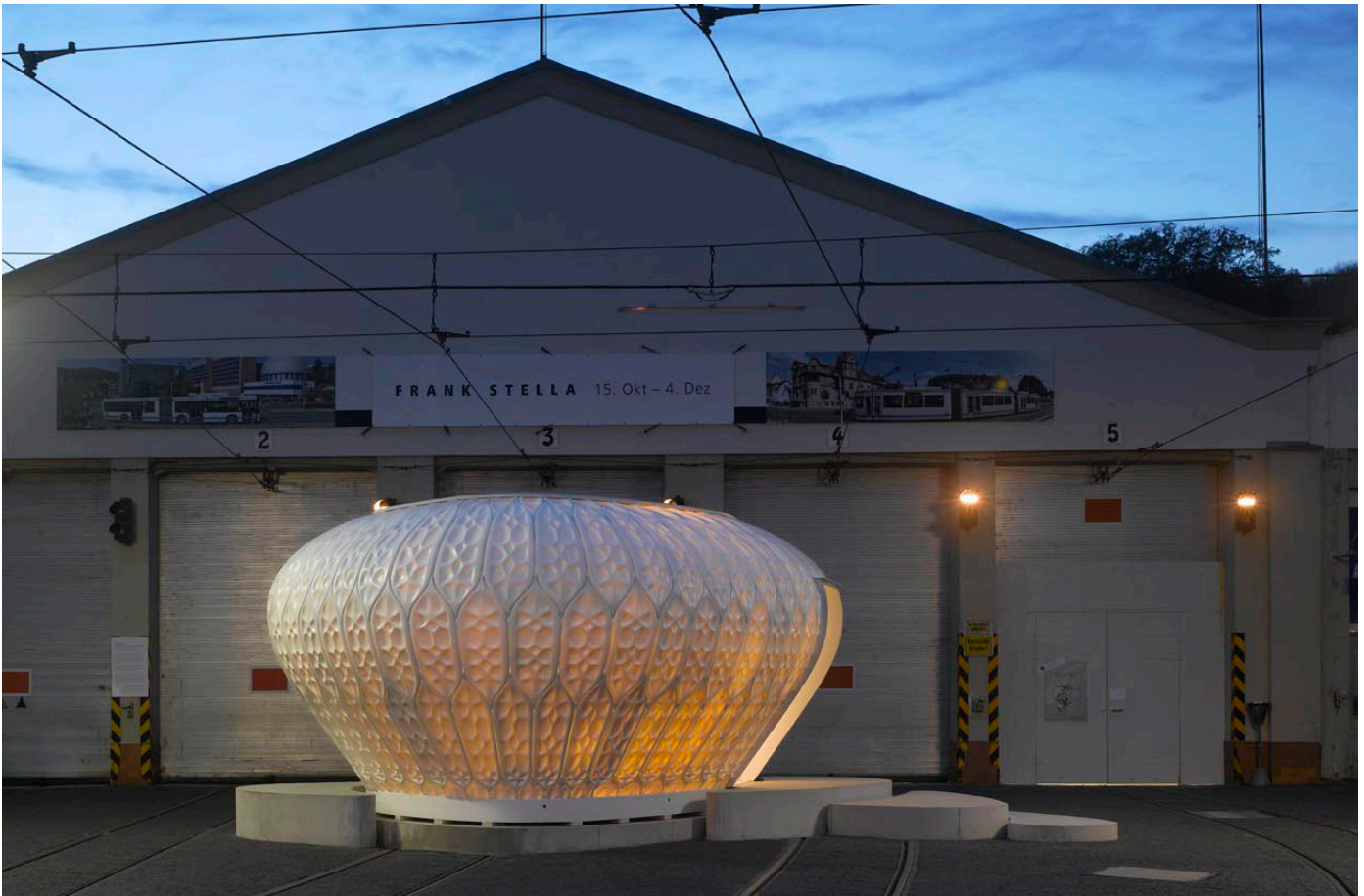


PAVILION COCOON_FS

MORPHOGENETIC DESIGN APPROACH, 2011-2012



COCOON_FS is a futuristic landmark that integrates outstanding architectural sculpture, highly efficient technologies, best functionalism and empowers biomimetic research. COCOON_FS visualizes a breathtaking example of green technologies, designed by one of the most advancing architecture firms in Europe. COCOON_FS is designed by the architecture company POHL Architekten in context of the PLANKTONTech worldwide research network. PLANKTONTech focuses on basic research of marine plankton organisms such as diatoms. Its aim is to develop material efficient constructions for architecture and design purposes based on biomimetics by learning from natural lightweight composite structures. As member of PLANKTONTech POHL is responsible for technical solutions by translating natural lightweight constructions into technical prototypes using highly efficient technical fibers. COCOON_FS is a floating system that, as research pavilion is designed to expose the activities of PLANKTONTech.

COCOON_FS visualizes both - natural lightweight construction as well as highly efficient technical design solutions. With its weight of only 750 kg, the pavilion can easily be transported to any location. In the sense of stability the floating construction is able to withstand thunderstorms. The self supporting shell of COCOON_FS is made of FRP (fibre reinforced polymers) that forms the skin and the supporting structure in one. The FRP composite design is optimised by all design parameters including broad iterative research of parametric design, production needs. Compared to biological solutions in nature, COCOON_FS is to be seen as morphogenetic design. The next steps of research are to optimize the technique and material effort for the pavilion and to produce it by numbers. As COCOON_FS will be visible in different locations. It was a special honour to pre-launch it for the purposes of the the biggest art exhibition for recent work of FRANK STELLA from 15.10. – 04.12.2011 in Jena, Germany.

Client
Alfred-Wegener Institut AWI,
Bremerhaven
PLANKTONTech

Architect
POHL Architekten

Planning and Construction Process
2010 – 2011

Gross
10 m² / 107 sq.ft.

Address
different locations
informations:
www.pohlarchitekten.de
www.planktontech.de

