

kg Steel sheet corrugated

Steel is a ferrous metal and is an alloy of iron and carbon, as well as potential other elements. It has a very high tensile strength. Steel has been used in the construction industry for over a century.

The core material for making steel is iron, which is found in iron ore. Iron is extracted from iron ore in blast furnaces through the smelting process, while controlling for the content of carbon. The molten steel is usually further processed before being cast into sheet. These steel sheets are then corrugated using roll forming. The corrugated steel sheets are finally galvanised by applying a coat of zinc crystals on their surface to significantly improve their resistance to corrosion.

Corrugated steel sheets are widely used in the construction industry, mainly as roofing, cladding, separations and permanent formwork.

Category Metals

Type Steel

Functional unit kg

Specific heat 490 J/(kg·K)

Density 7 850 kg/m³

Common uses

Roofing, cladding, separations, permanent formwork

Process name

Steel sheet corrugated (custom)

Input-output sector

Iron and Steel Manufacturing

Further information

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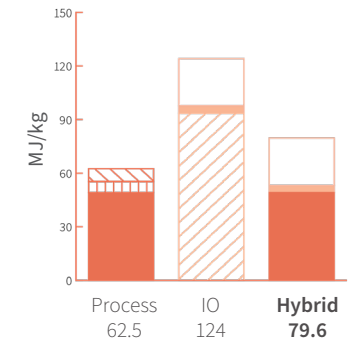
Material variations	Unit	Energy (MJ/unit)	Water (L/unit)	GHG emissions (kgCO ₂ e/unit)
Steel sheet corrugated	kg	79.6	73.4	5.5
Steel sheet corrugated - per m ²	m ²	259	239	17.9
Steel sheet corrugated - pre-painted	m ²	293	286	24.9

TOP THREE INPUTS

26.2% Steel, converter, low-alloyed, at plant/RER U/ AusSD U

4.9% Hot rolling, steel/RER U/ AusSD U

3.5% Road Transport



ENERGY

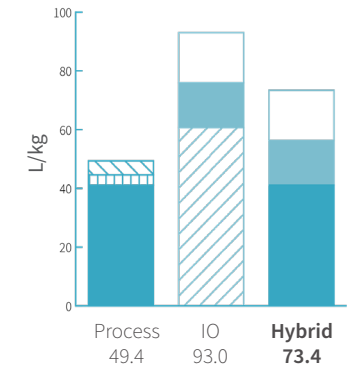
79.6
MJ/kg

TOP THREE INPUTS

22.6% Steel, converter, low-alloyed, at plant/RER U/ AusSD U

8.6% Hot rolling, steel/RER U/ AusSD U

4.8% Non Ferrous Metal Ore Mining



WATER

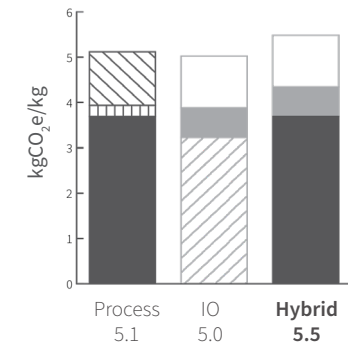
73.4
L/kg

TOP THREE INPUTS

28.0% Steel, converter, low-alloyed, at plant/RER U/ AusSD U

4.5% Hot rolling, steel/RER U/ AusSD U

2.5% Non Ferrous Metal Ore Mining



GREENHOUSE GAS EMISSIONS

5.5
kgCO₂e/kg