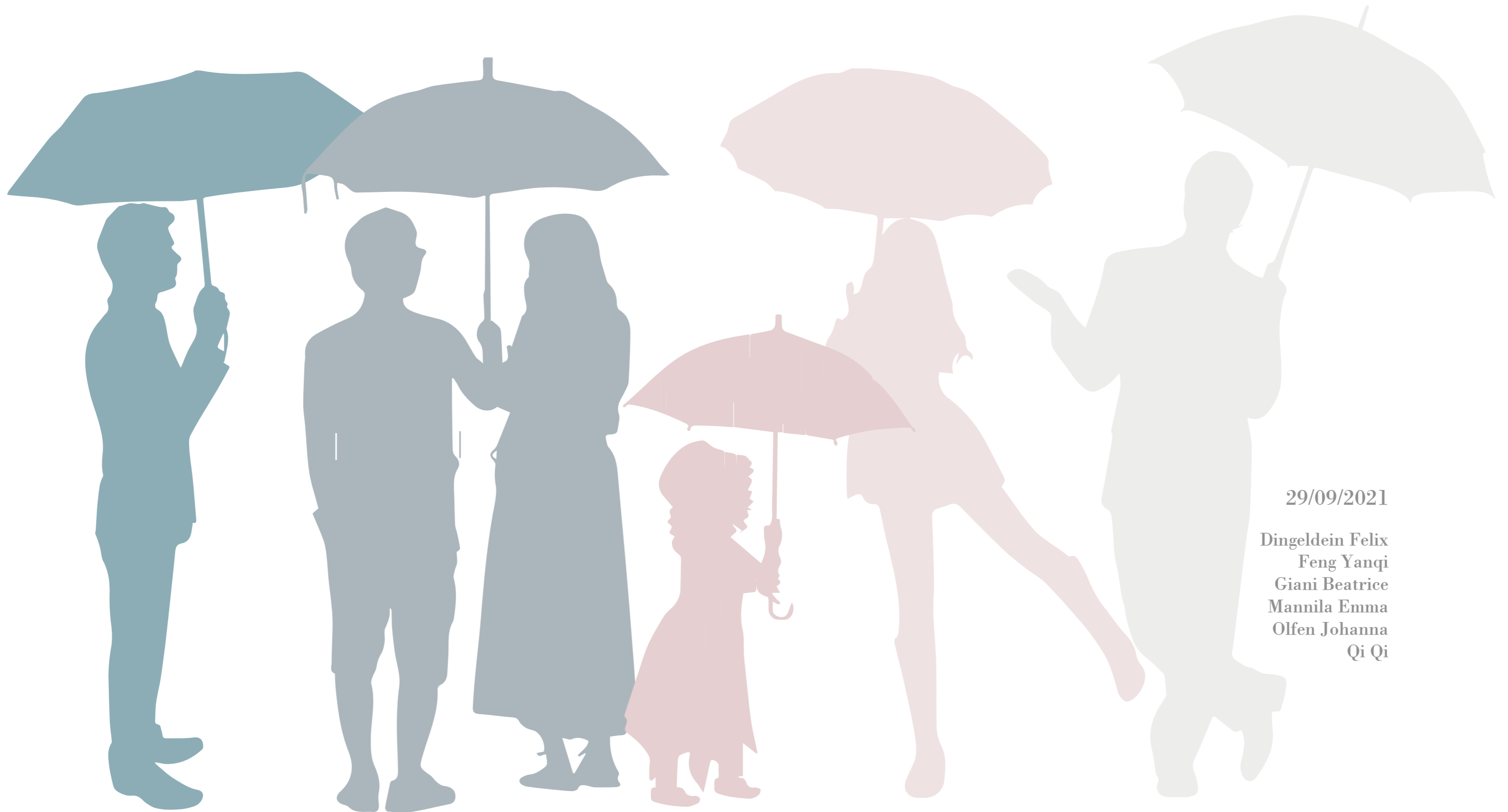


Back to basics



29/09/2021

Dingeldein Felix
Feng Yanqi
Giani Beatrice
Mannila Emma
Olfen Johanna
Qi Qi

general principle and requirement for a living space:

Natural / artificial light

Where does it come from? How much intensity do I need?

Color of lights and spaces

Which colours suit my function ? What feelings do they transmit?

Temperature

What is the best temperature for the activity I have to carry out?

Humidity

What is the best humidity for the activity I have to carry out?

Contact with nature and enviroment

How can I be connected with nature? Only by seeing?

Minimise tecnic use

How can I reduce movement with good design?

Activate different senses

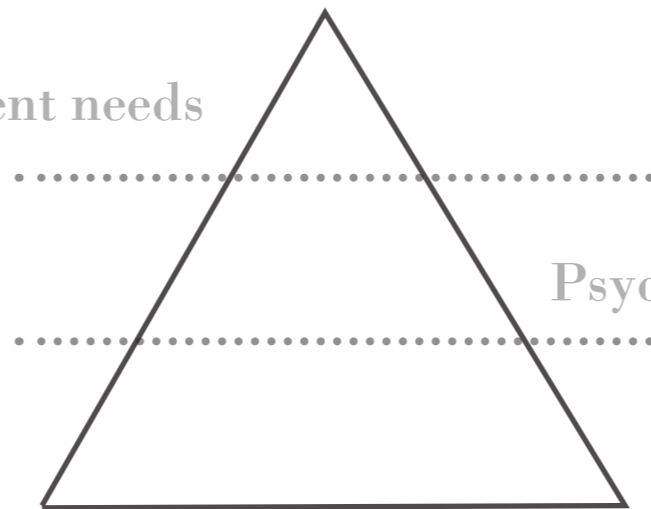
How can I create a space that involves all the senses?

Natural materials

How does it look? How does it feel ? What temperature does it have ?

05 Interaction

Self-fulfillment needs



with:

how:

People

measurement / visual / touch / online

Environment

air / view / imagination

Your soul

light / colours / atmosphere

Nature

be outside/ bring it inside

Space

spatial shape / materials / texture

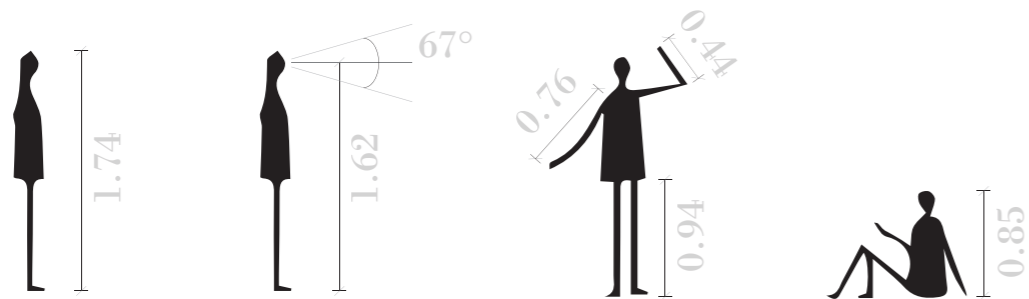
Sounds

acoustic performance / materials and
dynamism

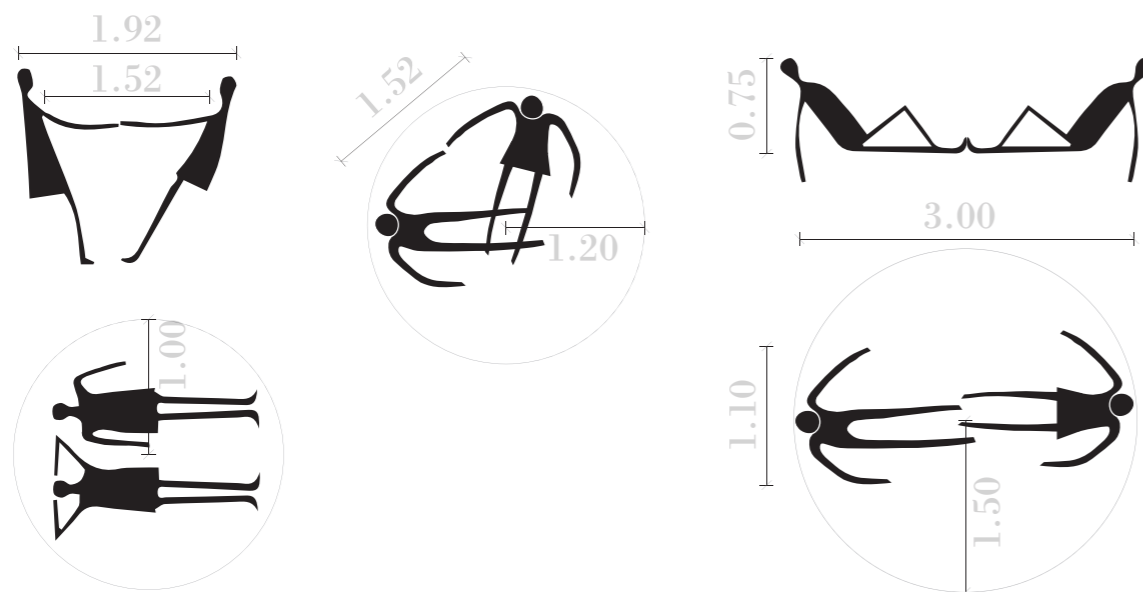
people:

Mario Bellini's Kar-a-sutra 1972

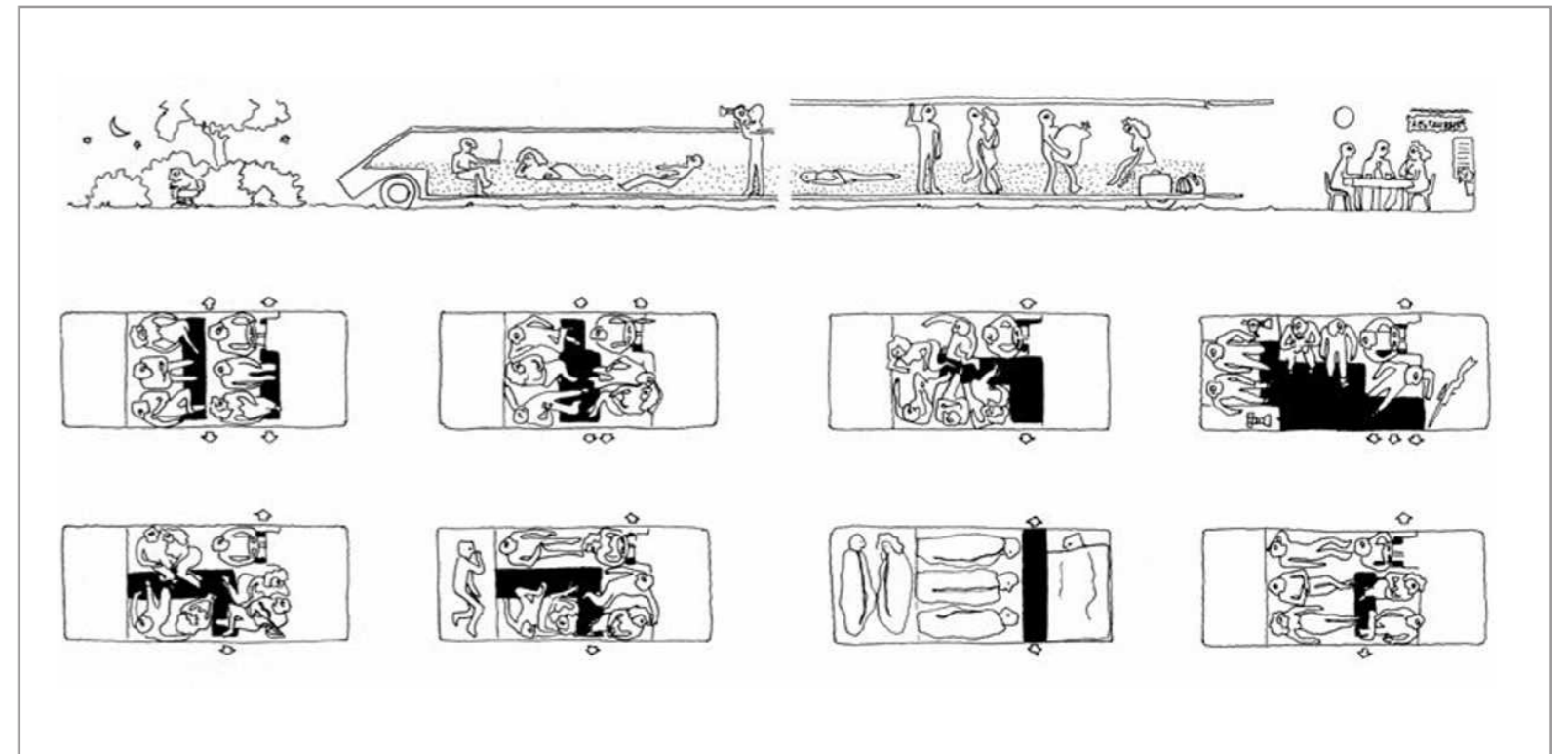
body measurements



body positions



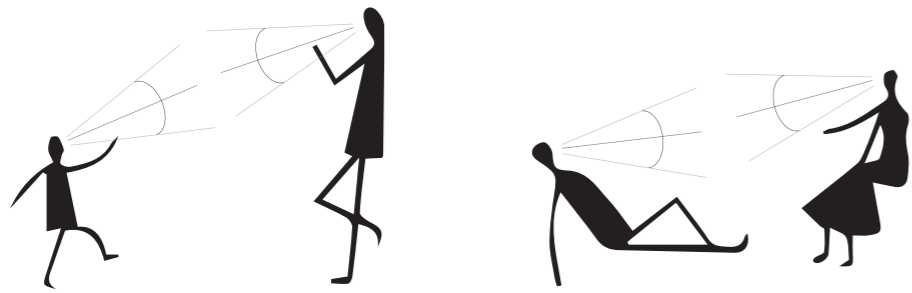
What position do I want to be in?



people:

Salottobuono, Il teatrino, Triennale di Milano, Matteo Ghidoni

eye contact

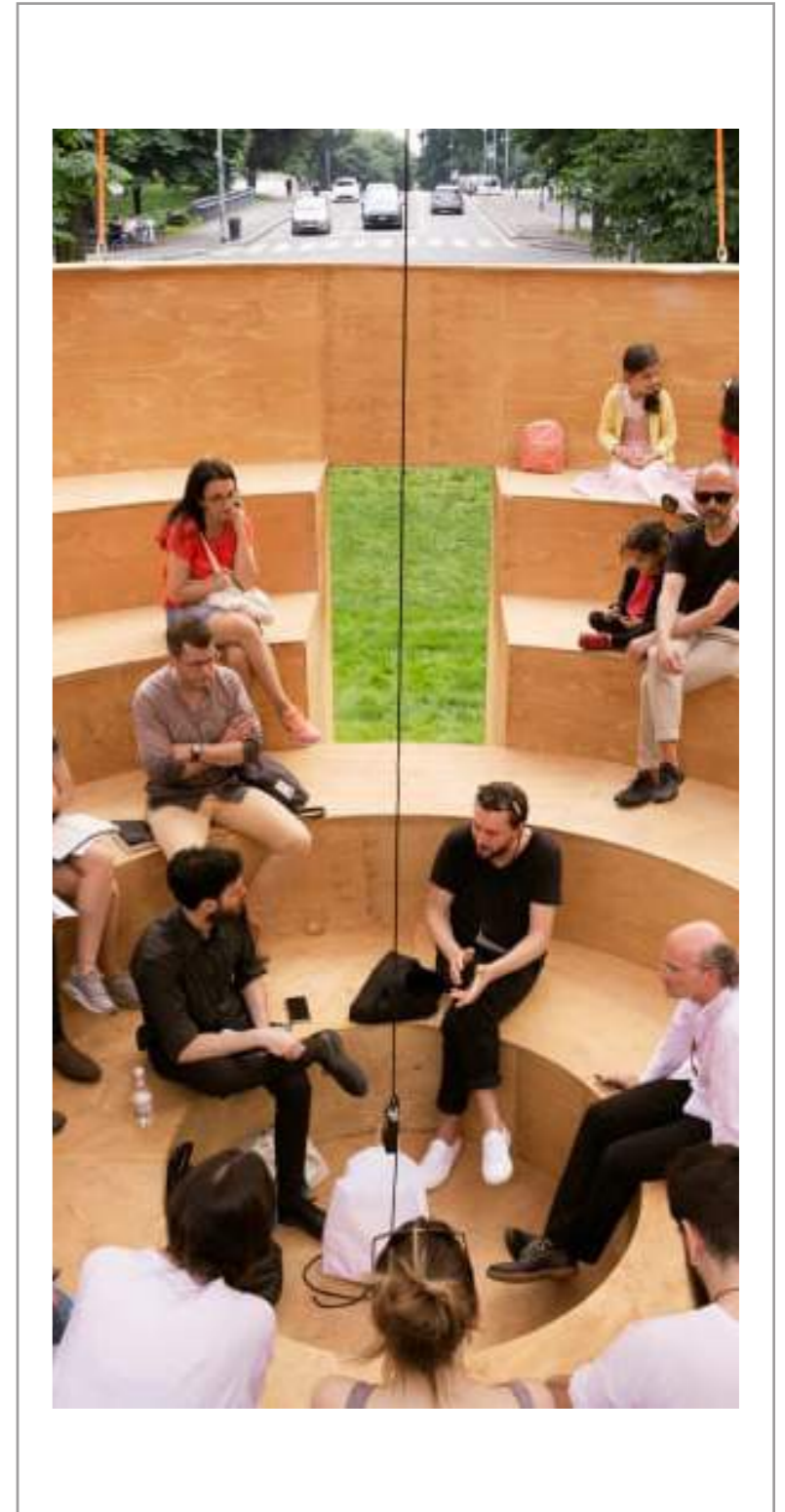


physical touch :



What I want to see?

