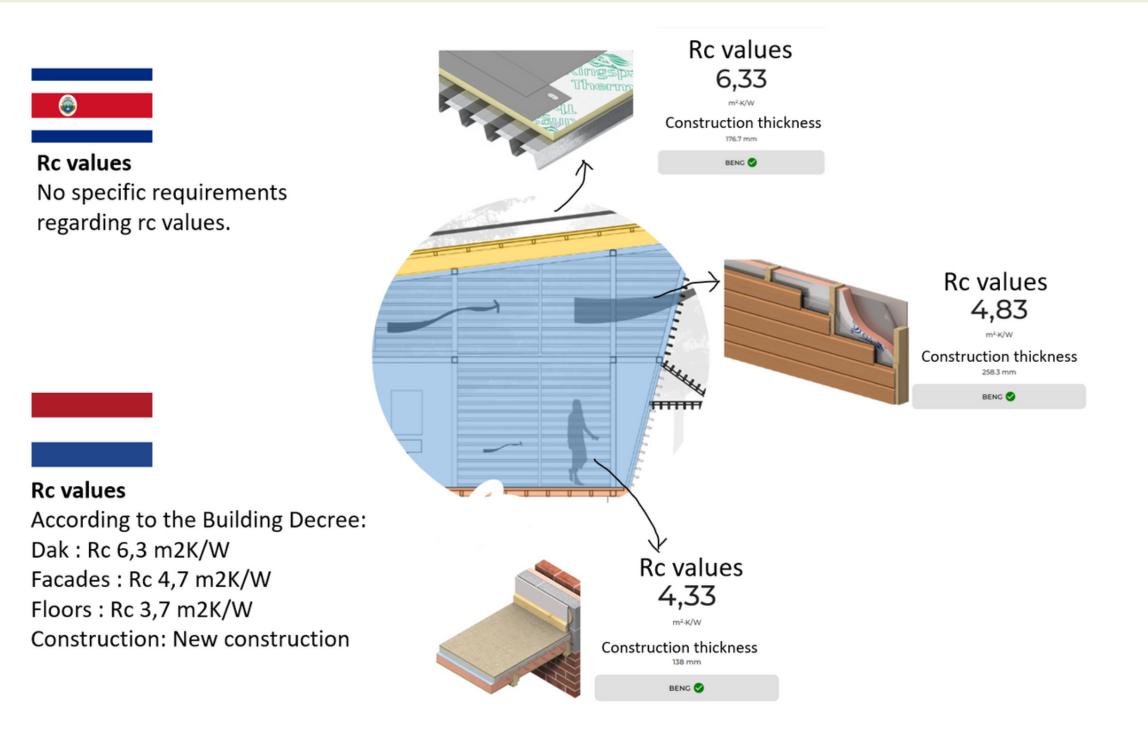
RESEARCH PHASE 1

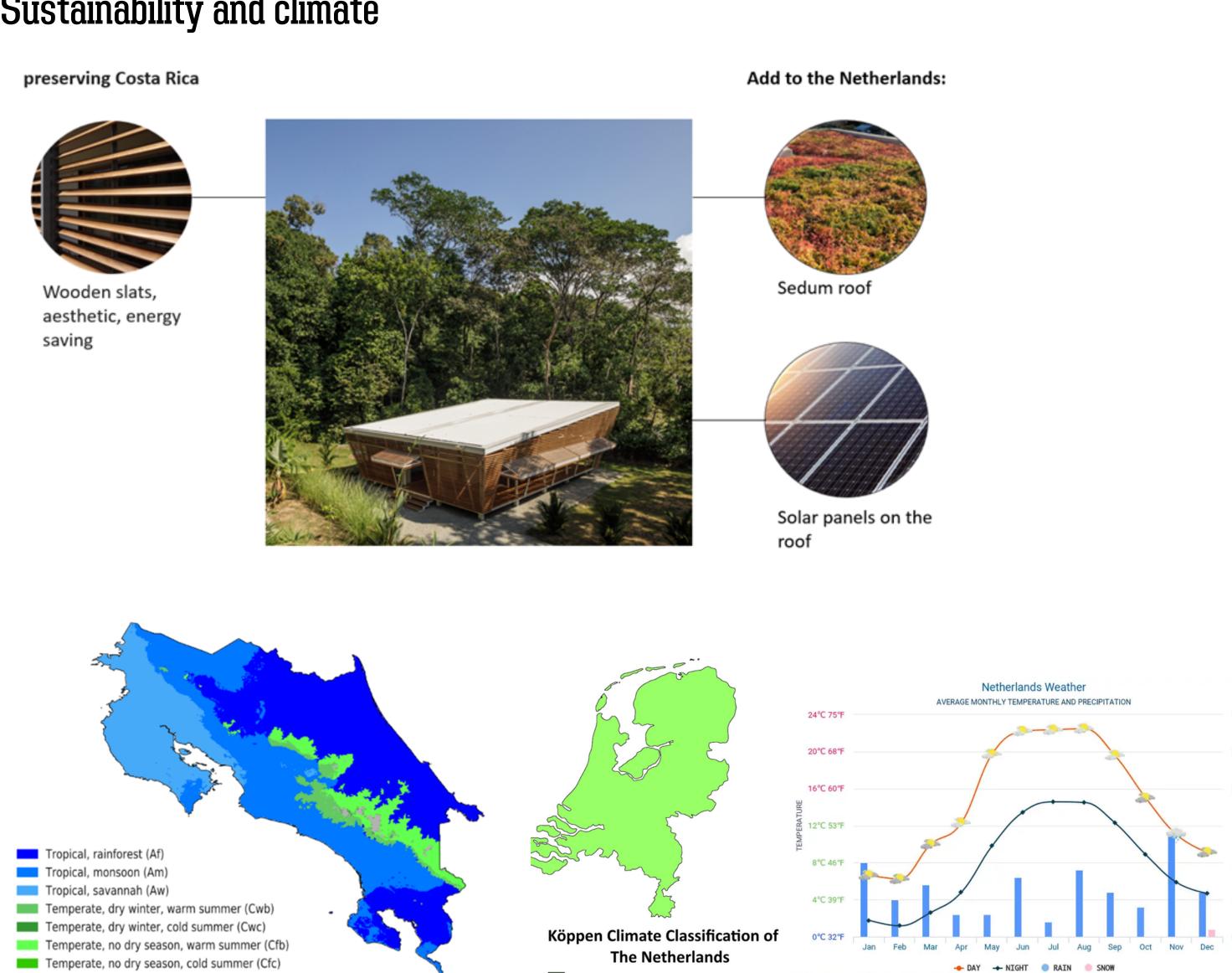
