

Sustainability with a System



Sustainability at heroyal

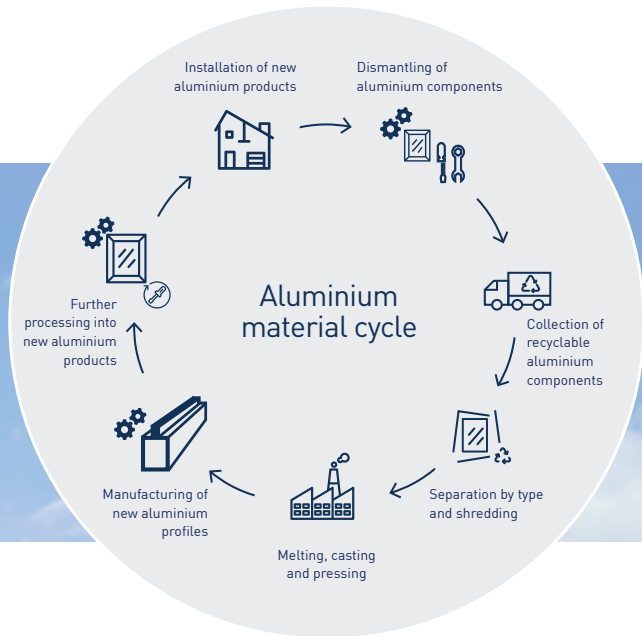


As a family-run company with more than 140 years of experience, we think in generations. That's why responsible use of resources has long been part of the company philosophy at heroyal.

There are a number of examples of this in the company today – from the choice of materials to energy conservation in the manufacturing process and climate-friendly distribution of heroyal products. We live up to our responsibility for future generations, in part by treating our employees respectfully.

Reconciling aspects of economic efficiency with sustainable action is a challenge that heroyal is happy to accept. This is the path that we have chosen and that we consistently pursue.

Sustainability Through Recycling



Thinking Sustainably

Aluminium is a valuable raw material. That's why we use recycled aluminium from the reusable material cycle of AlU|F e.V. The initiative guarantees environmentally compatible, energy-efficient and resource-conserving recycling of aluminium windows, doors and curtain walls.

- We are a member of AlU|F e.V. and therefore use up to 85 % recycled aluminium in production.
- Nearly all installed aluminium products are fed back into the production process.
- Recycled aluminium requires 95% less energy than new aluminium, without any loss of quality.

And we are constantly developing when it comes to other components as well. For example, some of our window systems use "green" thermal breaks that consist of up to 62 % renewable raw materials. This allows us to drastically reduce the amount of fossil-based raw materials we use. Because it is important to us that the installed elements be energy-efficient yet use as little material as possible.

Sustainability at the Building



AFI Vokovice, Prague

heroal system solutions make it easier to save energy and safer to build, and they make a valuable contribution to the sustainability of buildings. This is demonstrated by two buildings that are being executed with our systems for this very reason.

AFI Vokovice, Prague

The AFI Vokovice project in the Prague city centre takes sustainability considerations to a new level. With its focus on energy-efficiency, it represents the building of tomorrow.

The building that our long-standing partner Sipral a.s. has executed with real estate and investment company AFI Europe is equipped all around with the heroal C 50 curtain wall system, heroal W 72 window system and heroal D 72 door system. These systems stand out thanks to their good thermal insulation properties. Furthermore, heroal W 72 VF ventilation flaps and the heroal VS Z sun protection system contribute to a comfortable room climate, which further increases the building's energy-efficiency.

In view of the building's distinctive sustainability concept, heroal received the 2019 Green Good Design Award. Furthermore, in January 2019 the building was also awarded the LEED Platinum certification for ecological building – the highest certification for leadership in energy and environmental design.

Sustainability Through Energy-Efficiency



Tour Elithis Danube, Strasbourg

Building Sustainably

Tour Elithis Danube, Strasbourg

Another forward-looking project that was implemented with the heroal W 72 window system is the Tour Elithis Danube in Strasbourg's waterfront district. With 17 storeys, 60 flats and 900 square metres of office space, the PlusEnergy tower combines urban living with maximum energy-efficiency. For one thing, the Tour Elithis Danube produces more energy than it consumes. The positive energy balance of the Tour Elithis Danube is due in part to the integrated heroal W 72 window system, which achieves a U_f value of up to $0.93 \text{ W/m}^2\text{K}$ thanks to the thermally insulated profile composite made of aluminium half-shells, polyamide thermal breaks and completely foamed insulation zones.

Passive House Certification

Passive House certified systems from heroal offer the highest standards and impress customers with their exceptionally good U-values. Because our sustainability concept even extends to the buildings that are realised with our systems. For example, the exceptionally energy-efficient heroal W 77 window system contributes to the building's positive energy balance. With an installation depth of only 77 mm, it achieves a U_f value of $0.95 \text{ W/m}^2\text{K}$. Another system to offer optimal insulation values is the heroal IB Unique insulation box system, with its Super-Z folding installation technology and U_{sb} values of 0.39 to $0.58 \text{ W/m}^2\text{K}$, depending on the box size.

Sustainability in Production



At heroyal, environmental awareness begins with production. We strive to act sustainably, not only when choosing materials, but when distributing as well, so that our product manufacturing is as energy-efficient and environmentally friendly as possible.



Material usage: In addition to recycled aluminium, we use recyclable foils and are constantly reducing the amount of packaging we use.



Coating: Thanks to cutting-edge plant technology, we are able to achieve premium coating results while expending minimal energy. For example, we use the waste heat from the curing oven as an energy carrier for the retained water dryer, and in the pretreatment stage we were able to reduce the size and number of pumps by switching from spray to surge technology, saving energy as a result.



