GoldenEdge®
Medium Density Fibreboard

MDF PANELS INTERNATIONAL

THINLINE
REGULAR
LITEBOARD

SUPERLITE
HMR-0
SUPERMACH HDF-0

FSC
www.fsc.org
MIX
Wood from responsible sources
FSC® C019095

PLANTATION GROWN • RENEWABLE RESOURCE •

GoldenEdge Thinline

GoldenEdge Thinline represents our standard density products available between 2.5 and 6mm, specifically manufactured for interior use. Comprising especially engineered wood fibre bonded with synthetic resin adhesive under heat and pressure, GoldenEdge Thinline represents the most sophisticated and consistent thin interior board available, exceeding minimum specifications for all current relevant building standards.

APPLICATIONS:

GoldenEdge Thinline is ideally sized for normal building modules and numerous joinery and furniture applications. Not suitable for high humidity areas such as bathrooms, adjoining kitchen benches and stoves, saunas and spas, or any external situation.

Available Standards: E0, SE0
Available Certifications: FSC®, CARB P2 – EPA

RECOMMENDATIONS:

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction. Wood based panels are biodegradable and can be recycled. It is recommended to follow local regulation for the disposal of residues.

PROPERTIES:

- Versatility
- Superior Surface Finish

PHYSICAL PROPERTIES

PROPERTY	METRIC	2.5MM	4.75MM	6MM
Density	Kg/m^3	840	800	800
Weight	Kg/m^2	2.1	3.8	4.8
Internal Bond	kPa	1500	1200	1200
Moisture Content	%	7.5	7.5	7.5
Thickness Swell	%	30	21	16.5
MoE	MPa	3600	3800	4000
MoR	MPa	44	50	50

PROPERTY	IMPERIAL	0.1″	0.18″	0.23″
Density	lb/ft^3	53	50	50
Weight	lb/ft^2	0.43	0.77	0.98
Internal Bond	lb/in^2	220	180	180
Moisture Content	%	7.5	7.5	7.5
Thickness Swell	%	30	21	16.5
MoE	lb/in^2	520000	550000	580000
MoR	lb/in^2	6400	7250	7250

GENERAL TOLERANCES	
Length/Width	+- 2.0
Thickness	+- 0.15
Straightness	1.5
Squareness	3.0

SHEET SIZES			
2.5mm	2440 x 915	2440 x 1220	2465 x 1245
3mm	2440 x 915	2440 x 1220	2465 x 1245
4mm	2440 x 915	2440 x 1220	2465 x 1245
4.75mm	2440 x 915	2440 x 1220	2465 x 1245
5.5mm	2440 x 915	2440 x 1220	2465 x 1245
6mm	2440 x 915	2440 x 1220	2465 x 1245

Note: These values represent typical values and are guidelines only. Please note that Nelson Pine Industries Limited reserve the right to change product specifications without notice.

All GoldenEdge MDF production meets ISO9001 international standard, and the Nelson Pine Industries environment is managed according to ISO14001 international environmental management systems standard. This represents our commitment to continual improvement in environmental management.

Certified by:

FSC www.fsc.org MIX Wood from responsible sources FSC® C019095

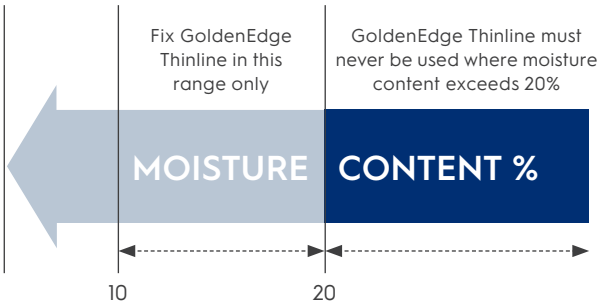
PLANTATION GROWN • RENEWABLE RESOURCE •

*On request other sheet sizes and thicknesses are available.

NELSON PINE INDUSTRIES LTD

PO Box 3049, Richmond,
Nelson, New Zealand 7050

Phone: 03 543 8800 or 0800 800 438
Website: www.nelsonpine.co.nz



FRAMEWORK SUPPORT CENTRES:

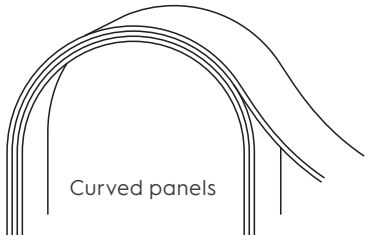
WALL LINING			CEILING LINING	
PANEL THICKNESS (MM)	STUD CENTRES (MM)	NOGGING CENTRES (MM)	JOIST/TRUSS CENTRES (MM)	NOGGING CENTRES (MM)
6	400	1200	450	800
-	450	1200	600	600
-	600	600	900	480
-	-	-	1200	480

FURNITURE AND JOINERY APPLICATIONS (ALL THICKNESSES):

GoldenEdge Thinline is ideal for thin panelling; it has excellent bending qualities which also makes it ideal for curved and laminated panels. Compatible with all types of interior panel products, GoldenEdge Thinline is best when used with other GoldenEdge MDF Panel products.