How do I want to get in touch?



your soul:

atmosphere:

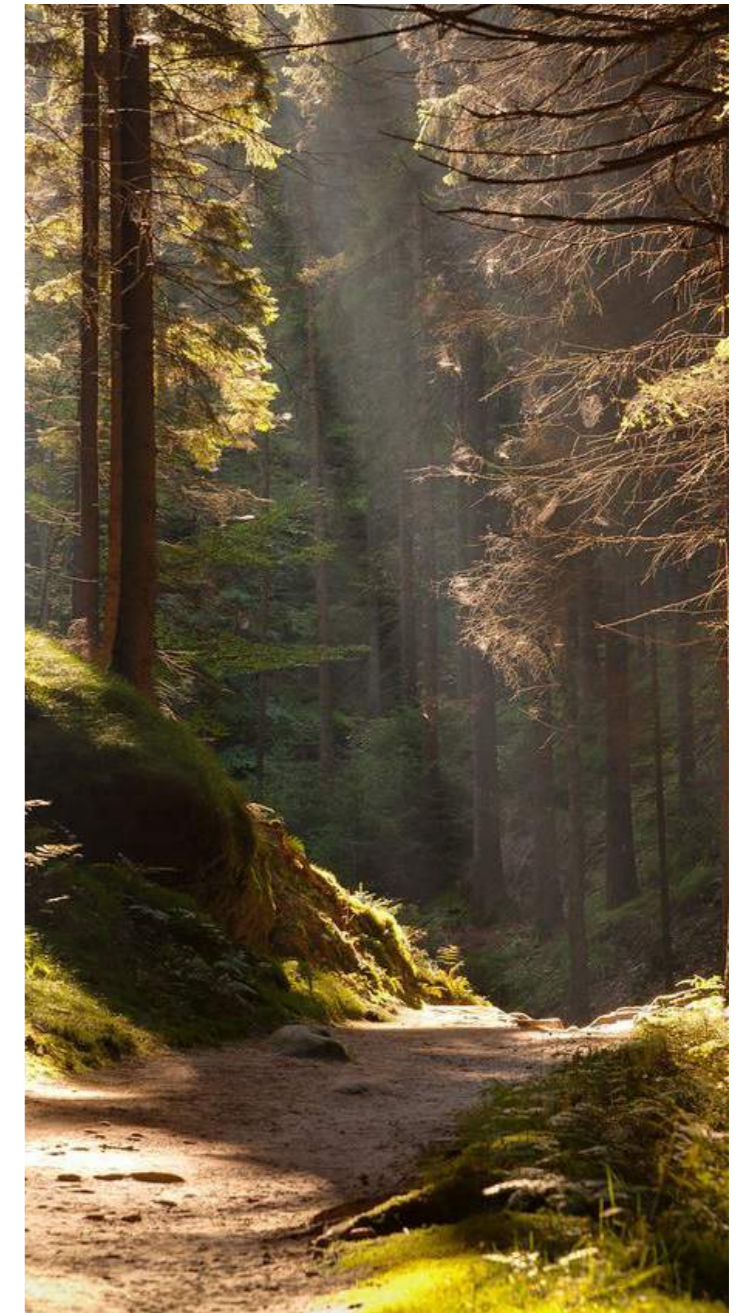
What atmosphere do I imagine for
an interaction space?

What helps me feel good?

Which spaces transmit feelings of
free expression?

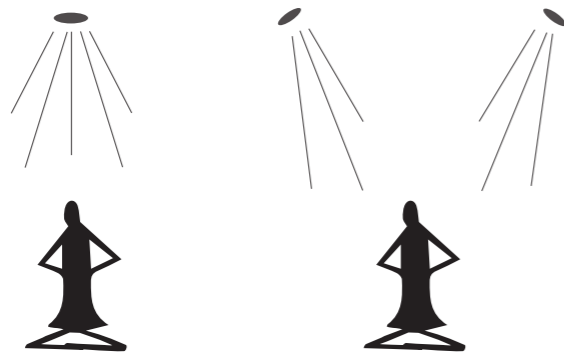
Upper Antelope Canyon, Navajo, Arizona, USA

Autumn and sun _ from Pinterest

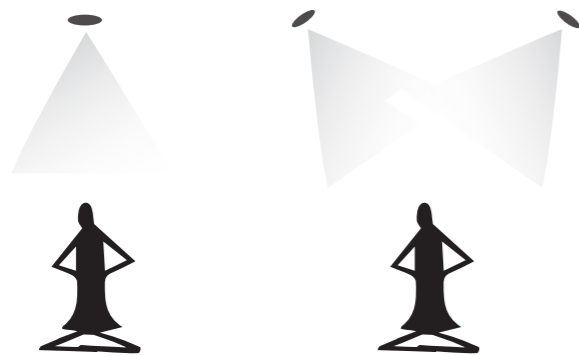


your soul:

light source : from the top

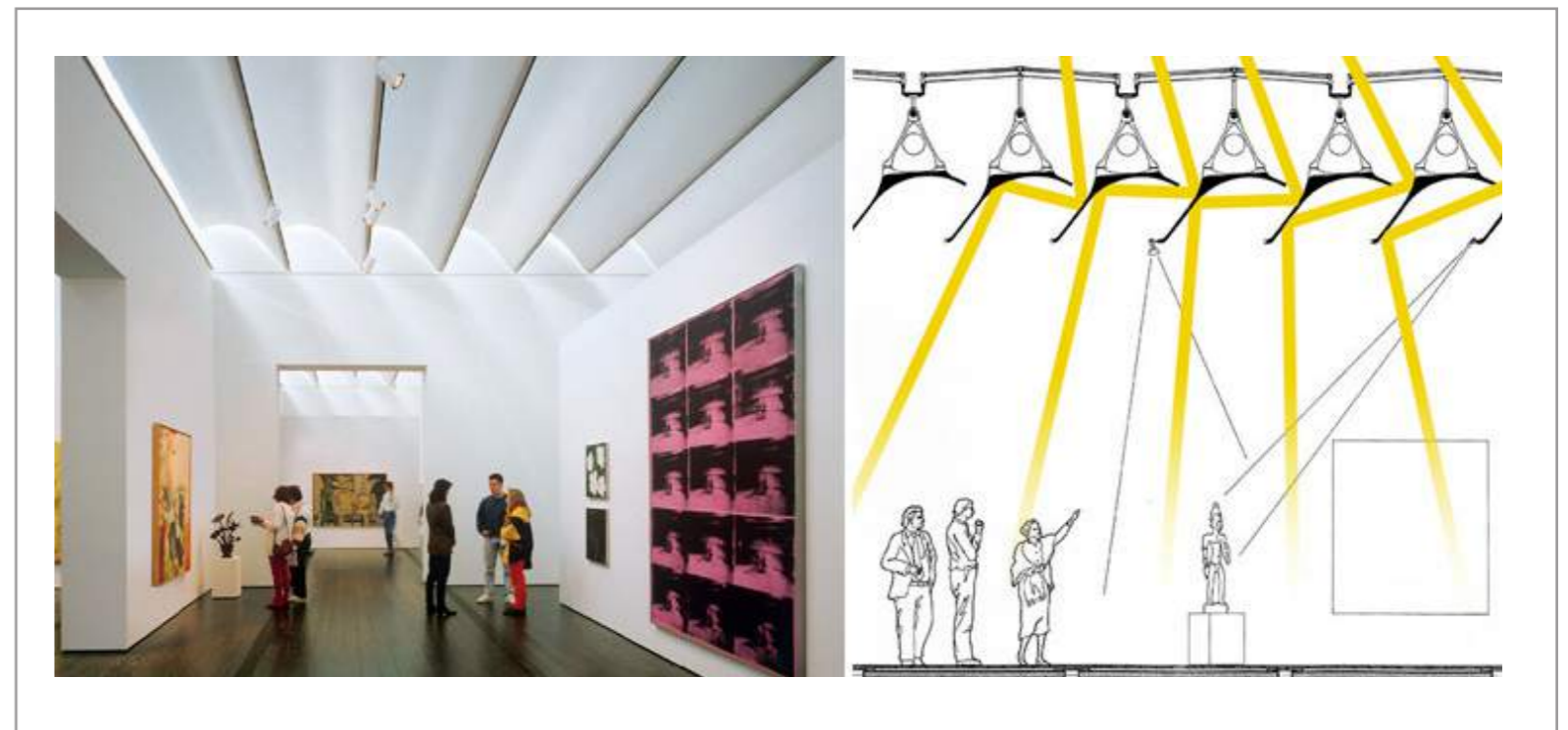


light type : diffuse, reflected



Kimbell Art Museum, Fort Worth, Texas (1972), Louis Kahn

Menil Collection a Houston, Texas (1986). Renzo Piano



your soul:

<https://www.archdaily.com/934845/how-color-tunable-lighting-improves-productivity>

Sala Beckett, Flores & Prats, Barcellona, Spain

light color : neutral , soft white, warm

from 2700 K to 3500 K

What do you feel?



color : warm _ from light orange to dark orange

relaxed _ from purple to light blue

natural materials

**Can you feel relaxed, protected,
serene, embraced?**



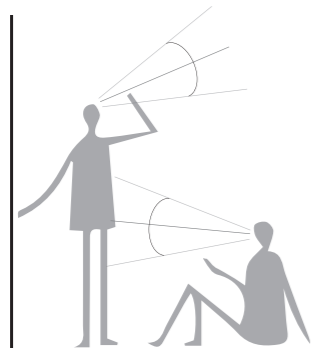
space:

UTAA, Rest hole in the University of Seoul, South Korea
Perspectives, Giles Miller Studio, Surrey, United Kingdom

welcoming shape: adapts to the body



boundaries



maintain concentration

feel protected

tactile materials



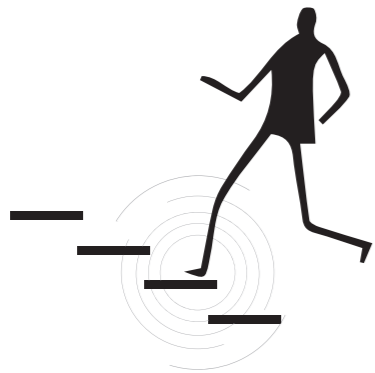
sound:

Franco Albini, scala ottagonale Palazzo Rosso, 1952-1961

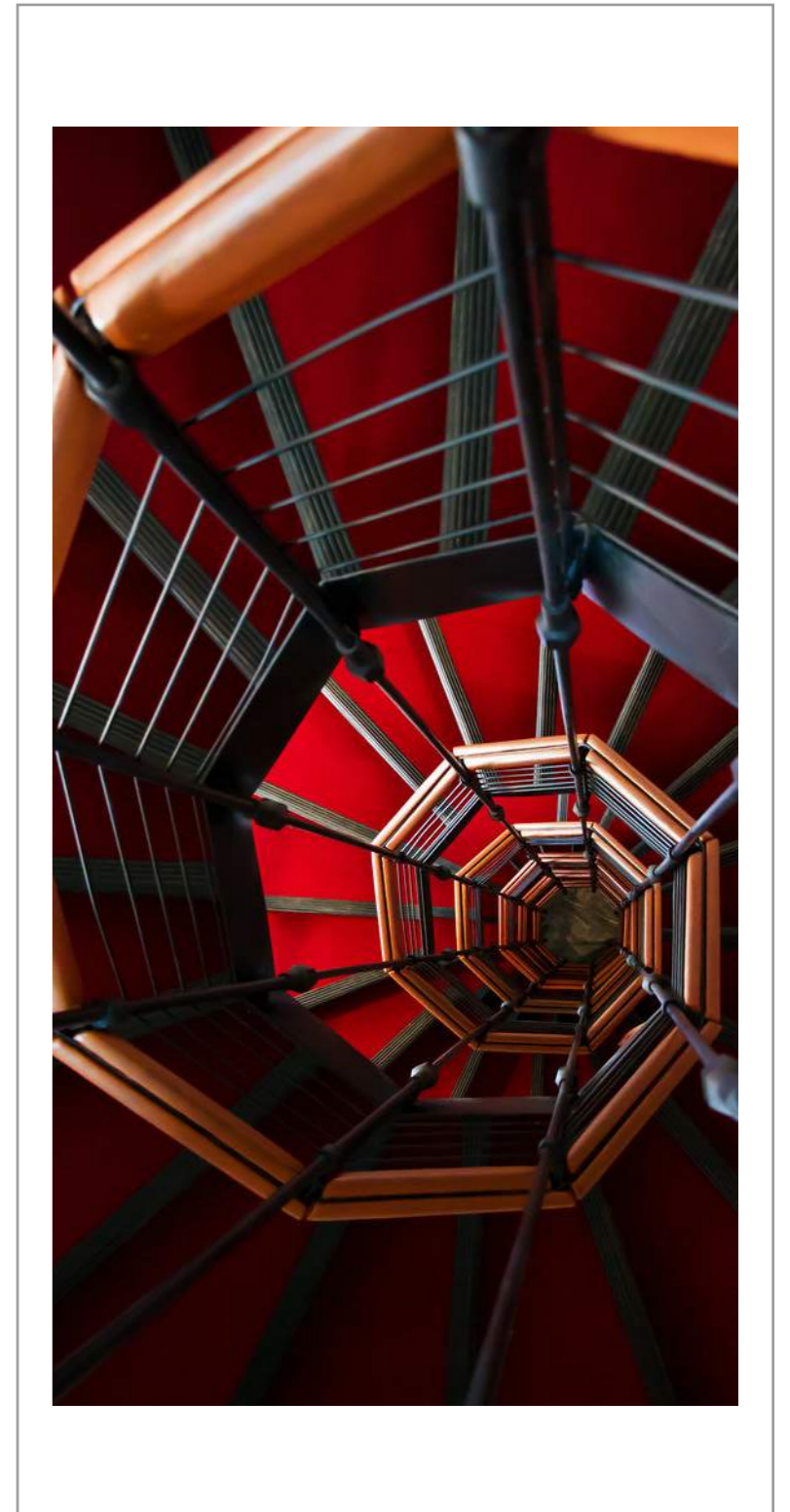
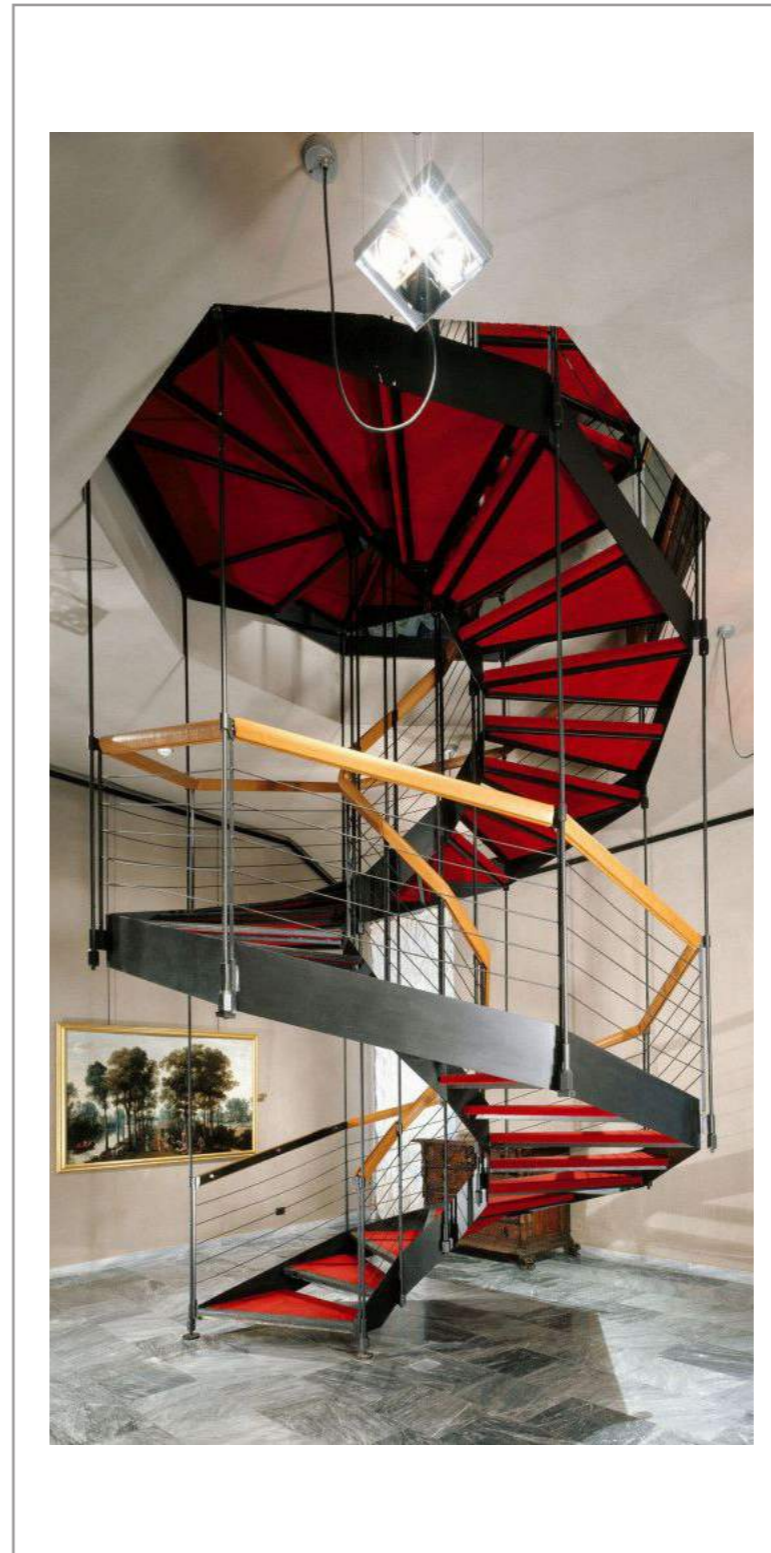
human interaction with materials



dynamism: sound, object movement



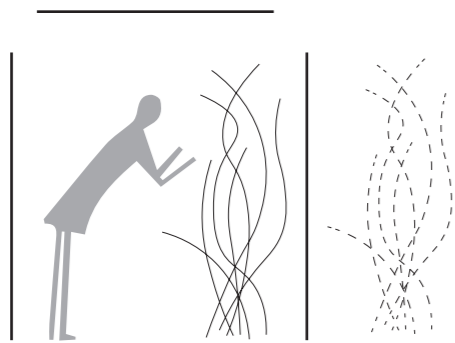
Does interacting with the space help me to feel part of it?