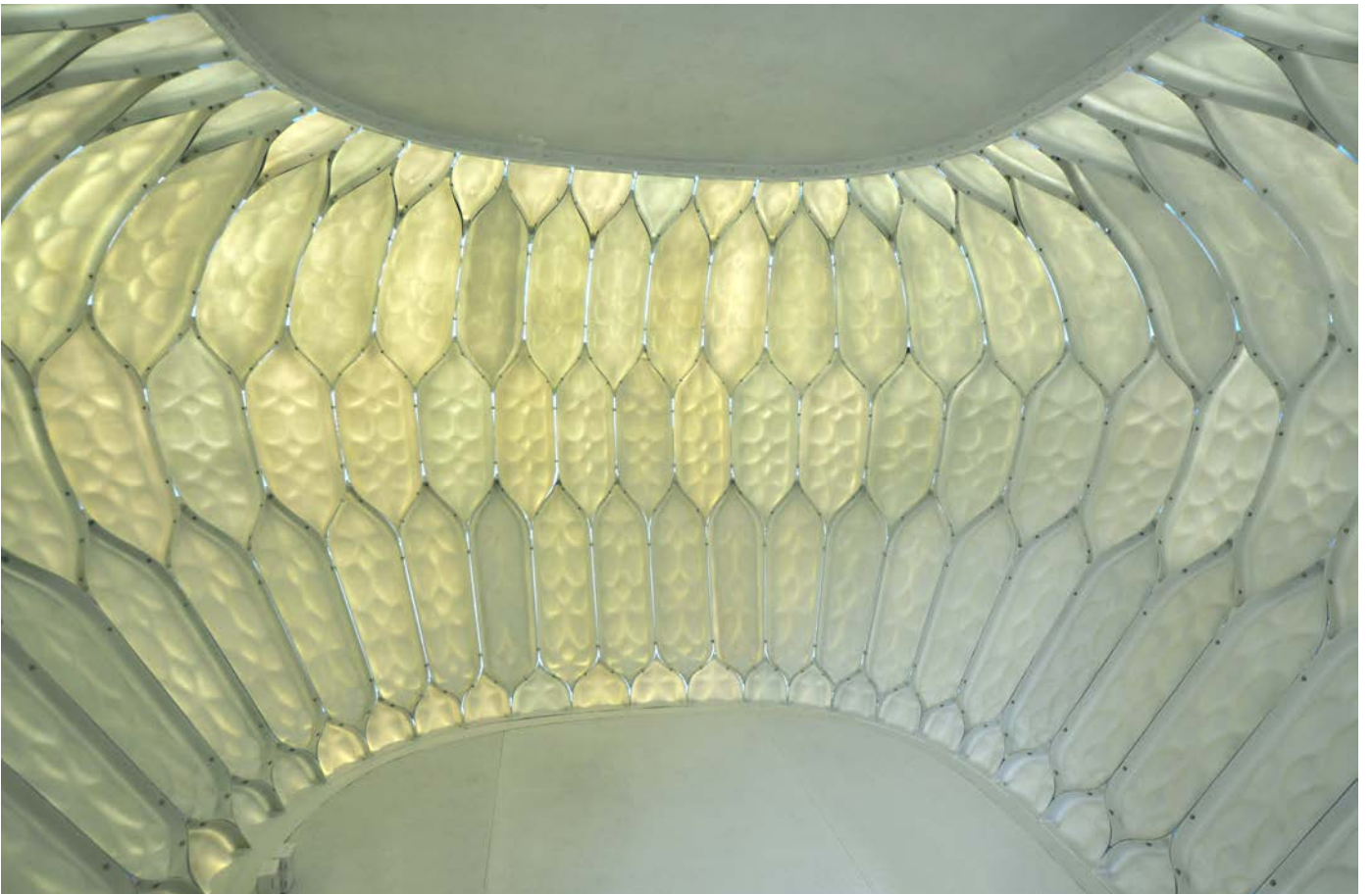
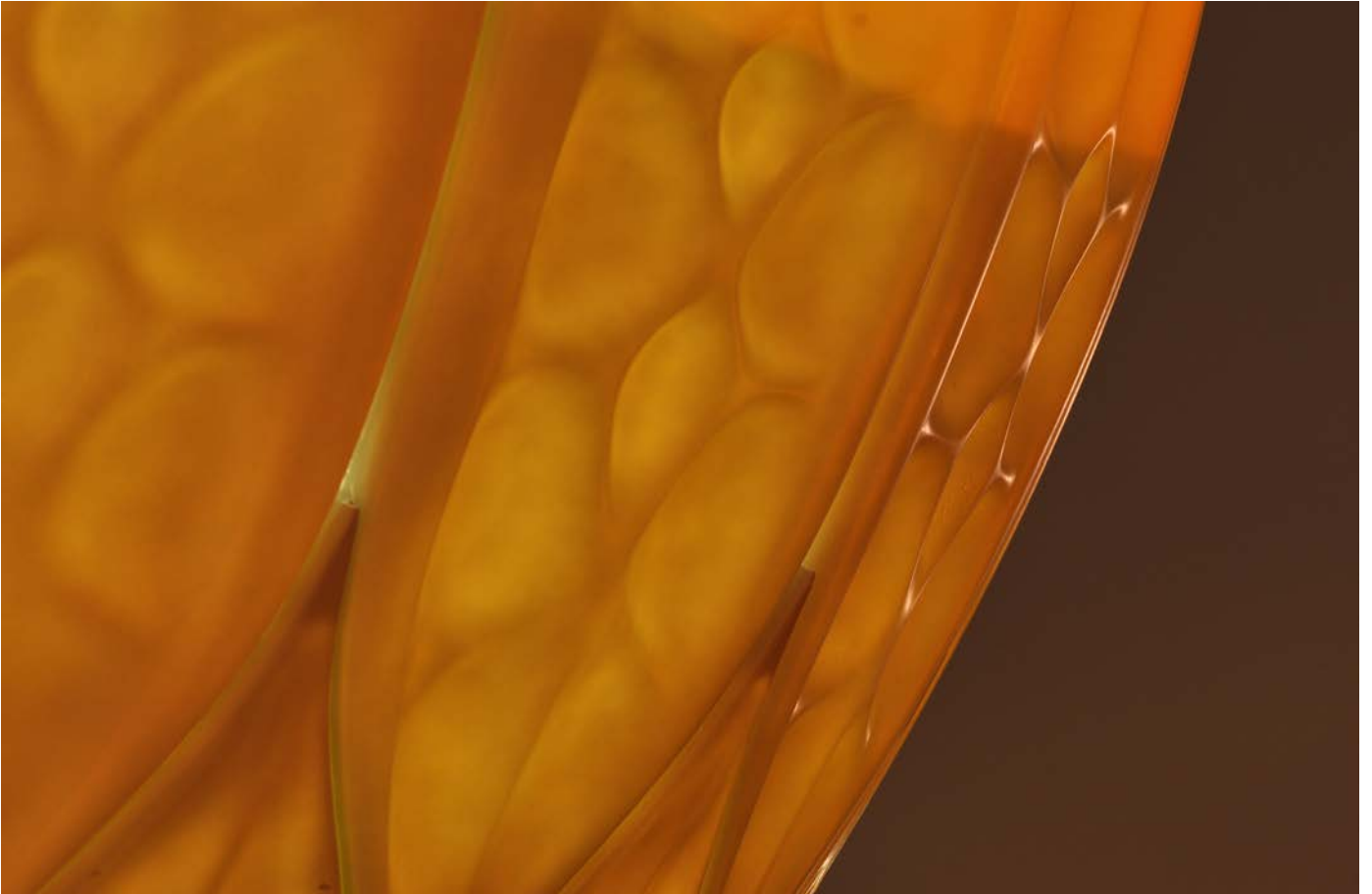
Further Information
http://www.facebook.com/pages/COCOON_FS/332808280066279

