Customised emissions-reduction solutions for fabricators, architects and planners

heroal Low Carbon Aluminium

heroal



The material of the future.

CO₂-reduced aluminium

heroal uses aluminium in many areas of the product portfolio. This is a material whose exceptional properties set it apart in a whole range of respects. The coating technologies give aluminium products an extremely durable, high-quality surface that retains its exceptional weather- and corrosion-resistant properties even after decades of use and is essentially maintenance-free. The high material stability enables unique aesthetics with slender profiles, even for very wide structures - all while keeping the use of material and weight to a minimum. To further reduce the carbon footprint of aluminium, heroal uses CO₂-reduced aluminium. By doing so, heroal actively contributes to climate protection while still offering technologically and environmentally sustainable solutions.

CO₂-reduced aluminium is produced using renewable energies generated by wind, water or the sun. This enables a significant reduction in CO₂ emissions during production. Another major aspect is the increased use of recycled aluminium, which uses just 5% of the energy compared to primary production. As this can be manufactured without any loss of quality, the material can be infinitely reused. As a member of the A|U|F e.V., we support the environmentally-friendly reuse of aluminium from old construction elements. This allows us to ensure that our products are recycled at the end of their life cycle, which conserves resources and helps to reduce CO₂ emissions in the building industry.

heroal Low Carbon Aluminium*:

- Carbon footprint: Has a global warming potential value up to a minimum of 1.9 kg CO₂ e/kg aluminium (LC-Al C1.9) per profile
- Recycling ratio: Contains a share of up to 75% post-consumer material (LC-Al R75)

 * based on a mass balance approach as defined by ISO 22095

 Manufacture of new aluminium windows
 Removal of old windows

 Further processing of new window profiles
 Collection of old aluminium windows

 Production of new extruded parts
 Reprocessing

 Metting and casting of
 Metting and casting of

new aluminium bolts

Recycling loop using aluminium windows as an example

New materials, extended portfolio

In 2025 we will be expanding our product portfolio for windows, doors and curtain walls with CO₂-reduced and recycled aluminium – heroal Low Carbon Aluminium. This will reduce the carbon footprint to up to 1.9 kg (LC-Al C1.9) with a recycling rate of up to 75% (LC-Al R75). This offer is certified by DEKRA. Compliance with the characteristic values is therefore constantly externally reviewed and ensured.

The path to a more climate-friendly future

The combination of renewable energies, innovative production methods and recycling has transformed aluminium into a critical material on the path to climate neutrality. heroal Low Carbon Aluminium is our contribution to improving the sustainability of buildings and reducing their carbon footprint.

heroal Low Carbon Aluminium is more than just a short-term response to current emissions reduction requirements, it is an innovative material for sustainable living spaces. heroal's Low Carbon Aluminium offer provides tailored solutions for fabricators, architects and planners alike. It enables a significant reduction in the emissions generated during the construction phase. At the same time, our partners benefit from a transparent overview of the CO₂ values and recycling mix of the materials used as well as from the recycling potential at the end of the product life cycle. This documentation helps heroal partners plan and realise high-quality and sustainable building projects.

heroal is committed to Low Carbon Aluminium because we are convinced that sustainable solutions are the path to a climate-neutral future. By working together, we can help shape the future of the building industry with a focus on innovation, climate protection and responsibility.