nature:

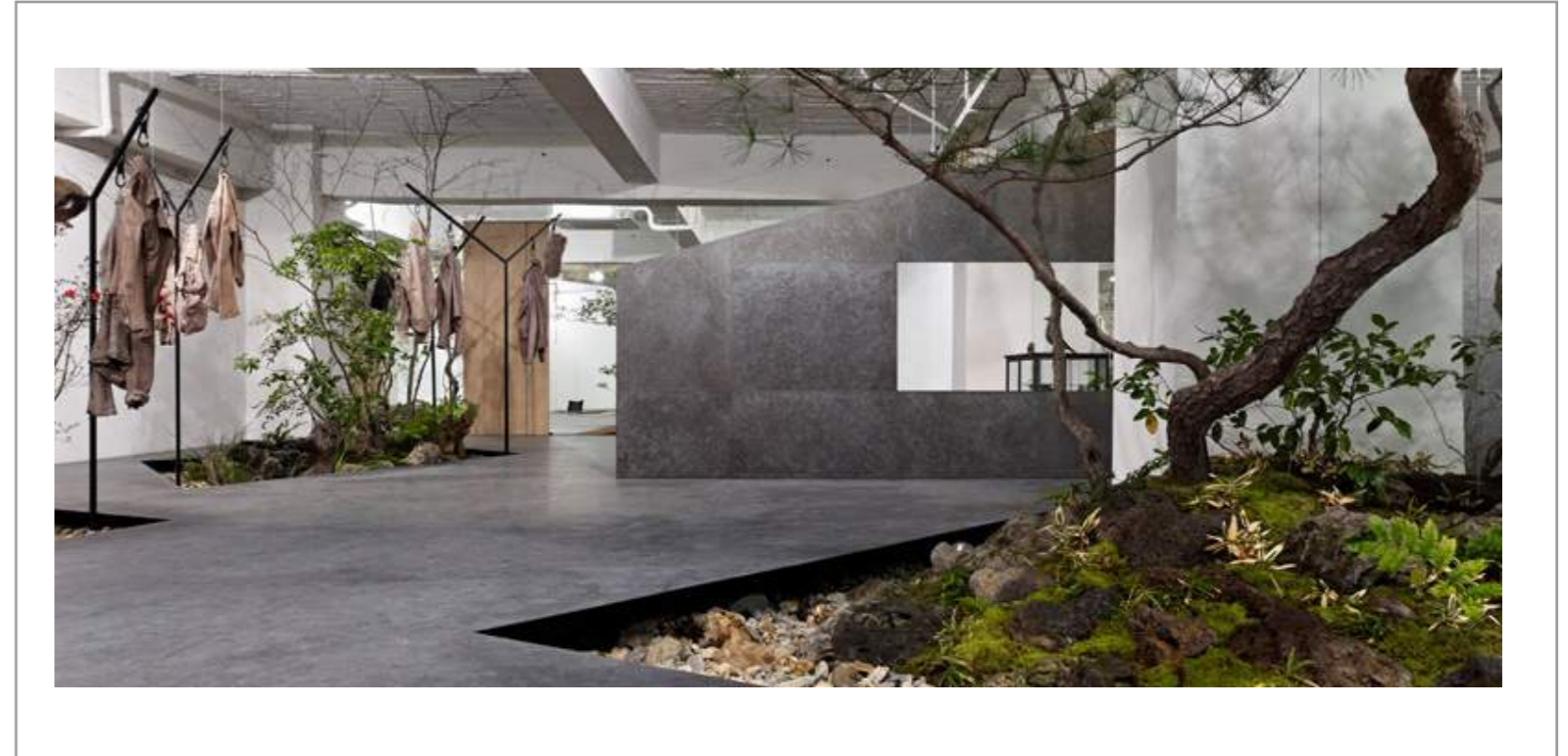
Showroom Sisii di Yuko Nagayama & Associates

be outside➔ bring it inside



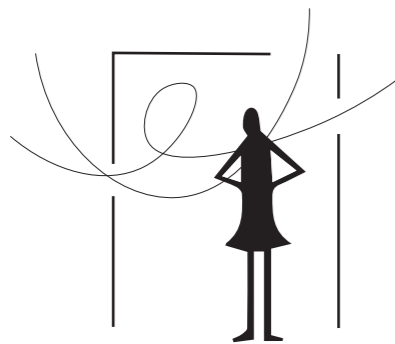
plant species :

- **Lingua di Suocera (Sansevieria trifasciata 'Laurentii')**
- **Ficus (Ficus benjamina)**
- **Crisantemo (Chrysanthemum morifolium)**
- **Aloe (Aloe vera)**
- **Dracena (Dracaena marginata)**
- **Dracena (Dracaena deremensis Warneckii)**



environment:

air : good air circulation



feelings of contact with the environment

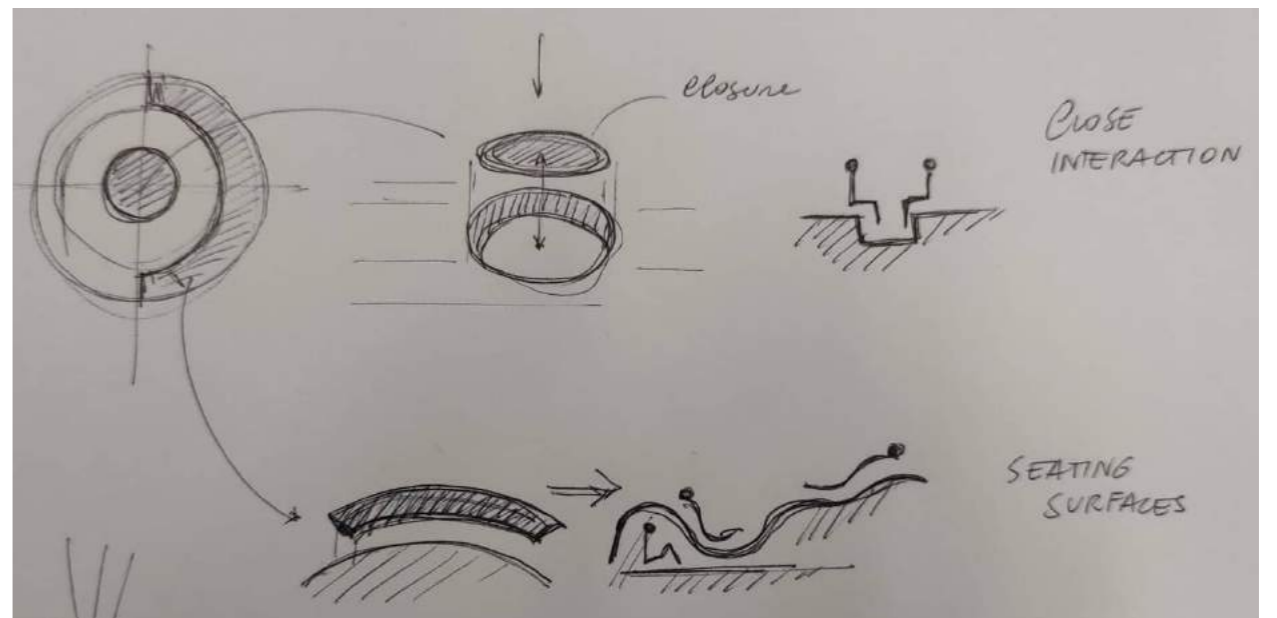
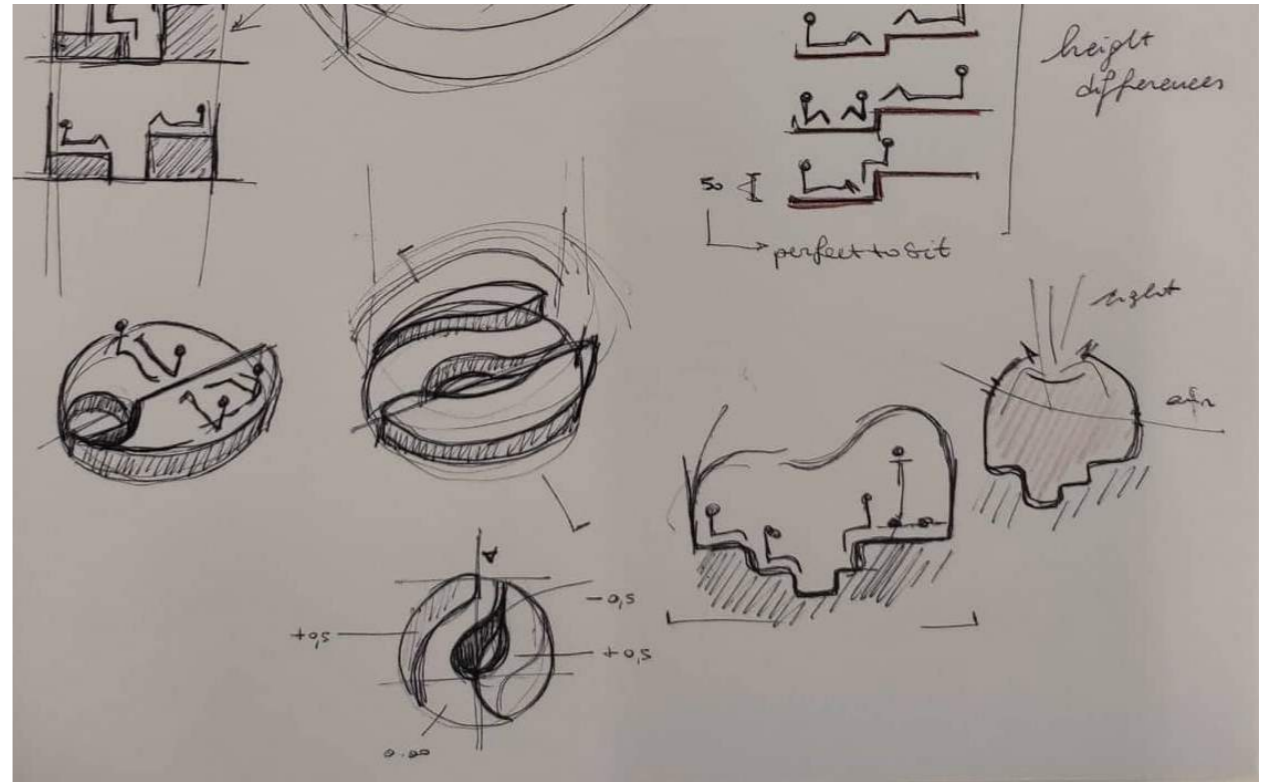
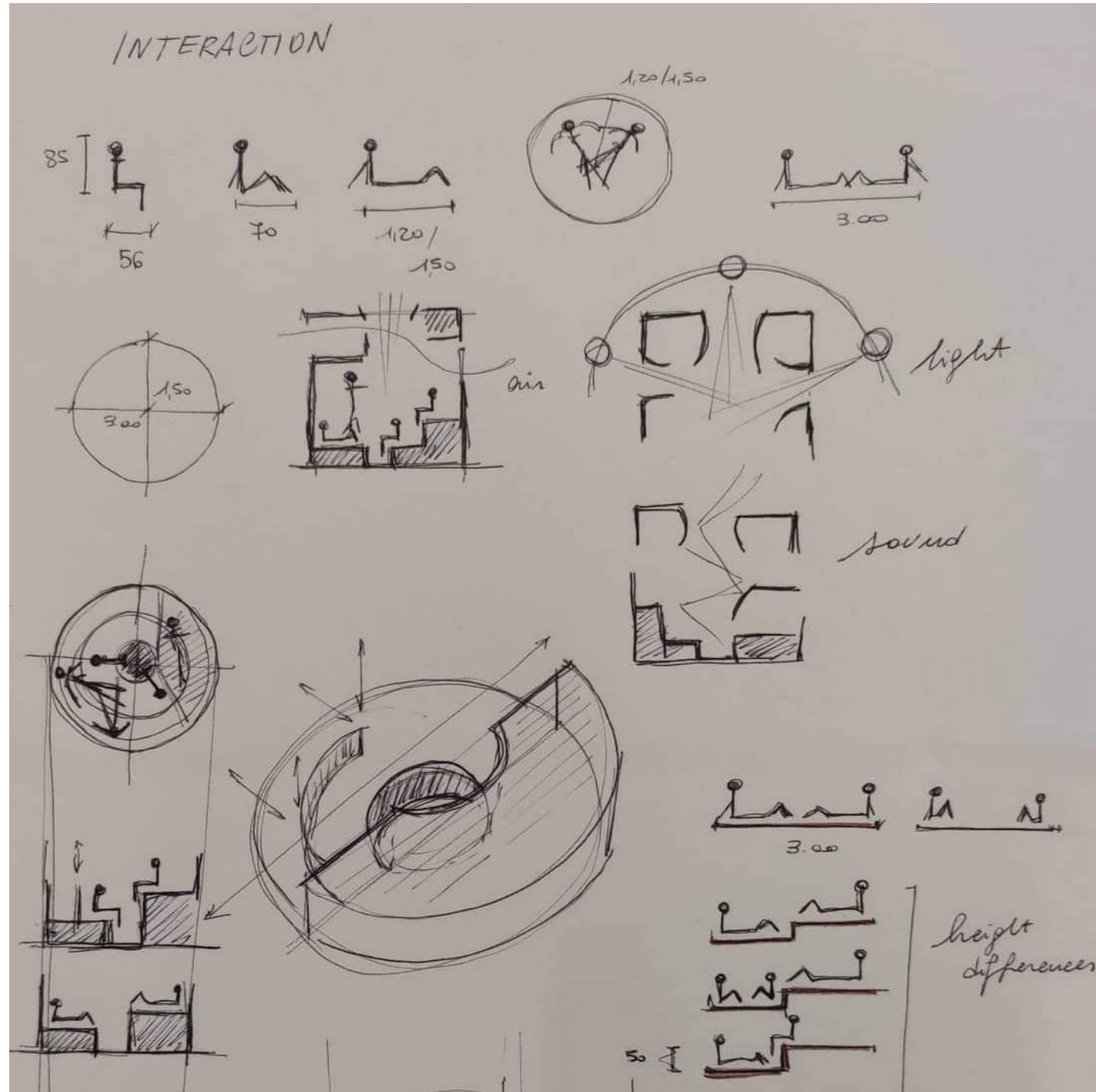
immagination

Does only physical contact help to interact with the environment?

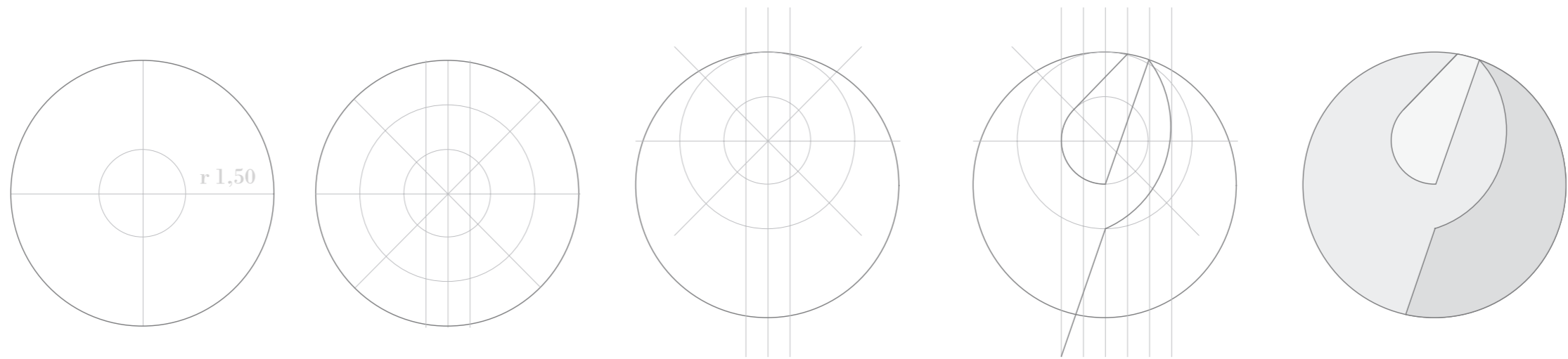
Giant Wooden Megaphones Amplify The Sound Of Nature In The Forest, by interior architecture students from the Estonian Academy of Arts



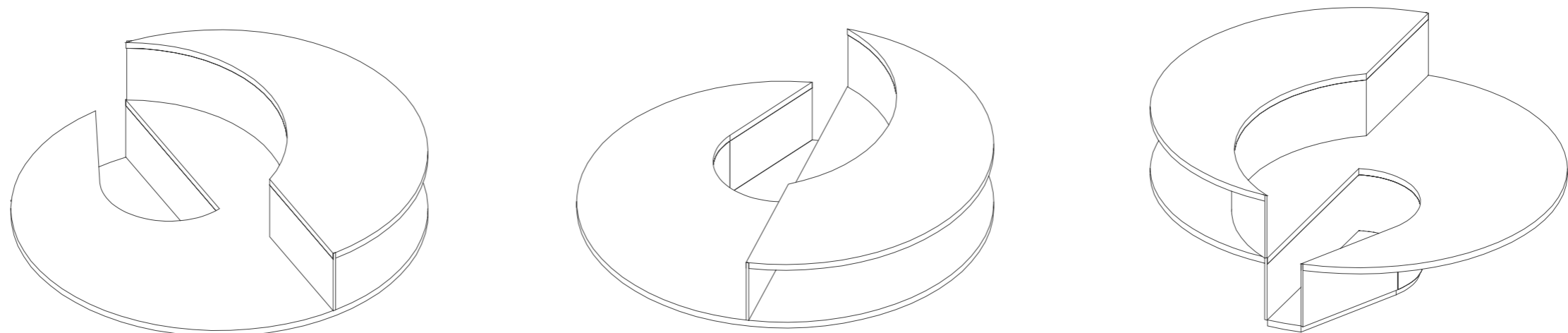
skatches:



first idea:

