MAYKU FormBox

Modelling a glass village with the Mayku FormBox.

Professional Case Study

Fully transparent glass-like models

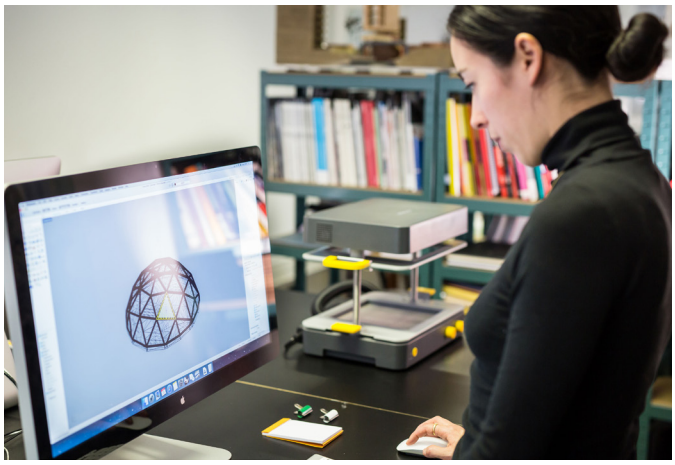
Using the FormBox, Tanya was able to work with perfectly transparent materials that couldn't be made with a 3D printer. Enabling her to mock up glasswork.

Significant time savings

By combining 3D printing with vacuum forming, Tanya was able to make a small batch of her domes in just a few minutes.

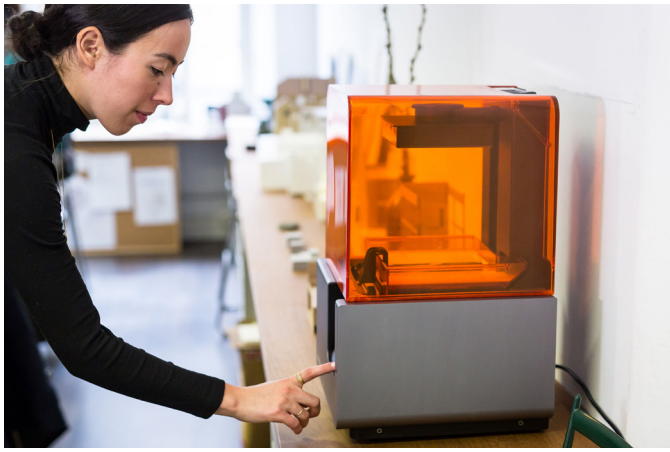
Massively reduced costs

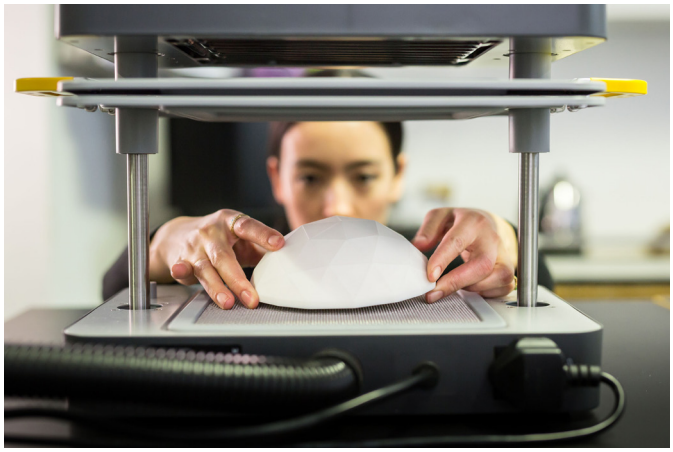
Tanya spent £1 for each model she created with the FormBox. On her client's budget, outsourcing production would have been prohibitively expensive.



"The FormBox is a fundamental part of my model-making set up. It's great for quick formal experimentation and mocking up transparent materials."

