

Regular



Description

GoldenEdge Regular 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 Regular can be worked easily with all conventional woodworking machines and hand tools. Tungsten carbide cutters and saws are recommended.

Physical Properties (Metric)

Behaviour in use – 9 & 18mm thicknesses

Property	Unit	Min Value	Mean Value	Max Value
Density	kg/m ³	690	725	–
Internal Bond	kPa	700	960	–
Modulus of Rupture	MPa	34.0	44.0	–
Modulus of Elasticity	MPa	2400	3000	–
24 Hour Thickness Swell				
– 18mm	%	–	4.7	5.6
– 9mm	%	–	9.0	11.1
Moisture Content	%	6.0	8.0	11.0

Physical Properties (Imperial)

Behaviour in use – 9 & 18mm thicknesses

Property	Unit	Min Value	Mean Value	Max Value
Density	lb/ft ³	43.0	45.2	–
Internal Bond	psi	102	139	–
Modulus of Rupture	psi	4930	6380	–
Modulus of Elasticity	psi x 10 ³	348	435	–
24 Hour Thickness Swell				
– 18mm	%	–	4.7	5.6
– 9mm	%	–	9.0	11.1
Moisture Content	%	6.0	8.0	11.0

Sheet Sizes (mm)

Thickness	Sheet Size
9mm	2440x1220
12mm	2440x1220
15mm	2440x1220
16mm	2440x1220
18mm	2440x1220 2440x1830
	3660x1220
25mm	2440x1220
30mm	2440x1220

On request other sheet sizes and thicknesses are available.

Sheet Tolerances (mm)

Thickness	±0.15
Length and Width	±1.6
Squareness	3.0
(maximum difference between diagonals)	
Straightness	1.6
(maximum deviation from line)	

Technical Advisory Note - Bracing Units

GoldenEdge - Medium Density Fibreboard (MDF)
Racking resistance of 9mm and 12mm GoldenEdge Regular MDF and 6mm Thinline

Description, Purpose and Application

GoldenEdge MDF has excellent strength quality, surface smoothness and stability. It can be used to provide sheet bracing resistance for light timber framed buildings under wind and earthquake loading to meet the requirements of the New Zealand Building Code section - B1 Structure and the 50 year durability requirement of section - B2 Durability.

Testing

The New Zealand Building Code lists NZS 3604:1999, "Timber framed buildings" as an Acceptable Solution within B1/AS1 of the approved document under clause 3.0-Timber. Clause 5.5.2 of NZS 3604 requires Bracing Unit (BU) ratings to be determined by test. Clause 8.3.1.2 of NZS 3604 states that the bracing capacity of wall bracing elements shall be determined by the BRANZ P21 test procedure and rated in accordance with BRANZ supplement P21 in Bracing Units (BU). Nelson Pine Industries Ltd commissioned BRANZ to carry out tests in order to derive bracing ratings to be used with NZS 3604:1999 for bracing walls constructed with bottom plates bolted to a concrete foundation or coach screwed to a timber foundation.

Summary of Panel Bracing Unit test results for 9mm and 12mm GoldenEdge Regular and 6mm GoldenEdge Thinline applied to one face only.

Normal wall Length (m)	MDF grade and mean density	MDF thickness	End straps	BU/m Earthquake	BU/m Wind
1.220	Regular - 725kg/m ³	9mm & 12mm	No	97	109
1.220	Regular - 725kg/m ³	9mm & 12mm	Yes	157	170
0.610	Regular - 725kg/m ³	9mm & 12mm	No	97	106
0.610	Regular - 725kg/m ³	9mm & 12mm	Yes	136	123
2.400	Thinline - 780kg/m ³	6mm	No	99	101
1.200	Thinline - 780kg/m ³	6mm	Yes	128	142

For full details of tests, nailing method and hold down requirements refer to the GoldenEdge MDF bracing manual.