Difficult shapes may be manufactured without steaming by laminating GoldenEdge Thinline.

Refer to table for minimum bending radii specifications. All types of woodworking glues are compatible with GoldenEdge Thinline including waterborne glues like PVA, if used to manufacturers' recommendations. Best results for gluing are achieved by sanding the board surface before application.



MINIMUM BENDING RADII

THICKNESS (MM)	MINIMUM BENDING RADII (MM)
3.0	150
4.0	200
4.75	240
6.0	300

OVERLAY FOR FLOORS/UNDERLAY FOR FLOOR COVERINGS:

GoldenEdge Thinline is suitable for overlaying timber, particle board, plywood, MDF, fibre-cement sheet and concrete floors to provide a flat, uniform, indent-resistant base for resilient sheet and tile floor coverings including semi-rigid PVC, cork, rubber, linoleum, cushioned vinyl and textile floor coverings.

GoldenEdge Thinline must only be installed over floors which are adequately ventilated and where there are no indications of dampness. The cause of moisture must be corrected and the floor allowed to dry.

Subfloor ventilators must provide a clear, cross flow of air beneath the floor so that any excessive moisture vapour is removed from the subfloor area. Excess moisture and dampness can lead to the distortion and possible decay of flooring members and excessive movement of the GoldenEdge Thinline.

Adequate ventilation is particularly important where impervious floor coverings are used, as they restrict the escape of moisture through the floor. In some circumstances, a moisture impervious membrane, such as polyethylene film or bitumen impregnated felt, may be used to cover the ground beneath the floor to retard moisture rise. For further information on subfloor ventilation contact your distributor.

Under normal climatic conditions, GoldenEdge Thinline may be used direct from the pack, however, best results will be achieved when the product is loose laid on the floor 24 hours before fixing. This will allow the material to equilibrate its moisture content with the site conditions.

The practice of loose laying the board for 24 hours is strongly recommended where there is any doubt on the adequacy of the subfloor ventilation.

GoldenEdge Thinline Underlay is not suitable for the application of water proofing membranes such as those used in showers and bathrooms.

Note: Prevailing climatic or installed environmental conditions can influence moisture content changes in wooden floors and underlays. The resulting dimensional movement may become noticeable where the floor covering bridges the GoldenEdge Thinline joins. In some cases, the joins may be highlighted by the effects of glancing light on the floor surface.

NELSON PINE INDUSTRIES LTD

PO Box 3049, Richmond,
Nelson, New Zealand 7050

Phone: 03 543 8800 or 0800 800 438
Website: www.nelsonpine.co.nz

Wooden Floors Overlay

INSTALLATION

Replace any loose or broken boards. Floor nails must be punched below the floorboard surface. GoldenEdge Thinline is sufficiently rigid to bridge minor irregularities in the floor surface. The best results are obtained when the floor is machine sanded to a flat plane. Lay sheets in a brick bond pattern. Allow 0.5mm clearance between panels and 5mm clearance at perimeter walls.

FIXING TABLE FOR OVERLAYING WOODEN FLOORING

HAND FASTENING

NAIL SIZE		FASTENING CENTRES	
(mm)	Corner (mm)	Edge (mm)	Inter (mm)
25x2 or 25x2.5mm	50	75	150

Galvanised steel, flat-head ring grooved buttress or underlay type nails recommended.

POWER FASTENING

STAPLE LENGTH		FASTENING CENTRES	
(mm)	Corner (mm)	Edge (mm)	Inter (mm)
22 (7/8")	50	75	150

Note: Staples to be galvanised, zinc or cadmium plated or resin coated steel. Recommended staple types BEA-90 series, SENCO N4450, HAYBOLD 60 series. Minimum fixing distance of 10mm in from any edge of the sheet is recommended.

OVERLAYING CONCRETE FLOORS

Concrete slab floors must be protected from ground moisture by a correctly installed vapour barrier. GoldenEdge Thinline must not be overlaid on new concrete floors until they have dried thoroughly to a surface relative humidity reading of 70% or less when measured using a hygrometer in accordance with AS 1884, Appendix A6, AS 2455.1, Appendix B3 or BRANZ Bulletin 388. As a general guide new concrete slabs require one month of drying for each 25mm of concrete thickness.

FIXING FOR CONCRETE FLOORS

On concrete floors fix with 4mm diameter beads of adhesive applied in a grid pattern at approximately 150mm centres in both directions.

ADHESIVES

Refer to relevant manufacturers for adhesive which is suitable for bonding Thinline to substrate.

FINISHING

Check that all fasteners are correctly driven and not protruding above the board surface. Carefully sand joins to a flat plane and sand fixing points using a flat based machine sander or sandpaper block. Do not use disk type sander. Sweep or vacuum to ensure all dust is removed.

Lining Exposed Beam Ceilings (6mm minimum)

To retain the integrity of GoldenEdge Thinline both surfaces and all edges must be pre-primed before fixing. Fixing between the rafters after the roof covering is laid is the preferred procedure. Exposure to wet weather must be avoided. Therefore if GoldenEdge Thinline must be laid on top of rafters the exposed interior ceiling should be laid progressively with the exterior covering.

