



## Triboard and Strandboard Building and Construction Product Information

### APPLICATIONS

- ◆ Wall and Ceiling Linings
- ◆ Partitions
- ◆ Flooring Overlays
- ◆ As a Substrate for Fire Performance Finishes

### LIMITATIONS

#### Triboard and Strandboard:

- ◆ Are intended for dry interior use only and must not be used as a substrate for external weathering materials (floors, walls, ceilings) – such as Nuralite, Butynol and other similar membrane materials.
- ◆ Must not be used for a flush plaster stopped jointing system to be subsequently wallpapered or painted (exceptions to this only apply to proprietary glued drywall partition systems)
- ◆ Ceiling lining installations, exposed on the upper face to elevated temperatures and low humidity conditions in roof spaces, must have insulation placed directly on the upper surface and have adequate provision for air changes within the roof space.
- ◆ Panels laid over exposed rafters/purlins, must be sealed on all edges and both faces with a protective coating after conditioning and prior to installation, in order to reduce moisture and humidity uptake during construction and building occupation.
- ◆ Must be paint or clear polyurethane finished prior to building occupancy.
- ◆ The application of water based spray-on textured coatings must not be used.

Triboard and Strandboard **must not** be used for:

- ◆ Exterior use.
- ◆ Areas subjected to repeated water spillage or constant dampness.
- ◆ Marine use.
- ◆ Shower linings.
- ◆ Saunas.
- ◆ Window reveals.
- ◆ Exterior door panels.

## **Product Care and Handling**

- ◆ Due to the uptake of airborne moisture, permanent panel distortion may occur if Triboard or Strandboard is placed in close proximity to timber framework with a moisture content exceeding 18%.
- ◆ Adequate pre-conditioning prior to installation and precise following of installation instructions are essential for satisfactory results, especially during wet seasons and high humidity.
- ◆ Attention to site storage, pre-conditioning at the point of installation and provision of specified joint clearances will reduce the effects of moisture up-take after installation and help to accommodate any panel movement.
- ◆ Panel conditioning prior to installation is of high importance, especially during periods of high rainfall or humidity. Panels should be filleted and conditioned for a minimum period of 48 hours prior to installation.

## **Storage**

- ◆ Correct storage procedures will eliminate sagging and permanent distortion of panels.
- ◆ Panels must be stored away from heat and direct sunlight.
- ◆ Panels must be flat stacked on at least 3 evenly spaced level bearers clear of dry ground, or a dry concrete floor.
- ◆ Bearers must be of uniform thickness and must extend across the full width of the pack.
- ◆ Panels must be protected from the weather. A breather type cover must be supported clear of the top and sides of the panels using battens to allow air to circulate freely.
- ◆ Metal strapping should be cut from packs as soon as practicable to avoid edge indentations.
- ◆ Avoid storing panels close to doorways adjacent to the external atmosphere.

## **Stock Rotation**

- ◆ The uptake of atmospheric moisture into board edges, which causes edge peaking, can be minimised by regular stock rotation.

## **COMPOSITION**

- ◆ Strandboard is composed of engineered strands orientated in such a way as to maximise strength and durability properties. Triboard is composed of an engineered strands core and MDF fibre surfaces.

## **Identification**

- ◆ Board size, classification and production batch number is denoted on the label on the side of the pack.

## Formaldehyde

- ◆ Triboard and Strandboard are manufactured to meet or exceed the E1 formaldehyde potential requirement in accordance with AS/NZS 1859.1:2004.
- ◆ During construction, and after close-in, emission levels can be further controlled by room ventilation and surface sealing.
- ◆ See the Triboard and Strandboard Material Safety Data Sheet (MSDS) for more detailed information.

## DESIGN CONSIDERATIONS

### Moisture

- ◆ Triboard or Strandboard must not be exposed to water or high humidity situations such as shower enclosures, steam rooms and saunas (See Limitations). As with most wood based products, Triboard and Strandboard are subject to minor dimensional variations due to changes in relative humidity, resulting in expansion and shrinkage.
- ◆ Both Triboard and Strandboard are manufactured with adhesives containing melamine which gives improved durability and stability in areas of high surface humidity, but they are **not water proof** and **must not** be allowed to come into direct or prolonged contact with water. The panels must be finished with a protective coating system to prevent moisture penetration.
- ◆ If the moisture content of the Triboard or Strandboard panel is above 18% it is considered to be wet and the long-term durability of the panel cannot be guaranteed. Most coating systems such as polyurethane require the panel moisture content to be below 15% for best results.

### Heat

- ◆ Precautions must be taken to ensure that Triboard and Strandboard are kept well clear of nearby heat sources, such as free standing fireplaces, space heaters, ovens, cooking elements, etc. The structural life of Triboard and Strandboard may be impaired if the surface temperature exceeds 50°C. Manufacturers of heat appliances must be consulted to ascertain the clearances or protection required to ensure 50°C is not exceeded.

