

ROCKFON SUSTAINABILITY

# Acoustics that Support Sustainable Construction



Sounds Beautiful



## WHY SUSTAINABILITY?

The built environment is responsible for

**42%**  
of global CO<sub>2</sub>  
emissions<sup>1)</sup>

**50%**  
of extracted  
material<sup>2)</sup>

From a sustainability perspective, this footprint is both a challenge and an opportunity. If we can collectively progress towards a more sustainable built environment, we will have gone a long way towards a more sustainable future.

### It's what is inside that counts

It takes a lot of energy to run an existing building – but what goes into the building has a big impact too.

**7–9%**  
of total global CO<sub>2</sub>  
emissions is estimated to be  
due to the manufacturing  
of buildings materials<sup>3)</sup>

And carbon emissions released before the building or infrastructure begins to be used, sometimes called upfront carbon, will be responsible for half of the entire carbon footprint of new construction between now and 2050.<sup>4)</sup>

For a construction sector with a lower impact, we need building materials with lower impacts. That is what we have been working to provide.

1) Architecture 2030, *Why the built environment?* ([architecture2030.org/why-the-built-environment/](http://architecture2030.org/why-the-built-environment/)).

2) European Commission, *Buildings and Construction* ([single-market-economy.ec.europa.eu/industry/sustainability/buildings-and-construction\\_en](http://single-market-economy.ec.europa.eu/industry/sustainability/buildings-and-construction_en)).

3) Global Alliance for Buildings and Construction, *Global Status Report for Buildings and Construction 2024/25* ([unep.org/resources/report/global-status-report-buildings-and-construction-20242025](http://unep.org/resources/report/global-status-report-buildings-and-construction-20242025)).

4) World Green Building Council et al., *Bringing embodied carbon upfront* ([worldgbc.s3.eu-west-2.amazonaws.com/wp-content/uploads/2022/09/22123951/WorldGBC\\_Bringing\\_Embodied\\_Carbon\\_Uptfront.pdf](http://worldgbc.s3.eu-west-2.amazonaws.com/wp-content/uploads/2022/09/22123951/WorldGBC_Bringing_Embodied_Carbon_Uptfront.pdf)).

## A ROCK-SOLID FOUNDATION

Our core material of stone wool  
combines performance and sustainability

### **Acoustics**

High-performing sound absorption with  
specialised designs for unique requirements,  
contributing to well-being.

### **Fire resilience**

Non-combustible and can withstand  
temperatures of over 1000°C, helping  
prevent fires from spreading.

### **Durability**

Widely recognised as a durable material,  
resistant to humidity and mould, designed  
to last the lifetime of a building and beyond

### **Abundance**

The Earth produces 38 000 times more  
volcanic stone each year than is used  
by the entire ROCKWOOL Group.

### **Recyclability**

Fully recyclable into new stone wool  
products in a closed loop, aligning  
with circular economy principles.

### **Decarbonisation**

Conversion to lower-emissions melting  
technology that is already available can  
reduce the emissions by up to 80 percent.



# THE SIX STAGES OF SUSTAINABILITY AT ROCKFON

Working towards a vision of closed-loop acoustics



At Rockfon, we aim to integrate sustainability into every stage of our product's life cycle, from design to end of life. And for our core material of stone wool, the life cycle can restart, with used stone wool being reintegrated into the production process. We work to close the loop and to produce acoustic solutions that improve well-being again and again.

## 1 | PLAN AND DESIGN

Designing with planet and people in mind



We design our products with circularity in mind. To fully harness the closed-loop recyclability of stone wool, we prioritise modular design – making it possible to remove ceiling systems without damaging the structure, or to replace individual components without compromising the whole.

Even better than recycling is using fewer materials to begin with. Our manufacturing process incorporates waste and by-products from other industries, such as slags from steel production. We also collect and reuse post-consumer stone wool through our Rockcycle scheme, and our facilities minimise waste by feeding internal production scraps back into the process.

This commitment applies across our entire product portfolio. Our grid systems are engineered for exceptional technical performance, while reducing steel use wherever possible. We're also introducing grid options made with lower-emissions steel.

Product safety remains paramount. We continuously monitor our raw material use in line with evolving regulations and the EU REACH framework (Registration, Evaluation, Authorisation and Restriction of Chemicals). In addition, we regularly screen and test our products to ensure they do not contain any substances of very high concern (SVHCs).

