







# ENVIRONMENTAL PRODUCT DECLARATION AND LIFE CYCLE ASSESSMENT

The EPD is based on a Life Cycle Assessment (LCA), which is used to quantify environmental impacts through material and energy flows. The LCA was prepared in accordance with the requirements of DIN EN 15804, DIN EN ISO 14040, DIN EN ISO 14044 and EN ISO 14025.

With a Life Cycle Assessment, the potential environmental impacts and influences associated with the products over their entire life cycle (raw material supply, manufacture, use and end of life) can be identified and presented.

Primarily, EPDs are used as a verification for sustainability certification systems for buildings, e.g. DGNB or LEED. In addition, they facilitate standardised communication on the environmental performance of products.

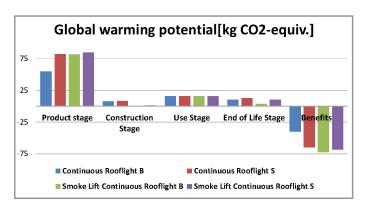
## SELECTED RESULTS AT A GLANCE

All declared environmental impacts correspond to EN 15804. Indicators on resource use, output flows and environmental impacts can be found in the full version of the EPD.

### Global warming potential (GWP)

The deciding factor for the GWP can be found in the manufacturing phase, especially in the production of required raw materials (in particular aluminium extrusion profile). The life cycle phases construction and end of life also contribute to the GWP, caused by thermal recycling of wooden packaging of Continuous Rooflights B and S (within the frame of the construction stage) and of plastic parts in the products (within the frame of the end of life stage). The GWP of the use stage is based on cleaning, maintenance, repaire and replacement processes. The products receive benefits from the energy generated in recovery processes and for the savings in raw materials caused by recycling processes. As most of the materials are recycled, the GWP for end of life stage is relatively low. Benefits mainly originate from the recycling of aluminium.

Higher values for Continuous Rooflight B result from the higher product mass and by a higher share in energy- intensive metallic components.

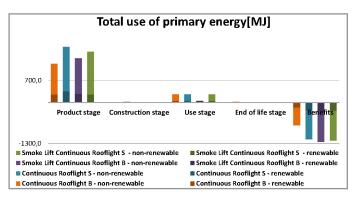


#### Other environmental impacts

The environmental impacts of the individual life stages are relatively uniform in all environmental categories. Only the depletion potential of stratospheric ozone layer and abiotic resources (elements) of the individual products show some fluctuations.

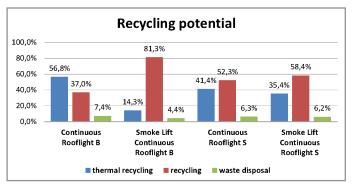
#### Use of energy

The total use of primary energy is determined by the production stage, in this case mainly by the production of neccessary raw materials. Energy for producing components for replacement and maintenance during the use stage plays a secondary role. As already seen in the GWP, benefits mainly derive from the recycling of aluminium.



## **Recycling potential**

Recycling potential can be explained as the share of the product, which can be recycled or reused thermally resp. can be disposed after approriate treatment. As Continuous Rooflight B has a high share of plastic, the recycling potential is shifting in the drection of thermal recycling.



Next revision: 17.05.2024