Tanya Eskander



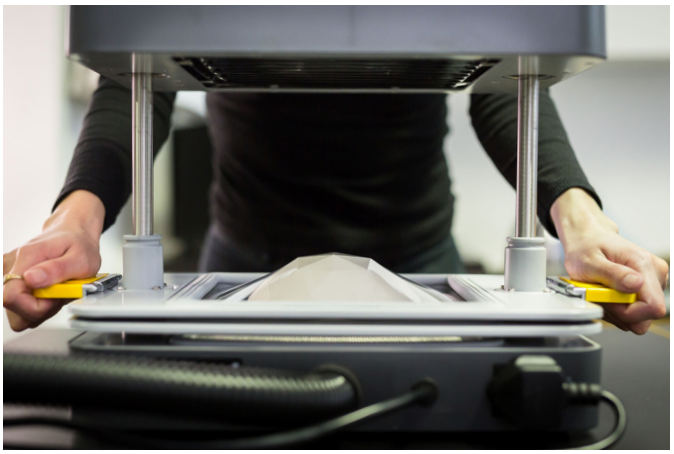


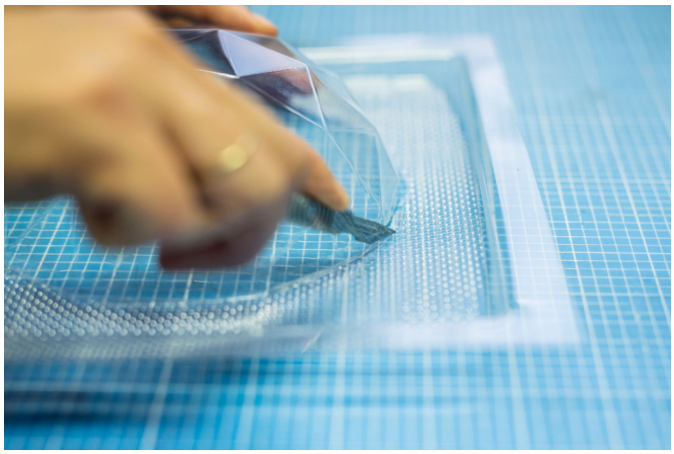
Tanya is a freelance architect working in London. She graduated from the Royal College of Art in 2017 and since then has helped clients from all over the world bring their visions to life. Having won several accolades for her work, quality is essential to Tanya. Her clients constantly demand more from her on a shorter time frame and so she runs her own model making workshop from her home studio.

The Challenge

Tanya was working with a London based Architectural practice on a new science park being developed for a university research complex. Part of the vision for the Eden project inspired site was to create a series of 10 microclimates. These would be encased in glass and provide a temperature controlled environment in which to conduct a variety of environmental science research projects.

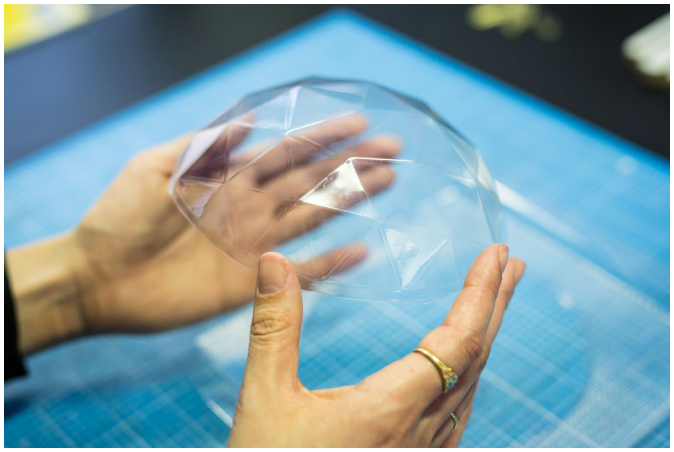
Tanya needed to make an architectural model of the site to show the client how the domes would look and how they would be situated in the science park. She only had a few days to get everything ready.





The Solution

First Tanya and the architectural firm ran a working session with the client to define the requirements for the domes. They tried out different ideas such as working with wood and using local materials to create the foundations for the site. Finally they settled on a geodesic structure and tanya got to work.



She created a 3D model of the site in 3DS max and rendered it for the Architectural firm to review. They were happy with what they saw and gave the go-ahead. It was time to get sign off from their client and so they needed a scale model of the site.

Tanya's model making set up has blue foam, a wire cutter, a 3d printer, a FormBox and various other tools and materials. First, she carved the terrain out of blue foam. After adding grass, trees and other detailing - she worked with cardboard, paper and wire to make a rough mockup of the dome structure. When she was happy with the construction she built a 3D model of the whole site in her CAD software and created detailed drawings for the dome.

She printed a negative of the dome in white resin on her SLA 3D printer overnight. She came in the next day and used the print as a master template to create the glass for the domes.

She placed the dome in her FormBox and quickly made 10 copies of the master template from transparent Mayku Sheets. She used a scalpel to cut the domes out and added them to her model. In a very short time she was able to create a professional result in a user-friendly and scalable workflow.

Cost Comparison

	External Vendor	Mayku FormBox
Setup cost	$2000+	$699
Part cost	$4	$2
Prototyping time	2-3 weeks	16 hours of 3D printing
Production time	2 weeks	2 hours