



CIRCLELOCK.

ENVIRONMENTAL DATA SHEET

The Circlelock (CL) offers the highest level of physical protection in a security entrance - the ultimate defence against intrusion into sensitive areas of a building. Ensuring only one authorised person enters at a time, high security portals eliminate the need for manned supervision or guards. In this document, we present the environmental impacts of the Circlelock as well as a summarised version of the full Environmental Product Declaration (EPD).

ENVIRONMENTAL IMPACTS

To get the full picture of the CL's environmental impact, we conducted a life-cycle assessment (LCA). This takes into consideration all resources and emissions involved in manufacturing, construction, use and end-of-life.

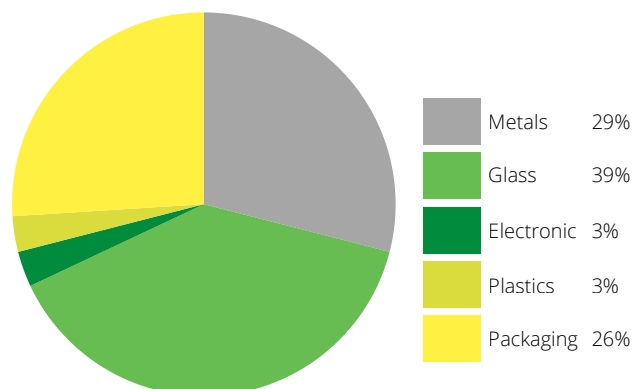
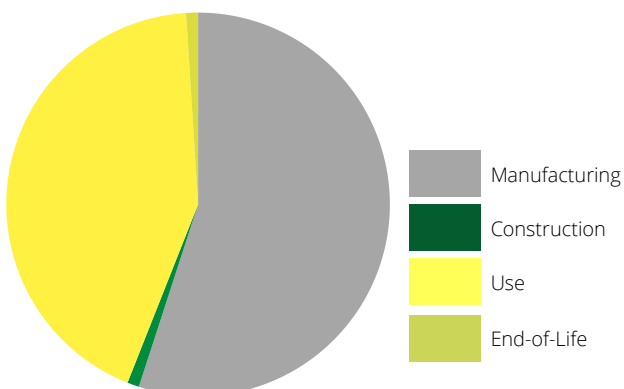
The most dominant life cycle stage is manufacturing, which encompasses material production processes (for example, glass fabrication). This is followed by the use phase, primarily attributed to operational energy consumption. As indicated by the carbon footprint graph, manufacturing has the highest emission contribution, followed by the use phase, aligning with these observations. The graph does not show data for recycling or the use of recycled glass, so these impacts are not represented.

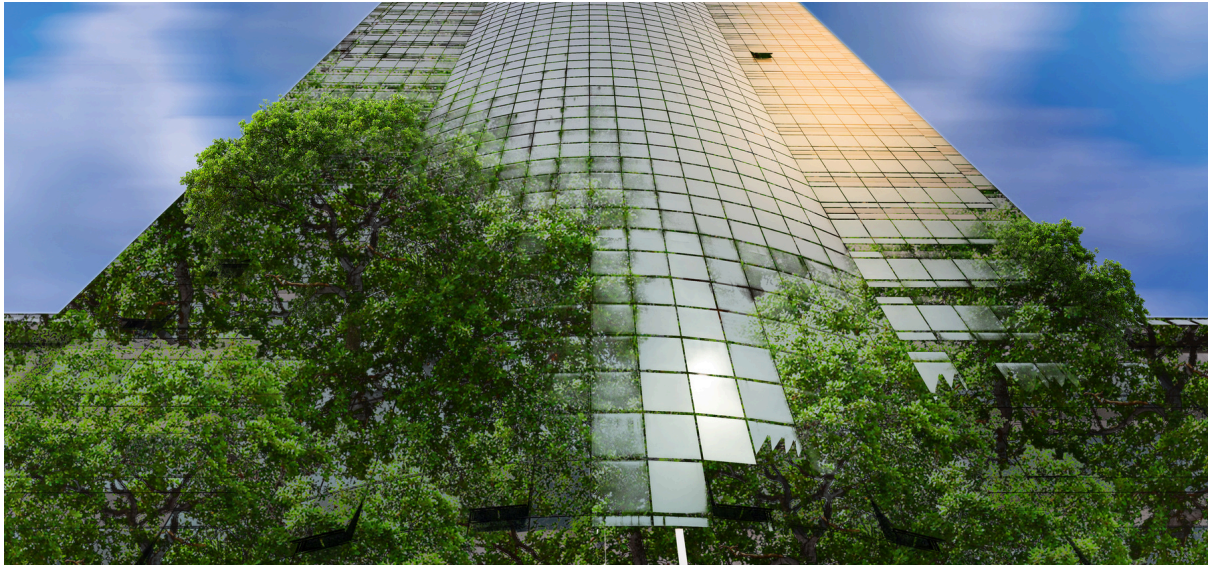
Compared with a revolving door, the impact during the use phase is lower. High-security solutions, such as Circlelock, are used less frequently than hospitality entrances, for example, our Tourniket.