FINISHING

Veneers and Plastic Sheeting Surfacing:

Satisfactory adhesion by cold cured adhesives relies on keying of the surface of GoldenEdge Thinline by light sanding. It is essential that a balancing of surfacing can be provided on both surfaces to avoid board distortion. Veneering of GoldenEdge Thinline on one surface alters the balance of the material to absorb moisture, therefore the risk of board distortion is high. This practice is not advisable.

GoldenEdge Regular

GoldenEdge Regular is an MDF for interior use, with excellent strength quality, surface smoothness and stability and a superior edge profile. The surface can be painted to achieve a high quality finish and provides a uniform substrate for overlaying. GoldenEdge Regular is extremely versatile and suitable for a wide range of uses, bearing in mind its high machinability and low formaldehyde emission levels.

APPLICATIONS:

The standard of our MDF range, GoldenEdge Regular comes in a wide range of thicknesses and is ideal for interior applications such as joinery, furniture mouldings, built-in furniture, shelving, wall linings, partitions, floor linings and other possibilities. GoldenEdge Regular provides excellent machining, cutting, colour and reception to finish and is an excellent substrate for natural wood veneer, vinyl's, printed papers, foils and melamine papers.

Available Standards: E0, SE0
Available Certifications: FSC®, CARB P2 - EPA

RECOMMENDATIONS:

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction. Wood based panels are biodegradable and can be recycled. It is recommended to follow local regulation for the disposal of residues.

PROPERTIES:

- Efficient Machinability
- Versatility
- Superior Surface Finish

NELSON PINE INDUSTRIES LTD
PO Box 3049, Richmond,
Nelson, New Zealand 7050
Phone: 03 543 8800 or 0800 800 438
Website: www.nelsonpine.co.nz

PHYSICAL PROPERTIES

PROPERTY	METRIC	9MM	15MM	18MM	30MM
Density	Kg/m^3	730	730	730	710
Weight	Kg/m^2	6.6	11.0	13.1	21.3
Internal Bond	kPa	920	800	750	700
Moisture Content	%	7.5	7.5	7.5	7.0
Thickness Swell 24h	%	12	6.5	5.5	4.2
MoE	MPa	3300	3400	3500	3500
MoR	MPa	40	40	40	40

PROPERTY	IMPERIAL	0.35″	0.59″	0.70″	1.18″
Density	lb/ft^3	46	46	46	44
Weight	lb/ft^2	1.5	2.25	2.7	4.4
Internal Bond	lb/in^2	130	120	110	100
Moisture Content	%	7.5	7.5	7.5	7.0
Thickness Swell 24h	%	12	6.5	5.5	4.2
MoE	lb/in^2	480000	490000	510000	510000
MoR	lb/in^2	5800	5800	5800	5800

GENERAL TOLERANCES	
Length/Width	+- 2.0
Thickness	+- 0.15
Straightness	1.5
Squareness	3.0

SHEET SIZES			
9mm	2440 x 920	2440 x 1220	2465 x 1245
12mm	2440 x 920	2440 x 1220	2465 x 1245
15mm	2440 x 920	2440 x 1220	2465 x 1245
18mm	2440 x 920	2440 x 1220	2465 x 1245
25mm	2440 x 920	2440 x 1220	2465 x 1245
30mm	2440 x 920	2440 x 1220	2465 x 1245

*On request other sheet sizes and thicknesses are available.

Note: These values represent typical values and are guidelines only. Please note that Nelson Pine Industries Limited reserve the right to change product specifications without notice.

All GoldenEdge MDF production meets ISO9001 international standard, and the Nelson Pine Industries environment is managed according to ISO14001 international environmental management systems standard. This represents our commitment to continual improvement in environmental management.

Certified by:

FSC www.fsc.org MIX Wood from responsible sources FSC® C019095

PLANTATION GROWN • RENEWABLE RESOURCE •

GoldenEdge Liteboard

GoldenEdge Liteboard is a low density MDF which performs well in situations where a lightweight end product is desired. GoldenEdge Liteboard is 20% lighter in weight than regular MDF but maintains the excellent strength quality, surface smoothness and stability. The reduction in density of GoldenEdge Liteboard ensures less stress on tools, promotes ease of work and consequent increased efficiency.

APPLICATIONS:

GoldenEdge Liteboard is suitable for interior fittings such as doors and wall linings. It can also be used for more creative applications, such as furniture, shop-fittings, and interior signage. The surface can be painted to achieve a high quality finish and provides a uniform substrate for overlaying. GoldenEdge Liteboard has a lighter tone than other MDF and is most suitable for any light, white or pale colour papers or foil for laminating. The colour is consistent.

Available Standards: E0, SE0
Available Certifications: FSC®, CARB P2 - EPA

RECOMMENDATIONS:

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction. Wood based panels are biodegradable and can be recycled. It is recommended to follow local regulation for the disposal of residues.

