Aluminium composite panel

Aluminium composite panels consist of a layer of foam insulation, sandwiched between two aluminium sheets. Aluminium sheets are chosen for their durability, resistance to corrosion, large colour palette and strength. The foam is typically polyethylene or polyurethane.

Rolled aluminium coils are used to sandwich the foam insulation, which is also fed to the manufacturing line as a roll. Adhesives are used to glue the aluminium sheets to the core.

Aluminium composite panels are typically used as cladding. The panel specified here is 4 mm thick.

Category *Metals*

Type *Aluminium*

Functional unit *m^2*

Specific heat *1 000 J/(kg·K)*

Density *1 900 kg/m^3*

Common uses
Cladding

Process name
Aluminium composite panel, ALUCOBOND, 4mm, FR (custom)

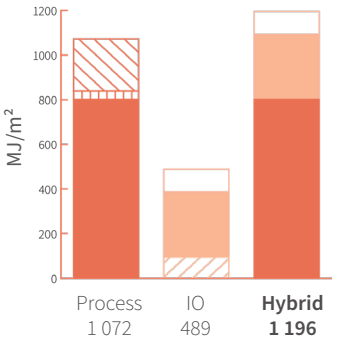
Input-output sector
Structural Metal Product Manufacturing

Further information
doi.org/10.26188/5da551a4afce4

EPiC Database

TOP THREE INPUTS

- 10.5% Iron and Steel Manufacturing
- 6.2% Thermoforming, with calendering/RER U/ AusSD U
- 5.3% Rock wool, at plant/CH U/ AusSD U

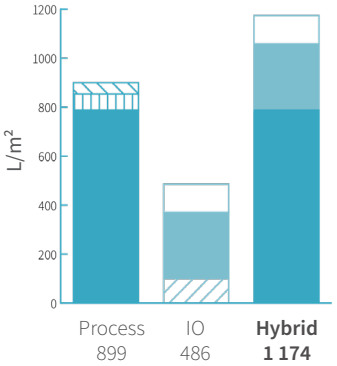


ENERGY

1 196 MJ/m²

TOP THREE INPUTS

- 44.4% Thermoforming, with calendering/RER U/ AusSD U
- 7.5% Iron and Steel Manufacturing
- 4.3% Rock wool, at plant/CH U/ AusSD U

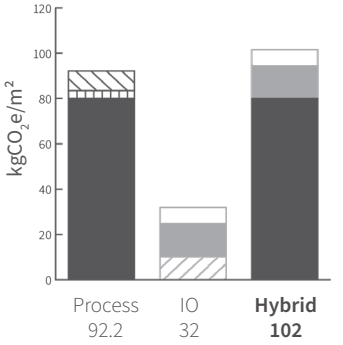


WATER

1 174 L/m²

TOP THREE INPUTS

- 5.6% Thermoforming, with calendering/RER U/ AusSD U
- 4.8% Rock wool, at plant/CH U/ AusSD U
- 4.6% Iron and Steel Manufacturing



GREENHOUSE GAS EMISSIONS

102 $kgCO_2e/m^2$