Boon Edam continues to reduce our impact through fact-based improvements.

MATERIAL COMPOSITION

Glass (39%) and metals (app. 29%) are the primary materials in the Circlelock high-security solution. The other materials, accounting for around 32%, include wood (as material in the product and as material for the packaging), plastics and electrical components.





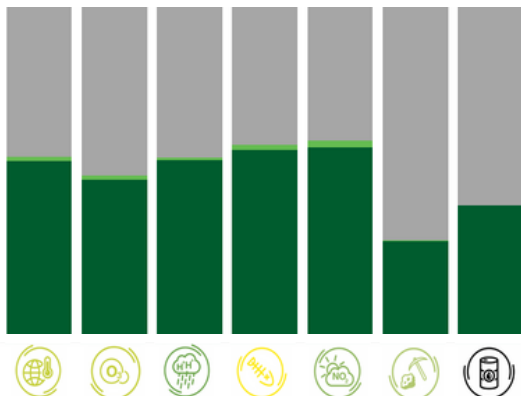
DETAILED ENVIRONMENTAL IMPACTS

The environmental impact of Circlelock (CL) is primarily associated with the production of raw materials. Electricity consumption during the use phase is the second most significant factor. Energy-efficient motors, careful optimisation of settings, and regular maintenance are therefore key to reducing the CL's overall impact.

These results have been obtained with a full life cycle assessment (LCA) and published as an Environmental Product Declaration (EPD), following the PCR 'Automatic doors, gates and revolving doors systems' by IBU. Our LCA includes servicing and maintaining the Boon Edam level of quality throughout its lifespan.

The full document can be accessed from [IBU's repository here](#).

- End-of-Life
- Use
- Construction
- Manufacturing



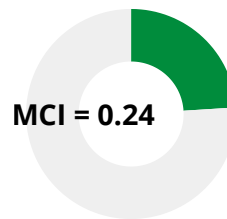
LOW CARBON ALUMINIUM

In 2024, we introduced low-carbon aluminium as part of our commitment to sustainability. By making this change, we have reduced our environmental footprint, recognising the important role aluminium plays in shaping our overall impact.

MATERIAL CIRCULARITY INDEX

MCI is an approach to measuring the circularity of materials, here expanded to the whole product. It accounts for reused and recycled materials in the product and recovered at the end of the product's life, according to the recommendations from the Ellen MacArthur Foundation.

www.ellenmacarthurfoundation.org



Boon Edam takes steps towards being consistently more circular and sustainable. Read about them on our website.

-  Global Warming
-  Ozone Depletion
-  Acidification
-  Eutrophication
-  Ozone Formation
-  Non-fossil Resources Use
-  Fossil Resources Use