

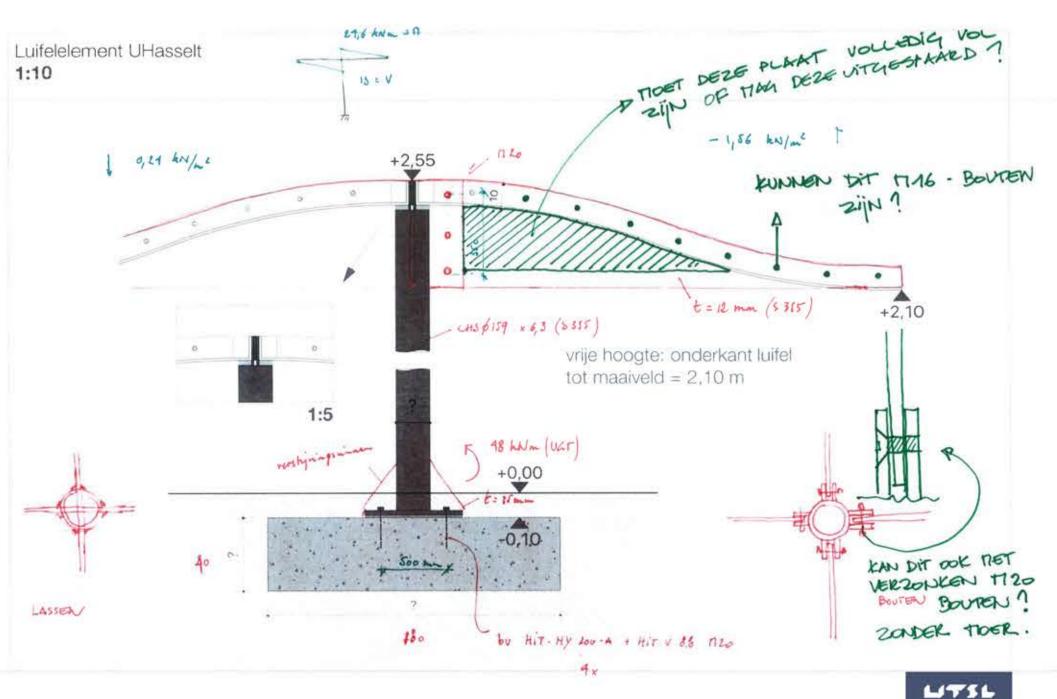
## NEW UHPRC WAVE

Our project "New-UHPRC-wave" is an experiment, looking for an interaction between design and the use of an innovative material. This material, UHPC [Ultra High Performance Concrete], uses smaller aggregates than regular concrete, thus achieving optimal packing density. UHPC also has an increased compressive strength, using fibers as reinforcement. A low water binder factor combined with fibers makes that UHPC has promising properties. This makes the material distinguish itself from concrete in terms of ecology and sustainability.

With the experimental data, we capitalized on the social relevance of UHPC. Less raw materials are needed for the same span that can be made with concrete. Thus, the structural parts manufactured with UHPC can be dimensioned much thinner.

Our design includes a canopy consisting of four elements. These elements have a dimension of 2000mmx2000mmx12mm. The system can be built in a modular way. It is possible to set up four elements, but series can also be made, as shown in the image above. In our design the four elements are attached to a steel column with a diameter of 150mm.

The elements can be completely prefabricated. After this, they can easily be transported and mounted into place.



UTIL STRUKTUURSTUDIES

-32 2 241 35 40 IBAN -32 2 539 47 14 BERG 7370 2478 7448 Info@util.be IBC 737-0307814-68 V. WWW.WIII.be IBTW REDS98.763.024

## **UHPC VS CONCRETE**

