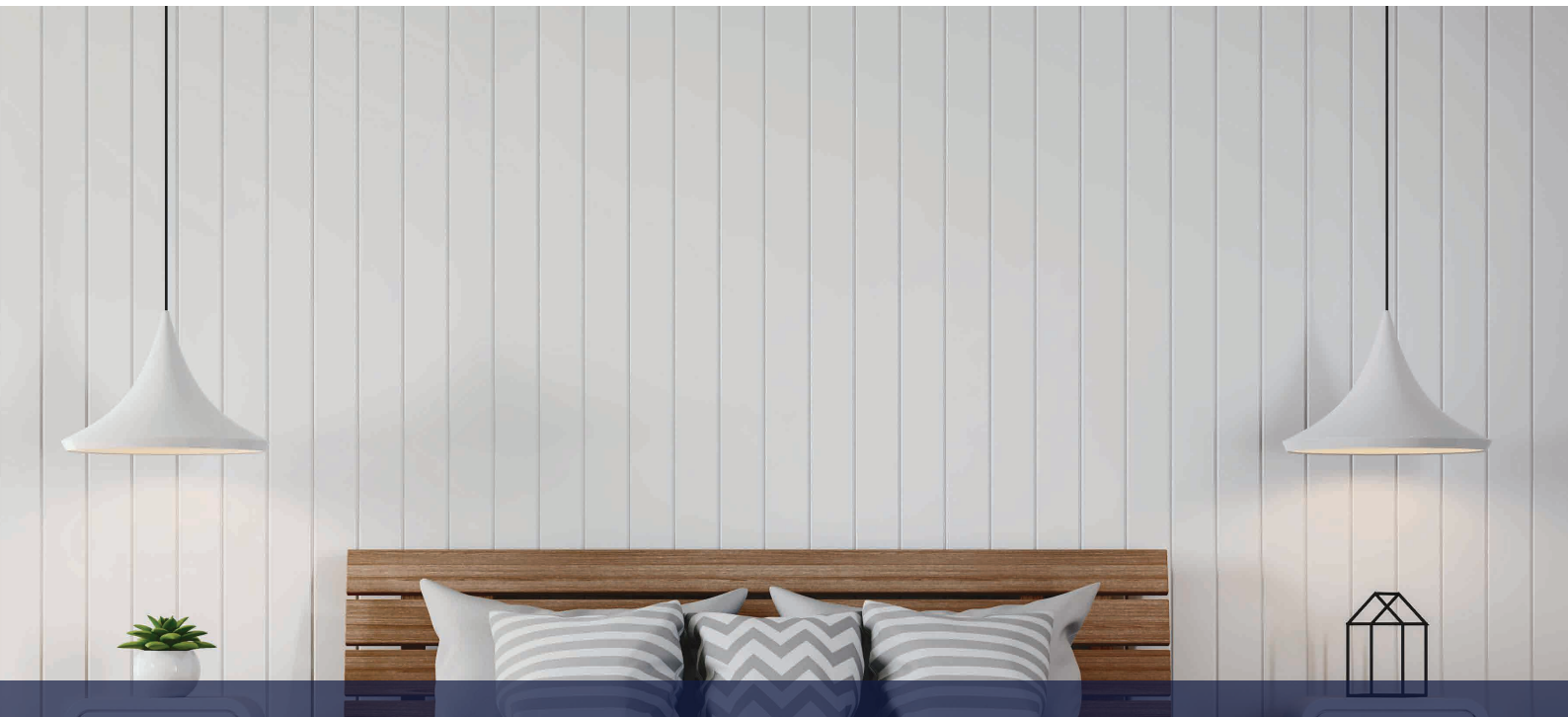
High Workability



Aesthetically
Pleasing



50 Years
Durability



For more information, please contact us at:



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