

CornWall

Sustainability Statement

November 2023





Impact areas of CornWall

With CornWall, Circular Matters aims to reduce carbon emissions in three key areas of our production process:

- Raw materials: locking carbon in the raw material for a long time
- · Manufacturing facility: making use of renewable energy
- Production process: low temperature process, no fossil fuels

This statement is not an Environmental Product Declaration (EPD)

We're currently in the process of obtaining an EPD (Environmental Product Declaration). For this it is important to generate data based on a fully upscaled production. We currently expect to publish the EPD in Q3 of '24.

Raw Materials

CornWall is made mainly from bare corn cob. Current uses for this bare corn cob include burning for heat, digestion into biogas, fiber in livestock fodder (despite low nutritional value) or bedding for animals, in all of which the embodied carbon is released again afterwards.

Almost all other raw materials are made from fast-growing biomass too. Only small amounts of pigments and coating ingredients are not biobased. That's how we end up with biobased percentage of higher than 99%. Once our suppliers of pigments and coatings have 100% biobased products available, we'll switch straight away.

Red list free

All raw materials are also declared Red List Free, meaning 100% of raw materials are disclosed and contain no red listed chemicals.

Manufacturing facility

CornWall is produced in a sustainable facility equipped with south-facing solar panels to allow for maximum sunlight exposure. The roof of our production line has 2106 solar panels, which generate about 600.000 kWh of green electricity.

Manufacturing process

We don't use any fossil fuels in our production process, only electricity. The temperature we use is about 10 times lower than the temperature needed for traditional wall tiles.





CO₂ and CornWall

We store more carbon in the CornWall than is emitted in the production process of the product and its raw materials, so it could be argued that the CornWall is 'carbon negative' or 'climate positive', meaning that our activity goes beyond achieving netzero carbon emissions, and creates an environmental benefit by removing additional carbon dioxide from the atmosphere.

However, due to EPD/LCA-rules, we are obligated to exclude the time-element: since the CornWall could one day be turned into CO₂ again (by composting or burning for example), we cannot say that we store the carbon forever.

So officially we're not climate positive forever, but we feel that if we can store carbon for hundreds of years, we're doing a pretty good and urgently needed job already.

Biodegradable

Cornwall is biodegradable. This means that in case Cornwall cannot be reused or recycled (which should always be the aim), it can be naturally broken down, leaving no trace. Don't throw away the CornWall elements yourself (because your local composting installation won't know which product this is), but get in touch with us so we can arrange the most sustainable end-of-life scenario.

Demountable fixing

CornWall can be fixed against a wall without using adhesives. These demountable fixing systems allow our clients to reuse the CornWall and push the product into subsequent lifecycles. This is especially interesting for retail and hospitality clients where the lifespan of an interior is often much shorter than the lifespan of the individual products that make up the interior.

Take back scheme at end of life

We want to avoid the composting or burning of CornWall. The material is designed in such a way that it can be recycled 100%. CornWall products that cannot be reused as a full product can be returned to our production facility. Here we will grind the product and turn it into a new CornWall. We can make specific agreements with larger clients about the collection and shipment of end-of-life products.





Contact FRONT®

For questions and suggestions, please reach out to:

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More information about CornWall can be found on our website: front-materials.com/cornwall