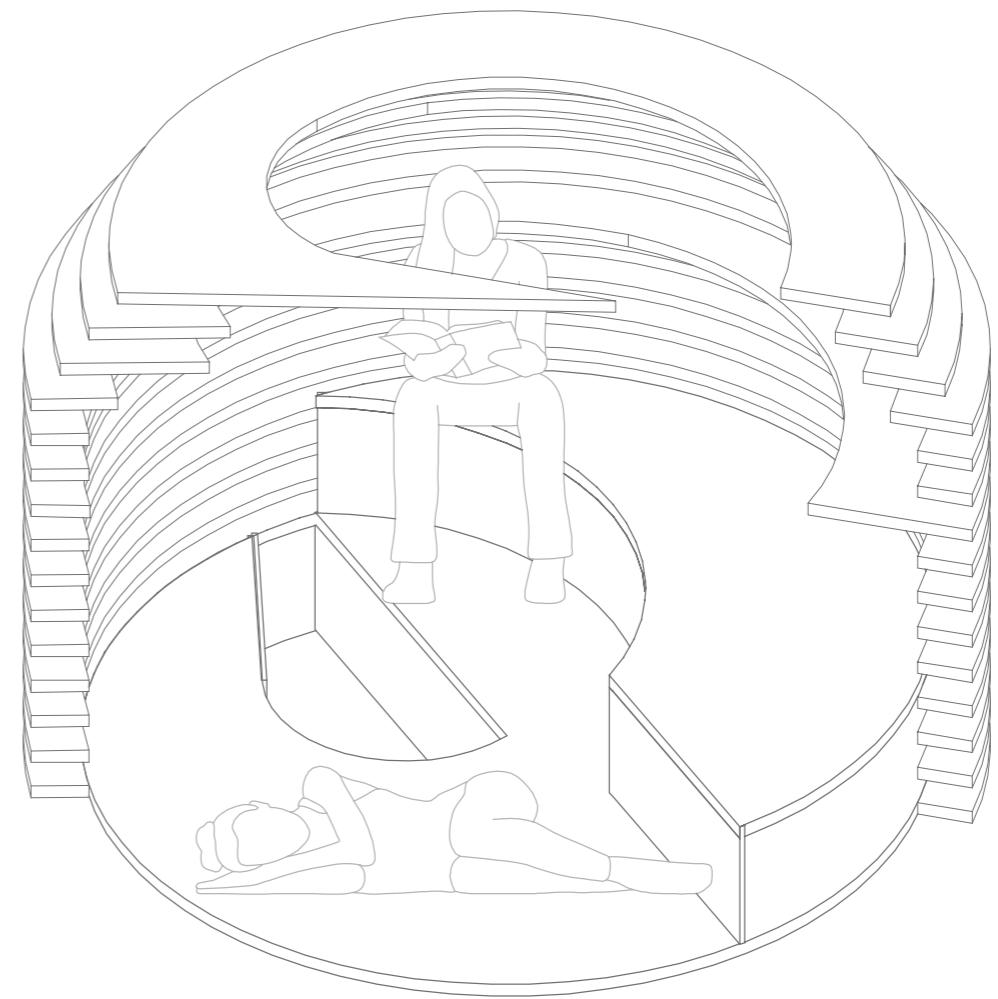
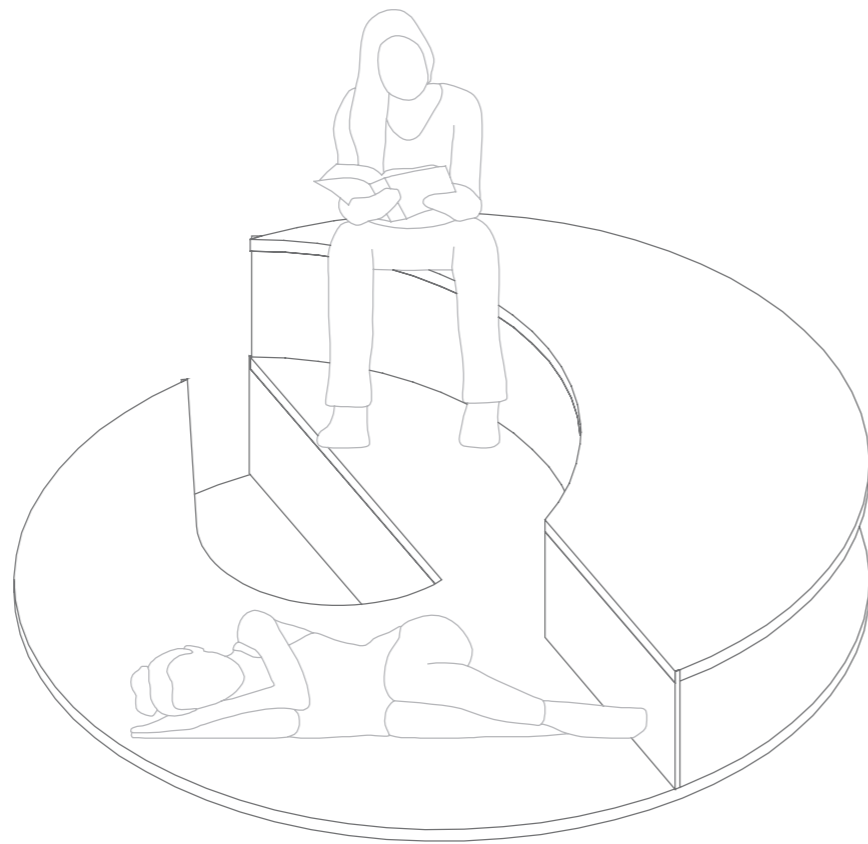


process: from the basic idea to the development



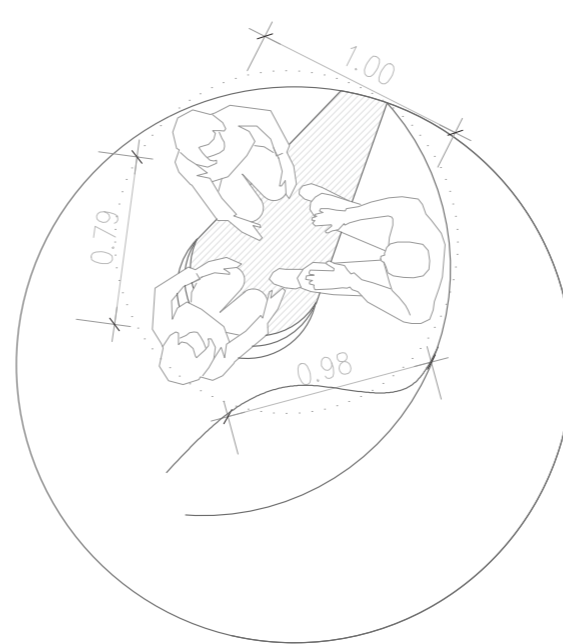
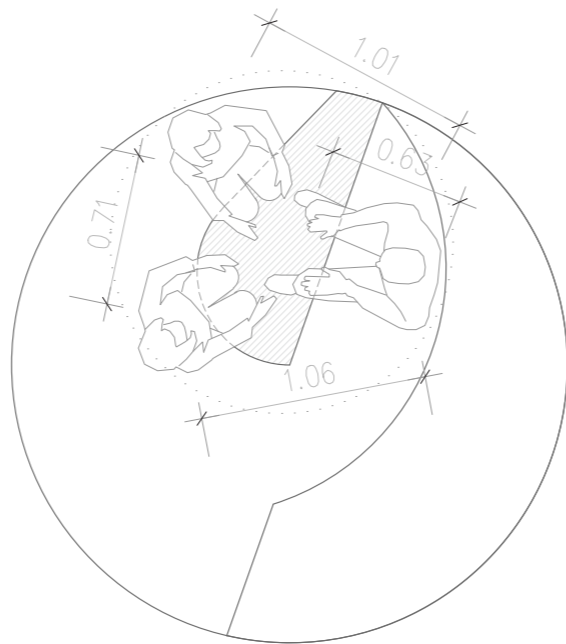
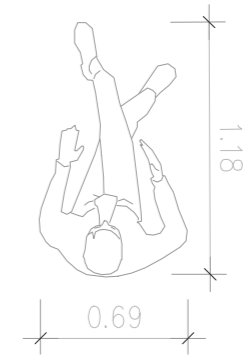
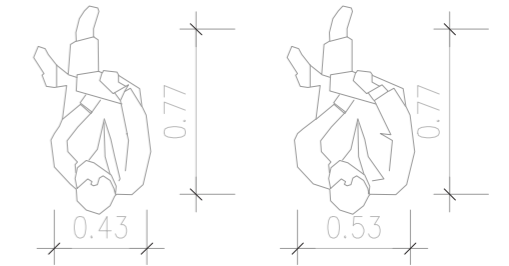
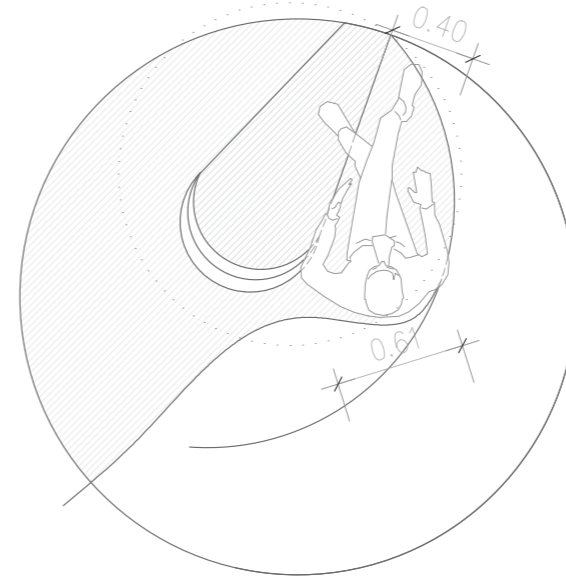
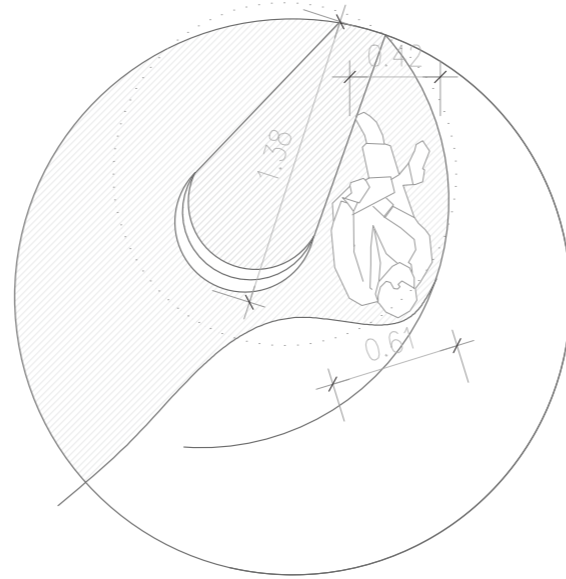
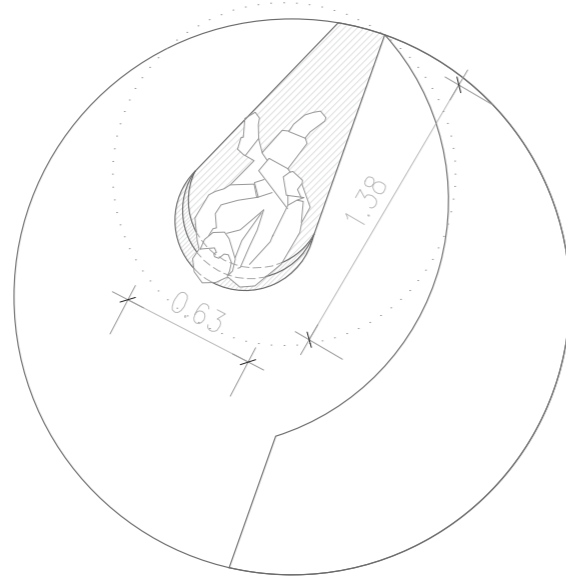
first idea:

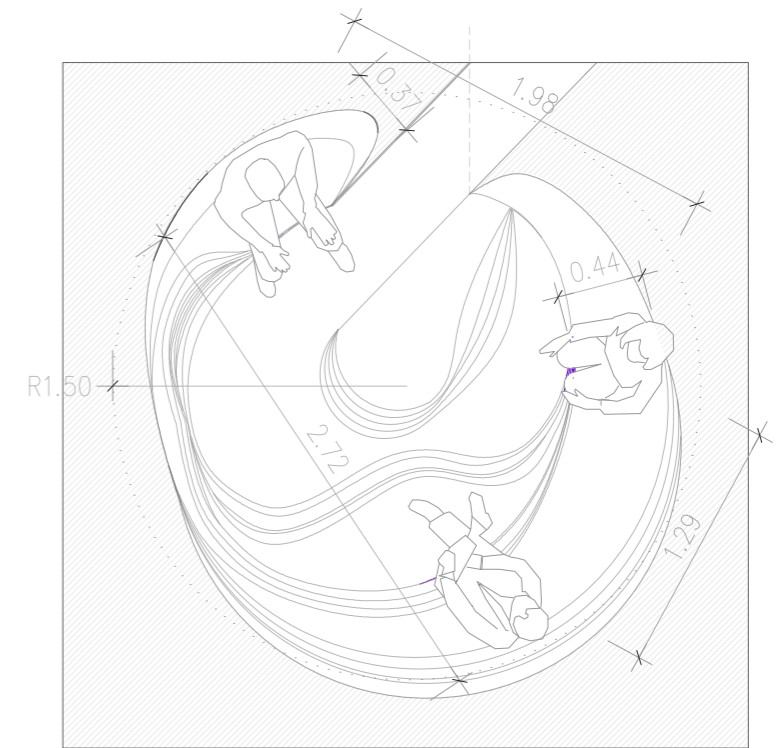
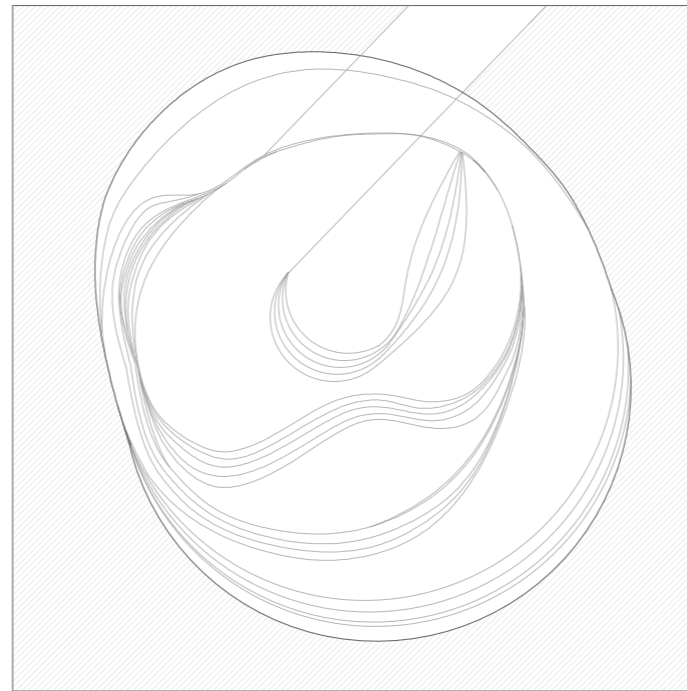
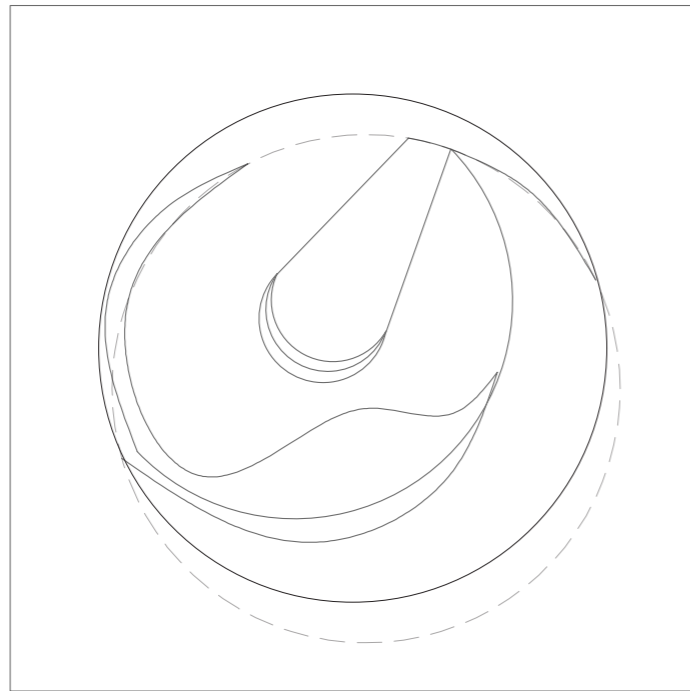
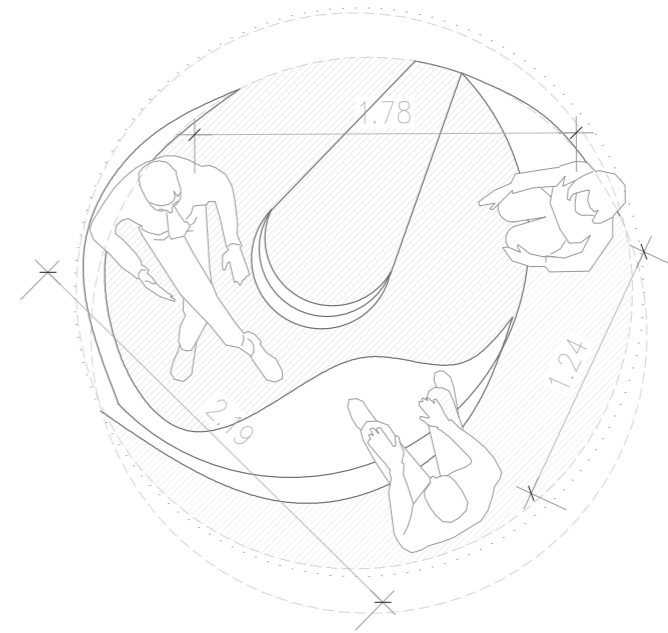
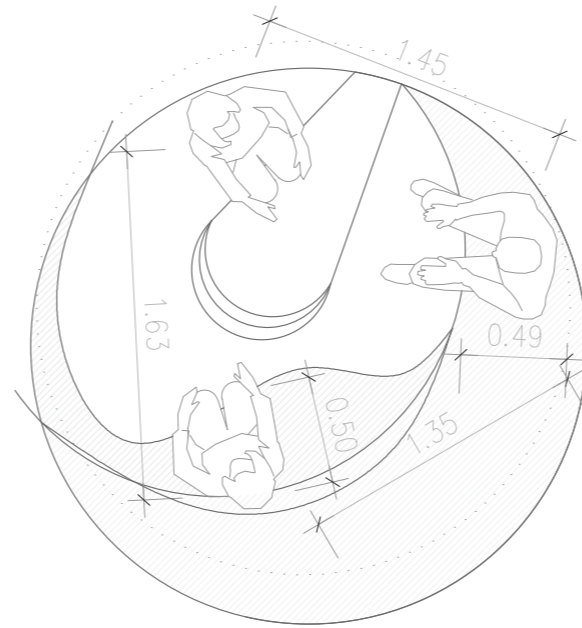
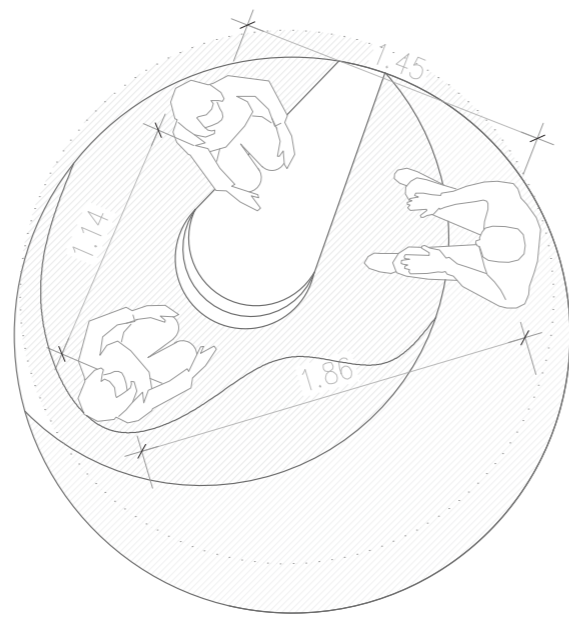
drop platform and protective casing, which can also be used as a space configurator



