

MEDIUM DENSITY FIBREBOARD - HMR

From the beginning in 1986, the products of Nelson Pine Industries New Zealand have led the world in meeting the needs of kitchen and furniture manufacturers, joinery companies and builders. Using the advanced technology of the Kusters continuous press, we produce superior quality MDF (Medium Density Fibreboard) and offer an unsurpassed range of board thicknesses.

HMR Thinline & Regular Density MDF

GoldenEdge HMR (High Moisture Resistance) MDF comes in a range of 13 thicknesses from 2.5mm to 25mm making it suitable for a comprehensive range of interior uses excluding situations of exposure to water or prolonged high humidity such as in shower cabinets or saunas. Recommended uses are for kitchen units, benchtop substrates, shelving, cupboards and internal wall panelling, standard bathroom vanities and washtub areas.

Renewable Resource GoldenEdge HMR Medium Density Fibreboard is produced from high quality grown Radiata pine fibre - a renewable resource which helps to preserve the natural environment.



plantation

Test Summaries

HMR Medium Density Fibreboard Test Summary

Property	Unit	3mm	5mm	18mm	25mm
Thickness	mm	3.01	5.02	17.98	25.09
Density	kg/m ³	767	765	728	682
Internal Board	kPa	1171	1662	891	830
Moisture Content	%	6.2	5.9	6.1	5.8
Modulus of Elasticity	MPa	3644	4207	3223	4644
Modulus of Rupture	MPa	45.1	54.9	52.5	47.3
Water Absorption 24 hrs 20 °C	%	35.1	24.8	11.8	13.9
Thickness Swell 24 hrs 20 °C	%	29.5	14.6	4.0	4.0
Wet Cyclic Test V313					
Internal Bond	kPa	860	1049	540	620
Thickness Swell	%	7.2	6.0	1.4	4.1



Wet Cyclic test for HMR Medium Density Fibreboard

Property	Unit	<8mm Individ.	Mean	12 to 22mm Individ.	Mean	23 to 33mm Individ.	Mean
TS 24 Hours	%	NS	NS	9	6	9	6
V313	%	12	9	12	9	12	9
IB Dry	kPa	550	700	450	600	450	600
V313	kPa	350	450	150	250	100	200
MOR	MPa	27	35	24	30	21	28
MOE	MPa	2300	3000	2200	2800	1900	1500

Product Range

GoldenEdge HMR Thinline and Regular Density MDF are specifically manufactured for interior use. GoldenEdge HMR Thinline MDF represents the most sophisticated and consistent thin interior board available. GoldenEdge HMR Thinline is ideally sized for normal building modules and numerous joinery and furniture applications.

GoldenEdge HMR is not suitable for high humidity areas such as bathrooms, zones immediately adjoining kitchen benches and stoves, saunas and spas, or any external situation. Areas subject to extreme heat such as those immediately adjacent to solid fuel heaters and free-standing fireplaces are also unsuitable.

GoldenEdge HMR Regular Density MDF has excellent strength quality, surface smoothness and stability and superior edge profile. The surface can be painted to achieve a high quality finish and provides a uniform substrate for overlaying. GoldenEdge HMR Regular Density MDF can be worked easily with all conventional woodworking machines and hand tools. Tungsten carbide cutters and saws are recommended.

GoldenEdge HMR Regular Density MDF is also an ideal substrate for laminating with natural wood veneer, vinyls, printed papers, foils and melamine papers.

GoldenEdge HMR Thinline		GoldenEdge HMR Regular Density MDF	
Sheet Size mm	2440 x 1220 Other sheet sizes subject to mill confirmation	Sheet Size mm	2440 x 1220 Other sheet sizes subject to mill confirmation
Thicknesses mm	2.5 3 4 4.75 5 5.5 6	Thicknesses mm	9 12 15 16 18 25

Brief Guide to Installation & Finishing

Screw Holding: GoldenEdge HMR Regular Density MDF provides good screw holding strength both in the faces and edges. The best results are obtained with the parallel thread screws such as the Twinfast or particle board screws. Conventional wood screws are not recommended.

Nailing: GoldenEdge HMR Regular Density MDF can be fixed by nailing with good holding power and no split out.

Stapling: Staples can be used effectively for joint fitting. For best results it is helpful to add adhesive to the joint prior to assembly. When stapling into GoldenEdge HMR Thinline and Regular Density MDF, it is important to have good control of air pressure to avoid excessive penetration of staples.

Sanding and Finishing: Special attention to sanding edges gives excellent results. Use 120 grit paper followed by 240 or 320 grit paper.

Stopping: Stop all nail and staple holes with a proprietary plastic wood putty. Match and blend colours as required to suit. Lightly sand with 320 grit paper.

Painting: For best results application of three coats is recommended. First coat primer/undercoat is critical to the final finish. It is recommended that primer/undercoat is applied to paint manufacturer's recommendations. Apply second and third coats or additional coats as required. A light sand using 280 to 320 grit paper is recommended after the first coat and between subsequent coats.

Laminating: GoldenEdge HMR Regular Density MDF is an ideal substrate for laminating with natural wood veneer, vinyls, printed papers, foils and melamine papers. A balanced laminated panel would eliminate minor cupping or bowing. Care must be taken to avoid conditions of very high pressure, high press temperature and long press times during laminating.

Product Care: Care in stock turn is essential to avoid board variations caused by moisture uptake. Therefore the principle of first in first out stock rotation should be used. Storage should always be in areas not subject to:

1. High humidity
2. Water infiltration
3. Abnormal temperature variation
4. Direct sunlight
5. Spillage of liquids such as coffee or tea