PROPERTIES:

- Efficient Machinability
- Versatility
- Light

NELSON PINE INDUSTRIES LTD
PO Box 3049, Richmond,
Nelson, New Zealand 7050

Phone: 03 543 8800 or 0800 800 438
Website: www.nelsonpine.co.nz

PHYSICAL PROPERTIES

PROPERTY	METRIC	7MM	15MM	18MM	30MM
Density	Kg/m^3	680	610	610	610
Weight	Kg/m^2	4.8	9.2	11.0	18.3
Internal Bond	MPa	850	680	650	650
Moisture Content	%	7.5	7.5	7.5	7.5
Thickness Swell 24h	%	15	7.8	6.0	4.2
MoE	MPa	3000	2650	2800	3000
MoR	MPa	40	35	35	35

PROPERTY	IMPERIAL	0.27″	0.59″	0.70″	1.18″
Density	lb/ft^3	43	38	38	38
Weight	lb/ft^2	0.98	1.9	2.25	3.75
Internal Bond	lb/in^2	120	100	95	95
Moisture Content	%	7.5	7.5	7.5	7.5
Thickness Swell 24h	%	15	7.8	6.0	4.2
MoE	lb/in^2	440000	380000	410000	440000
MoR	lb/in^2	5800	5100	5100	5100

GENERAL TOLERANCES	
Length/Width	+- 2.0
Thickness	+- 0.15
Straightness	1.5
Squareness	3.0

SHEET SIZES			
7mm	2440 x 1220	2440 x 1830	2445 x 925
9mm	2440 x 1220	2440 x 1830	2445 x 925
12mm	2440 x 1220	2440 x 1830	2445 x 925
15mm	2440 x 1220	2440 x 1830	2445 x 925
18mm	2440 x 1220	2440 x 1830	2445 x 925
24mm	2440 x 1220	2440 x 1830	2445 x 925
30mm	2440 x 1220	2440 x 1830	2445 x 925

*On request other sheet sizes and thicknesses are available.

Note: These values represent typical values and are guidelines only. Please note that Nelson Pine Industries Limited reserve the right to change product specifications without notice.

All GoldenEdge MDF production meets ISO9001 international standard, and the Nelson Pine Industries environment is managed according to ISO14001 international environmental management systems standard. This represents our commitment to continual improvement in environmental management.

Certified by:

FSC www.fsc.org MIX Wood from responsible sources FSC® C019095

PLANTATION GROWN • RENEWABLE RESOURCE •

GoldenEdge Superlite

GoldenEdge Superlite is our lowest density MDF which performs well in situations where a lightweight end product is desired. GoldenEdge Superlite is 33% lighter in weight than regular MDF but maintains the excellent strength quality, surface smoothness and stability. The reduction in density of GoldenEdge Superlite ensures less stress on tools, promotes ease of work and consequent increased efficiency.

APPLICATIONS:

GoldenEdge Superlite is suitable for interior fittings such as doors and wall linings. It can also be used for more creative applications, such as furniture, shop-fittings, and interior signage. The surface can be painted to achieve a high quality finish and provides a uniform substrate for overlaying. GoldenEdge Superlite has a lighter tone than other MDF and is most suitable for any light, white or pale colour papers or foil for laminating. The colour is consistent.

Available Standards: E0, SE0
Available Certifications: FSC®, CARB P2 - EPA

RECOMMENDATIONS:

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction. Wood based panels are biodegradable and can be recycled. It is recommended to follow local regulation for the disposal of residues.

PROPERTIES:

- Efficient Machinability
- Versatility
- Logistical Efficiency

NELSON PINE INDUSTRIES LTD
PO Box 3049, Richmond,
Nelson, New Zealand 7050

Phone: 03 543 8800 or 0800 800 438
Website: www.nelsonpine.co.nz

PHYSICAL PROPERTIES

PROPERTY	METRIC	12MM	18MM	25MM
Density	Kg/m^3	500	510	510
Weight	Kg/m^2	6.0	9.2	12.8
Internal Bond	kPa	410	430	480
Moisture Content	%	7.0	7.0	7.0
Thickness Swell 24h	%	12.0	8.0	6.5
MoE	MPa	1700	1900	1750
MoR	MPa	22	22	22

PROPERTY	IMPERIAL	0.47″	0.70″	0.98″
Density	lb/ft^3	31	32	32
Weight	lb/ft^2	1.2	1.9	2.6
Internal Bond	lb/in^2	60	60	70
Moisture Content	%	7.0	7.0	7.0
Thickness Swell	%	12.0	8.0	6.5
MoE	lb/in^2	250000	280000	250000
MoR	lb/in^2	3200	3200	3200

GENERAL TOLERANCES	
Length/Width	+- 2.0
Thickness	+- 0.15
Straightness	1.5
Squareness	3.0

SHEET SIZES	
12mm	2465 x 1245
15mm	2465 x 1245
18mm	2465 x 1245
25mm	2465 x 1245
30mm	2465 x 1245

*On request other sheet sizes and thicknesses are available.

Note: These values represent typical values and are guidelines only. Please note that Nelson Pine Industries Limited reserve the right to change product specifications without notice.

All GoldenEdge MDF production meets ISO9001 international standard, and the Nelson Pine Industries environment is managed according to ISO14001 international environmental management systems standard. This represents our commitment to continual improvement in environmental management.