**Over 90%**

of our acoustic product sales are Cradle to Cradle Certified®

**86%**

of our acoustic product sales are Cradle to Cradle Certified® Silver



## 2 | PRODUCTION

### *Sourcing and producing responsibly*

The way we source materials and manufacture our products is one of the most impactful areas of our sustainability efforts. Most of our European basalt suppliers are located within 300 kilometres of our production facilities, helping to reduce transport-related emissions. We also set clear expectations for all suppliers through our Code of Conduct and actively monitor our supply chain for potential risks.

We have already made significant progress in reducing the environmental impact of our production. The Rockfon production line at the ROCKWOOL factory in France is fully electric and powered by low-carbon energy sources.

In the Netherlands, we are working to transition our stone wool production to electric melting technology, which is expected to cut CO<sub>2</sub> emissions by up to 80 percent. In Poland, one Rockfon production line switched from coal to natural gas in 2021, reducing CO<sub>2</sub> emissions by around 25 percent. Additionally, the electricity used across all our stone wool factories is matched by renewable energy credits, supporting the shift toward lower-emission energy generation.

Our grid factory in Wijnegem, Belgium, generates more than one million kWh of electricity each year from approximately 7000 solar panels installed on the factory roof, with a portion of the electricity used to power the factory itself.



**Up to  
80%**  
emissions reductions  
potential from the  
conversion of our line in  
the Netherlands to electric  
melting technology

**One  
million**  
kWh of electricity  
produced each year  
from the solar panels  
on the roof of our grid  
factory in Belgium

**Zero  
Waste**  
of stone wool  
from factories  
with Rockfon  
lines is sent  
to landfill

## 3 | CONSTRUCTION

### Supporting more sustainable construction practices

Our products and processes are designed to help create a more sustainable construction sector.

This begins by ensuring you have the right documentation to make informed, sustainable choices. We provide information about the environmental impact of our product families across their full life cycles through our Environmental Product Declarations (EPDs). Sustainability-related details, such as Global Warming Potential (GWP) and recyclability, are also included in our product data sheets.



We believe that more sustainable choices should be rewarded. Thanks to their material properties, production processes, and comprehensive documentation, our products can contribute to certifications from multiple green building schemes, including BREEAM, LEED, WELL, and DGNB.

But sustainability isn't just something we put on paper – it's a principle we apply on real job sites. Our ceiling tiles are easy to cut and customise, helping to minimise waste during installation. They are also significantly lighter than traditional wet-felted mineral fiber or gypsum ceiling panels, helping reduce the risk of repetitive strain injuries for installers.



## 4 | USE OF PRODUCTS

### Providing long-lasting, high-performing solutions

Once installed, the performance of our core materials truly comes to life. The majority of our stone wool acoustic solutions offer Class A sound absorption, enhanced by specialised designs to meet unique functional needs. This acoustic performance transforms noisy environments into healthy, welcoming spaces where people can create, focus, rest, heal, and thrive. In 2024, Rockfon solutions improved the learning conditions for 700,000 students worldwide.

Our performance extends beyond acoustics. Stone wool tiles are non-combustible, helping to prevent fire from spreading, which gives valuable time for safe evacuation.

Many of our products carry leading indoor climate certifications, including the French VOC A+, Finnish M1, Blue Angel, Singapore Green Building Product Certificate, and the Danish Indoor Climate Label.

Thanks to the durability of stone wool, Rockfon acoustic solutions are built to last. Resistant to moisture, mould, and humidity, our products remain effective throughout the lifetime of a building – reducing the need for replacement, minimising waste, and supporting a more sustainable built environment.