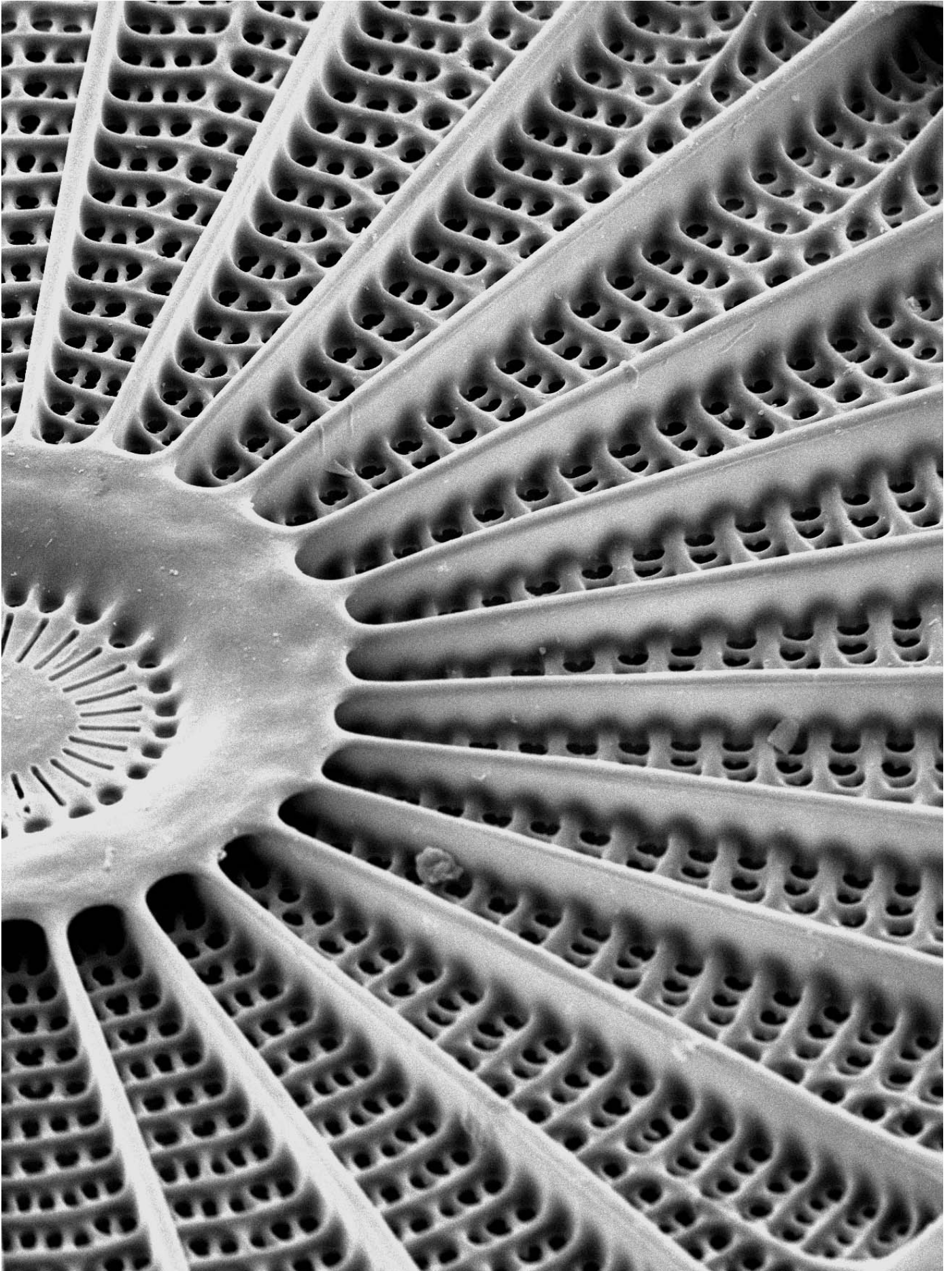
P O H L A R C H I T E K T E N

