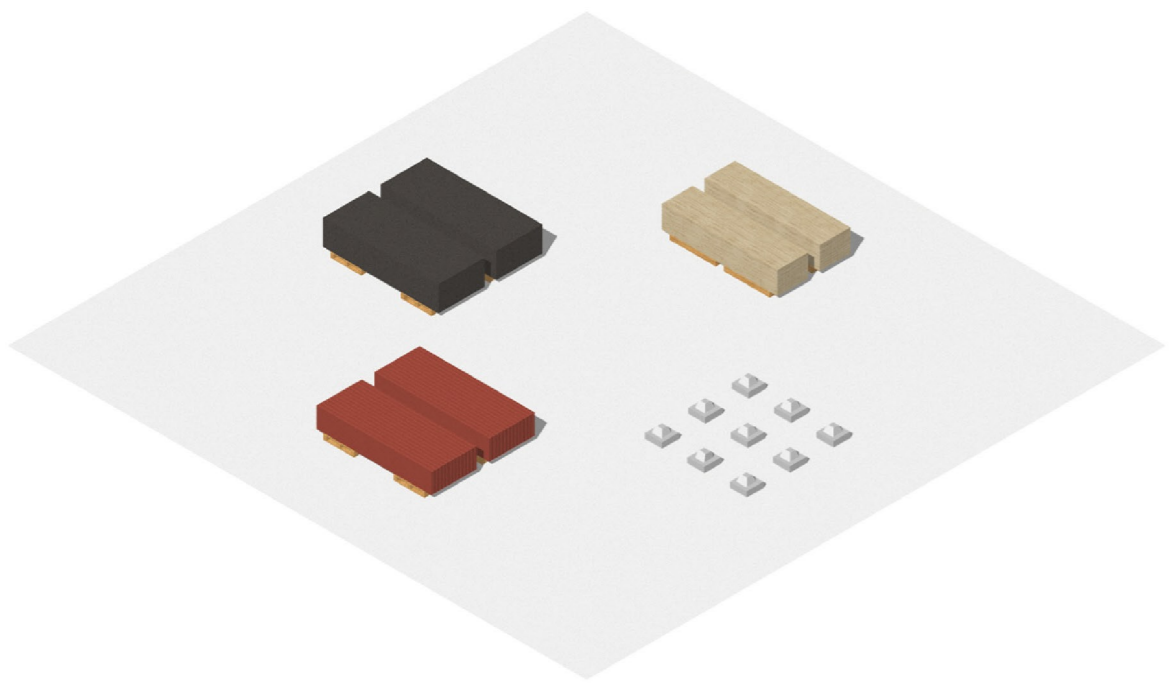


# LZ779 Helsinki (FI)

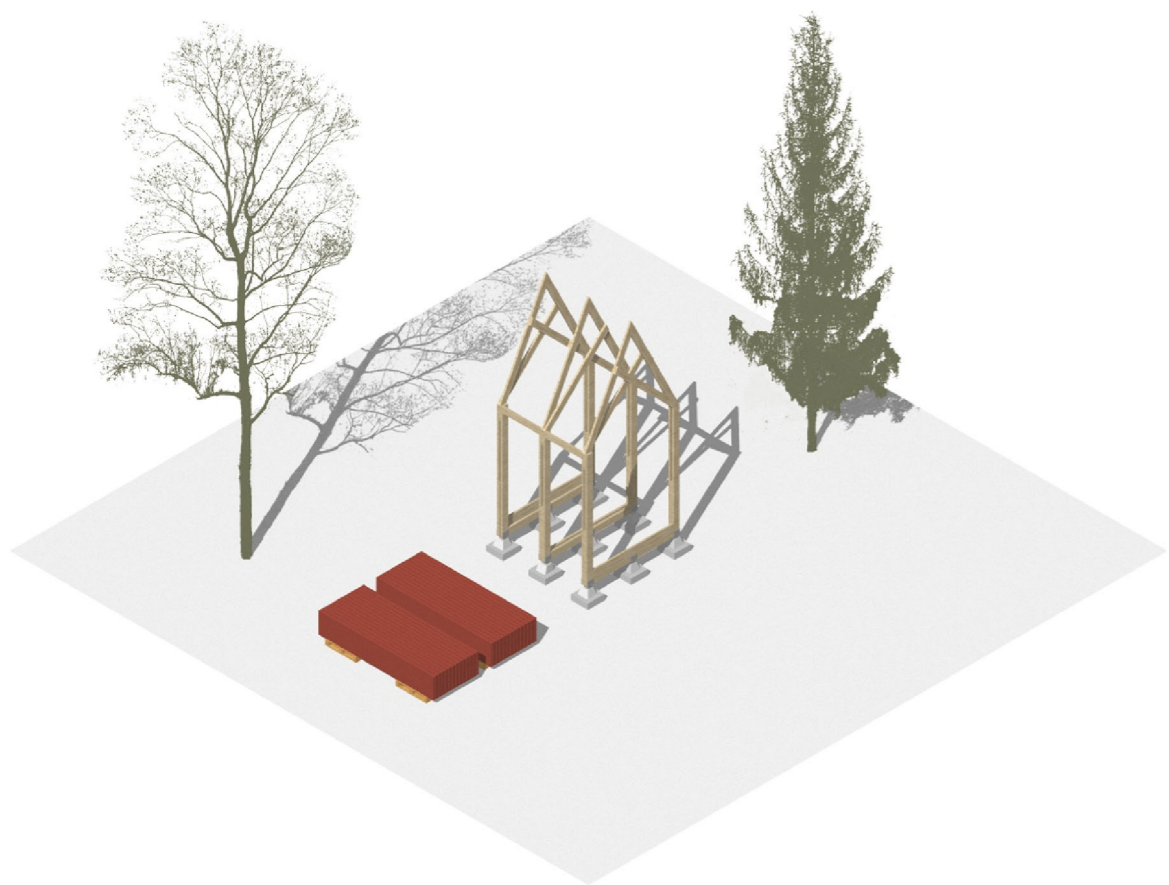
## MATERIALS

The chosen structure for Aallonharja is ecologically and economically sustainable. The materials are light, easy to build on-site and natural. The untreated timber as a main structural material is the most common Finnish renewable material, while also being cost-efficient and easily transported to the construction sites. In addition to timber, wood-based insulation and wood fiber windboards are used to provide comfortable weather protection and give sturdiness to the structure. The foundations are adaptable. Ready-made concrete plinths are used in order to raise the structure from the ground and allow animal life to flow through, while the concrete pontoons provide firmness to the floating cabins. Thus, the foundations do not need any heavy digging and can be reused later on. Completely recyclable profiled steel is used for the roof.



