Technical Data Sheet

Bestwood MDF Standard & MDF MR

JANUARY 2019

Sustainably Sourced

New Zealand Made

E0 Formaldehyde

BESTWOOD®

Bestwood MDF Standard and Bestwood MDF MR are made in New Zealand from Radiata Pine sourced from sustainably managed New Zealand plantation forests. MDF MR is specially formulated to offer enhanced moisture resistance.

MDF – Medium Density Fibreboard
MR – Moisture Resistant
E0 – Low emissions

1. INTENDED USE

Bestwood MDF Standard and MDF MR are designed to be used as a substrate for decorative finishes such as timber veneers, melamine and laminate. They are suitable for interior cabinetry, wall and ceiling panels but must be sealed or painted if being used without a decorative overlay. Bestwood MDF can also be used for interior wall linings where it can be suitable for structural bracing in accordance with NZS 3604.

2. LIMITATIONS

Bestwood MDF Standard and MDF MR are not suitable for use in exterior applications or interior applications where ambient environmental moisture content is likely to be elevated for extended periods such as interior swimming pool, saunas or industrial wet areas. This also includes exposure to external moisture if the structure is not fully closed in. Bestwood MDF MR is recommended where some resistance to moisture is desirable such as bathroom, laundry and kitchen cabinetry.

Where Bestwood MDF Standard and MDF MR is required to meet the requirements of the New Zealand Building Code, or forms part of a building system, the application and supporting structures must be designed by suitably qualified design professionals.

Where structural bracing is required, design must be in accordance with NZS 3604.

For interior decorative products, this data sheet should be read in conjunction with the limitations outlined in the relevant Bestwood product Technical Data Sheet.

3. MANUFACTURE

Bestwood MDF Standard and MDF MR are made in New Zealand from Radiata Pine sourced from sustainably managed New Zealand plantation forests. Medium-density fibreboard (MDF) is an engineered wood product made by breaking down wood residuals into wood fibers and combining them with wax and a resin binder and forming panels by applying high temperature and pressure.

4. PHYSICAL PROPERTIES

The physical properties and characteristics overleaf are for Bestwood MDF Standard and MDF MR only. These should be read in conjunction with the surface physical properties of the Bestwood product where appropriate (ie. Bestwood Melamine, Bestwood Veneer, Bestwood Acrylic).

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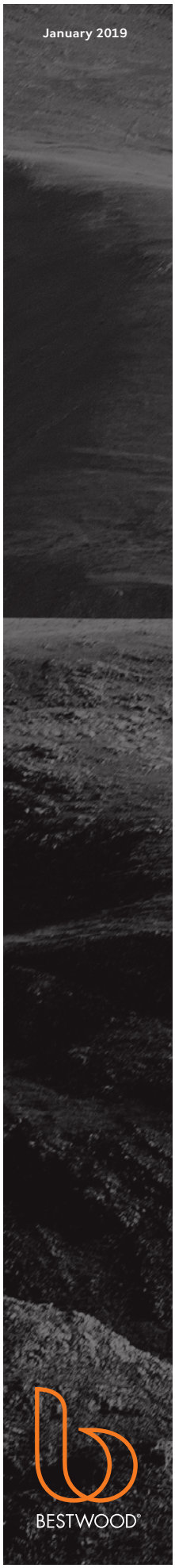

Bestwood MDF Standard & MDF MR				
Properties	**Units**	**Min Value**	**Mean Value**	**Max Value**
Density	kg/m³	690	725	
Internal Bond	kPa	700	960	
Modulus of Elasticity	MPa	2,400	3,000	
Modulus of Rupture	MPa	34.0	44.0	
Moisture Content	%	6.0	8.0	11.0
24 Hour Thickness Swell (18mm)	%		4.7	5.6
24 Hour Thickness Swell (18mm)	%		9.0	11.1
Tolerance on Nominal Dimensions				
Thickness	mm		+/- 0.15	
Length/Width	mm		+/- 1.6	
Squareness	mm/m		3.0	
Edge Straightness	mm/m		1.6	

5. SUBSTRATE OPTIONS

Bestwood MDF Standard and MDF MR are available in a range of sizes and thicknesses. Please refer to the substrate chart under the Technical Resources section of our website **www.bestwood.co.nz**

6. ENVIRONMENTAL CHOICE

Bestwood MDF 6mm or thicker carries an Environmental Choice certification. The Environmental Choice certificate is available to download from the Bestwood website. **www.bestwood.co.nz**

To view all of the Environmental Choice certified products from New Zealand Panels Group, view our profile on the Environmental Choice website **www.environmentalchoice.org.nz**

7. COMPLIANCE

New Zealand Building Code Clause B2 Durability: Bestwood MDF Standard and MDF MR/E0 meets the durability requirements for interior linings of five years in accordance with B2 3.1 (c)

Clause B1 Structural: NZS 3604-2011 "Timber Framed Buildings" is listed as an acceptable solution within B1/AS1. NZS 3604 sets out a method for calculating bracing demand and required bracing stated in bracing units per metre BU/m for wind and earthquake for wall bracing elements. BU/m are determined by the BRANZ P21 test procedure.

