

Trade Essentials® Particleboard MR

Trade Essentials Particleboard MR is a moisture resistant particleboard for use in areas of high humidity or areas where occasional wetting may occur. The superior performance of Particleboard MR compared to standard particleboard is due to the bonding of wood particles with a special moisture resistant resin system. Particleboard MR can be easily identified by the green dye incorporated in the core of the board.



APPLICATIONS

Trade Essentials® Particleboard MR is designed for interior use in areas of high humidity such as kitchen cupboards, bathroom vanities, laundry cupboards, shelving, or any situation where a moisture resistant particleboard is required. 33mm particleboard is used for tables, desks and bench tops.

SHEET SIZES & THICKNESSES

Trade Essentials Particleboard MR is available in a large range of sheet sizes and thicknesses. See Appendix 6.

PROPERTIES

(Typical physical properties when tested to AS/NZS 1859.1)

Specification	Unit	THICKNESS			
		9-12mm	13-22mm	23-33mm	>33mm
Density	kg/m ³	660	640	610	630
Modulus of Rupture	MPa	20.0	17.0	15.5	17.5
Modulus of Elasticity	MPa	2700	2300	2400	3000
Internal Bond	MPa	1.00	0.80	0.70	0.60
Surface Soundness	MPa	2.0	1.6	1.6	1.7
Screw Holding Face	N	-	700	800	800
Screw Holding Edge	N	-	900	900	900
Thickness Swell 1hr	%	<5	<6	<5	<5
Wet Bending Strength (Method A)	MPa	5.5	4.5	4.5	5.5
Formaldehyde Level	mg/L	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0

WEIGHT

Thickness	12mm	16mm	18mm	25mm	33mm
kg per m ²	7.8	10.4	11.5	15.5	20.1

FIRE HAZARD INDICES

(Typically achieved when tested to AS/NZS 1530.3)

Indices	Result	Range
Ignitability	14	0-20
Spread of Flame	8	0-10
Heat Evolved	7	0-10
Smoke Developed	4	0-10

FIRE TEST RESULTS

Cone Calorimeter (Results when tested in accordance with AS/NZS 3837)

Classification	Result
Group Number	3
Average Specific Extinction Area	61.2 Kg/m ²

MOISTURE RESISTANCE

Complies with Wet Cyclic Test moisture resistant properties as specified in the Properties table (AS/NZS 1859.1).

Trade Essentials Particleboard MR is manufactured to meet the Australian AS/NZS standard for E1 formaldehyde emission levels (≤1.0mg/L)

Trade Essentials Particleboard MR is also available in the lower formaldehyde emission level E0 (≤ 0.5mg/L).

GREENfirst PRODUCT

Trade Essentials Particleboard MR E0 is a Greenfirst product.

General Site Work Notes

Appendix 1. Handling & Product Application Guidelines Section 9:1

Board Product: Site Work Notes

Appendix 3. Handling & Product Application Section 9:3

Sheet Size & Thickness Availability

Appendix 6 Section 9:6

Greenfirst Product

Section 3:1