### Fire Properties

Triboard (Based on 15mm board)

Strandboard (based on 20mm board)

Early Fire Hazard Properties:  
(AS/NZS 1530.3:1999)

Ignitability Index:	14	14
Spread of Flame Index:	6	7
Heat Evolved Index:	5	6
Smoke Developed Index:	4	4

**Note:** These values apply to uncoated Triboard and Strandboard, and these properties will improve with the application of a fire retardant coating (see Finishing).

## INSTALLATION

### Framework Setout

- ◆ Allow for studs, purlins, rafters, beams, etc. to accommodate a 2 to 3 mm expansion gap at panel joints especially where large areas or long walls are to be covered. For negative detailing, allow an 8mm gap on a pre-painted stud.
- ◆ Alternatively, provide an 8 to 10mm clearance between sheet edges and fixed members such as beams, columns etc.

### Exposed Beam Ceilings

- ◆ Pre-condition all panels, and then prime all surfaces and edges prior to fixing ceiling sheets.
- ◆ Weather protection is essential to avoid exposure to inclement conditions during the construction period.
- ◆ Where practicable, install exposed interior ceiling linings progressively with the exterior roof covering (the preferred method of installation is to fix after the roof is in place).
- ◆ Skillion roofs require special care. Maintain an air gap between the top of the insulation and underside of the roofing underlay, from the soffit to the ridge. The gap allows air circulation, to regulate humidity and temperature.

### Flooring Overlays

- ◆ When up-grading existing wooden or concrete floors, Strandboard may be used as an overlay and clear finished, or used under carpet or vinyl.

### Direct Overlay - Preparation

- ◆ The existing floor should be sanded level.
- ◆ Using a staggered sheet layout pattern, pre-conditioned panels must be fixed combining nails or screws plus a full spread adhesive application. Full details can be obtained by contacting Juken New Zealand Ltd.
- ◆ Refer also to the JNL Strandboard brochure for additional information.

### Fixing

- ◆ Installation must not begin until the building is closed in and weatherproof.
- ◆ When using 3600mm x 1200mm or 2400mm x 1200mm panels, allow a 3mm edge clearance.
- ◆ A 3mm panel edge clearance is recommended for **all** sheet sizes during wet winter months or in extremely humid conditions.
- ◆ Board surfaces should be primed or clear sealed immediately after fixing, to minimise the effects of atmospheric moisture or direct sunlight and to resist marking during construction activities.

- ◆ Panels can be fixed to timber or steel framing. When fixing to steel framing, 12 gauge self drilling screws can be used.
- ◆ The moisture content of any timber framing must not exceed 15% at the time of installing the panels. Excess moisture content will result in timber shrinkage and may lead to possible popping of nail or screw heads

### Fixing Schedule

Panel Thickness (mm)	Nail Size (mm)	Screw length (mm)	Fixing Centres Edges (mm)	Fixing Centres Intermediate (mm)	From Panel Edge (mm)
9	40 x 2.5	30	150	200	10
12	45 x 2.5	30	150	200	10
15	45 x 2.5	40	150	200	10

Note: screws are 8 gauge.

## FINISHING

### Stopping

- ◆ Fill fastening holes with a solvent-based wood dough or non-shrinking plaster based stopping, tinting as required, for clear-coated applications.

### Clear Finishing

- ◆ For flooring overlays, polyurethane coatings should provide protection in normal residential applications for up to five years if properly applied and maintained. This does not apply to areas such as laundries, bathrooms, shower, changing rooms and toilets. The defined wet areas must be covered by an impervious surface finish system.
- ◆ Acrylic primer coatings will provide a more textured surface than solvent based paint systems.

### Paint Finishing

- ◆ Triboard and Strandboard can be finished using either solvent based or water based paints. In all instances, the paint manufacturer's recommendations should be followed.

### Flame Retardant Paint Coatings

- ◆ Proprietary flame retardant coating systems (intumescent coatings) are available. Some of these are as follows:

Resene	Fireguard
Firepro	Firepro C646, Flamecoat Interior Acrylic Paint.
Benjamin Moore	Flame Control

## HEALTH AND SAFETY

- ◆ Material Safety Data Sheets for all Juken New Zealand Ltd Triboard and Strandboard products are available and should be consulted before using these products. Please contact Juken New Zealand Ltd or [www.Triboard.com](http://www.Triboard.com).

## **WORKING CHARACTERISTICS**

### **Machining**

- ◆ Triboard and Strandboard can be easily machined, grooved and routed in any direction. Triboard and Strandboard are easily cut with a fine toothed hand saw or circular saw adjusted to protrude just through the board surface. Tungsten tipped machine tools are recommended for volume production. To avoid breakouts apply only nominal pressure when using power tools.

**Note:** For best results always ensure hand and machine tools are sharp, and always use approved eye protection when machining these products.

## **TECHNICAL SUPPORT**

For advice on all technical matters please contact Juken New Zealand Ltd.

Juken New Zealand Ltd reserves the right to revise any information contained in this brochure without notice.

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