Bestwood MDF Standard has been tested in accordance with the P21 test procedure and the derived bracing units together with construction method and fastening requirements are published in the technical literature for GoldenEdge® and Customwood®

8. SUSTAINABILITY

Bestwood MDF Standard and MDF MR are made in New Zealand from Radiata Pine sourced from sustainably managed New Zealand plantation forests. Both are low formaldehyde and rated E0.

As a leader in the panel industry New Zealand Panels Group adopts and promotes sustainable business practices designed to minimise our environmental impact.

The company continues to search out alternative products to meet the growing needs of our environmentally conscious customers, while creating processes in our manufacturing plant that are mindful of the environment for future generations.

Some of the sustainable principles include:

- The use of sustainably sourced veneers, melamine and boards.
- Supplying low formaldehyde board.
- Reducing our manufacturing waste.
- Developing new processes to minimise energy consumption.
- Our purpose-built plant in East Tamaki features a number of initiatives that have significantly improved our environmental footprint, including a GreenStar 4 star rating for the building.

9. HEALTH AND SAFETY

MDF should be handled in accordance with the Materials Data Safety Sheet (MSDS) for Bestwood MDF products. The MSDS is available for download from www.bestwood.co.nz. Wood dust and dust from resins used in the manufacture of MDF are known health hazards. When machining MDF sheets, including drilling, planing routing and sawing, a suitable class P1 or P2 respirator should be worn along with non-fogging safety glasses.

To avoid cuts from sharp edges suitable protective gloves should be worn.

Bestwood MDF Standard and MDF MR meet the low formaldehyde emission class E0 – less than 0.5 mg/litre.

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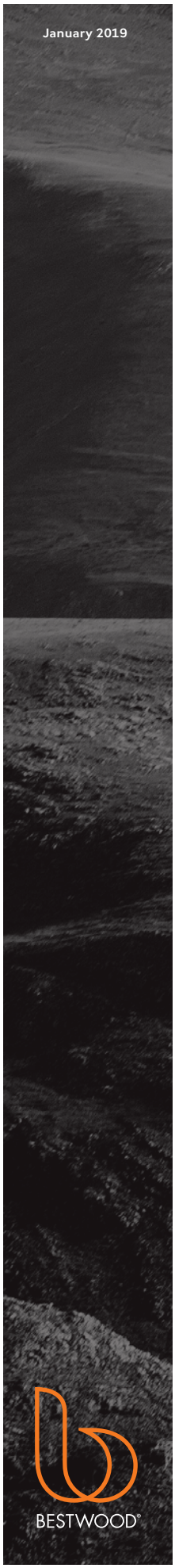

10. HANDLING AND STORAGE

Bestwood MDF Standard and MDF MR sheets must be stored in dry interior conditions on a minimum of three bearers across the full width of the sheet keeping the sheets flat at all times.

- Avoid leaning sheets against walls.
- Store sheets where construction traffic and construction activity will not damage sheets.
- Treat sheets as a finished product and avoid dragging sheets across other surfaces.

11. WARRANTY

New Zealand Panels Group offers a 10 year warranty on its Bestwood MDF Standard and MDF MR sheets provided they are used for their intended purpose as a substrate for interior decorative panels and installed in accordance with best practice, in a tradesman like manner and in accordance with relevant Standards and New Zealand Building Code requirements.

When used as structural bracing Bestwood MDF Standard is warranted for 50 years provided it is installed strictly in accordance with the GoldenEdge® or Customwood® Bracing literature and installed in interior dry conditions. Supporting framing must be in accordance with NZS 3604-2011.

12. TECHNICAL SUPPORT

Further information and technical support is available by contacting Bestwood on 0800 866 678. This publication was updated in January 2019. Please ensure that you are using the latest publication by contacting Bestwood or downloading the latest Technical Data Sheet from **www.bestwood.co.nz**

Bestwood, a business unit of New Zealand Panels Group, reserves the right to make changes to information in this publication without notice.

13. CONTACT US

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