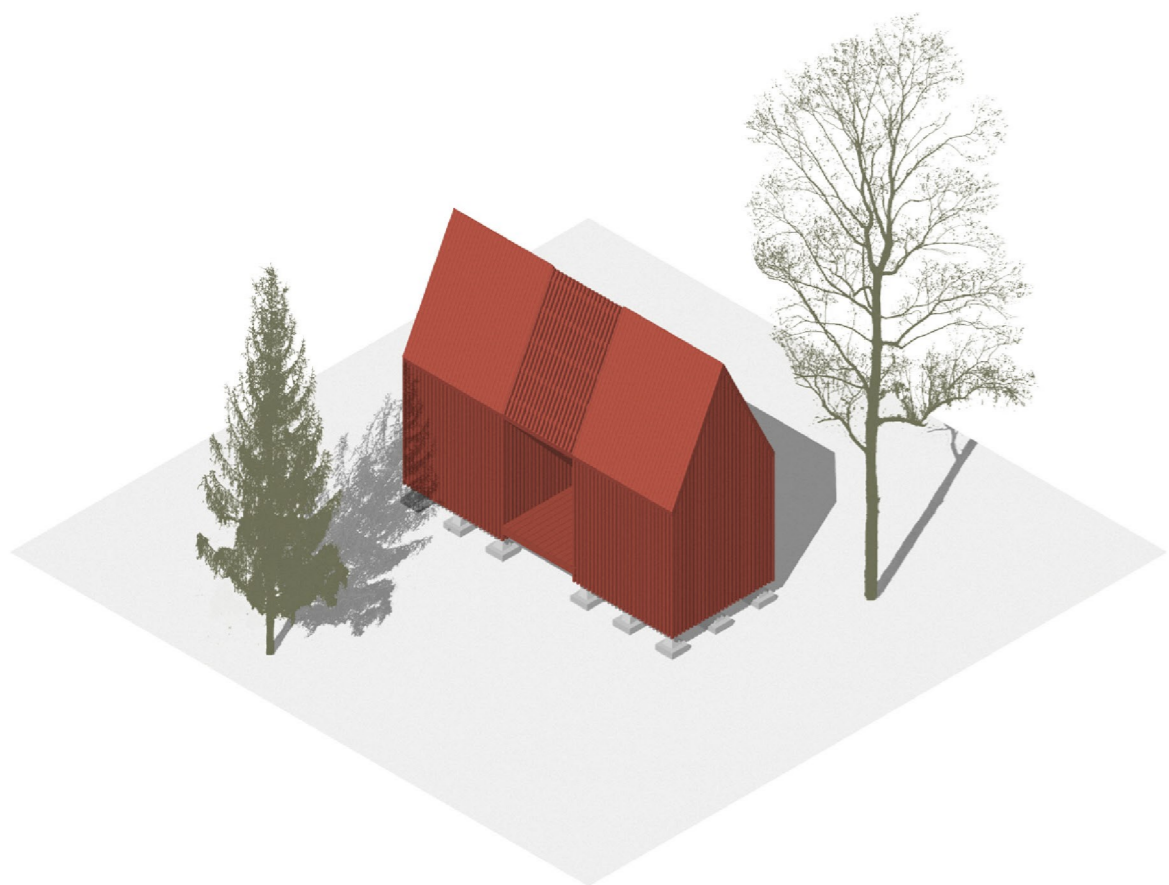
## FRAMES

The building is designed according to widely used dimensions, in order to minimise material loss and make the construction process faster. The main width and depth of the frame is 2,4 x 2,4 meters, which is equivalent to two factory-shipped windboards assembled together. The height of the building is 2,7 meters plus the 2,4 meters high gable roof. These dimensions create one modular frame that can be easily multiplied and combined. All of the structure materials are lightweight and easy to work with, so that the frame can be built anywhere by hand and without the need of heavy machinery. The timber elements are lifted and assembled on-site, thus making the building of the cabins possible even with volunteer help amongst willing Helsinki residents.



