

# m<sup>3</sup> MDF sheet

Medium density fibreboard (MDF), is a manufactured timber product made from reconstituted wood fibres. It is denser than particleboard or plywood, and has a smooth finish. MDF is commonly covered with timber veneer, vinyl, or a melamine paper coating, providing increased durability, water resistance and aesthetic qualities. MDF is cost-effective when compared with other sheet materials, and is typically stronger than particleboard.

MDF is created by combining residual wood fibres with a resin binder and wax, and pressing at a high temperature. Urea-formaldehyde is commonly used for non-waterproof applications, and melamine urea formaldehyde for increased water resistance.

MDF is commonly used for joinery and interior purposes. Depending on the resin used, it can have a moderate resistance to water, and is generally not suited to exterior applications.

**Category** *Timber products*  
**Type** *Manufactured timber product*  
**Functional unit** *m<sup>3</sup>*  
**Specific heat** *1 300 J/(kg·K)*  
**Density** *684 kg/m<sup>3</sup>*

**Common uses**  
*Interior joinery, walling, flooring*

**Process name**  
*Medium density fibreboard, at plant/RER U/AusSD U*

**Input-output sector**  
*Other Wood Product Manufacturing*

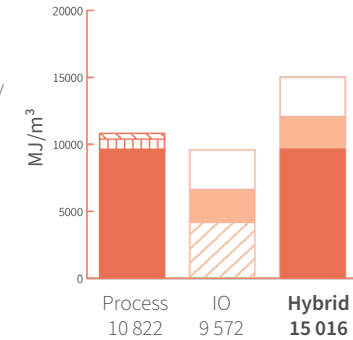
**Further information**  
[doi.org/10.26188/5da555b3e3bf9](https://doi.org/10.26188/5da555b3e3bf9)

**Material variations**

Material variations	Unit	Energy (MJ/unit)	Water (L/unit)	GHG emissions (kgCO <sub>2</sub> e/unit)
MDF sheet	m <sup>3</sup>	15 016	8 471	899
Melamine-coated MDF board - 16 mm	m <sup>2</sup>	344	283	18.7
Melamine-coated MDF board - 18 mm	m <sup>2</sup>	390	323	21.3
Melamine-coated MDF board - 25 mm	m <sup>2</sup>	557	453	30.5

**TOP THREE INPUTS**

- 11.0%** Natural gas, burned in industrial furnace >100kW/ RER U/AusSD U
- 9.9%** Road Transport
- 7.6%** Paraffin, at plant/RER U/ AusSD U

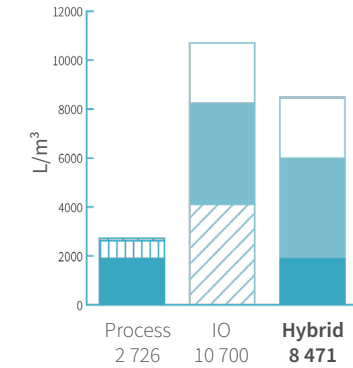


**ENERGY**



**TOP THREE INPUTS**

- 8.1%** Paraffin, at plant/RER U/ AusSD U
- 3.0%** Water Supply, Sewerage and Drainage Services
- 2.1%** Wholesale Trade

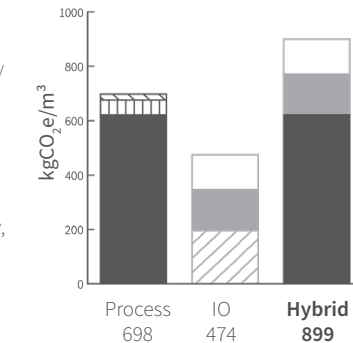


**WATER**



**TOP THREE INPUTS**

- 11.6%** Natural gas, burned in industrial furnace >100kW/ RER U/AusSD U
- 5.4%** Road Transport
- 1.9%** Wood chips, from industry, softwood, burned in furnace 300kW/CH U/ AusSD U



**GREENHOUSE GAS EMISSIONS**

