

m³ Particleboard

Particleboard, also known as chipboard, is a manufactured timber product made from reconstituted wood particles. Unlike OSB, the particles are randomly orientated, and the board has uniform properties in each direction. Due to this, it is a relatively stable product, and offers a cheaper alternative to other timber sheet products. It is typically weaker than plywood and highly susceptible to water damage, warping and expansion, and is generally not suitable for outdoor applications.

Small wood particles are layered with a formaldehyde-based resin, or melamine-based resin (for increased water resistance). Other additives are commonly included to increase resistance to insect damage, fire, and water.

Particleboard is commonly used for low cost joinery and dry area construction. It is often painted, or covered with a timber veneer or melamine coating to increase water resistance, durability and aesthetic qualities.

Category *Timber products*
Type *Manufactured timber product*
Functional unit *m³*
Specific heat *1 300 J/(kg·K)*
Density *680 kg/m³*

Common uses
Interior joinery, walling, flooring

Process name
Particle board, indoor use, at plant/RER U/AusSD U

Input-output sector
Other Wood Product Manufacturing

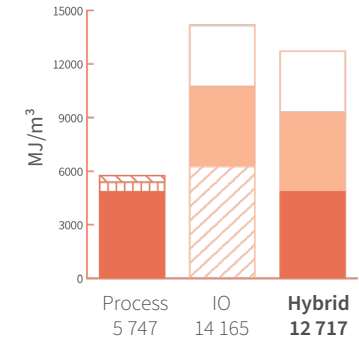
Further information
doi.org/10.26188/5da5562dbfbf9

Material variations

	Unit	Energy (MJ/unit)	Water (L/unit)	GHG emissions (kgCO ₂ e/unit)
Particleboard - indoor	m ³	12 717	10 720	696
Particleboard outdoor	m ³	15 879	20 491	813

TOP THREE INPUTS

- 18.0% Road Transport
- 4.3% Paraffin, at plant/RER U/AusSD U
- 1.8% Wholesale Trade

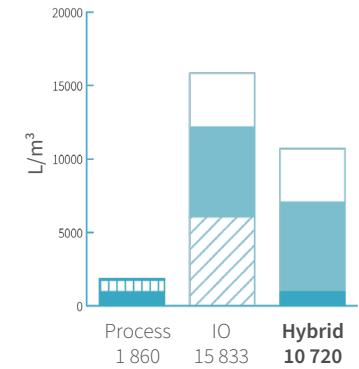


ENERGY



TOP THREE INPUTS

- 3.6% Water Supply, Sewerage and Drainage Services
- 3.1% Paraffin, at plant/RER U/AusSD U
- 2.5% Wholesale Trade

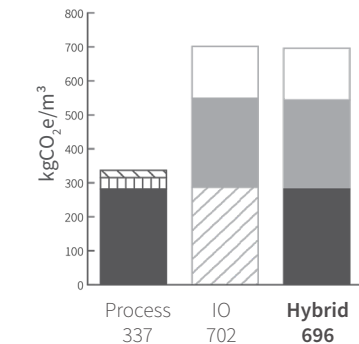


WATER



TOP THREE INPUTS

- 10.9% Road Transport
- 2.1% Wholesale Trade
- 1.8% Other Fabricated Metal Product manufacturing



GREENHOUSE GAS EMISSIONS