PAVILION COCOON_FS
MORPHOGENETIC DESIGN APPROACH, 2011-2012

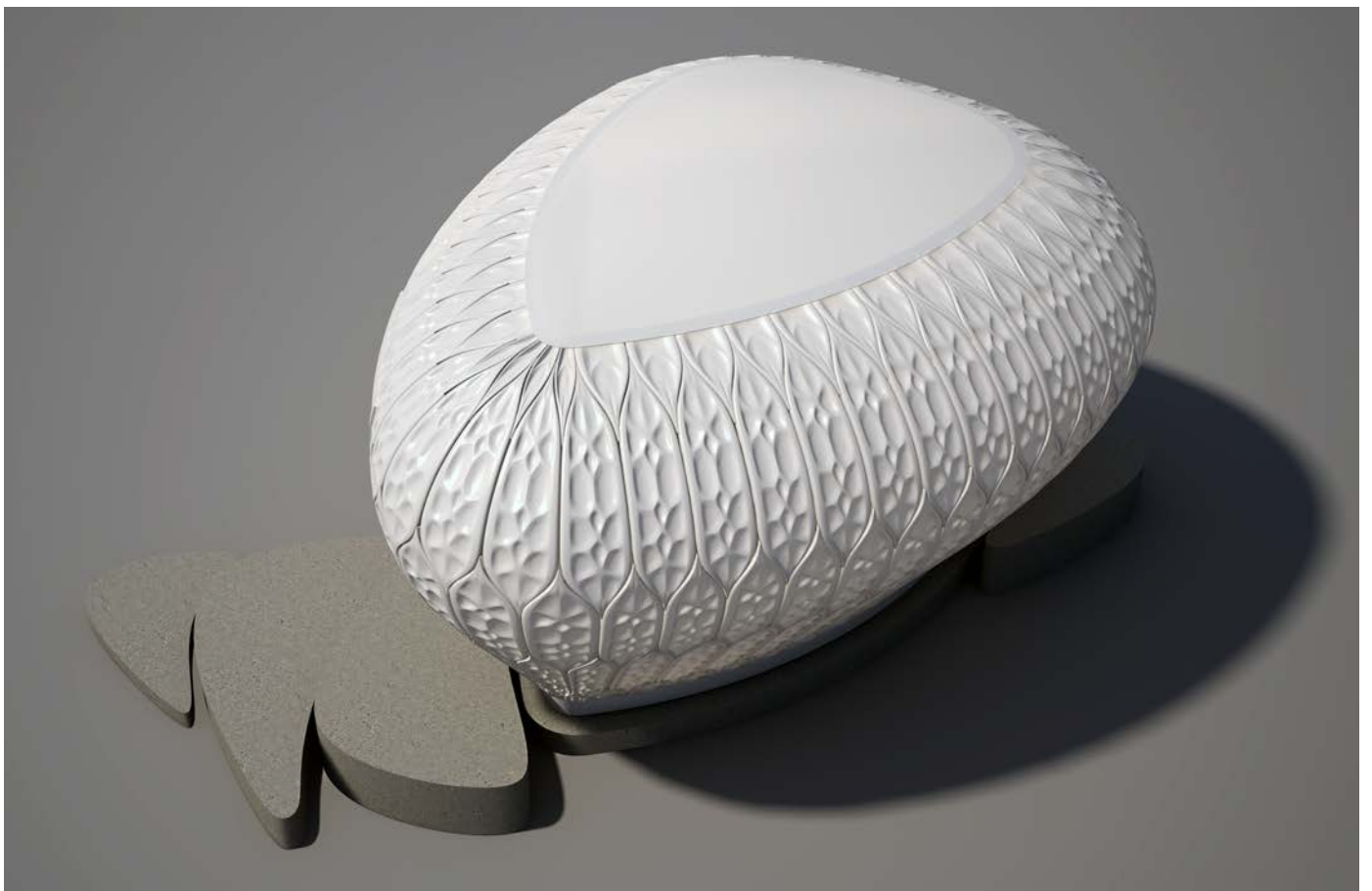
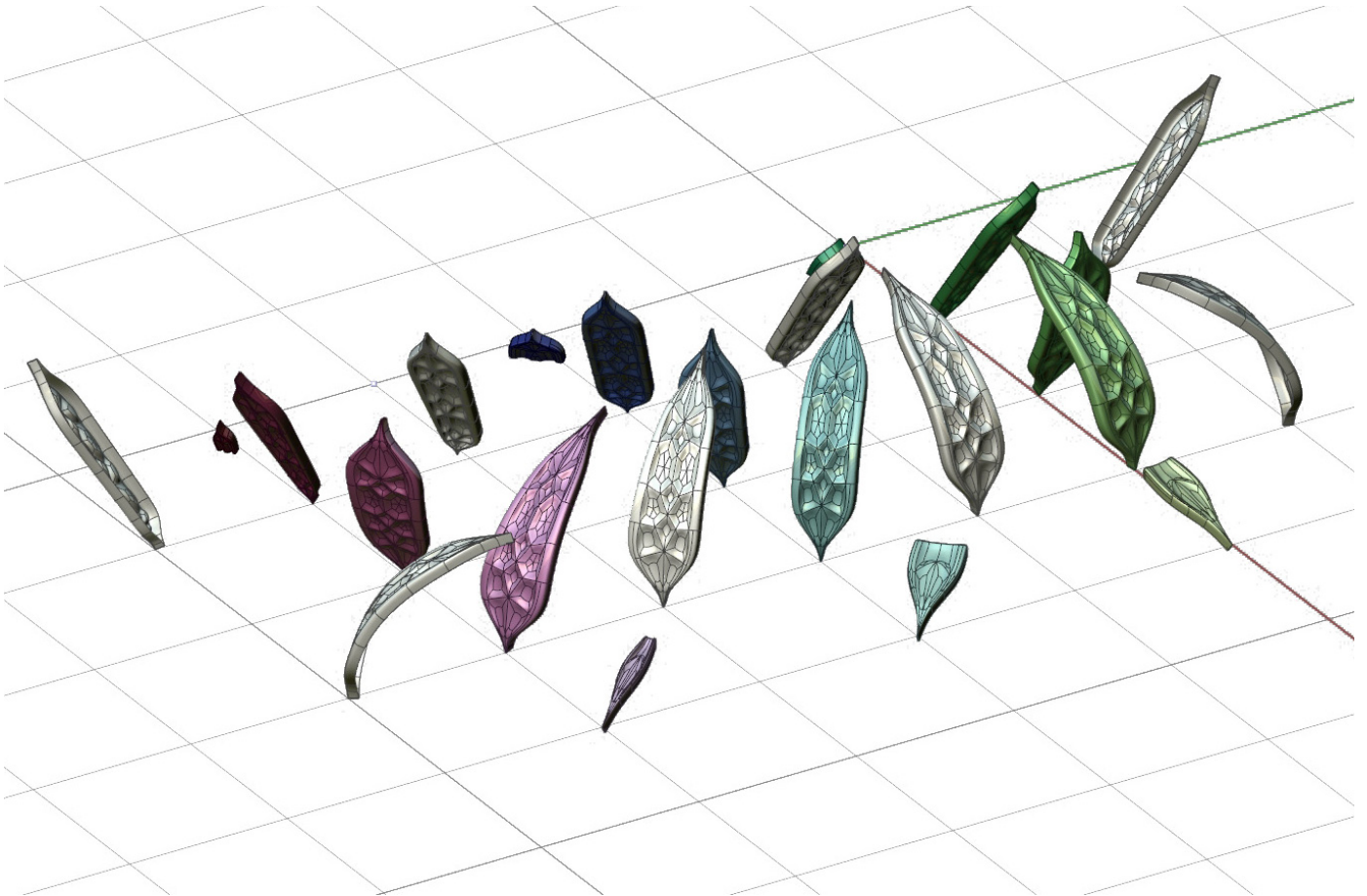




