

CEWOOD Internal Recycling and Circular Production Description

CEWOOD is a company that produces natural cemented wood wool panels used in buildings for ceilings, walls, and insulation. The company is strongly focused on environmental care and follows a zero-waste, circular production model. Recycling and reuse are central parts of how CEWOOD handles both manufacturing and used materials.

Before customers place their first order, CEWOOD recommends careful planning. By optimizing the layout and measurements in the design phase, customers can reduce the amount of leftover material. This simple step helps avoid unnecessary waste. During the use of the panels, regular cleaning and basic repairs can help the panels stay in good condition for a long time. Many small damages can be fixed without replacing the entire panel, which also supports sustainability.

When panels are no longer needed, CEWOOD encourages customers to find ways to reuse them. The panels are made from natural materials, which means they can be used in many creative and useful ways. Old panels can be removed from buildings and reused in new construction projects. They can also serve as thermal insulation or be placed behind new plaster layers. Some people use them for art, furniture, or decoration. In gardens, broken pieces of panels can be used as mulch, which helps keep weeds away and improves the soil. These kinds of reuse help reduce waste and give the material a second life.

If customers are not able to reuse the panels themselves, CEWOOD offers a return option. This return program is currently only available in the European region and must be agreed upon before placing the first order. Although the return option is currently available only within the European region, it still covers over 80% of CEWOOD's manufactured and sold materials. This allows the majority of CEWOOD products to be collected, reused, or recycled through the company's internal system, supporting its circular production model on a large scale.

Customers need to inform CEWOOD in advance if they plan to return the used panels after installation or after the product's full use. CEWOOD then decides whether the return is reasonable based on transport costs and environmental impact. Customers must sign a return agreement and ensure the panels are free from additionally treated panels with plaster, screws, or paint. Treated or dirty panels will not be accepted. Returned materials must be safely packaged, and the cost of return shipping is paid by the customer. Depending on CEWOOD's available storage space, there may also be a small storage fee before recycling begins.

Once the panels are returned, CEWOOD takes responsibility for recycling them. There are different ways this can be done depending on the condition of the panels. One method is upcycling, which means creating new and valuable products out of old materials. Even if the panels are scratched or broken, they can be turned into smaller decorative tiles or redesigned ceiling panels. They can also be resized and treated with special machines to hide any visible damage.

If the panels cannot be reused in their original form, CEWOOD uses a process called downcycling. This means breaking the panels into smaller pieces and using them to make raw materials. These shredded and sifted parts can be used for several purposes. They can serve as insulation in walls, floors, or roofs. Some parts can be added to cement or used to make pre-made construction panels. Other pieces can be used in farming, as they help improve soil quality. The shredded material is fully biodegradable and can act as a soil conditioner that increases oxygen and natural compounds in the



ground. The panels can even be used for extracting useful chemicals like calcium acetate or to create energy through clean incineration in special facilities.

Although disposal is a last resort, CEWOOD tries to avoid it entirely. Since the panels are made from 100% natural materials, nearly every part can be reused or recycled. Landfill disposal is only considered if no other options are available, and only in strict accordance with environmental guidelines.

CEWOOD's recycling system is built entirely on the company's own internal resources. All recycling, refurbishing, and recovery processes take place within CEWOOD's own production cycle, using in-house equipment and expertise. From panel return to shredding, sorting, and repurposing, the entire process is managed and controlled by CEWOOD.

At CEWOOD, all recycling and circular production processes are managed and controlled internally under the responsibility of the company's R&D Engineer. This role oversees the development, implementation, and continuous improvement of recycling methods, ensuring that returned and production waste is efficiently repurposed using in-house resources. The R&D Engineer also ensures that all processes align with CEWOOD's zero-waste goals and quality standards.

The company afterwards collaborates with partners who are interested to use recycled materials and gain the most out of the recycled material properties. This ensures high quality, traceability, and a closed-loop system. CEWOOD's goal is to avoid waste completely and to achieve full material circularity, proving that sustainable building solutions can be realized through a fully self-managed recycling process.