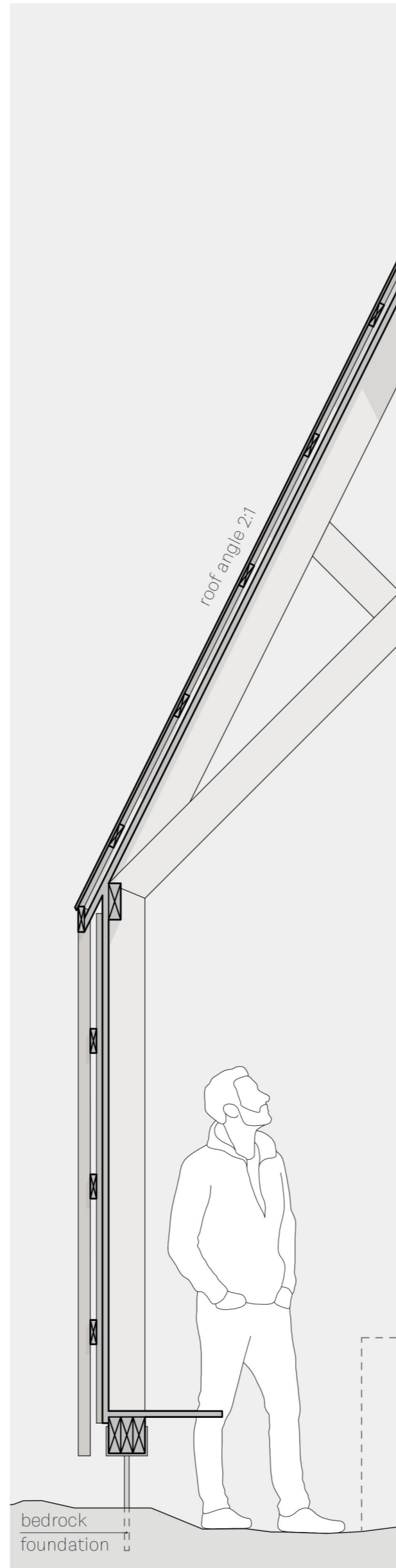
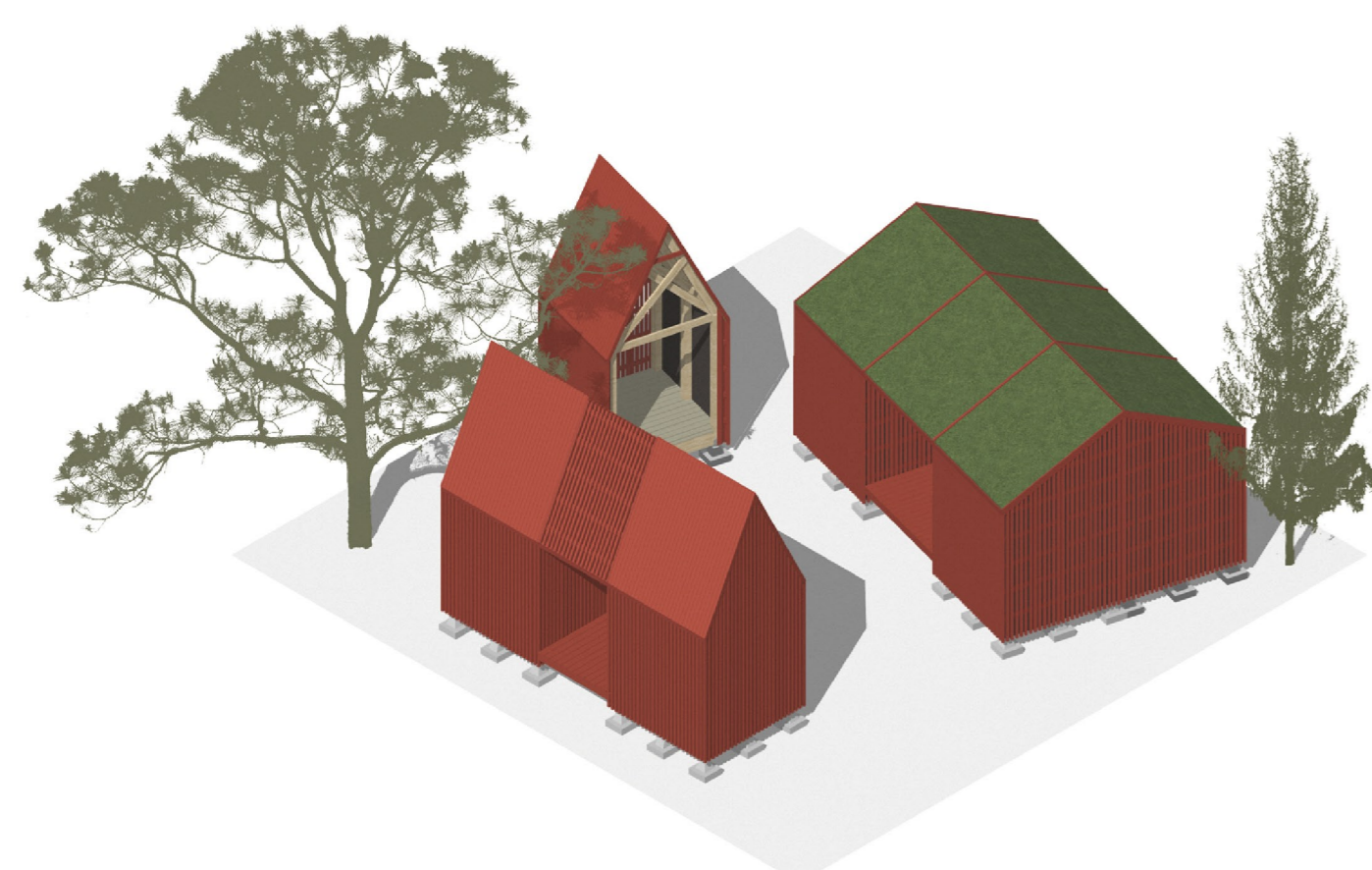
## BUILDINGS

