Textile and Film-Based Modular Facades – STRUCTURAL MEMBRANES 2021

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ABSTRACT

Textile and foil-based materials open up a previously unexploited potential for their application in the building envelope, since they allow for a significant reduction of mass, CO₂ and grey energy bound up in the construction whilst expanding the architectural design spectrum for both new and existing buildings.

A modular façade system with transparent, translucent or even opaque envelope elements with a corresponding frame profile system is presented, which allows these differently designed envelope elements to be mounted. The façade system is designed to meet the relevant building physics requirements while ensuring maximum user comfort.

The results of the research work in the corresponding project "FoilTex" will be presented.

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