

ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025

VARIFLEX Partition System

Fullwall Element

DORMA Hüppe Raumtrennsysteme GmbH + Co. KG

Compiled in collaboration with:

brands & values®

Issuer and Programme Holder:



Institut Bauen
und Umwelt e.V.



Environmental Product Declaration as per ISO 14025

An Environmental Product Declaration (EPD) was prepared in compliance with ISO 14025 and EN 15804 for the VARIFLEX partition made by DORMA Hüppe Raumtrennsysteme GmbH + Co. KG.

The objective was to identify and assess the potential environmental impacts related to the partition system. A life cycle analysis (LCA) was therefore carried out in accordance with ISO 14040, providing a methodological framework for presentation of the product's "eco-balance".

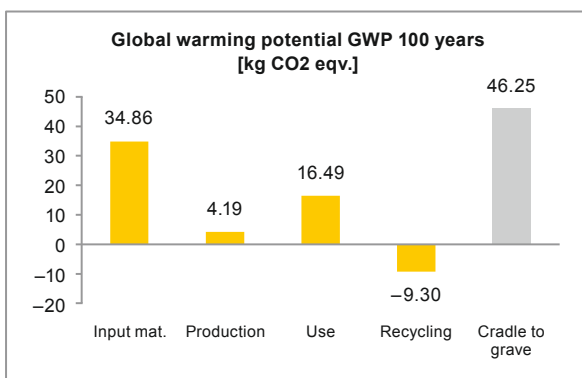
An LCA/eco-balance enables assessment of the climate change and ecological aspects associated with a product – i.e. the product-specific potential environmental impacts arising from raw material extraction (cradle) through production and use and on to recycling/disposal (grave).

An EPD thus enables participation in tenders involving sustainable building certification procedures and facilitates communication of the environmental performance of the products assessed.

LCA: Summary of VARIFLEX Results

Global warming potential (GWP)

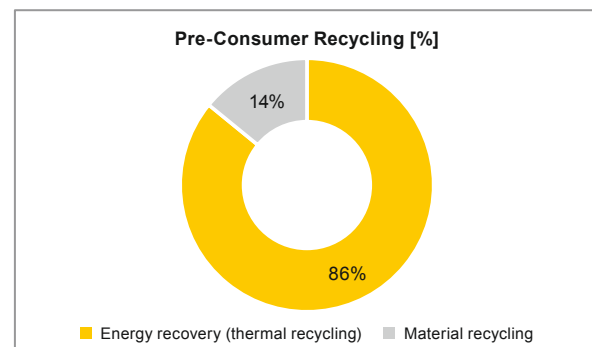
In the course of its life, the VARIFLEX fullwall element gives rise to greenhouse gas emissions totaling 46.25 kg CO₂ eqv. The environmental impacts arising from the raw material extraction and processing stage are significant for the CO₂ balance of the VARIFLEX. The fullwall element earns credits due to its high recycling potential at the end of its useful life.



Credits arise from energy recovered in the thermal recycling process applied to the production waste and from recycling the fullwall element after the use phase.

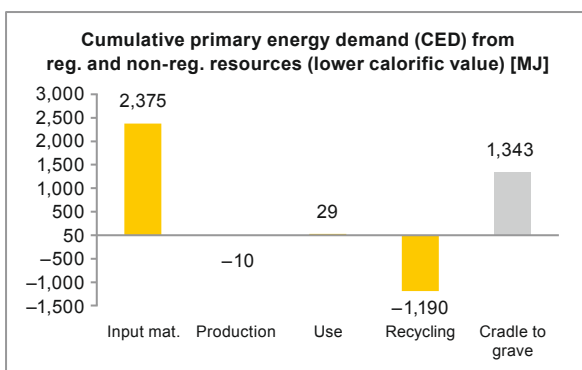
Pre-consumer recycling

The total weight of the production waste recycled at the pre-consumer stage is 2.830 kg/m² or 6% of the material input. Of this, 14% is sent for material recycling and 86% for energy recovery by thermal recycling.



Primary energy requirement

The cumulative energy demand (CED) arising from the manufacture, use and recycling of the VARIFLEX fullwall element totals 1,343 megajoules (MJ). The greatest amount of energy consumed occurs at the raw material extraction and processing stage due to the high power requirement of the aluminum and bitumen sheet production phase and the manufacture of the particle board.



Post-consumer recycling

At the end of the product's life, 16% of the VARIFLEX fullwall element is sent for material recycling and 84% for energy recovery by thermal recycling. The packaging waste is added to the post-consumer recycling potential.