Recycling: We also keep material usage as low as possible during the actual coating process, and we reuse improperly coated profiles after removing the coating.

Sustainability During Transport



Manufacturing Sustainably



Disposal: We constantly reduce chemical waste and dispose of it according to applicable guidelines.



Foam filling process: Foam filling in the modular insulation zone of our aluminium compound profiles is carried out with PU foams manufactured in a process developed by heroyal that uses no halogenated propellants. We use water as a propellant, thereby making a substantial contribution to the protection of the ozone layer.



Energy management: We generate a majority of the energy used in production ourselves in our in-house cogeneration unit.



Distribution: For distribution we use our own truck fleet, which conforms with the highest standards. All of our vehicles have level 4 environmental stickers.

Sustainability Through Progress



Interview with Jürgen Schöppner,
plant manager at heroyal in Hövelhof



How does heroyal help protect health and the environment when coating aluminium profiles?

heroyal has eliminated all carcinogenic substances from the aluminium coating. All of our coating systems for pretreatment have been chrome-free for years. What's more, we have our own water supply with a closed water circuit. Process water is purified in-house so effectively that we can dispose of it via the communal wastewater system.

How do you deal with residual powder from the coating process?

Overspray is vacuumed from the powder booth and fed back into the coating circuit. This lets us achieve almost 100 % effectiveness when powder-coating. Because we coat such high volumes at heroyal, we're able to coat 95% of the profiles with recovered powder.

How does the quality line contribute to sustainability?

Thanks to surface inspection, profiles that don't meet our quality standards are automatically rejected and never make it to the shipping stage. And because we still use only a single material for packaging, we're able to recycle it 100 %. Thanks to the winding process during profile packaging, we've managed to eliminate energy-intensive shrink wrapping.

Sustainability Through Appreciation



Interview with Rubina Schilling,
personnel specialist at heroyal



Recharge Room

Acting Sustainably

Ms Schilling, what does sustainability mean for you?

For me sustainability means having a respectful approach to resources. From a human resources standpoint, for me that means valuing the employees and their different abilities. Everyone makes their contribution, and only together can we achieve something great.

What points of contact do you have with sustainability in your everyday work at heroyal?

In the HR department I'm responsible for mentoring trainees and dual students. For us, training sustainably means passing along existing knowledge to future generations of employees.

How do you put this idea into practice specifically?

From the beginning, trainees and dual training students assume responsibility at heroyal and can achieve common goals by applying their individual skills. The focus is on teamwork across fields, departments and factories, because we see sustainability as having to do with mutual respect. In this way, we train junior staff that will play an active role in shaping the future of heroyal.

Sustainability in Everyday Work



Sustainability Through Creative Open Spaces



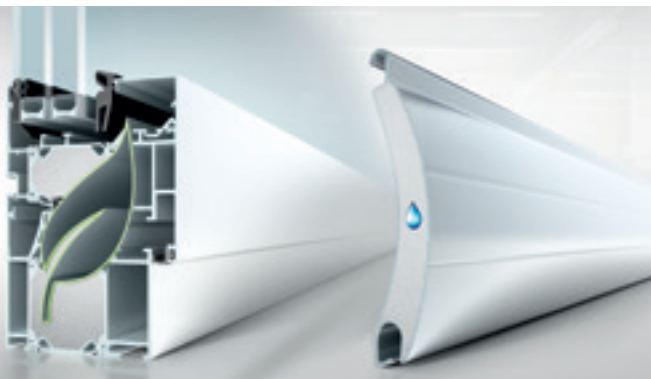
For us, sustainability means dealing responsibly with resources and acknowledging our responsibility towards future generations. That's why we offer many different forms of support for employees who want to grow with us. For only with a strong and motivated team can we succeed in the long term.

- To ensure that our employees can perform sustainably at heroal, we offer them numerous opportunities for **training and further development**.
- Our trainees and new employees receive optimal support. For example, we hold **Introductory Days** to make it easier for them to get started.
- To help them be mobile, all of our dual training students receive a **smart**.
- New employees get to know every aspect of the company and their new colleagues as part of the **My first year @ heroal** event series.

- All the employees benefit from the range of options offered by the **sport promotion programme** as well as the **subsidised pension scheme**.
- The **leasing offer for bicycles and e-bikes** enables every employee to travel to and from work in a way that promotes health and protects the environment.
- All the office spaces feature integrated **sun and glare protection systems** for a comfortable indoor climate with natural daylight.
- We have created an **open work environment** based on the multi-space approach: Depending on the work situation, our employees can choose exactly the environment they find most suitable to promote **communication** and **information exchange** and to create new space for **creative ideas**.
- The **heroal Bistro** offers a healthy and balanced menu with **fresh, regional products**, while also providing a setting for networking and communication.

Sustainability with Certification

You can count on heroal when it comes to sustainability as well. And you can be sure of this thanks to the range of certificates we have obtained for our sustainable actions.



Convincing Sustainably

Aluminium und Umwelt im Fenster-, Türen- und Fassadenbau (A|U|F e.V.)

Sustainability and responsibility in ecology and business



Certification of passive house components

The Passive House Institute certifies products in view of their suitability for use in passive houses



Minergie Standard

MINERGIE is a registered trademark for sustainable building and, since 1998, the Swiss standard for comfort, efficiency and value preservation

MINERGIE®

DEKRA Certification GmbH – ISO 50001:2011

Product design, manufacturing, coating and distribution of aluminium profile systems for roller shutters, roller doors, windows, doors and curtain walls

DEKRA

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