Certified by:

FSC www.fsc.org MIX Wood from responsible sources FSC® C019095

PLANTATION GROWN • RENEWABLE RESOURCE •

GoldenEdge HMR-0

GoldenEdge HMR-0 is a moisture resistance MDF, indicated for applications in humid conditions. It is our standard range for moisture resistant MDF, making it the right choice for applications with high relative humidity. With very low swelling values, GoldenEdge HMR-0 has excellent dimensional stability against variations in relative humidity in the environment where it is used.

APPLICATIONS:

GoldenEdge HMR-0 is recommended for uses in kitchen units, benchtop substrates, shelving, cupboards, standard bathroom vanities and washtub areas, excluding situations of exposure to water or prolonged high humidity such as such as in shower cabinets or saunas. The surface density also gives the possibility of using a wide range of finishing techniques: lacquering, coating, veneering, foil wrapping and covering.

Available Standards: E0, SE0
Available Certifications: FSC®, CARB P2 – EPA

RECOMMENDATIONS:

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction. Wood based panels are biodegradable and can be recycled. It is recommended to follow local regulation for the disposal of residues.

PROPERTIES:

- Superior Machined Finish
- Versatility
- Moisture Resistant
- Dimensional Stability

PHYSICAL PROPERTIES

PROPERTY	METRIC	3.0MM	12MM	18MM	25MM
Density	Kg/m^3	820	730	730	710
Internal Bond	kPa	1600	1100	950	920
MoR	MPa	47	45	44	42
MoE	MPa	3600	3300	3600	3500
24hr Thickness Swell 20c	%	25	8.0	5.0	4.0
Moisture Content	%	7.5	7.5	7.5	7.5
Wet Cyclic Test V313					
- Internal Bond	kPa		550	600	240
- Thickness Swell	%		6.7	4.6	4.8

PROPERTY	IMPERIAL	0.1"	0.47"	0.70"	0.98"
Density	lb/ft^3	51	45	45.5	44
Internal Bond	lb/in^2	230	160	140	130
MoR	lb/in^2	6800	6500	6400	6100
MoE	lb/in^2	520000	480000	520000	510000
24hr Thickness Swell 20c	%	28	8.0	5.0	4.0
Moisture Content	%	7.5	7.5	7.5	7.5
Wet Cyclic Test V313					
- Internal Bond	lb/in^2		80	90	35
- Thickness Swell	%		6.7	4.6	4.8

SHEET SIZES		
2.5mm	2440 x 1220	2465 x 1245
12mm	2440 x 1220	2465 x 1245
15mm	2440 x 1220	2465 x 1245
18mm	2440 x 1220	2465 x 1245
25mm	2440 x 1220	2465 x 1245
30mm	2440 x 1220	2465 x 1245

Note: These values represent typical values and are guidelines only. Please note that Nelson Pine Industries Limited reserve the right to change product specifications without notice.

All GoldenEdge MDF production meets ISO9001 international standard, and the Nelson Pine Industries environment is managed according to ISO14001 international environmental management systems standard. This represents our commitment to continual improvement in environmental management.

Certified by:

FSC www.fsc.org MIX Wood from responsible sources FSC® C019095

PLANTATION GROWN • RENEWABLE RESOURCE •

*On request other sheet sizes and thicknesses are available.

GoldenEdge SuperMach HDF-0

GoldenEdge SuperMach HDF-0 is a load-bearing MDF which exhibits improved density compared to our regular density range, as well as moisture resistant qualities for use in humid conditions. GoldenEdge SuperMach HDF-0 is excellent for machinability, paintability and for grooved profiling. Its physical properties make SuperMach HDF-0 highly machinable, and the smooth surface finish lends itself well to being painted or coated.

APPLICATIONS:

With improved support for high loads, GoldenEdge SuperMach HDF-0 can be applied in situations which require a greater level of strength and load bearing, while remaining dimensionally stable in contact with moisture. Ideal for interior applications such as joinery, built-in furniture, shelving, floor linings and other possibilities, GoldenEdge SuperMach HDF-0 is an excellent substrate for natural wood veneer, vinyl's, printed papers, foils and melamine papers.

Available Standards: E0
Available Certifications: FSC®, CARB P2

RECOMMENDATIONS:

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction. Wood based panels are biodegradable and can be recycled. It is recommended to follow local regulation for the disposal of residues.

PROPERTIES:

- Moisture Resistant
- Superior Machined Finish
- Superior Paint Finish

NELSON PINE INDUSTRIES LTD
PO Box 3049, Richmond,
Nelson, New Zealand 7050

Phone: 03 543 8800 or 0800 800 438
Website: www.nelsonpine.co.nz

PHYSICAL PROPERTIES

PROPERTY	METRIC	2.5MM	12MM	18MM	19mm
Density	Kg/m^3	900	800	800	800
Weight	Kg/m^2	2.3	9.6	14.4	15.1
Internal Bond	kPa	2200	1200	1300	1300
Moisture Content	%	7.5	7.5	7.5	7.5
Thickness Swell 24hr	%	29.0	5.0	4.4	4.2
MoE	MPa	4000	4500	4200	4200
MoR	MPa	50	50	50	50