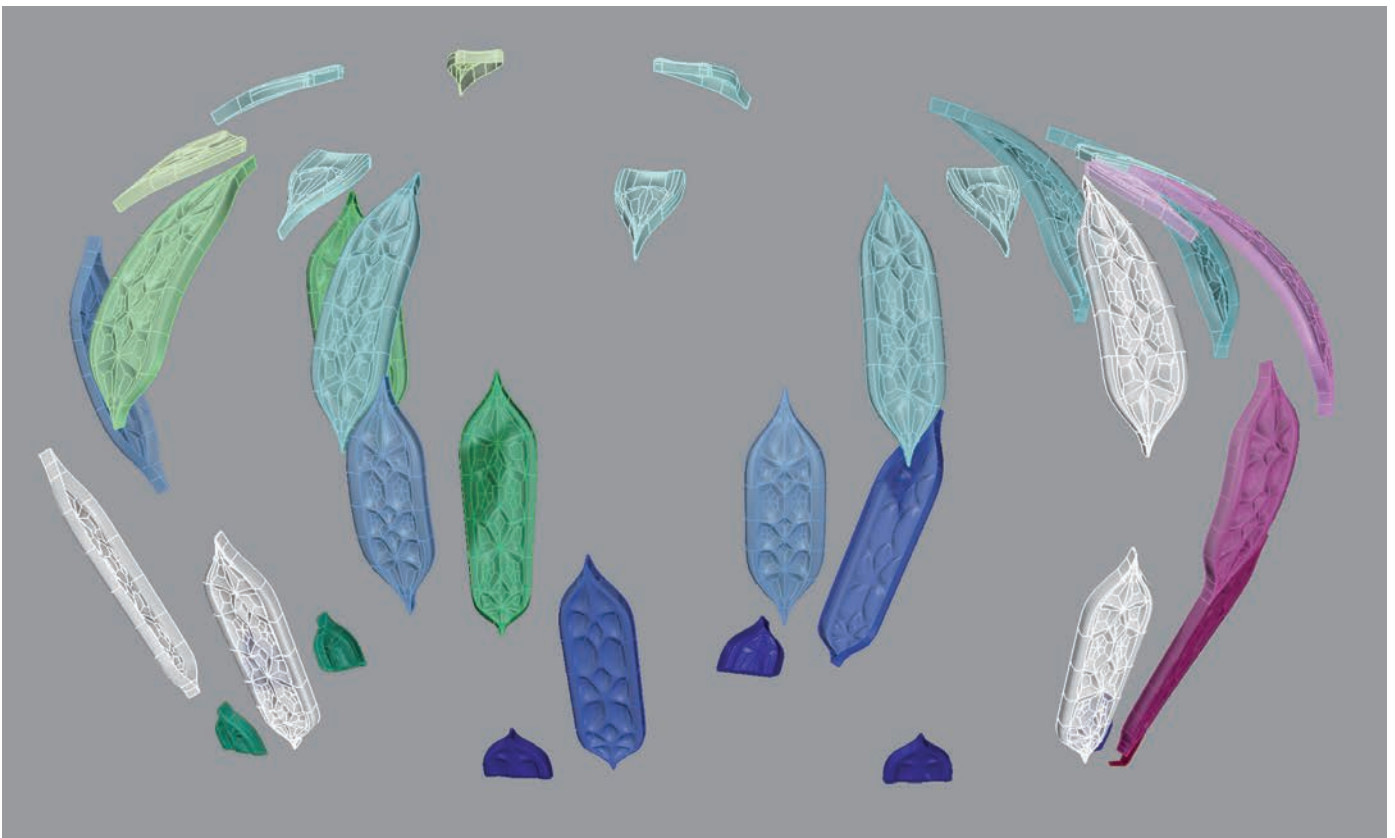
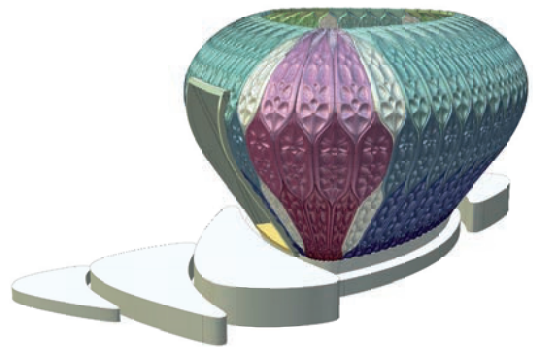
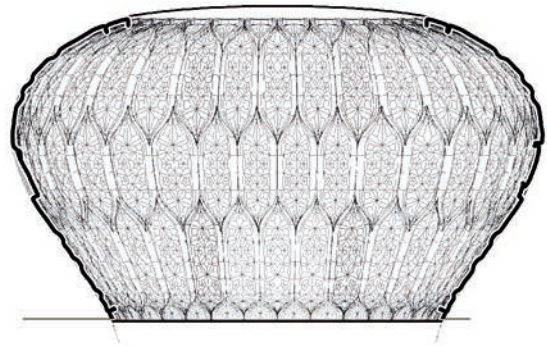
