1. DESIGN under efficient and sustainable parameters

This innovative system integrates construction parameters directly into the design stage to ensure efficiency and sustainability in the subsequent realization stages. This is possible thanks to the use of mathematical algorithms (a-b-b-c, overlapping, angle, hexagon and triangle), which subdivide the input surface into elements which are able to be stacked and extract their coordinates to proceed with the fabrication stage.

2. FABRICATION without molds

This new manufacturing system does not require additional molds thanks to forming each component using the previous one as mold. This idea of production is materialized by digitally injecting layers of a viscous material inside a vertical container.

3. STORAGE / TRANSPORTATION in stacks

Despite the fact that the components have curved non-standard geometries and they might be all different, they can easily be accumulated in regular stacks. This feature is advantageous for their storage and transportation since the components use the space in the most efficient way, reducing time and pollution involved in these stages.

4. ASSEMBLY without formwork

The specific geometry of the components avoids the need of formwork, minimizes the amount of work in the construction site and reduces the production of waste.

Simplifying complex geometries...

Efficient Fabrication System for Geometrically Complex Building Elements

*Zero-waste* system in all stages

...into stacked components