PROPERTY	IMPERIAL	0.09″	0.47″	0.70″	0.75″
Density	lb/ft^3	56	50	50	50
Weight	lb/ft^2	0.47	2.0	2.9	3.1
Internal Bond	lb/in^2	320	180	190	190
Moisture Content	%	7.5	7.5	7.5	7.5
Thickness Swell 24hr	%	29.0	5.0	4.8	4.2
MoE	lb/in^2	580000	650000	610000	610000
MoR	lb/in^2	7300	7300	7300	7300

GENERAL TOLERANCES	
Length/Width	+- 2.0
Thickness	+- 0.15
Straightness	1.5
Squareness	3.0

SHEET SIZES		
2.5mm	2440 x 1220	2465 x 1245
12mm	2440 x 1220	2465 x 1245
15mm	2440 x 1220	2465 x 1245
18mm	2440 x 1220	2465 x 1245
19mm	2440 x 1220	2465 x 1245

*On request other sheet sizes and thicknesses are available.

Note: These values represent typical values and are guidelines only. Please note that Nelson Pine Industries Limited reserve the right to change product specifications without notice.

All GoldenEdge MDF production meets ISO9001 international standard, and the Nelson Pine Industries environment is managed according to ISO14001 international environmental management systems standard. This represents our commitment to continual improvement in environmental management.

Certified by:

FSC www.fsc.org MIX Wood from responsible sources FSC® C019095

PLANTATION GROWN • RENEWABLE RESOURCE •

Fixing, Finishing & Storage

MACHINING

GoldenEdge MDF Panels can be worked easily with standard wood working machinery. The homogenous nature of GoldenEdge ensures that a good finish can be achieved on the edges. Tungsten carbide cutters and saws are recommended.

LAMINATING

Because of its light colour GoldenEdge 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 ensure that conditions of very high press pressure, high press temperature and long press times do not exist during laminating.

SCREW HOLDING

GoldenEdge MDF provides good screw holding strength both in the faces and edges. The recommendations are:

SCREW TYPE

The best results are obtained with the parallel thread screws such as the Twinfast or particle board screws. Conventional wood screws are not recommended.

SCREW GAUGE

The choice of screw gauge should be decided in relation to board thickness. The maximum screw gauge when edge fixing into GoldenEdge MDF is:

BOARD THICKNESS	MAX SCREW GAUGE
9	5
12	6
15	7
16	7
18	8
25	9

PILOT HOLE

A pilot hole is recommended to avoid splitting during edge screw fixing.

SCREW GAUGE	RECOMMENDED PILOT HOLE	
	LITEBOARD	REGULAR
4	1.5mm	2.0mm
5	1.8mm	2.4mm
6	2.0mm	2.6mm
7	2.2mm	2.7mm
8	2.5mm	3.0mm
9	2.8mm	3.3mm

SCREW POSITION

The position of screws inserted into the faces and edges of MDF should be decided in relation to board thickness and screw size. Screws inserted into the edges should be not less than 25mm from the corners.

SCREW TENSION

The screw must not be overtightened as further turning will reduce the holding strength.

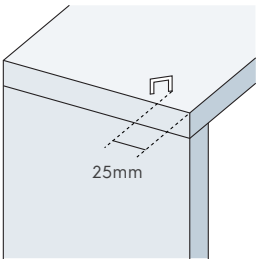
SCREW WITHDRAWAL STRENGTHS

To illustrate the holding power of screws in GoldenEdge MDF the forces required to withdraw typical parallel thread screws in an axial direction from 16m GoldenEdge MDF faces and edges are given below.

SCREW GAUGE	DEPTH OF INSERTION (MM)		WITHDRAWAL STRENGTH (N)	
	FACE	EDGE	FACE	EDGE
5	12	12	580	360
	16	20	1080	640
6	12	12	640	390
	16	20	1140	960
8	12	12	750	470
	16	20	1330	1060

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 MDF, it is important to have good control of air pressure to avoid excessive penetration of staples. For nailing use either annular groove or helical nails of 13 or 14 gauge, for best results.



MDF	STAPLE
9mm	20mm
12mm	20-25mm
15mm	30mm
16mm	32mm
18mm	36mm

Do not staple within 25mm of edge of board. Offset staple to edge of board.

NAILING SCHEDULE

FIXING CENTRES (MM)	150 Edge
	200 Intermediate
SHEET EDGE CLEARANCE (MM)	2

(Note all nails either non-ferrous or plated)

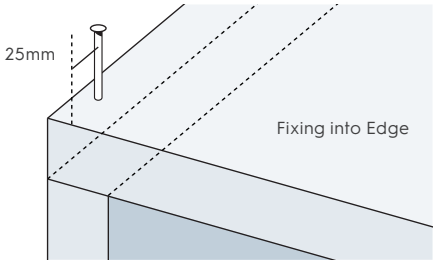
NAILING

GoldenEdge MDF can be fixed by nailing with good holding power and no split out when the following conditions are met:

1. Types of Nails
Use either annular grooved or helical (spiral) nails.

2. Nail Sizes
Use only 13 or 14 gauge nails. These give best results with good holding power in 16mm and 18mm GoldenEdge MDF. The length of nail should not exceed 50mm. Nailing is not recommended for 9mm and 12mm GoldenEdge MDF.