## Class A

Sound Absorption  
as standard

Stone wool fibers  
can withstand  
temperatures of

**+1000°C**



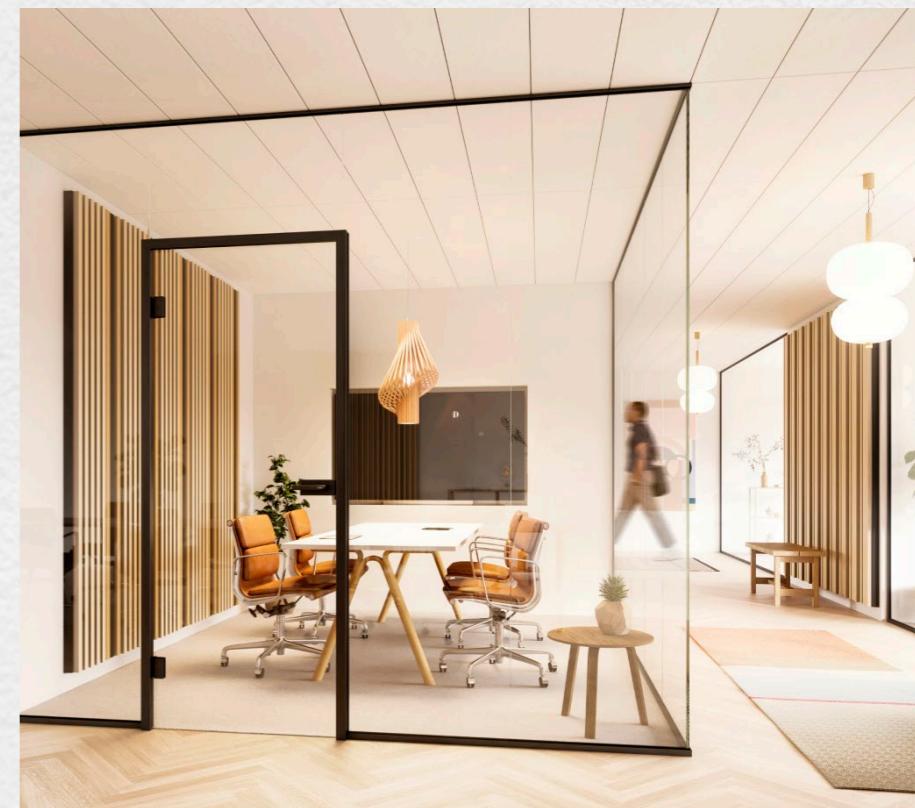
**700,000+**

students improved their learning conditions in 2024 thanks to Rockfon solutions



## 27% reduction in stress

can be achieved by improving acoustic conditions in open-office environments<sup>1)</sup>



<sup>1)</sup> David M. Sykes, PhD, Productivity: How Acoustics Affect Workers' Performance In Offices & Open Areas ([mpsacoustics.com/wp-content/uploads/2009/10/Productivity.pdf](http://mpsacoustics.com/wp-content/uploads/2009/10/Productivity.pdf)).

## 5 | END-OF-LIFE

Facilitating demount and take-back

Creating a more sustainable construction sector means planning for what happens to products at the end of their life. A key element of this is modularity. Our goal is to design ceiling systems that can be dismantled without damaging the surrounding structure.

In some cases, this means removing entire acoustic elements. In others – such as with our modular ceilings – it simply involves replacing one or several tiles within the existing grid. This modular approach allows for easy replacement of damaged components without generating unnecessary construction waste, and enables end-of-life products to be more readily recycled.

To support this, we offer a variety of options for returning used ceiling tiles or leftover materials from installations. Whether by partnering with demolition companies or providing bags and pallets for on-site waste collection, we strive to give our customers a convenient and responsible pathway to recycle intact products and offcuts.



## 6 | NEW LIFE

Giving new life to used material

The final step in the circular journey is about giving used materials a new lease of life. Thanks to ROCKWOOL's Rockcycle programme, we are well equipped to do this. Through Rockcycle, offcuts and end-of-life stone wool tiles are re-melted at our own facilities and reintroduced into the production of new stone wool products – sometimes even recycled directly into new acoustic solutions in a fully closed loop.

Rockcycle harnesses the unique and infinite recyclability of stone wool, helping our customers reduce the use of primary materials while keeping waste out of landfill. In addition, our steel grid systems are fully recyclable through established recycling streams.

**59 000  
tonnes**

of stone wool recycled  
by ROCKWOOL Group  
through Rockcycle in 2024

We've also successfully piloted programmes in Denmark, France, and the Netherlands for the direct re-use of ceiling tiles. Re-use is the most optimal circular approach, as it avoids the need for re-melting altogether. It is especially relevant for ceiling tiles, which are often removed during renovations while still being in excellent condition. The inherent durability of stone wool enhances its potential for reuse.

Finally, we are exploring innovative options to transform stone wool waste into new products without re-melting, offering a recycling method with an even lower environmental footprint.



