LIM KINS

Reflection Barbara Foolen de Oliveira

GRADUATION PROCESS

How is your graduation topic positioned in the studio?

My graduation topic looks into the redesign of a unitized facade system. When designing such a facade system there are many aspects that need to be looked into like building physics, structure, building process and so on. These aspects have all been learning objectives during the Building Technology studio.

How did the research approach work out (and why or why not)? And did it lead to the results you aimed for?

The research approach taken began by defining the design requirements. Following this the design was created, analysed and evaluated against those set requirements. Having those requirements set in the beginning really helped stir the design into the right direction. However I was not able to set all of the design requirements at the beginning of the process as some only became clearer along the way. This meant that some of the initial designed options where not evaluated against some of these requirements which where added later on.

How are research and design related?

In order to design such a complex element there was a constant need to research about properties and restrictions. Furthermore research also was used in form of inspiration by looking at existing examples known to work.

Did you encounter moral/ethical issues or dilemmas during the process? How did you deal with these?

One of the biggest ethical dilemma I encountered at the beginning of the project. In the project I designed a fully glazed facade. As it is known this is not the most sustainable option as it is not a good insulator for the winter time and in summer it contributes to a very hot inside climate.

The way I dealt with it was by trying to at least identify and establish the problem as it cannot go unmentioned. Furthermore I gave suggestions on how this same design could be changed in order to minimize the issue.

SOCIETAL IMPACT

To what extent are the results applicable in practice?

In theory the design could be applied in practice, as all the regulations where taken into account. However thoroughly reviewing the manufacturing process and testing it in real life is needed before hand.

To what extent has the projected innovation been achieved?

The design is inspired in previous work and thus can seem similar. However with this design the previous work is developed further into a fully size panel that is more suitable to be used in practice.

Does the project contribute to sustainable development?

As mentioned before the sustainable development of this project is also the ethical dilemma of it. The project on it's own does not contribute to the sustainable development however it addresses this issue and suggestions are given on how further improvements on sustainability can be made.

What is the impact of your project on sustainability (people, planet, profit/prosperity)?

This needs to be looked into further with the end-of-life assessment.

What is the socio-cultural and ethical impact?

The wish for a transparent facade is facilitated. This means people can have more daylight inside and a greater connection with their environments.

What is the relation between the project and the wider social context?

With a high transparency unitized facade system it is expected that more building projects can use this and thus more people can enjoy the wanted transparency in their building. This means that having a high transparency factor in the building is made widely available.

How does the project affects architecture / the built environment?

With this design it brings a new option to use in the building facade. It is an addition to the excising solutions, but now combining the pro's of the unitized systems and a structural glazed one.

PERSONAL REFLECTION

During the course of the project I came to realize the importance of my classmates. Almost everyone from my building technology master had already graduated. This played a role as normally you would talk about your project with classmates during a coffee brake and sometimes come to realize what was wrong, needed changing or even how it could be improved. Another aspect where classmates could be beneficial is the fact that they are doing another topic and are able to look at my project from another perspective.