



NZ / AUS Specifications

Specifications for New Zealand / Australian Standards

Table of mechanical properties for Designpanel MDF Standard Panels (E1 or E0)

Density range: 650 to 850 kg/m ³								
Moisture content range: 5 to 10 %od								
Formaldehyde emissions (desiccator method)					E1 panels ≤ 1.0 mg/litre E0 panels ≤ 0.5 mg/litre			
Thickness (mm)	Internal Bond (MPa)		MOR (MPa)		Thickness Swell 24 hrs (%)		MOE (MPa)	
	Designpanel typical	AS/NZS 1859.2:2004 minimum	Designpanel typical	AS/NZS 1859.2:2004 minimum	Designpanel typical	AS/NZS 1859.2:2004 maximum	Designpanel typical	AS/NZS 1859.2:2004 minimum
3	1.00	0.60	36	34	25.0	37.5	3500	2800
4	1.00	0.60	45	34	20.0	37.5	3500	2800
4.75	1.00	0.60	45	34	20.0	37.5	3500	2800
6	1.00	0.60	45	30	14.0	28.0	4000	2600
9	0.90	0.50	35	28	10.0	15.0	2600	2400
12	0.90	0.50	35	28	10.0	15.0	3000	2400
15	0.90	0.45	35	26	8.0	12.0	3200	2000
16	0.90	0.45	35	26	8.0	12.0	3200	2000
18	0.90	0.45	35	26	6.0	12.0	3200	2000
25	0.80	0.40	35	23	5.0	10.0	3400	1800

Table of mechanical properties for Designpanel MDF Light Panels (E1 or E0)

Density range: 550 to 650 kg/m ³								
Moisture content range: 5 to 10 %od								
Formaldehyde emissions (desiccator method)					E1 panels ≤ 1.0 mg/litre E0 panels ≤ 0.5 mg/litre			
Thickness (mm)	Internal Bond (MPa)		MOR (MPa)		Thickness Swell 24 hrs (%)		MOE (MPa)	
	Designpanel typical	AS/NZS 1859.2:2004 minimum	Designpanel typical	AS/NZS 1859.2:2004 minimum	Designpanel typical	AS/NZS 1859.2:2004 maximum	Designpanel typical	AS/NZS 1859.2:2004 minimum
12	0.80	0.50	30	26	10.0	NA	3000	NA
16	0.80	0.45	30	24	9.0	NA	2500	NA
18	0.80	0.45	30	24	8.0	NA	2800	NA
30	0.65	0.40	25	21	4.5	NA	2400	NA

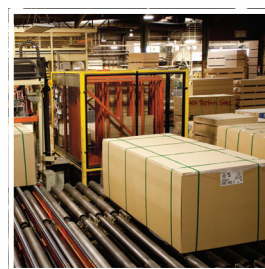
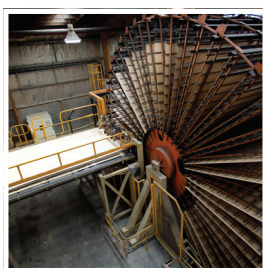


Table of mechanical properties for Designpanel MDF MUF Panels (E1)

Density range: 650 to 750 kg/m³
Moisture content range: 5 to 10 %od

Formaldehyde emissions (desiccator method)

E1 panels ≤ 1.0 mg/litre

Thickness (mm)	Internal Bond (MPa)		MOR (MPa)		Thickness Swell 24 hrs (%)		MOE (MPa)	
	Designpanel typical	AS/NZS 1859.2:2004 minimum	Designpanel typical	AS/NZS 1859.2:2004 minimum	Designpanel typical	AS/NZS 1859.2:2004 maximum	Designpanel typical	AS/NZS 1859.2:2004 minimum
12	1.20	0.50	35	28	8.0	15.0	3000	2400
16	1.20	0.45	35	26	6.0	12.0	3200	2000
18	1.20	0.45	35	26	4.0	12.0	3200	2000
25	1.20	0.40	35	23	3.8	10.0	3400	1800

Note: To calculate the weight of a MDF sheet, multiply the density (kg/m³) by length (m) by width (m) by thickness (mm) and divide by 1000.

Example: A sheet of standard density (average 720 kg/m³) 18 mm MDF, size 1.22m by 2.44m weighs: $720 \times 1.22 \times 2.44 \times 18 \div 1000 = 38.6$ kilograms

Other product options can be considered but may be subject to specific order criteria.
Please contact customer services.



Table of dimensional tolerance for all Designpanel MDF Panels

Dimension	Designpanel typical	AS/NZS 1859.2:2004 tolerances
Thickness (mm)	+/- 0.15	+/- 0.2
Length and Width (mm)	+/- 2.0	+/- 5.0 mm
Diagonal difference	3.0	NA

We guarantee that Designpanel will meet the minimum specifications on the properties described above according to AS/NZS 1859.2:2004

Note on dimensional stability: MDF is made of wood and moisture is always present in wood. Furthermore, moisture will enter or leave wood products depending on environmental conditions like air temperature and relative humidity. As moisture enters or leaves, wood products properties and dimensions will change. Appropriate design and storage measures have to be taken to minimize MDF exposure to ambient changes and subsequent changes in dimensions and properties. In general, the impact of moisture changes in panel properties is minimal if the air relative humidity is maintained between 50 and 80%. In general, panels will expand (up to 3 mm/m) if exposed to ambient air with more than 65%RH and will shrink (up to 3 mm/m) if exposed to ambient air with less than 65%RH.