



LAMILUX
GLASSYSTEME

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

CI Systems Glazed Elements F100 | FE Energysave
Type F | Smoke Lift ME



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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 Glazed Elements F100, FE Energysave, Type F, Smoke Lift ME. 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 defines 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)

In contrast to the global warming potential, both products considered here gain credits here as early as the installation phase, where thermal use of the wooden packaging is considered and the heat energy generated by it is credited.

Global warming potential

The global warming potential of the daylight elements is the manufacturing phase, 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 FE Energysave variant is caused on the one hand by the greater absolute mass of the product, and on the other by the greater relative percentage of energy-intensive raw materials such as glass and aluminium. The installation and disposal life-cycle phases make contributions towards global warming potential due to the assumed treatment of the packaging on the one hand (thermal use of the wooden crate after installing the product in the scope of the installation phase) and also the GRP upstand that all products include (which is also used thermally to a great extent in the scope of the disposal phase). 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.

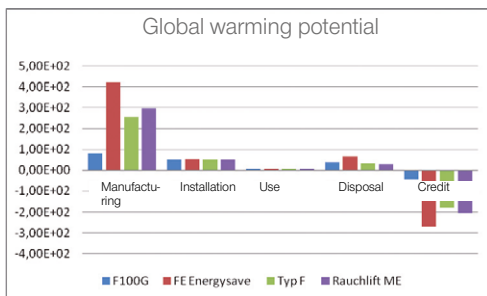


Fig. 1 Global warming potential

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.

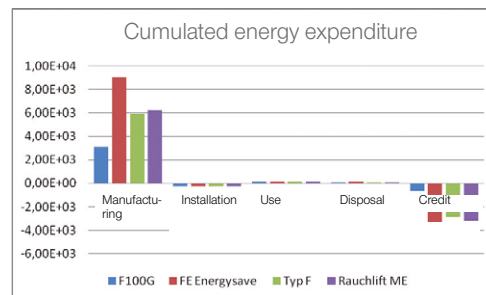


Fig. 2 Cumulated energy expenditure

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.

As the products under consideration here have a very high percentage of glass and aluminium, the material recycling potential is high.

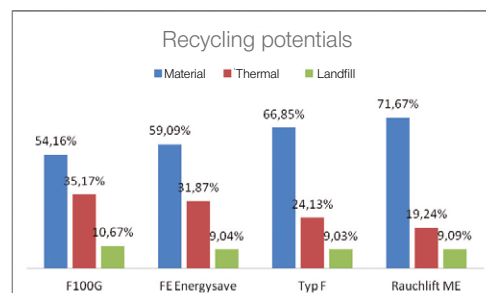


Fig.3: Recycling potentials