

## **Reflection on the research and design process**

L.J. Spikker (Léon) for Architectural Engineering Studio 11  
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### **Technological research & design**

The relationship between the design proposal and the research is focused on the possibilities of robotic hot-wire cutting (RHWC) EPS molds and concrete casting. This relationship is expressed in a couple of related aspects; the buildings expressive shape, the coastal site and the building method.

At the start of the graduation (P1) I wanted to generate a building from production and material constraints. Along the way I found out that production constraints are related to shape as well. This led to an iterative process where an initial design, inspired by use, technology and site, was to be adapted to the production technique in various iterations. The insights this research left me with led to a design assignment which was focused on the expression of the possibilities of RHWC and casting. The building had to show, at a glance, that this new technology leads to new possibilities. But at a more fundamental level it influences the building method (prefabricated, panelized, custom sandwich construction).

### **Location & design**

The rural location allowed me to focus on the possibilities of RHWC for an architectural language, without having to focus too much attention on surrounding buildings, urban fabric or the history of the site. As a different source of inspiration I had nature: dunes, wind and sea.

Initially the program was defined as a beach club, to contrast this new building technique to the, in my opinion, horrible decorated sheds which populate modern beaches. To make it stand out and justify its high construction costs it had to become extravagant and luxurious, which made it so large it would be unrealistic as a pilot project for this technique. Therefore, this program was abandoned in favor of a smaller, more flexible dune house, as to focus attention on the expression of site and technique.

### **Studio method vs. own approach**

The studio's method was focused on a trinity: technology, use and context. The search for a proper use for this site was long and desperate. This could have been avoided by admitting to focus on technique and context, letting the program/use be of secondary importance. The hierarchy of the different aspects is something I should consider seriously in a next project.

Because of the novelty of this production technique I switched from a rather large seaside restaurant to a smaller weekend retreat quite late in my project (halfway between P3 and P4). It doesn't make sense to apply a new technology on something large on your first try.

The focus on technology as propagated in the studio (INTECTURE: integration of technology in architecture) I found very interesting and inspirational. To distill the architectural language from the material and process was very revealing to me. At the same time, because of my focus on expressive architecture, I found it difficult to communicate the reason of certain aspects of the design from a 'technical' point of view. In the end, I believe things came together quite nicely with the design drawing from the beautiful, rough site and the novel production technique.

The studio's method allowed for a technologically inspired architectural language I didn't possess beforehand. Every material, every process can lead to new possibilities in giving expression to a certain program on a certain place.