Biomason and FRONT launch the world's first commercially available bio-concrete product that offers 60% fewer emissions than conventional cement

Amsterdam / Durham, NC — What if the floors beneath your feet were grown by bacteria? That's the premise behind Mimmik, a new bio-concrete tile developed by biotechnology company Biomason and distributed across Europe by Amsterdam-based sustainable materials platform FRONT. The product is now commercially available and it may be one of the most significant material innovations to reach the construction industry in decades.

Concrete is the most widely used building material on Earth, and cement, its key binding agent, accounts for roughly 8% of global CO_2 emissions. The problem is the process: making cement requires enormous heat, and that heat releases carbon at scale.

Biomason's answer comes from nature. Inspired by how coral reefs have synthesized calcium carbonate for millions of years, the company developed **Zymecrete™ Technology**, a process that uses bacteria as microscopic production plants. The bacteria take carbon and calcium from raw materials and crystallize them into calcium carbonate, binding aggregates into tiles with the compressive strength of conventional concrete. No extreme heat required.

The result: a tile with **60% fewer emissions** than traditional cement products, reaching full strength in approximately **40 hours**, compared to the 28 days conventional concrete requires to cure. Crucially, the CO_2 in the raw materials isn't released; it's locked into the crystalline structure of the calcium carbonate.

"When one of our first Mimmik projects in London was completed, people said nothing stood out to them," says Camilo Restrepo, CEO of Biomason, who spent 19 years in the traditional cement industry before joining the company. "That was exactly the answer I was looking for. Mimmik should perform like any other high-quality tile, and it does."

The tiles are produced at the world's first bio-concrete tile manufacturing facility, built in partnership with Danish pre-cast manufacturer IBF. The facility currently produces 8,000 square meters of tiles annually, with plans to scale to 20,000 this year.

Beyond performance, Mimmik offers something the construction industry has never had: color. Because Zymecrete is crystalline rather than gray, **tiles take on the natural hues of their aggregates**, sand, gravel and local stone, making it possible for city infrastructure to reflect the geology of the places it's built on. This is already visible in the first collection that is now commercially available.

"Right now, concrete products are often grey and monotone because of one material choice made a hundred years ago," says Ward Massa, co-founder of FRONT. "Mimmik changes that default. We can bring nature back into our buildings and cities."

The first projects with the tiles in England, the Netherlands, and Denmark have been completed successfully. Mimmik is available now for commercial specification.

Learn more about Mimmik here: https://www.front-materials.com/mimmik/

About Biomason: Biomason is a biotechnology company that grows construction materials using microbial processes, pioneering the use of Microbial Induced Carbonate Precipitation at industrial scale. biomason.com

About FRONT: FRONT is an Amsterdam-based platform for sustainable building materials, connecting innovative manufacturers with forward-thinking architects, developers, and builders across Europe. front-materials.com

You can find the press kit with images of the products, production process and first projects here:
https://drive.google.com/open?id=1ecrF0_XsKk2Q6dUkq2Jw2eBDmXQaQ3S5&usp=drive_fs