



LAMILUX
GLASSYSTEME

KEY FACTS **ENVIRONMENTAL PRODUCT DECLARATION** acc. to EN 15804

CI Systems Continuous Rooflight B Smoke Lift B | Continuous Rooflight S | Smoke Lift S



Publisher and program owner:
ift Rosenheim GmbH

Created in cooperation with:

brands & values®



Environmental Product Declaration

An Environmental Product Declaration (EPD) was created in accordance with ISO 14025 and EN 15804 as commissioned by LAMILUX Heinrich-Strunz-Gruppe for the daylight elements CI Systems Continuous Rooflight B, Smoke Lift B, Continuous Rooflight S, Smoke Lift S. The objective was to identify the potential environmental influences related to the elements. To allow this to happen, a life-cycle assessment (LCA) was performed in accordance with ISO 14040/44, for which the standard de-

fines the method and framework. The life-cycle assessment is a method of evaluating the environmental aspects related to a product and the product-specific, potential environmental influence of extracting the raw materials (cradle) through production, use up to recycling/disposal (end of product life). With a view to this, an EPD is used for participating in tendering processes in the scope of sustainable building certification systems and allows the environmental performance of a product to be communicated.

Overview of selected EPD results

(All results of the EPD as per the indicators mandated by EN 15804 on resource use, output flows, and environmental influences must be taken from the complete EPD report)

Global warming potential

The global warming potential of the daylight elements is the manufacturing, and above all the production of the required raw materials. The actual Lamilux in-house production process does not have any major effect here.

The higher value for the continuous rooflight B variant is caused by the greater absolute mass of the product, and the greater relative percentage of energy-intensive metals such as aluminium. The installation and disposal life-cycle phases make contributions towards global warming potential due to the assumed treatment of the (thermal use of the wooden crate after installing the product in the scope of the installation phase - only relevant for continuous rooflights B and S, the smoke lifts use the same packaging) and also the polycarbonate glazing components that all products include, for which again thermal utilisation was assumed. The comparatively low greenhouse gas emissions in the use phase are due to cleaning and maintenance processes. The elements acquire bonuses from the energy gained in the recycling processes and/or for raw material savings achieved by recycling.

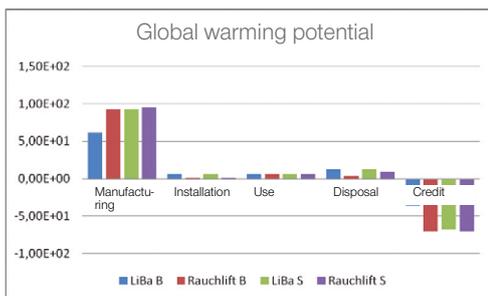


Fig. 1 Global warming potential

Cumulated energy expenditure

The cumulated energy expenditure (CEE) is clearly defined by the manufacturing phase, and as with the Global warming potential substantially by the production of the required raw materials.

Besides the manufacturing phase of the life-cycle, the use phase also plays a minor role; the production of maintenance parts has also been taken into consideration here. In a similar manner to the global warming potential, there are also credits for the recovery of the product components.

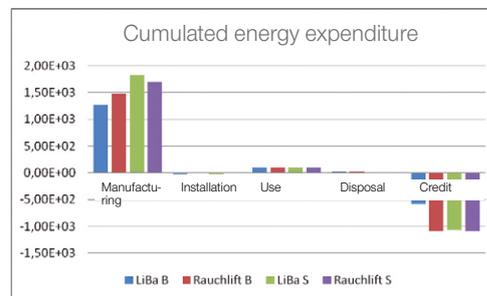


Fig. 2 Cumulated energy expenditure

Recycling Potential

Recycling potential means the assumption of realistic scenarios that depend on the product-specific dismantling quota and material-specific recycling/recovery quotas. This identifies the materials within the product that can be recycled after use, and those that are landfilled after appropriate treatment.

The variant-specific material components and the related manner and efficiency of the recovery path lead to different potential distributions.

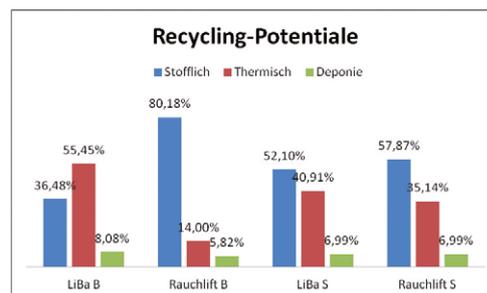


Fig.3: Recycling potentials