3. Distance from the Corner
Nails must be at least 25mm from the corner of the MDF panel.



4. Nailing at a slight angle will further increase the holding power.

5. Nailing is not recommended to the edges of 9mm and 12mm MDF (screwing is recommended).

6. Air gun pressure should be adjusted to ensure that the nail head finishes level with the surface of the panel.

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 low shrinkage wood filler. 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.

WORKING WITH GOLDENEDGE

To achieve a smooth continuous surface without warping or distortion, GoldenEdge should never be fixed to timber framing or substrates with moisture content exceeding 20%.

FINISHING

Veneers and Plastic Sheeting Surfacing: Satisfactory adhesion by cold cured adhesives relies on keying of the surface of GoldenEdge by light sanding. It is essential that a balancing of surfacing be provided on both surfaces to avoid board distortion. Veneering of GoldenEdge on one surface alters the balance of the material to absorb moisture, therefore the risk of board distortion is high. This practice is not advisable.

Fixing, Finishing & Storage

LINING WALLS (6MM MINIMUM RECOMMENDED)

Because of the susceptibility of GoldenEdge MDF to expansion and contraction all joints between sheets should provide for movement. Therefore a 2mm expansion gap must be provided for. Treatment of the joint can vary - vee joint, rounded joint, timber half round, PVC jointers. GoldenEdge MDF must be supported by framework and nailed at specific points please refer to table below.

WALL LINING			CEILING LINING	
PANEL THICKNESS (MM)	STUD CENTRES (MM)	NOGGING CENTRES (MM)	JOIST/TRUSS CENTRES (MM)	NOGGING CENTRES (MM)
6, 9, 12	400	1200	450	800
-	450	1200	600	600
-	600	800	900	480
-	-	-	1200	480

LINING MASONRY WALLS (6MM MINIMUM RECOMMENDED)

Because of the GoldenEdge susceptibility to water vapour, masonry walls must be sealed from external moisture ingress. The following procedures must be adhered to.

Step 1
Application of an effective damp proof course (eg. Flintkote) to the exterior of backfilled basement floors.

Step 2
A moisture barrier must be applied (ie. paint film) to the interior of basement walls. Furring strips are then overlaid, (50 x 25mm) the spacing of which is given in Framework Support Centres table. 25mm end gaps should be left around the furring strips to encourage air movement.

Step 3
A reflective insulation foil should then be applied to the face immediately before the application of the GoldenEdge board, then fixed in the manner described for timber frame lining. Consideration should be give to the insertion of small ventilation holes at the bottom of each sheet, finished with facing plates. The non-compliance with any or all of the previous steps will encourage sheet movement and therefore cause the lining to buckle.

Modern developments in construction adhesives have made them extremely effective and useful in fixing sheet materials as an alternative to mechanical fixing by nails or staples. Construction adhesives and GoldenEdge are compatible, being ideal for lining interiors. It is recommended that solvent based elastomeric construction adhesives be used preferably of the 'slow cure' variety. Water based varieties are not recommended. Manufacturers' recommendations with reference to method and degree of application must be followed closely.

STORAGE

The method of manufacturing MDF ensures a balanced construction resulting from the uniform distribution of fibres throughout the thickness of the board. The maintenance of this inherent flatness is dependent upon the use of correct storage and handling procedures. Without these, boards may develop a permanent set under their own weight particularly if they are not adequately supported on a flat pallet or by sufficient bearers during any storage period.

THE FOLLOWING PROCEDURES ARE RECOMMENDED:

1. MDF sheets should preferably be stored horizontally and lifted clear of the floor using dry bearers as supports.

2. Where individual bearers are used they should be of equal thickness and placed at not more than 800mm centres for boards of 15mm thickness or more. Closer spacing is required for thinner boards.

3. The bearers supporting successive layers should be in vertical alignment.

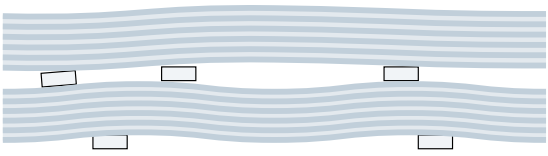
4. Stacks of boards should have flush sides to minimise damage to protruding edges or overhanging corners.

5. Vertical storage of small numbers of boards is acceptable provided the boards are well supported close to vertical position.

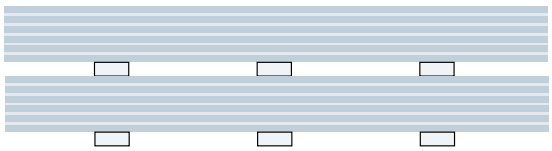
6. The storage area should be well ventilated and the conditions should be reasonably dry. An average relative humidity of 50% will maintain board moisture content in the range 7-9%.

7. Boards should be fully protected from the weather during transportation and storage.

8. One or two scrap boards should be placed on top of stacked boards, to reduce the effect of short term changes in environmental conditions.