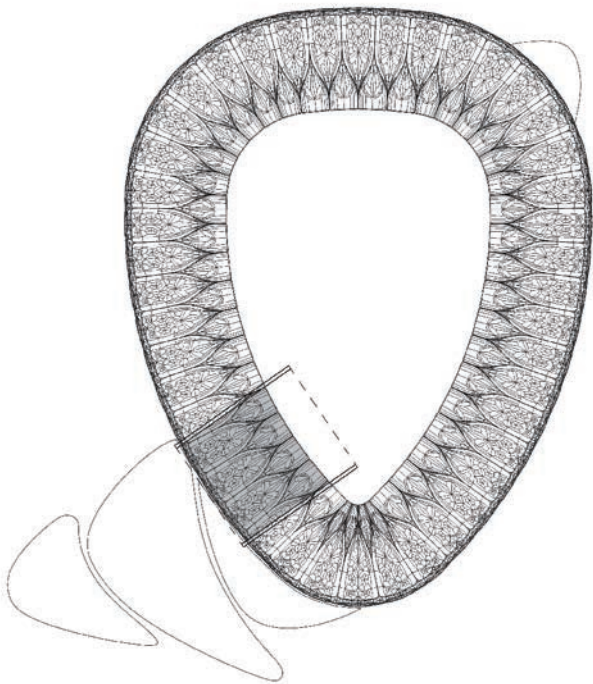




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