

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025

Perforated Ceiling / Wall Panel Metawell GmbH

Written in cooperation with:

brands & values[®]

Issuer and Program Holder:



Institut Bauen
und Umwelt e.V.



Environmental Product Declaration ISO 14025

An Environmental Product Declaration (EPD) in accordance with ISO 14025 and EN 15804 was written for Metawell GmbH and its product the perforated ceiling / wall panel.

The objective was to investigate and identify the potential environmental impact of the perforated ceiling / wall panel. For those purposes a Life Cycle Assessment (LCA) in accordance with ISO 14040 was conducted.

The LCA is a method to appraise product-related environmental aspects and product-specific environmental impact from raw material extraction (cradle), through production and usage to recycling/disposal (grave).

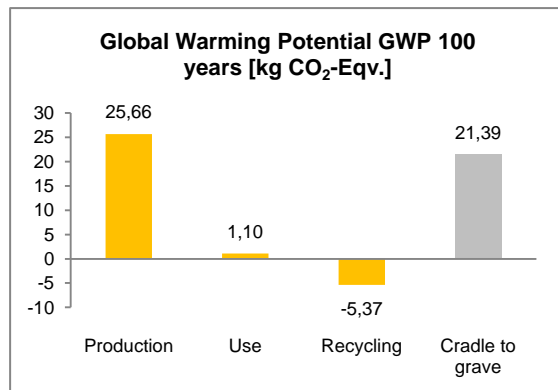
An EPD allows participation in tenders within sustainable building certification systems and serves as a communications tool to publicize the environmental performance of products.

LCA: Perforated Ceiling / Wall Panel Summary of Results

Global Warming Potential

During its life cycle the perforated ceiling / wall panel causes greenhouse gas emissions of 21.39 kg/m² CO₂ equivalents. Environmental pollution arising from raw material extraction is significant for the CO₂ footprint of the perforated ceiling / wall panel.

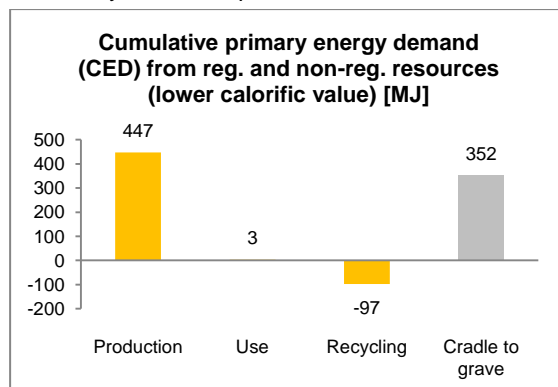
The ceiling / wall panel received credits for the high recycling potential at the end of its use. Additional credits accrued from the recycling processes of production scrap.



Primary Energy Requirements

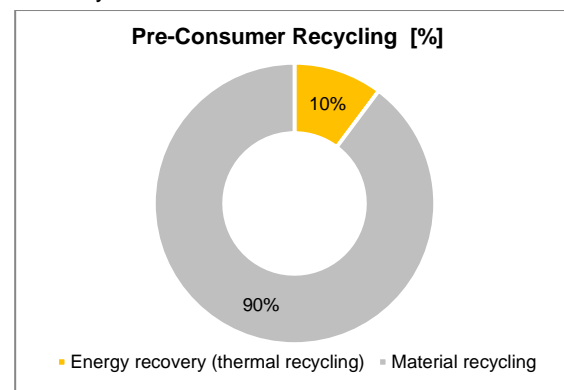
The energy consumed for the manufacture, use and recycling of the perforated ceiling / wall panel totaled 352 megajoules (MJ) per square meter. The largest consumer is raw material extraction related to energy expenditures for aluminum production.

Credits resulted for energy savings realized in secondary aluminum production.



Pre-Consumer Recycling Percentage

The total weight of production waste, which represents the pre-consumer recycling percentage, was 1.111 kg/m² or 22% of material usage. Of the total, 90% went to material recycling and 10% to energy recovery.



Post-Consumer Recycling Percentage

At the end of the the perforated ceiling / wall panel life cycle, 89% of the product goes to material recycling and 11% to energy recovery. Packaging waste is taken into account in the post-consumer recycling potential.

