

prime MDF standard & MDF MR technical data sheet BPIR class 1

Prime MDF Standard and Prime MDF MR are made in New Zealand from radiata pine fibre sourced from sustainably grown timber. MDF MR is specially formulated to offer enhanced moisture resistance.

MDF – Medium Density Fibreboard

MR – Moisture Resistant

E0 – Low emissions (VOC)

Product Name: Prime MDF

Product line and identification:
Prime MDF Standard and Prime MDF MR

1. Intended Use

Prime 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.

2. Limitations

Prime 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, sauna or industrial wet areas. Prime MDF MR is suitable for use where some resistance to moisture is desirable such as bathroom, laundry and kitchen cabinetry. This also includes exposure to external moisture if the structure is not fully closed in.

Where Prime MDF Standard or MDF MR are 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 Prime product Technical Data Sheet.

Installation

Specific installation instructions are not provided as the product is primarily used for the manufacturing of kitchens, furniture and fittings.



E0
Formaldehyde



Sustainably
Sourced





3. Manufacture

Prime MDF Standard and MDF MR are manufactured in New Zealand by Nelson Pine Industries Limited from plantation-grown timber sourced from sustainable forests. Medium-density fibreboard (MDF) is an engineered wood product made by breaking down wood residuals into wood fibres and combining them with wax and a resin binder and forming panels by applying high temperature and pressure.

Manufacturer: Nelson Pine Industries Ltd
Address: Lower Queen Street, Richmond, Nelson. NZ
Phone: 0800 800 438
Email: info@nelsonpine.co.nz
Website: www.nelsonpine.co.nz
NZBN: 9429041375129

4. Physical Properties

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

Prime MDF Standard & MDF MR				
Properties	Units	Min Value	Mean Value	Max Value
Density	kg/m ³	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 (9mm)	%		9.0	11.1
Tolerance on Nominal Dimensions				
Thickness	mm		+/- 0.15	
Length/Width	mm		+/- 1.6	
Squarness	mm/m		3.0	
Edge Straightness	mm/m		1.6	
Flatness (Warpage)	mm/m		1.5	

VOC	Standard	Rating	Emissions
Formaldehyde	AS/NZS 1859.2	E0	≤ 0.5mg/lit

5. Substrate Options

Prime MDF Standard and MDF MR are available in a range of sizes and thicknesses. Please refer to the substrate chart under the Prime Substrates section of our website www.primepanels.co.nz

6. Eco Choice Aotearoa

Prime MDF 6mm or thicker carries Eco Choice Aotearoa certification. The Eco Choice Aotearoa certificate (licence No. 3210078) for EC-32-17 Furniture, Fittings & Flooring is available to download from the Prime Panels website www.primepanels.co.nz

To view all of the Eco Choice Aotearoa certified products from New Zealand Panels Group, view our profile on the Eco Choice Aotearoa [website](http://www.ecochoice.co.nz).

7. Compliance

New Zealand Building Code 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 meter BU/m for wind and earthquake for wall bracing elements. BU/m are determined by BRANZ P21 test procedure.

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

New Zealand Building Code Clause B2 Durability:

Prime MDF Standard and MDF MR meets the durability requirements for interior linings of five years in accordance with B2 3.1(c)

New Zealand Building Code Clause C3 Protection

from Fire: According to the NZBC Verification Method C/VM2 Appendix A1.5 Table A1 Prime MDF Standard and MDF MR 9mm and thicker meets the requirements for Group 3 as a wood product, ≥9mm thick, with a density ≥400kg/m³ without the need for testing.

Note: The above Group Number Classification applies to the raw board only. For Group Number Classifications for a pressed panel refer to the appropriate Prime decorative panel Technical Data Sheet

NZ Building Act Section 26: Prime MDF is NOT subject to a warning or ban under Section 26 of the New Zealand Building Act



8. Sustainability

Prime MDF Standard and MDF MR are manufactured from plantation grown timber cut from sustainable forests. Both are low formaldehyde and rated EO. As a leader in the panel industry New Zealand Panels Group adopts and promotes sustainable business practices designed to minimise our environmental impact, and work towards becoming carbon-negative.

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. Both MDF Standard and MDF MR are rated EO.
- 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.
- All our manufacturing sites only use electricity from 100% certified renewable resources.

9. Health and Safety

Prime MDF Standard and MDF MR should be handled in accordance with the Safety Data sheet (SDS) for Prime MDF products. The SDS is available for download from www.primepanels.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.

Both Prime MDF Standard and Prime MDF MR meet the low formaldehyde emission class EO – less than 0.5 mg/litre.

10. Handling and Storage

Prime 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 Prime MDF Standard and MDF MR provided it is used for its 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 Prime 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 Prime Panels on 0800 477 463. This publication was updated in November 2023. Please ensure that you are using the latest publication by contacting Prime Panels or downloading the latest Technical Data Sheet from www.primepanels.co.nz.

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

Contact us

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