people & space:

starting with the study of people and possible positions

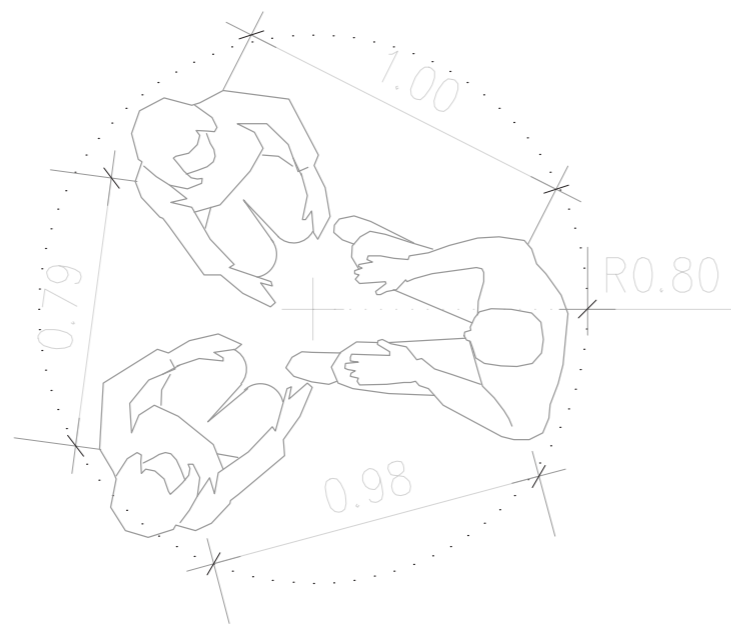




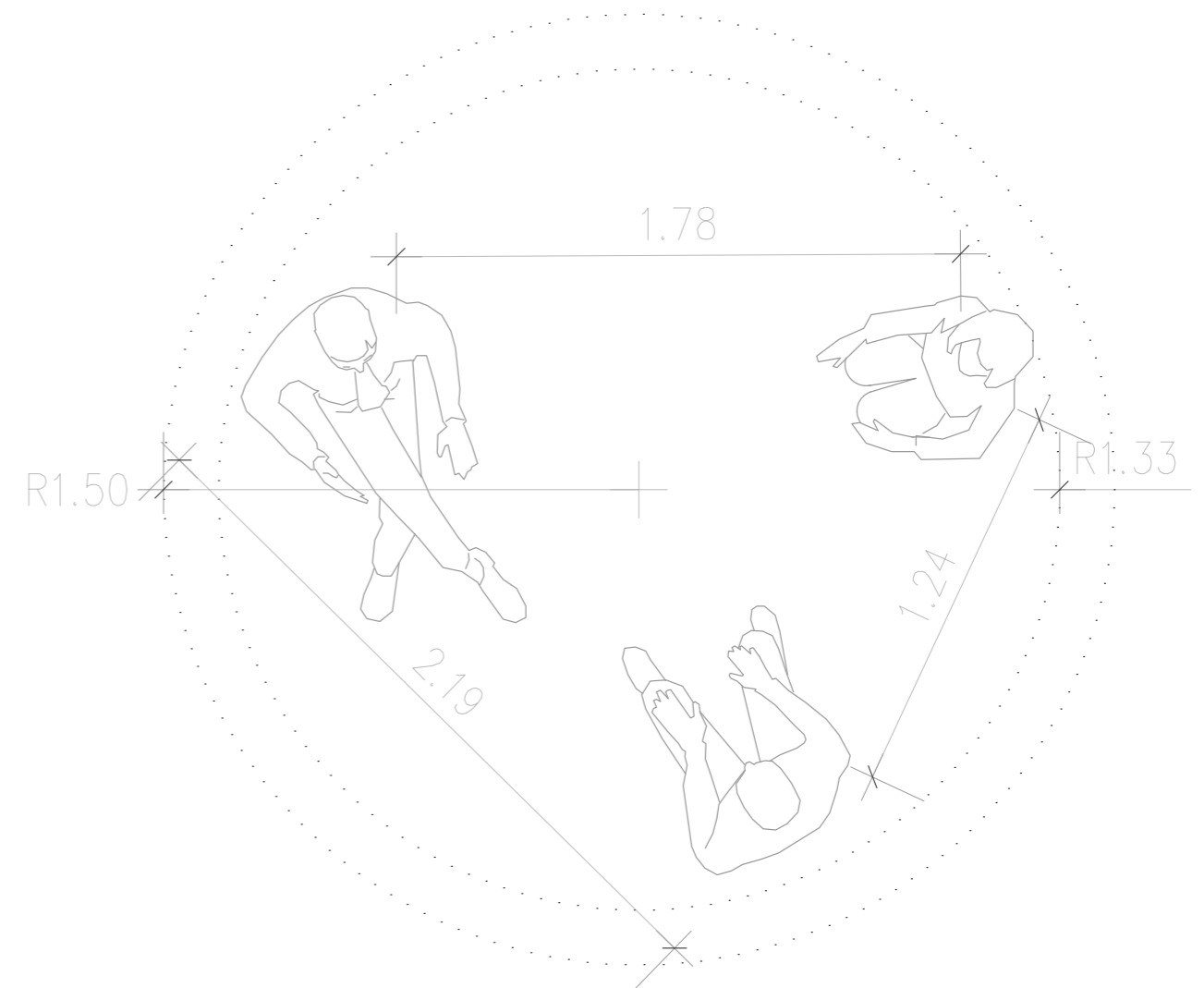
2 kind of interaction:

the space can be used by three people at the same time
and everyone is free to interact in their own way

intimate interaction _ R0.80 m

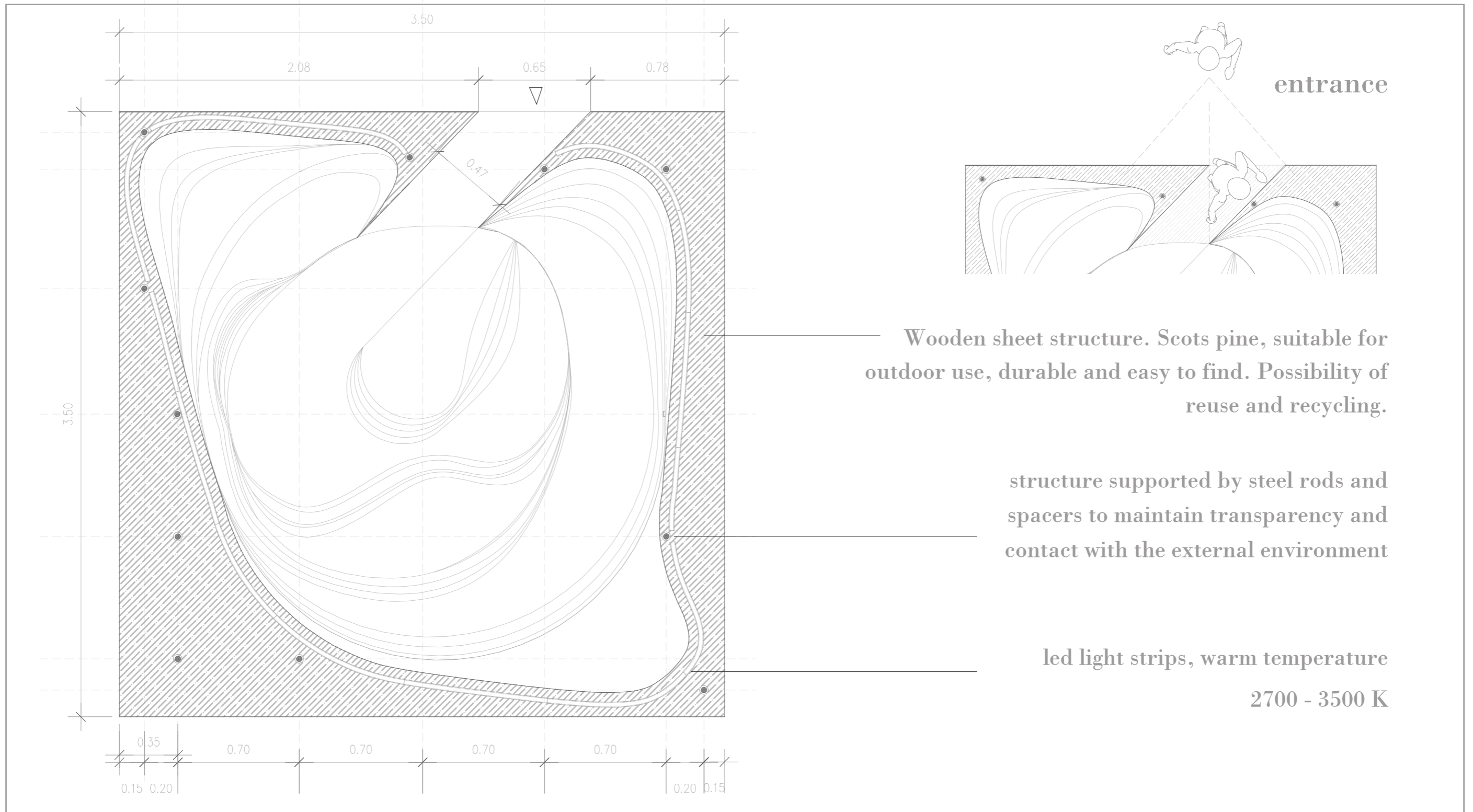


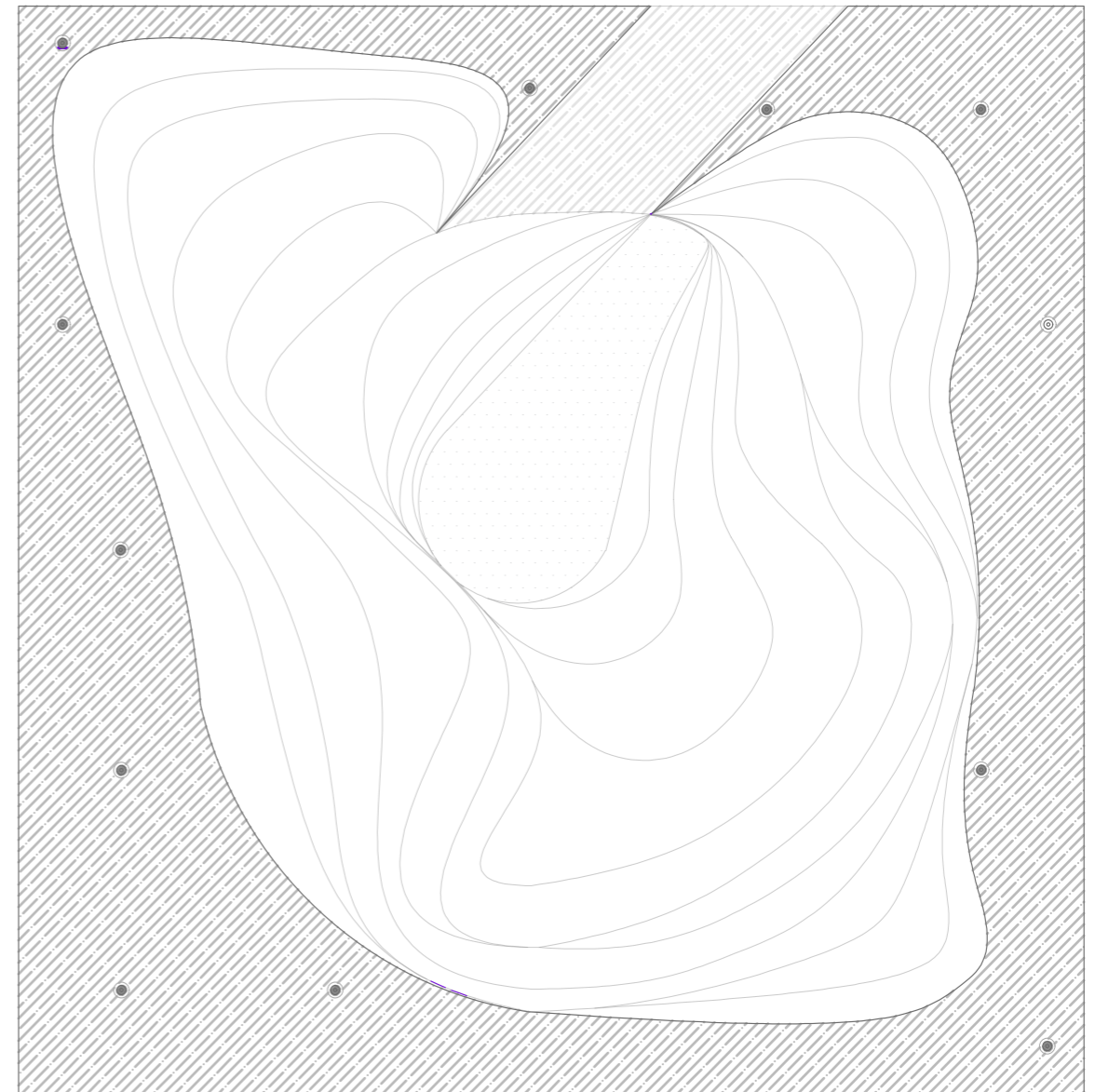
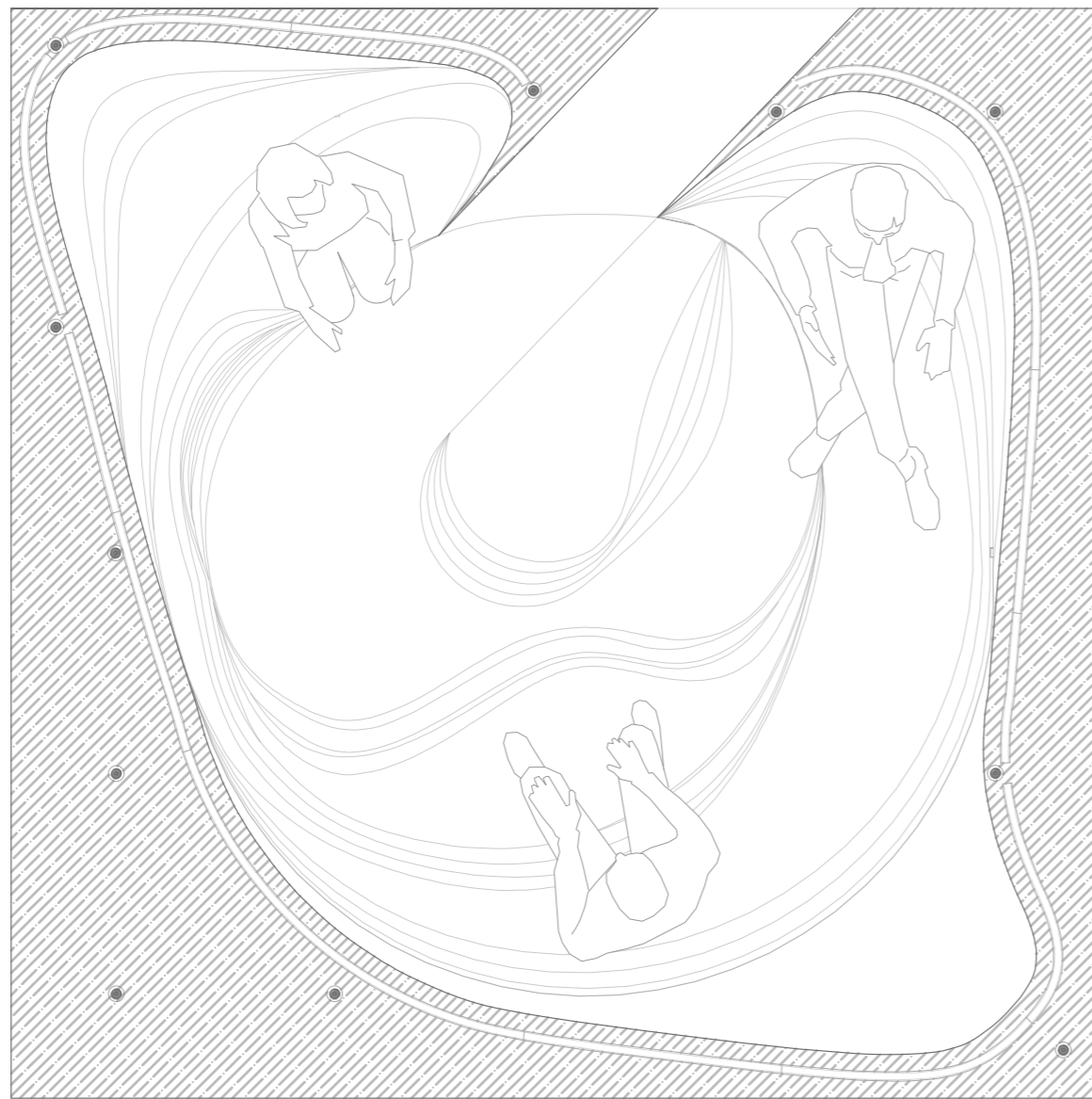
cognitive interaction _ R1.35 /1.50 m