By combining the frames, different buildings and services can be created flexibly. For example, having two modular frames together, an accommodation unit that fits beds for two can be achieved. Saunas can be created by combining 2x3 units together. Sheltered barbeques or storage cabins are obtained by opening up some exterior walls. After assembling the frames, the structure is covered with windboards and then clad with red timber slats. Wood based insulation is used if needed. The slatted façade helps in making the building more lightweight, as well as discouraging acts of vandalism by causing graffiti tags to be unreadable.

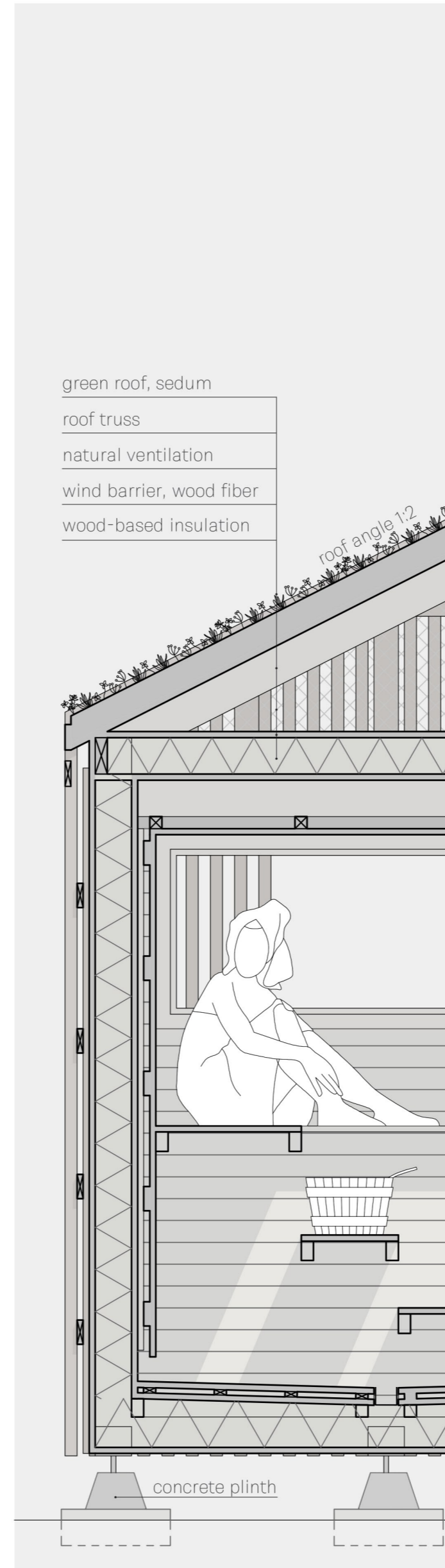


## PHASES

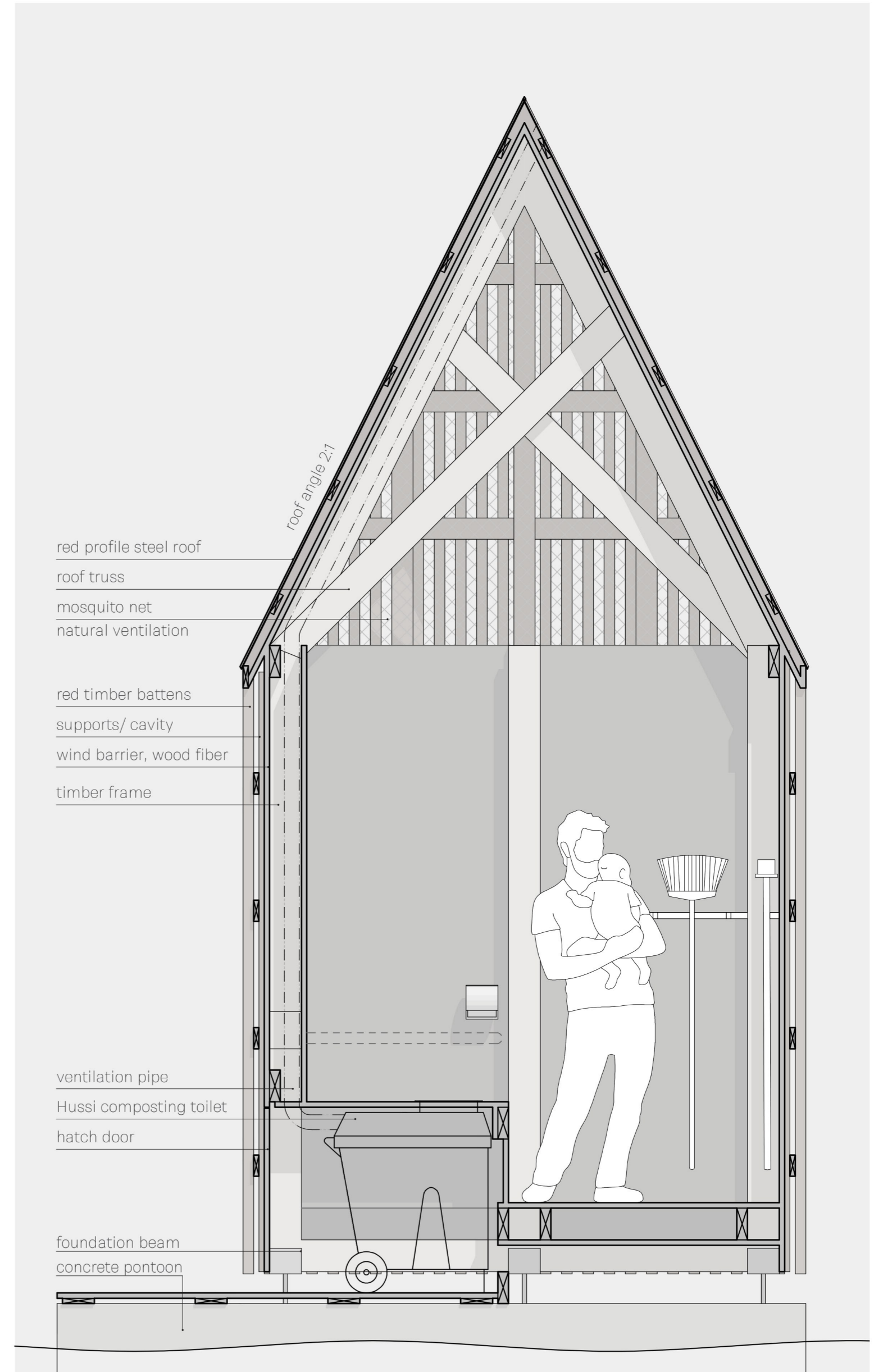
Construction is phased according to each island's needs. Firstly, the jetty and floating cabin are built for accessibility. Secondly, small scale buildings like barbeque shelters, firewood storages and toilets are built inland for daytime activities. During the third phase, self-service saunas and cabins for overnight accommodation are added. The fourth and last phase includes buildings that need staff, like cafes and kiosks. All of the buildings are organically placed in compact clusters according to each site's landscape. They are meant to mindfully meander around the natural environment. For example, an efficient cluster between the forest's trees is created by pairing up a sauna with a firewood storage unit and a toilet cabin.



**SHELTERED BBQ SECTION**  
SCALE 1:20



**SAUNA SECTION**  
SCALE 1:20



**FLOATING CABIN SECTION**  
SCALE 1:20

