Shaping

The goal for the form-finding is to create modular and easily repeatable units that can be related to each other to create various adjacencies and connections as part of a flexible and open-ended system.

In the initial form-finding process, for the tessellation, it was decided to study the different units independently from each other, since this is also the base of the entire system logic and not to align them next to each other from this stage. From the initial trials of tessellation, the goal was to create smooth surfaces, straight corners and with side openings and during the process, different mesh subdivisions were tested. After defining the tessellation pattern for each type and subdividing the mesh, a dynamic relaxation process through Kangaroo was carried out each time to visualize the volume and shaping of the room.

For the final tessellation and form-finding, a simplification was chosen and a more modular approach, also related to the fact that some spaces are incremental in size. In order to be able to replicate and combine the spaces, this would have

to apply also at the roof shaping logic, creating simpler vaulted and domed roofs that can easily adjust to different units and that can increase in size. Also, the mesh subdivision was simplified, in order to be later easier translated to construction elements.