## **Building physics**



RC values research

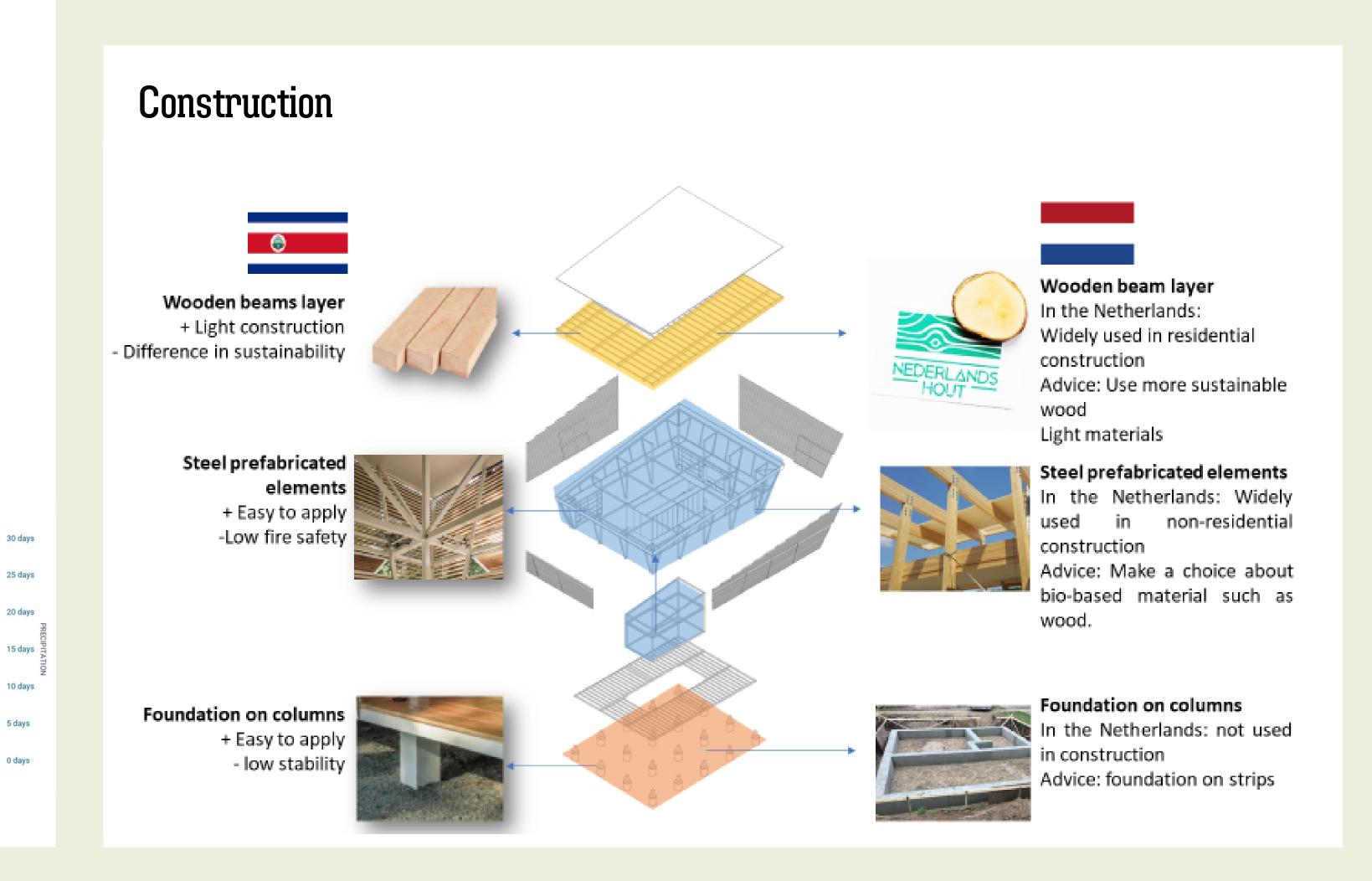
## Sustainability and climate

Polar, tundra (ET)



