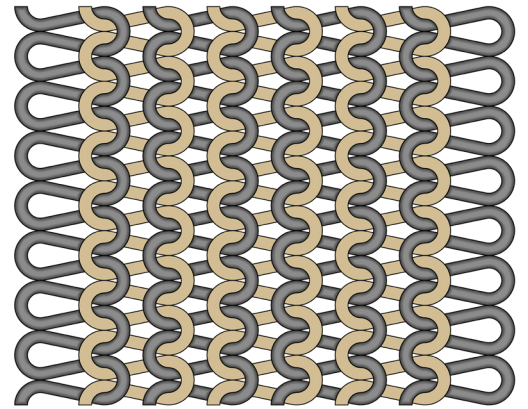
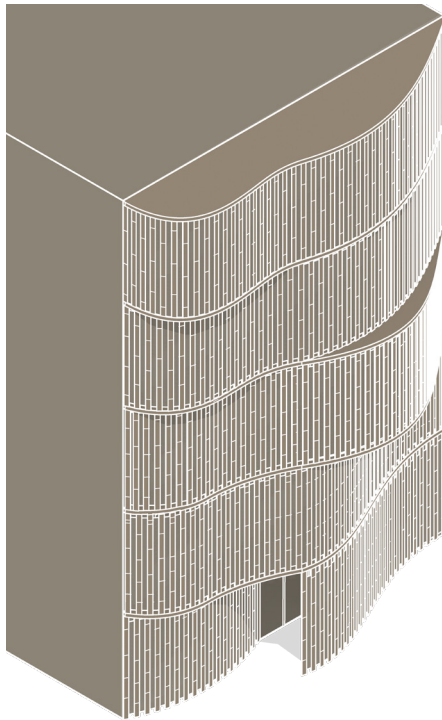


EMMA OLSSON

TEXTILE/WOOD

- a material exploration of hybrids of textile and wood in architecture



MATTER SPACE STRUCTURE

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Textiles and wood have always been important materials in humans built environment. These materials were optimal for us to use in tent constructions in nomadic times, tents that can date back to the early human times. But as the world evolved so did architecture and during the last millenniums textiles have been changed to more static materials like stone, brick, or concrete.

Today in architecture one can most often find textiles as thin membranes in light-weight constructions. In combination with steel, they can create and cover complex forms. The purpose of the thesis is to challenge the idea of how textiles are used as a material in architecture as well as broaden the use of its techniques with wood as a tool. The techniques used stems from current applications of textiles in architecture as well as other fields where textiles are used widely.

The aim and goal of this exploration is to create architectural hybrids of wood and textiles which can be used as architectural materials. This thesis starts by exploring and experiment with textiles and wood to create hybrids between the two materials to be used in architecture. It will investigate

its material qualities and how these can be transformed by exploring different techniques. The project will continue by further exploration to create architectural qualities and use cases.

Furthermore this thesis is a process of developing and testing different techniques and methods by using both physical and digital tools. This will be done by working mainly with physical exploration and model making with a compliment of drawings and 3D modelling.

Eight different hybrids of various types of wood and textiles are the result of the studies and exploration. These hybrids are applied in architectural settings and will be exhibited as a catalogue of architectural elements. The results are showcasing a wide variety of qualities and expressions which implies that the uses of the combination of wood and textiles could have a wider implementation in architecture than it has today.

Keywords : Textile architecture, Material hybrids, Textiles, Wood