

# **ENVIRONMENTAL PRODUCT DECLARATION**

as per ISO 14025

# VARITRANS 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 VARITRANS 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 "ecobalance".

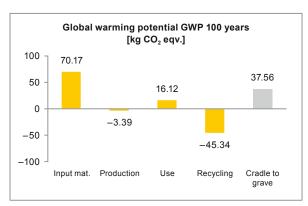
An LCA/eco-balance enables assessment of the climate change and ecological aspects associated with a product – i.e. the product-specific potential environmental impacts arising from raw material extraction (cradle) through production and use and on to recycling/disposal (grave).

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 VARITRANS Results

#### Global warming potential (GWP)

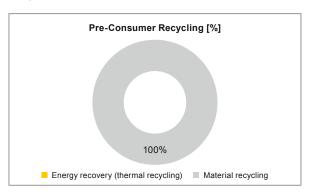
In the course of its life, the VARITRANS fullwall element gives rise to greenhouse gas emissions totaling 37.56 kg  $\rm CO_2$  eqv. The environmental impacts arising from the raw material extraction and processing stage are significant for the  $\rm CO_2$  balance of the VARITRANS. The fullwall element earns credits due to its high recycling potential at the end of its useful life. Further credits arise from the recycling of the production offcuts.



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.

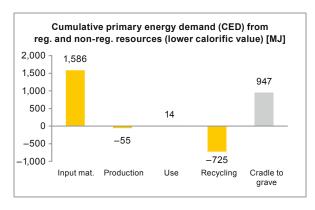
#### Pre-consumer recycling

The total weight of the production waste recycled at the pre-consumer stage is 0.311 kg/m² or 1% of the material input. Of this, 100% is sent for material recycling.



#### Primary energy requirement

The cumulative energy demand (CED) arising from the manufacture, use and recycling of the VARITRANS fullwall element totals 947 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 production phase and the manufacture of the safety glass.



#### Post-consumer recycling

At the end of the product's life, 77% of the VARITRANS fullwall element is sent for material recycling and 23% for energy recovery by thermal recycling. The packaging waste is added to the post-consumer recycling potential.

