



THE HEXAUDI PROJECT: CARBON-NEGATIVE FAÇADE

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The HexAudi Project: Carbon-negative Façade

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The HexAudi façade panel on the exterior of the Audi car dealership in Trudering, Bavaria, Germany is a Made of Air carbon-negative rainscreen cladding. In partnership with Audi, Made of Air created the compound, developed the final design, manufactured the boards, and supported the installation onto the building's exterior façade.



The brief was to create a cladding from a sustainable product to replace the typical aluminum that Audi used. Simultaneously, it was critical to keep to Audi's high-end and branded design while meeting product requirements. For the project ~600 square meters of product was produced following a co-development program.

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Aside from complying with the existing Audi design and providing a unique, durable material, the solution had to be price-competitive, competing in an open-tender market against other, more conventional sustainable solutions.

In addition to its aesthetic value, our material is highly durable. It has performed well under weathering and UV tests. Since its installation in May 2021, it has withstood several weather cycles, preserving its aesthetic as well as mechanical properties and quality.

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The product is a combination of Made of Air's proprietary functionalized biochar, the key carbon-negative element, and bio-based polymer binders. The result is granular materials that can be thermoformed using existing processes. In effect, this material is a permanent carbon sink that goes beyond reducing embodied emissions, providing the double benefit of carbon removal and avoided emissions. For the Audi application, 10 tons of CO₂ have been sequestered from the atmosphere.

Now we are in the process of scaling production for the built environment, which will be an invaluable asset for the industry to go carbon-negative.

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