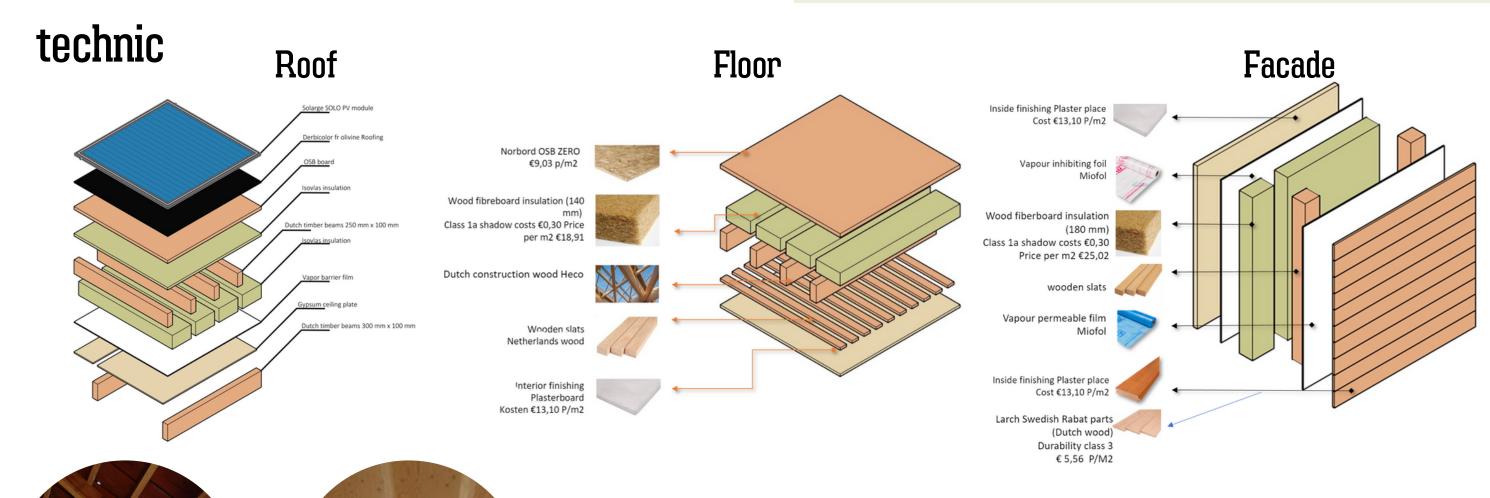
cfb (Temperate Oceanic Climate)

# Logistics and implementation Differences in implementation and logistics area Factory prefabrication Wood Steel Transport construction site (Truck with own crane) Electric === ← Gasoline Construction method Operable louver facades Timber frame construction \_\_\_\_\_\_