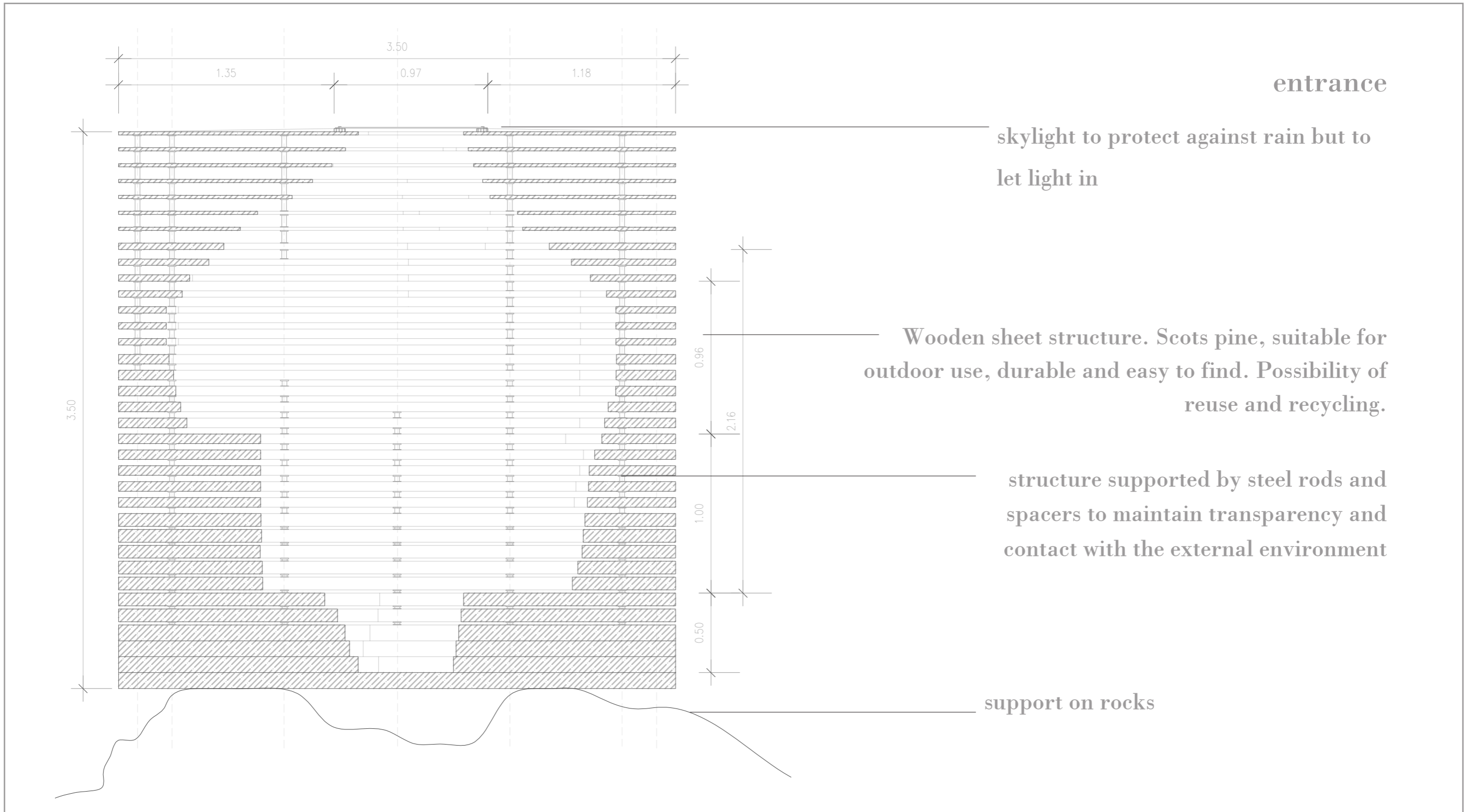


project:

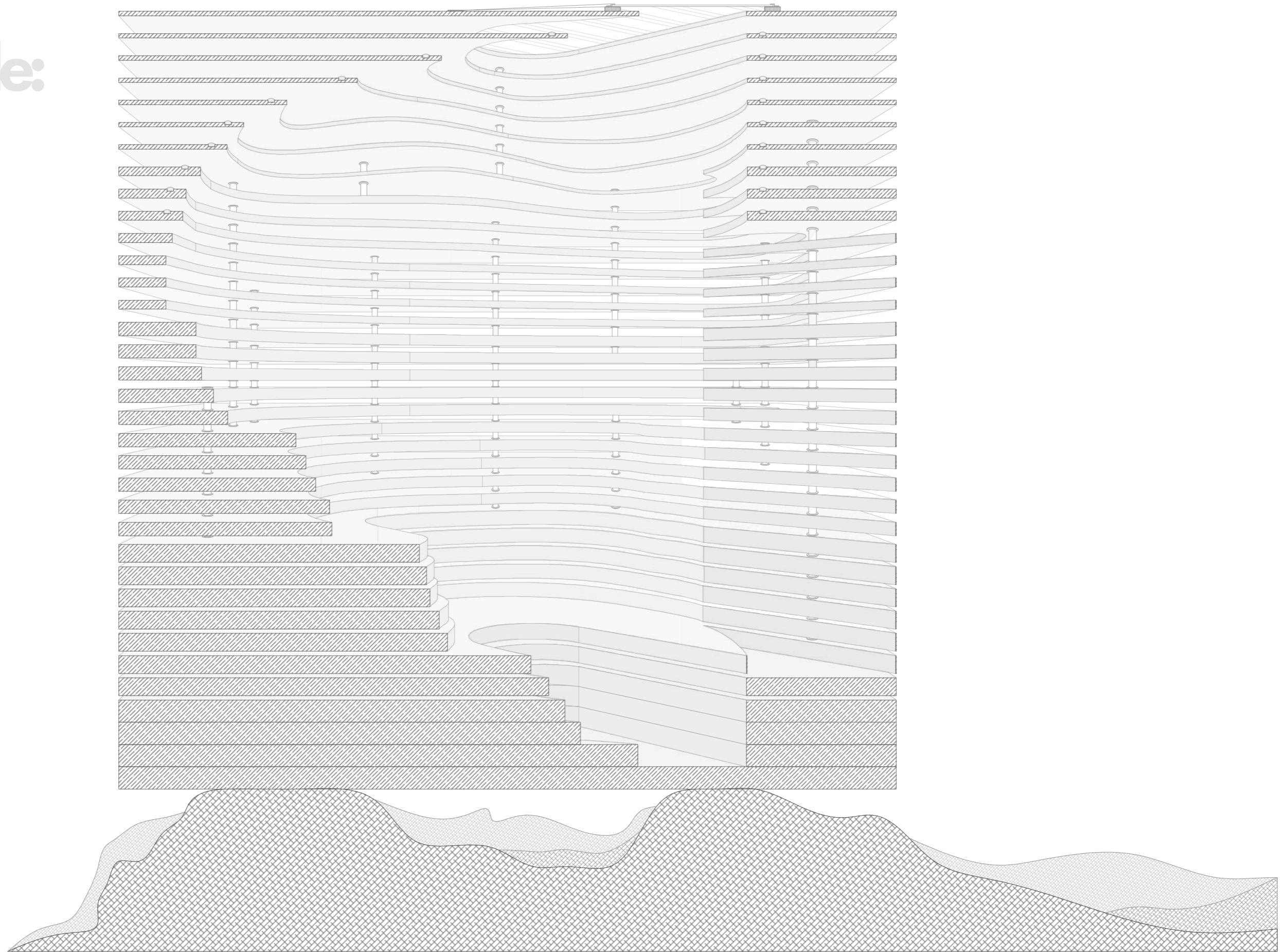
plan, section at 1.80 m



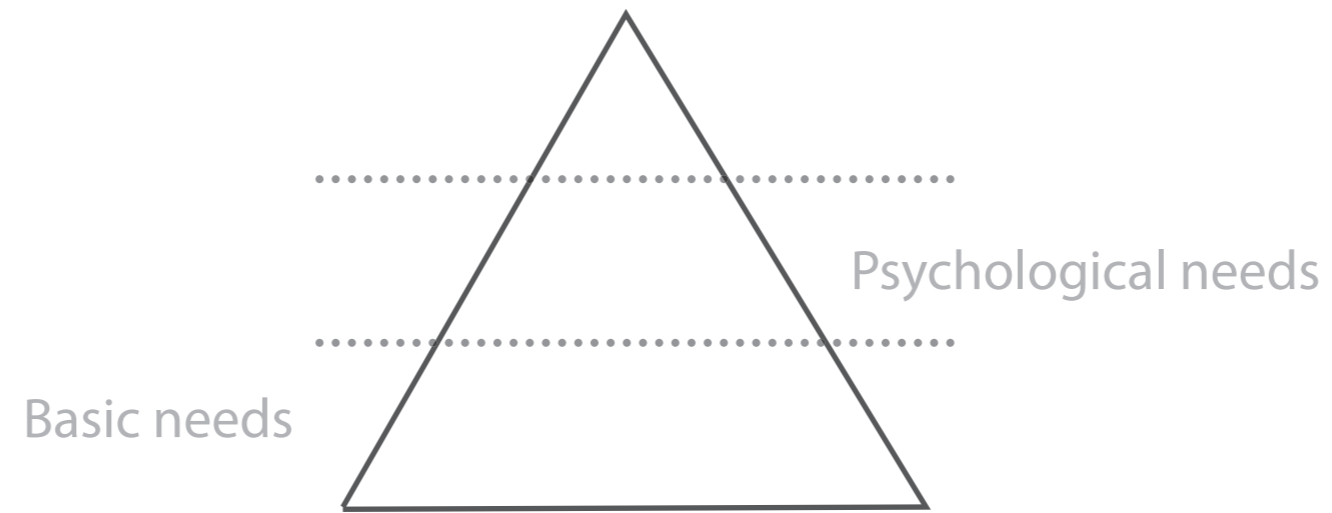




inside:



Q1 Sleeping



Basic Needs

SAFETY

water: a bottle of water

electricity: power outlet

breath: smooth breathing (humidity/oxygen/fresh air)

