

m³ Cross laminated timber (CLT)

Cross laminated timber (CLT) is a manufactured timber product, similar to plywood. Solid timber members are bonded together, with the grain alternating by 90 degrees for each lamination. CLT is much thicker than traditional plywood and has superior structural capabilities. It has excellent dimensional stability, strength and rigidity.

CLT is fabricated using a range of different timber varieties. It is typically bonded together using melamine urea formaldehyde, polyurethane or other adhesives.

CLT has different structural capabilities when compared with conventional timber, and acts as a sheet product, rather than a framing product. It can be used as a complete floor, wall or roof system, without the need for additional supporting members.

Category *Timber products*

Type *Manufactured timber product*

Functional unit *m³*

Specific heat *1 300 J/(kg·K)*

Density *490 kg/m³*

Common uses
Flooring and walling system, structural panels, timber sheets

Process name
Glued laminated timber, indoor use, at plant/RER U/AusSD U

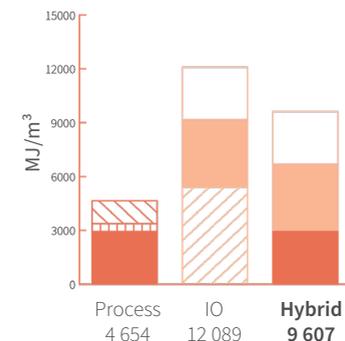
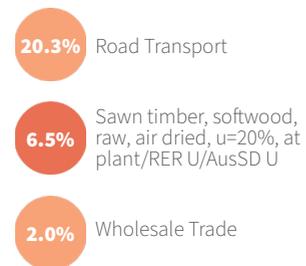
Input-output sector
Other Wood Product Manufacturing

Further information
doi.org/10.26188/5da55346af5dc

Material variations

	Unit	Energy (MJ/unit)	Water (L/unit)	GHG emissions (kgCO ₂ e/unit)
Cross laminated timber (CLT)	m ³	9 607	8 608	645
CLT - 60 mm	m ²	576	516	38.7
CLT - 105 mm	m ²	1 009	904	67.7
CLT - 175 mm	m ²	1 681	1 506	113

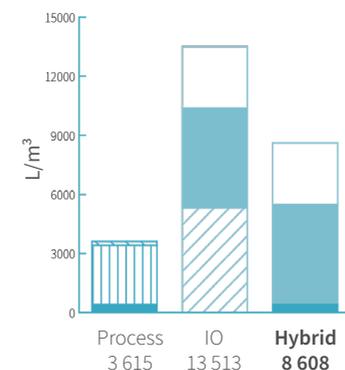
TOP THREE INPUTS



ENERGY



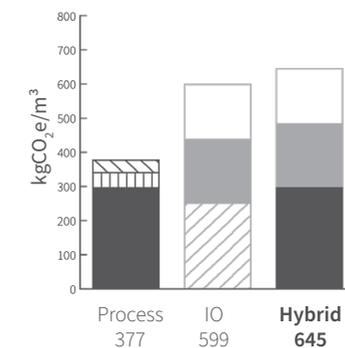
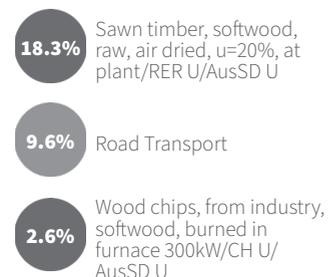
TOP THREE INPUTS



WATER



TOP THREE INPUTS



GREENHOUSE GAS EMISSIONS