Unsatisfactory Support



Ideal Support

TAKING DELIVERY

GoldenEdge is delivered with cover sheets included at top and bottom. These packs are plastic strapped and should be dismantled and conditioned on bearers as soon as possible. Care should be taken when cutting strapping.

CONDITIONING

To ensure the compatibility of GoldenEdge with other materials with which it is being used, a conditioning period of at least 48 hours must be observed. To promote air movement around the individual sheets, 75mm gluts must be inserted between the sheets. It is essential that each sheet is supported not more than 900mm centres and 300mm from the end. If the stack must be covered a 'breather' type sheeting with a clear air space must be provided between the stack and the cover sheet; impervious materials such as polyethylene sheet must be avoided.

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.

Product Performance and Warranty

TECHNICAL ADVISORY SERVICE:

GoldenEdge Medium Density Fibreboard is manufactured in New Zealand by Nelson Pine Industries Ltd to the highest standards of quality and consistency.

Nelson Pine Industries Ltd will assist you in all aspects of technical advice. You are invited to call the Technical Manager MDF 0800 800 438 Toll Free for technical information relating to fixing, techniques, design performance, fire resistance and questions relating to specific performance criteria.

PRODUCT PERFORMANCE:

GoldenEdge MDF Panels should not be used in exterior applications, should not be exposed to water or high humidity situations (saunas, shower cabinets) and should be kept clear of nearby heat sources such as solid fuel heaters and free standing fireplaces. GoldenEdge is manufactured specifically for applications such as high quality furniture and joinery, using urea formaldehyde resin manufactured expressly for Nelson Pine Industries.

Formaldehyde concentrations in areas without proper ventilation are significantly reduced by sealing all exposed surfaces and edges with two coats of paint or polyurethane.

GoldenEdge MDF Panels are resistant to fungal decay provided that the board does not exceed 20% moisture content for extended periods. They are also resistant to attack by common household wood borer. There are no additives such as insecticides or fungicides.

As with all wood and wood products, it is possible that GoldenEdge panels may contract or expand with moisture content. Provision for linear expansion in the panels should be made in any design utilising MDF.

DURABILITY:

GoldenEdge will be durable for 15 years when used for non-bracing and non-structural interior applications in houses as follows:

Used for the construction of fixtures such as benches or basin supports where:

- the top surface is covered with a tough impermeable covering such as melamine laminate, stainless steel or a polyester vanity unit
- the sides and edges of the GoldenEdge are coated with a sealer and exposed faces and edges with two top coats of impervious coating
- damage to coatings is repaired

Other uses (eg. Shelving, skirting trim, furniture, door jambs, stair treads and non-bracing linings):

GoldenEdge will be durable for 50 years when used in dry interior environments (ie. not saunas, spa rooms or shower rooms). When used in wet rooms (eg. laundries and bathrooms) the provisions of NZBC E3 must be complied with and an impervious coating applied to GoldenEdge. The bottom of GoldenEdge linings and floor level trim will swell and eventually deteriorate if exposed to persistent or cyclic wetting.

PRODUCT WARRANTY:

GoldenEdge carries a 12 month warranty against faulty materials or workmanship by the manufacturer to the extent of replacement of the product but not including any indirect or consequential loss subject to the provisions of the Consumer Guarantees Act 1993.

WARNING

This warranty applies only when the product has been used in accordance with the recommendations. Any defect must be advised to the manufacturer within 21 days of determination or from the day such defects should have become known.

Nelson Pine Industries Ltd reserves the right to change specifications contained in this publication without notice.

This is a reconstituted wood panel made from wood, resin and wax. This must be handled in accordance with safe work practices.

Exposure to wood dust and/or formaldehyde may cause irritation to the eyes, respiratory system and skin, and may cause sensitisation by inhalation resulting in asthma, and by skin contact resulting in dermatitis.

Wood dust is classified as a known carcinogen. Repeated inhalation of wood dust over many years may cause nasal cancer. Formaldehyde is classified as a probable carcinogen.

STORAGE:

Storage areas containing large quantities of this product must be adequately ventilated.

SAFE WORK PRACTICE:

Work areas must be well ventilated and kept clean. Sawing, sanding and machining equipment must be fitted with dust extractors to ensure that dust levels are kept within standards laid down by Worksafe Australia, Occupational Safety and Health New Zealand, or the specific country of use. If not, a dust mask conforming with AS/NZS 1715 and AS/NZS 1716 and eye protection conforming with AS/NZS 1337 must be worn.

Offcuts, shavings and dust must be disposed of in a manner which avoids the generation of dust and in accordance with the requirements of local waste disposal authorities.

In end use applications all product surfaces exposed to occupied space must be sealed.

FURTHER INFORMATION:

Refer to the Material Safety Data Sheet for this product available from Nelson Pine Industries Ltd website at www.nelsonpine.co.nz

NELSON PINE INDUSTRIES LTD

PO Box 3049, Richmond,
Nelson, New Zealand 7050

Phone: 03 543 8800 or 0800 800 438

Website: www.nelsonpine.co.nz

GoldenEdge, Tree Device and Panelbrace are tradenames and trademarks of Nelson Pine Industries Ltd

MS 22012/SEPTEMBER 2024