warm: good temperature for sleep(18-20 °C),mattress, quilt and sheet, curtains

Psychological Needs

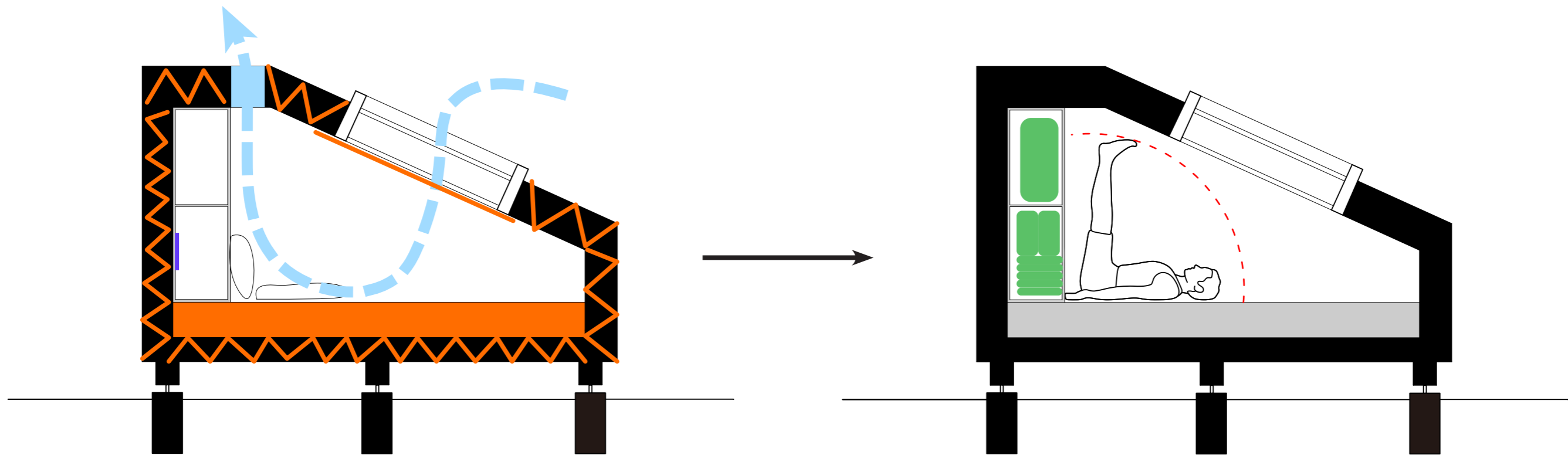
FEEL COMFORTABLE

position: lying,sitting, yoga, reading

warm: adjustable temperature and different types of quilts, rugs

storage: for sleeping clothes and quilts, rugs

space to move: move space beside the bed

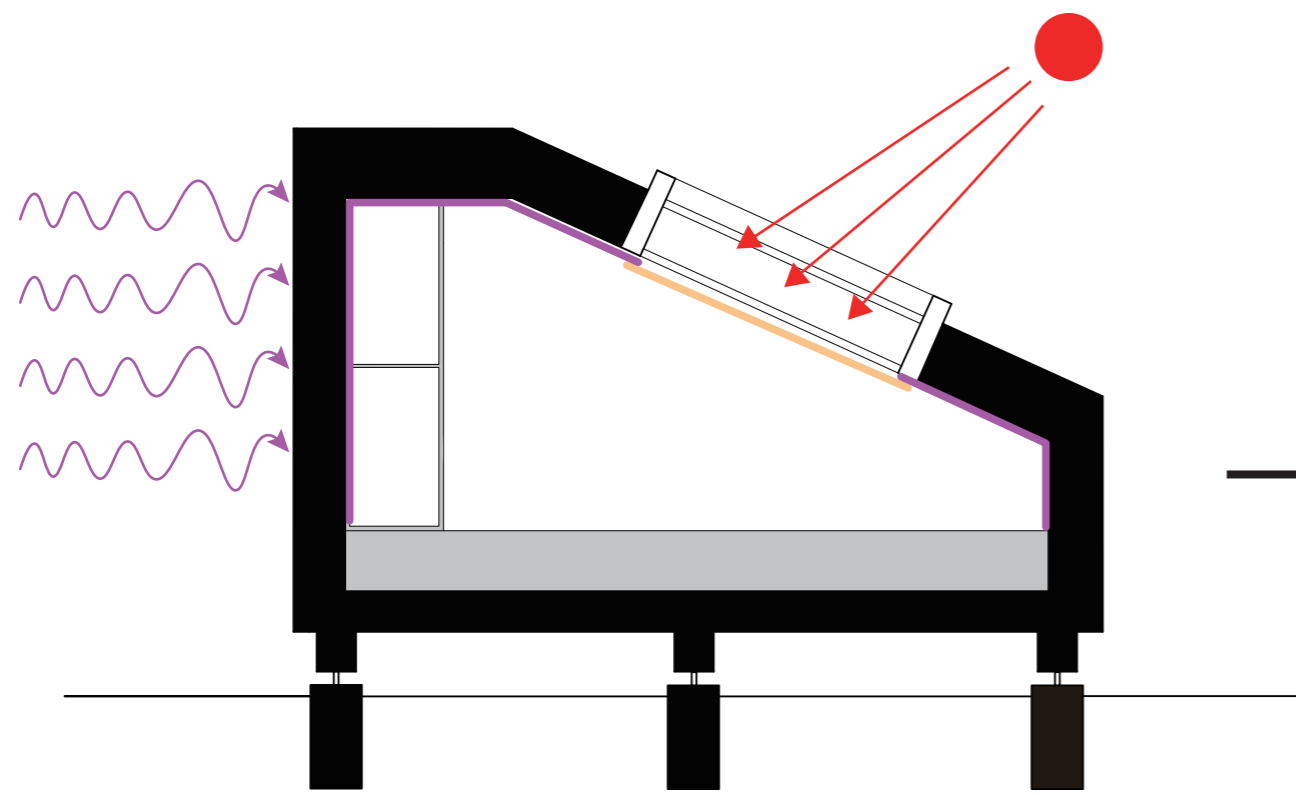


Basic Needs

NO DISTURBING

sound: low noise

light: summer/ noon sunlight shading



Psychological Needs

IN GOOD MOOD

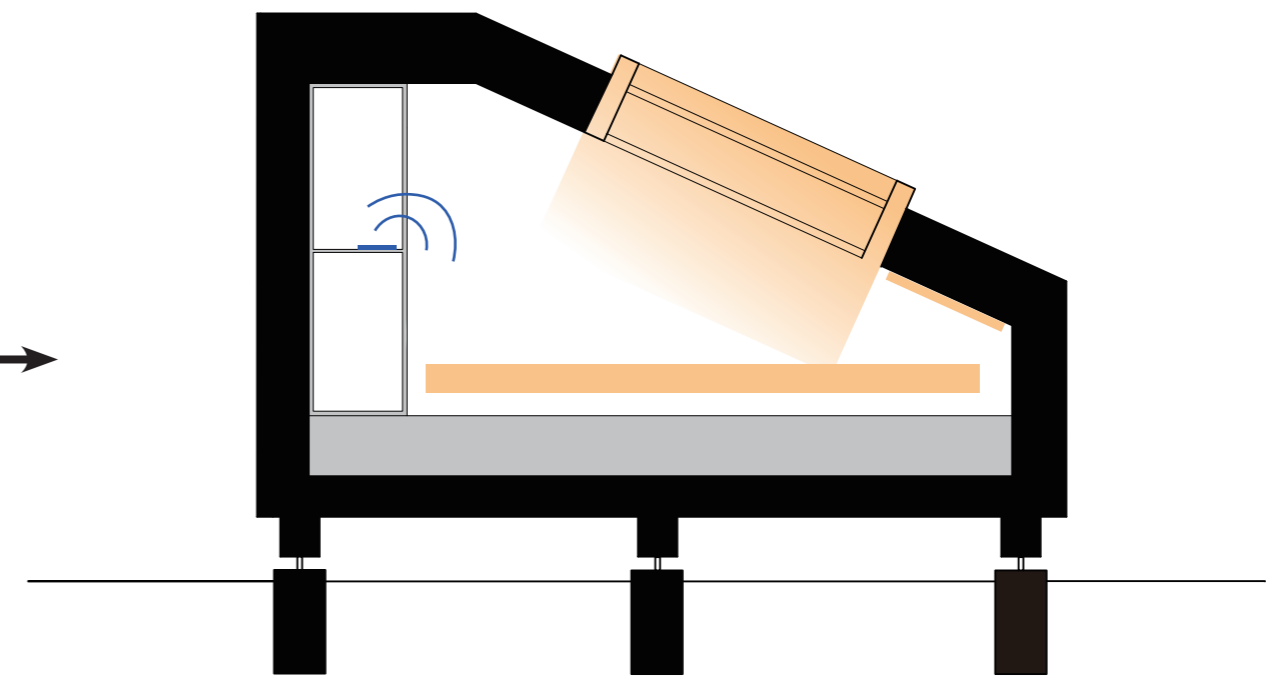
sound: white noise and light music

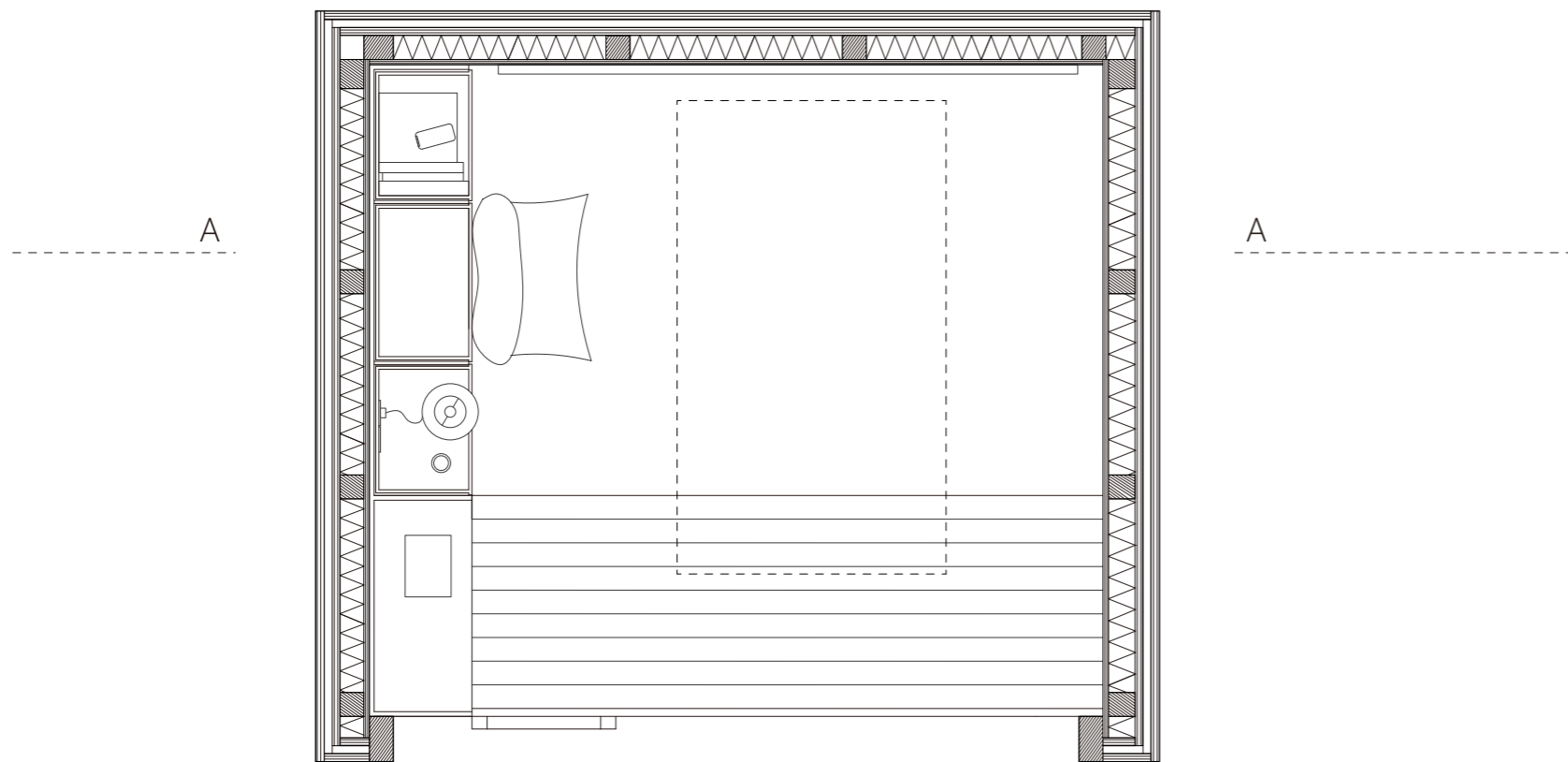
light: artificial light, natural light

smell: sleep-conducive smells

color: light blue color

communication and entertainment: cellphone





PLAN 1:25

1 wall construction

24/148 mm wrot untreated larch tongued-and-grooved boarding on 28/48 mm battens;
 24 mm plywood;
 75mm thermal insulation;
 vapour barrier;
 9 mm birch plywood;

2 roof construction

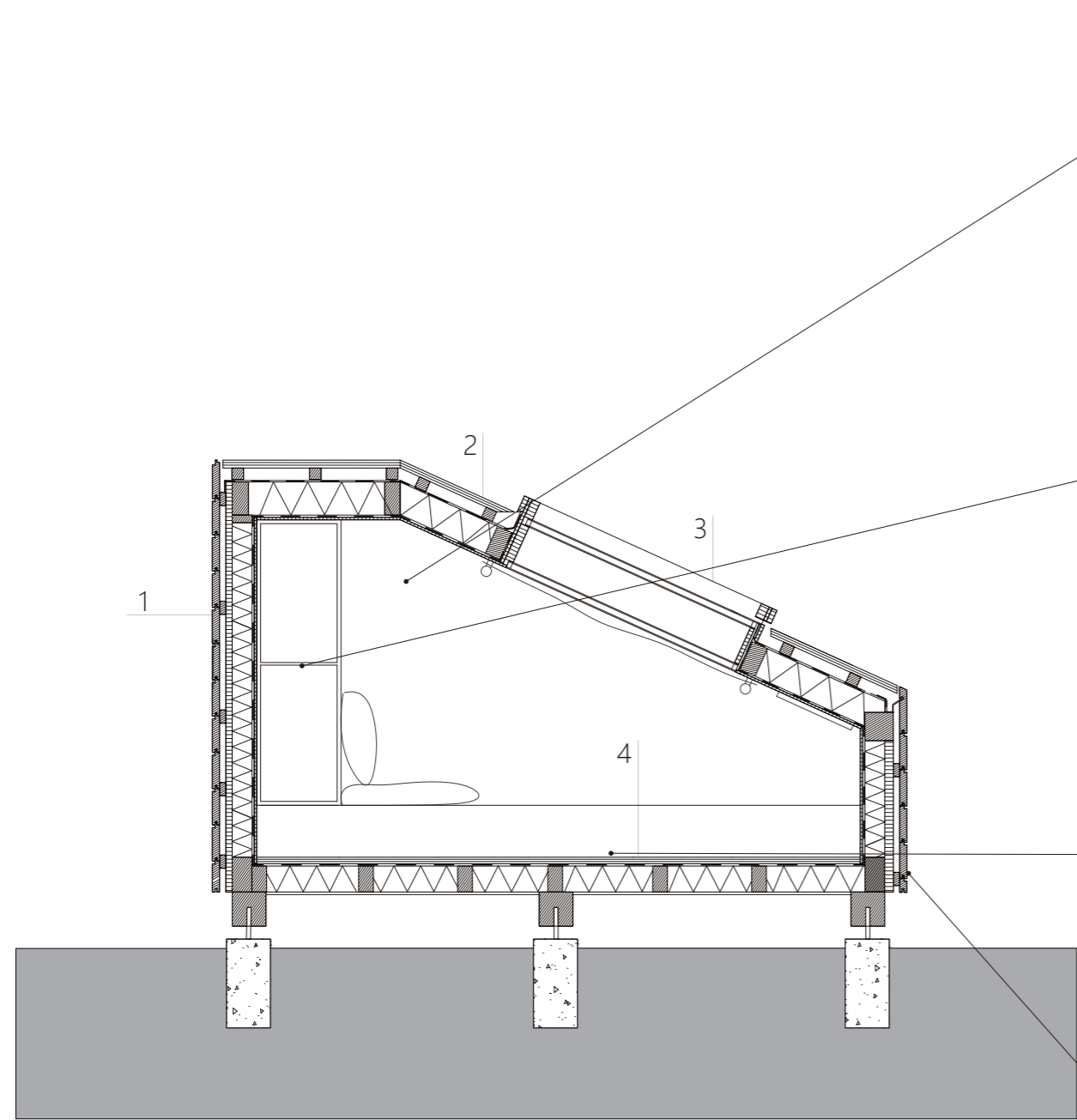
24/148 mm wrot untreated larch tongued-and-grooved boarding on 48/48 mm battens;
 bituminous roof sealing layer;
 125 mm mineral-wool thermal insulation;
 vapour barrier;
 9 mm birch plywood;

3 window construction

double glazing: 2* 4 mm float glass + 12 mm cavity;
 Blackout curtains;

4 ground floor construction

24 mm birch plywood, varnished;
 vapour barrier;
 48/125 mm battens;
 125 mm mineral-wool thermal insulation;
 6 mm plywood (caseboard);

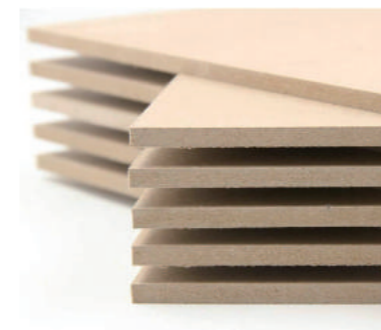


A-A SECTION 1:25

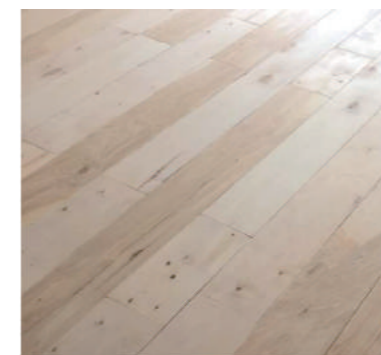
interior materials 9mm birch plywood



cabinet materials MDF



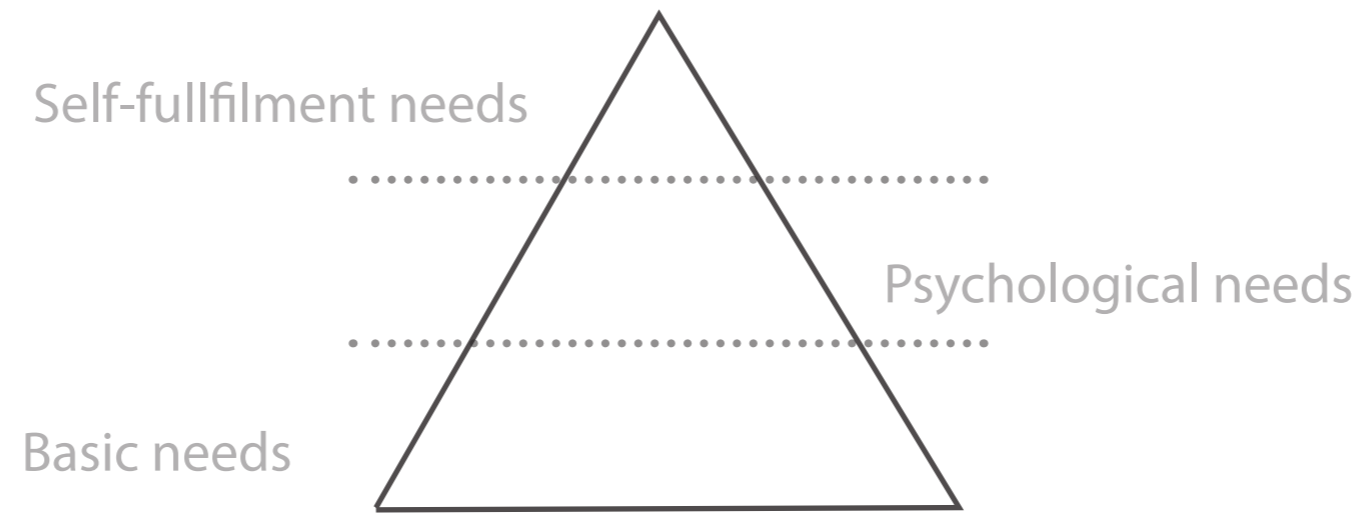
floor material 24mm birch plywood



exterior cladding 24/148 mm wrot untreated larch tongued-andgrooved boards



Eating



good digestion:

minimize stress

- nature
- away from working space, ..
- enough time

straight pelvis

- brings chin into the best chewing-position
- best position = floor sitting

minimize distractions

- tidy place
- no tv or sth. similar

atmosphere:

not feeling alone:

- outdoor impressions
(visual relations, outside people)
- audio book/podcast

soft distractions:

- concentrate on eating
but not feeling alone
- not too quiet
(just hearing yourself chew)

inspiration



lighting:

evenly lighted table

- no blinding

natural light:

- use it as good as possible
to support the biorythm

artificial light:

- imitate the natural light
 - breakfast: blue (activates)
 - lunch: getting warmer
 - coffee: more blue
(when activation needed)
 - dinner: warm light (distressing)

adaptation:

1-x guests

- pillow sitting (minimize materials)

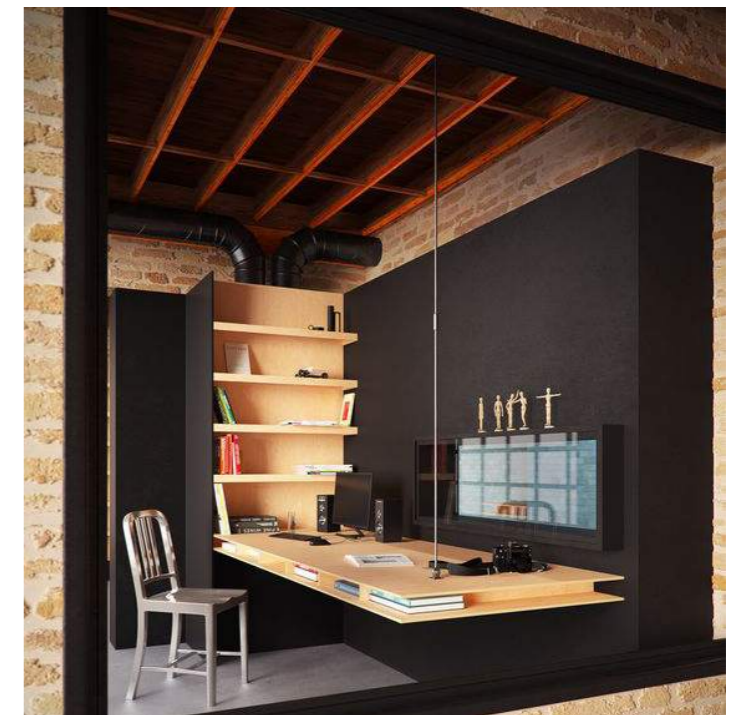
sitting positions:

- eating: sitting straight, no backrest
- chilling/talking: flexible backrest

eating breaks = 'body breaks'

