

M+ Room

Meeting M+

CO₂ impact of this product:

-109.18 kg/CO₂ -e

Negative values indicate CO₂ storage, for example in wood or bamboo.
Scope: life cycle modules A1–A3, or cradle-to-gate.

This is roughly equivalent to the production of:



5 pairs of jeans



7 leather handbags



114.9 kg of chocolate



46 fast food hamburgers

What is needed to offset this:



11 trees growing for 1 year

The above comparisons are based on average, approximate values.

Explanation

We have worked with an independent expert party to develop a CO₂ impact calculator to enable us to make a substantiated assessment of the climate impact of our products.

This calculation is based on the European standard EN 15804+A2, which looks at the impact of:

- Raw material extraction
- Transport
- Production of materials

For this calculation, we use the renowned Ecoinvent database, as prescribed in the Dutch Determination Method for Environmental Performance of Buildings. Each material component (such as MDF, foam, textiles) is analysed separately for CO₂ emissions (expressed in kg CO₂ equivalents), after which the total climate impact is calculated. Our focus on A1–A3 stems from our conviction that the greatest climate gains can be achieved in the production phase. As a manufacturer, we can exert direct influence here through our choice of materials and production process.

Circular return principle

M+ was developed with circularity as its starting point. At the end of their useful life, we take back products. More than 90% of the materials and components are then reused in the production of new M+ Rooms.

This approach fits seamlessly with our vision of minimising waste and extending the life cycle of materials. In combination with the use of sustainable raw materials such as wood and bamboo, this contributes to a responsible, future-oriented product — and to a structural reduction in environmental impact over its entire life cycle.

Item	Climate impact	Parts	Climate impact
Steel door and frame 2800 x 2300 mm	285,54	1,00	285,54
Wall 1000 x 2300 x 100 mm	- 18,96	6,00	- 113,76
Technical wall A 1000 x 2300 x 100 mm	- 17,16	1,00	- 17,16
Technical wall C 1000 x 2300 x 100 mm	- 17,73	4,00	- 53,19
Technical wall F 1000 x 2300 x 100 mm	- 18,67	1,00	- 18,67
Technical ceiling 1000 x 2800 x 60 mm	- 53,28	2,00	- 106,56
Ceiling 1000 x 2800 x 60 mm	- 60,88	2,00	- 121,76
Single connector	0,41	10,00	4,10
Connector A	0,99	20,00	19,80
Ceiling connector	0,78	16,00	12,48
			- 109,18

Explanation of the CO₂ calculation

This calculation was performed using a CO₂ impact calculator developed on the basis of European standard EN 15804+A2. We focus on modules A1-A3: raw material extraction, transport and material production. Issues such as assembly (the actual assembly of parts) and any finishing work are not yet included. Nevertheless, the current approach already provides a reliable picture, as most of the CO₂ impact is usually generated during the production of the individual materials (A1-A3). Use, assembly and end-of-life are outside the scope.

The data used comes from the internationally recognised Ecoinvent database, as prescribed in the Dutch determination method Milieuprestatie Bouwwerken (Environmental Performance of Buildings). In addition to the CO₂ impact, this calculation also provides input for the MKI (Environmental Cost Indicator), a value that expresses environmental damage in social costs (€ per unit of product).

The reuse correction has not yet been included in this calculation. Thanks to our deposit and return process, an average of 90% of the materials can be reused. This approach is in line with our design philosophy: measuring what we can influence and actively steering towards direct CO₂ reduction in the chain.

Embodied Carbon across the Life-Cycle Phases