# PHASE 2 STUDIO

# design left view front view 3D view 3D view rear view right view



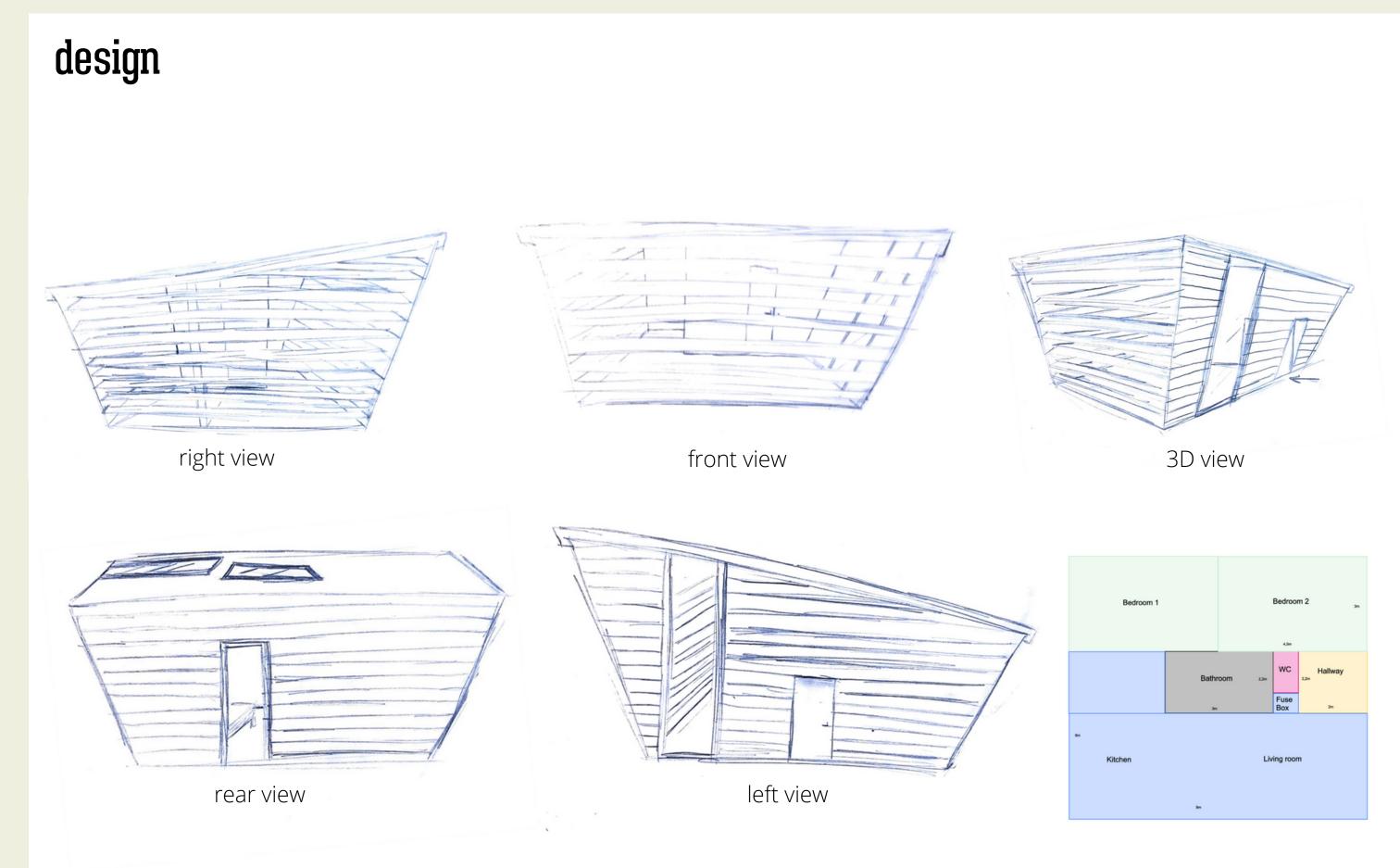


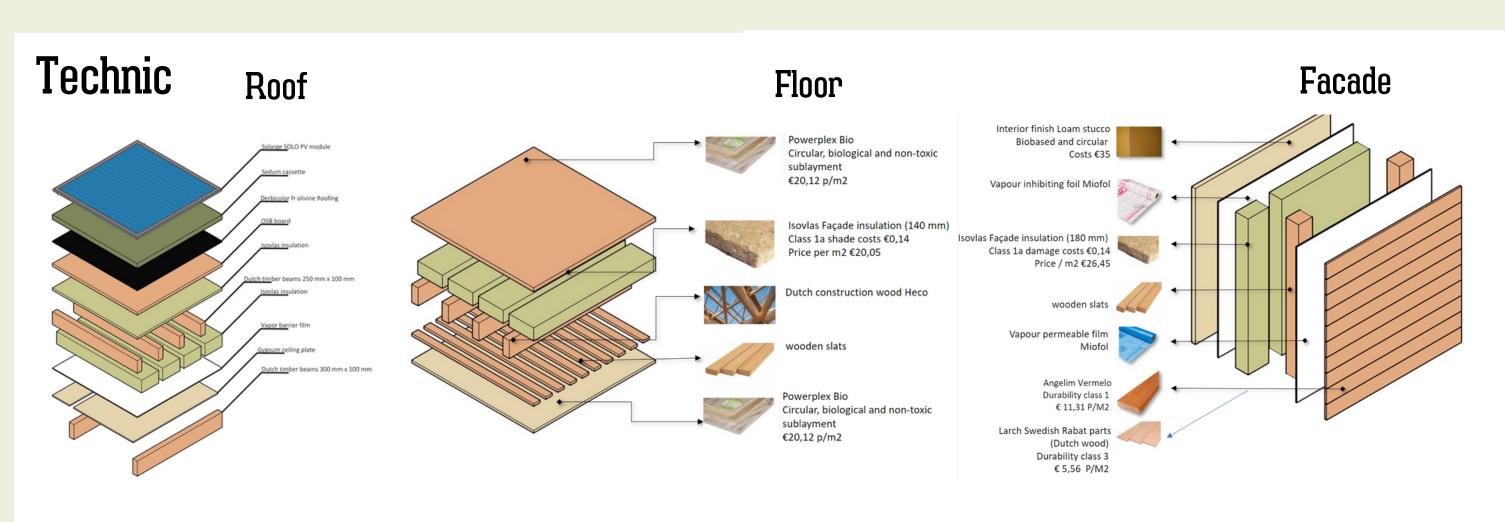


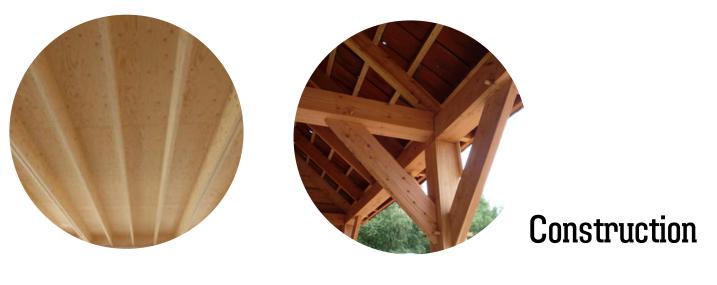
Sound absorbing material



## HOLIDAY ACCOMODATION













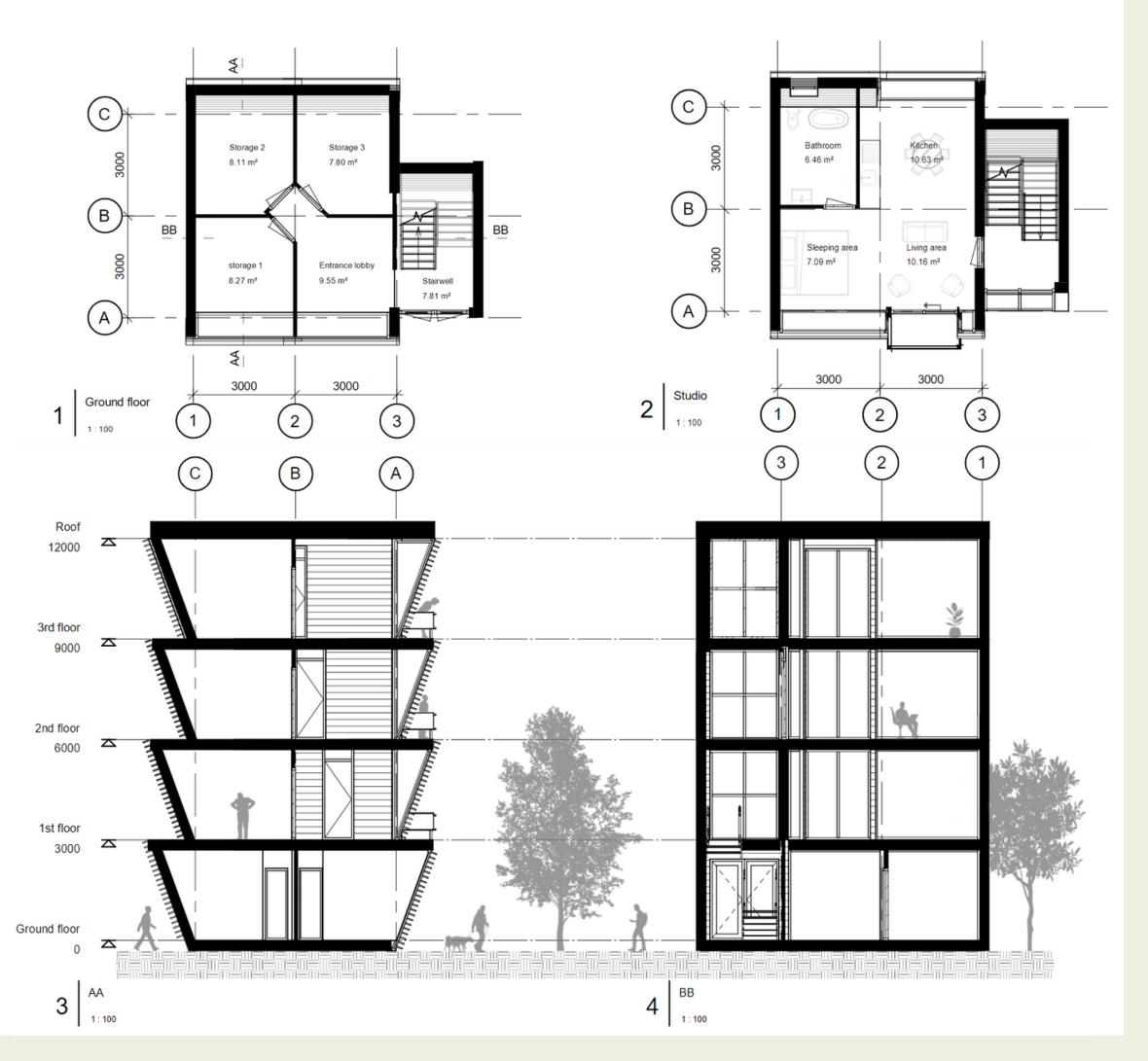
## **PHASE 3 Studios Sin Huella**

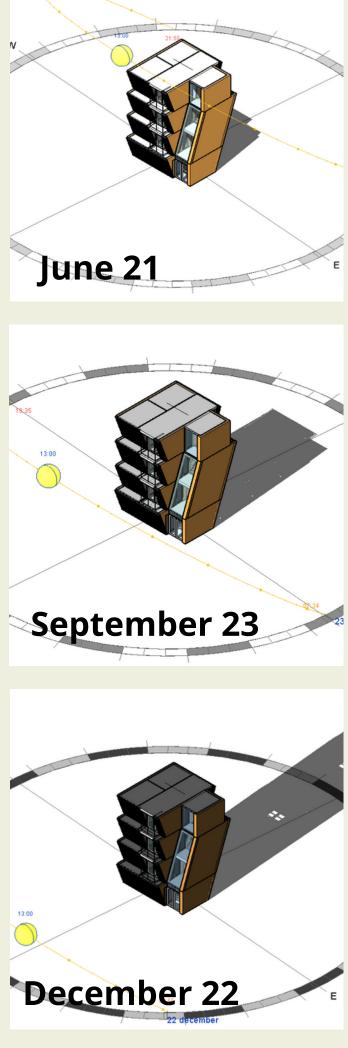


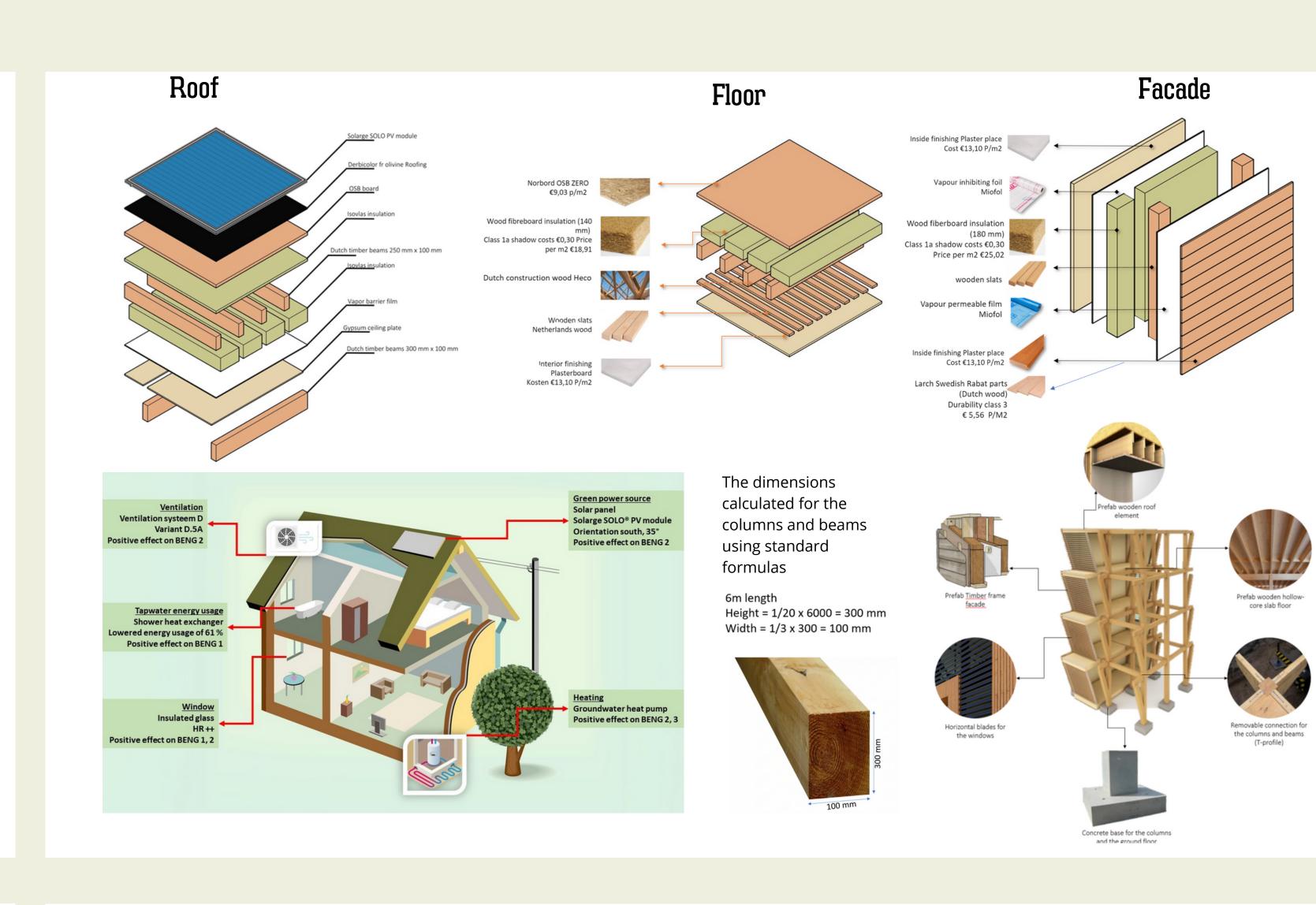




In the past three weeks, project group 11 has been busy with researching and designing no footprint and sustainable housing based on the No Footprint House that was built in Costa Rica. The definitive design had to be adjusted to Dutch standards. The urban studio's are based on the concept of the smallest No Footprint House of 36m2. The materials of the studio's are similar to the materials used for the NFH variants and mainly consist of locally produced, Dutch wood and curtain walls. The wooden louvres are also implemented in the new design. The apartments are meant for students/starters who prefer to live alone. The studio's constist of a main, open area which is divided between a sleeping area, a living area and a dining area. The bathroom is quite small, but just the right size for a toilet and a bath/shower.







### 4 E's

- Equity Our greatest concern is the housing shortage, which is why we have opted for stackable studios. The studios can even be added later to create more studios.
- Economy The materials are chosen on the basis of cost, so that it remains affordable for the buyer. The materials chosen are the most sustainable materials based on the shadow costs.
- Engineering The applied construction method is easily applicable in the environment due to the prefab elements. The building is also assembled so that it can be used for other purposes later on.
- Environment The studios are designed for starters and students, making the chosen location an ideal place for this target group. The location is close to the center and public transport, which is also a plus for this target group.