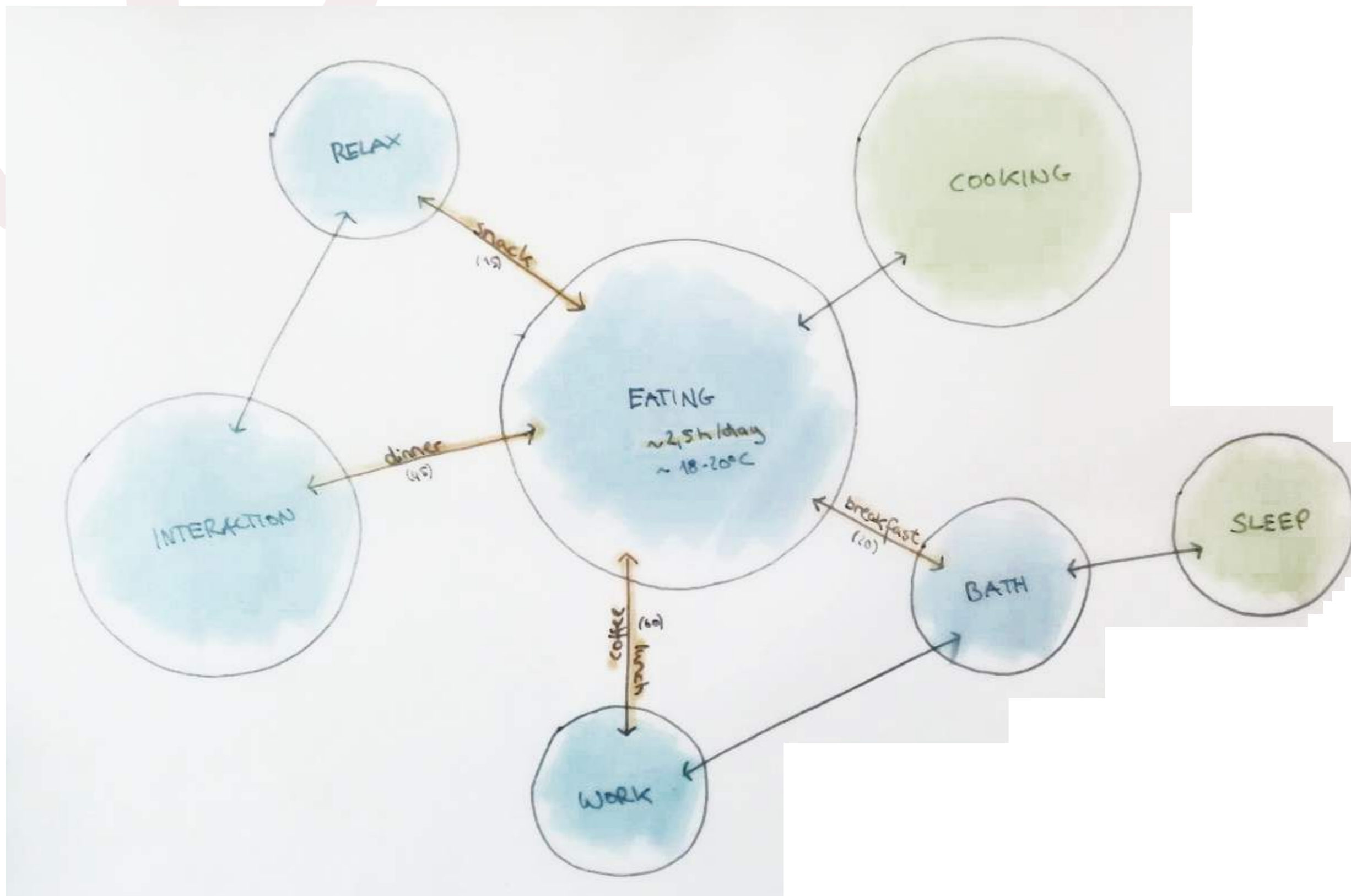
- encourage different eating positions
- different table heights

inspiration



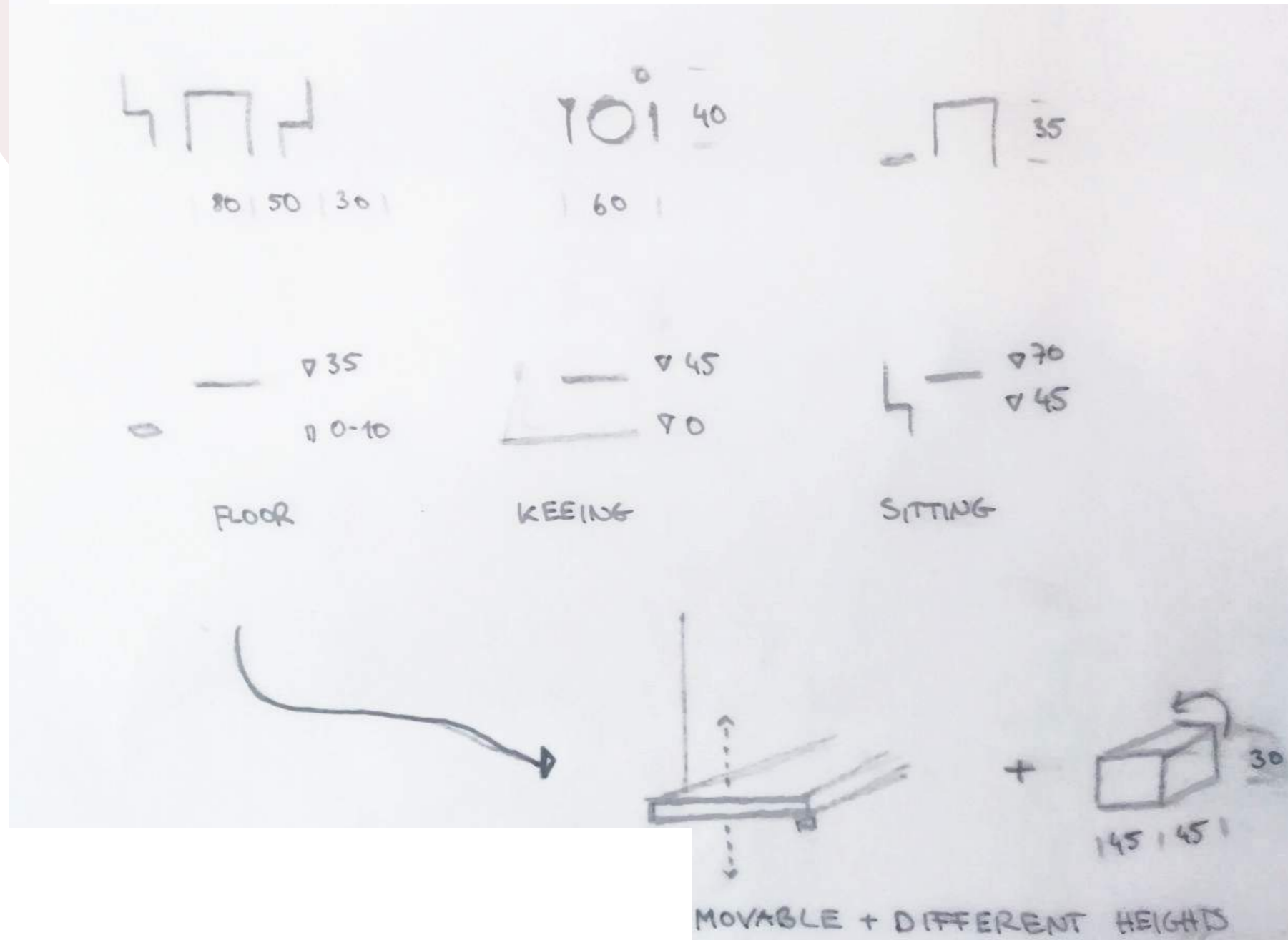
location & daily use

Bubble Diagram



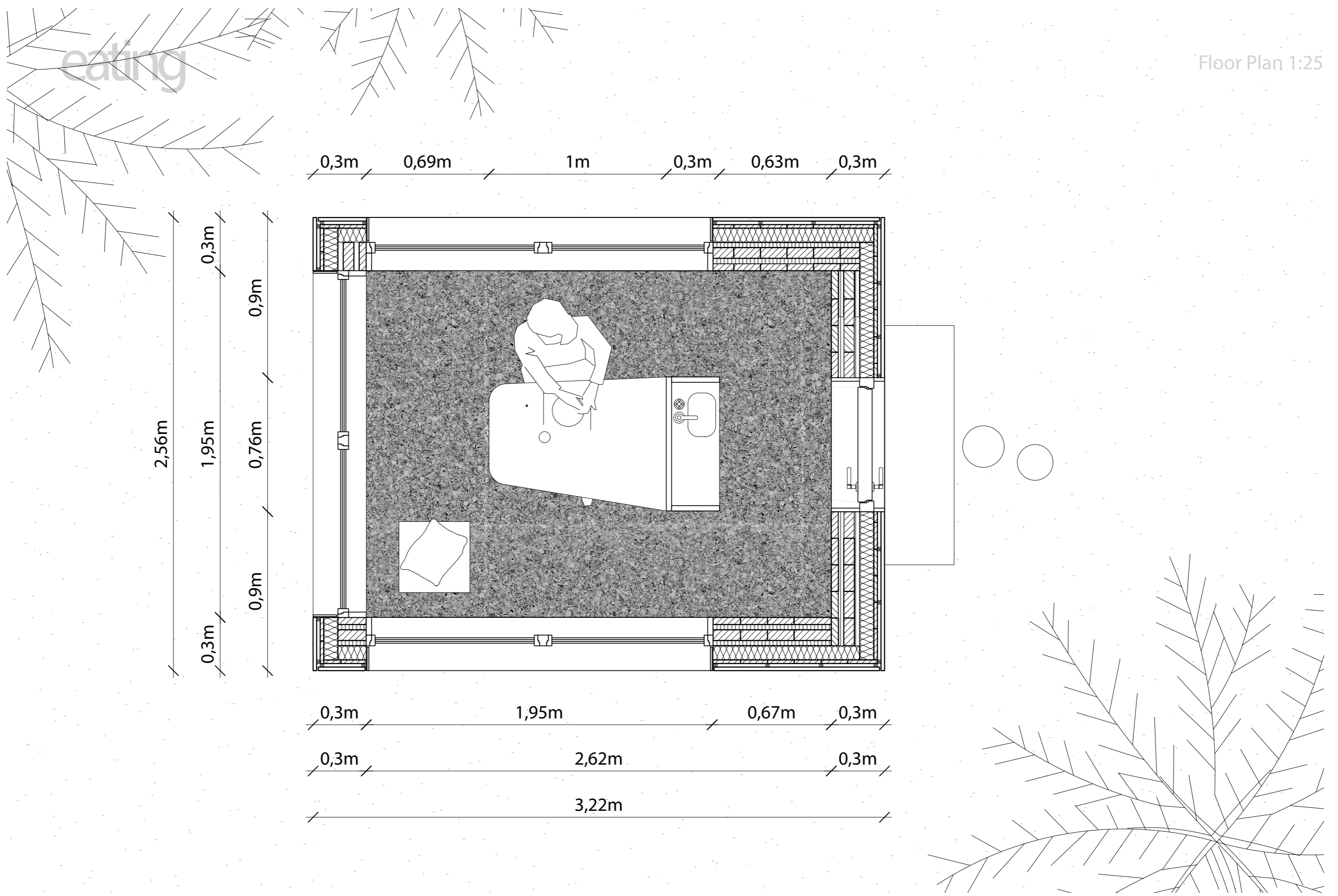
concept

materials



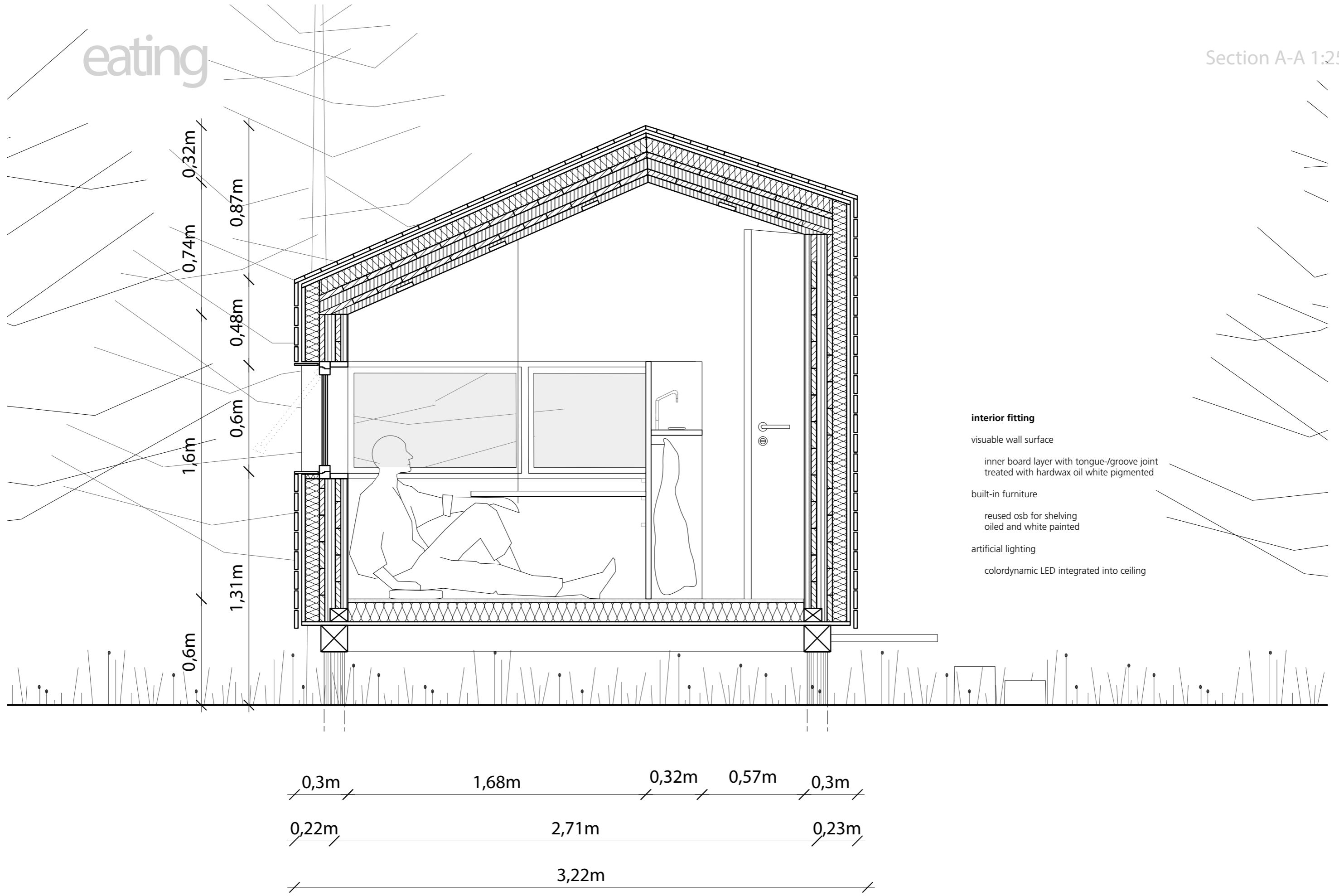
eating

Floor Plan 1:25



eating

Section A-A 1:25



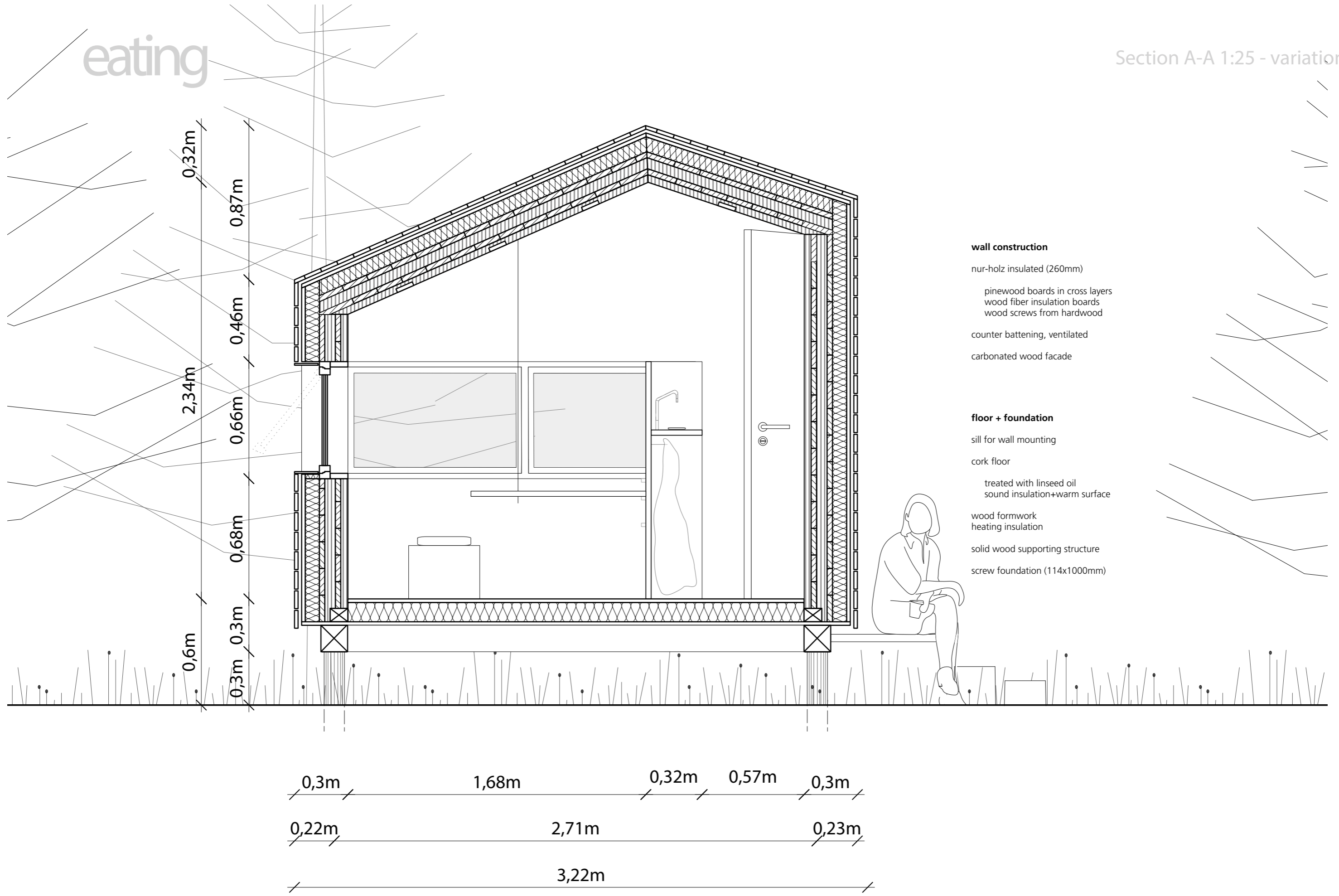
- interior fitting**
- visuable wall surface
 - inner board layer with tongue-/groove joint treated with hardwax oil white pigmented
- built-in furniture
 - reused osb for shelving oiled and white painted
- artificial lighting
 - colordynamic LED integrated into ceiling

0,32m
0,74m
0,87m
0,48m
0,6m
1,6m
1,31m
0,6m

0,3m 1,68m 0,32m 0,57m 0,3m
0,22m 2,71m 0,23m
3,22m

eating

Section A-A 1:25 - variation



0,32m
0,87m
0,46m
2,34m
0,66m
0,68m
0,6m
0,3m

0,3m 1,68m 0,32m 0,57m 0,3m
0,22m 2,71m 0,23m
3,22m

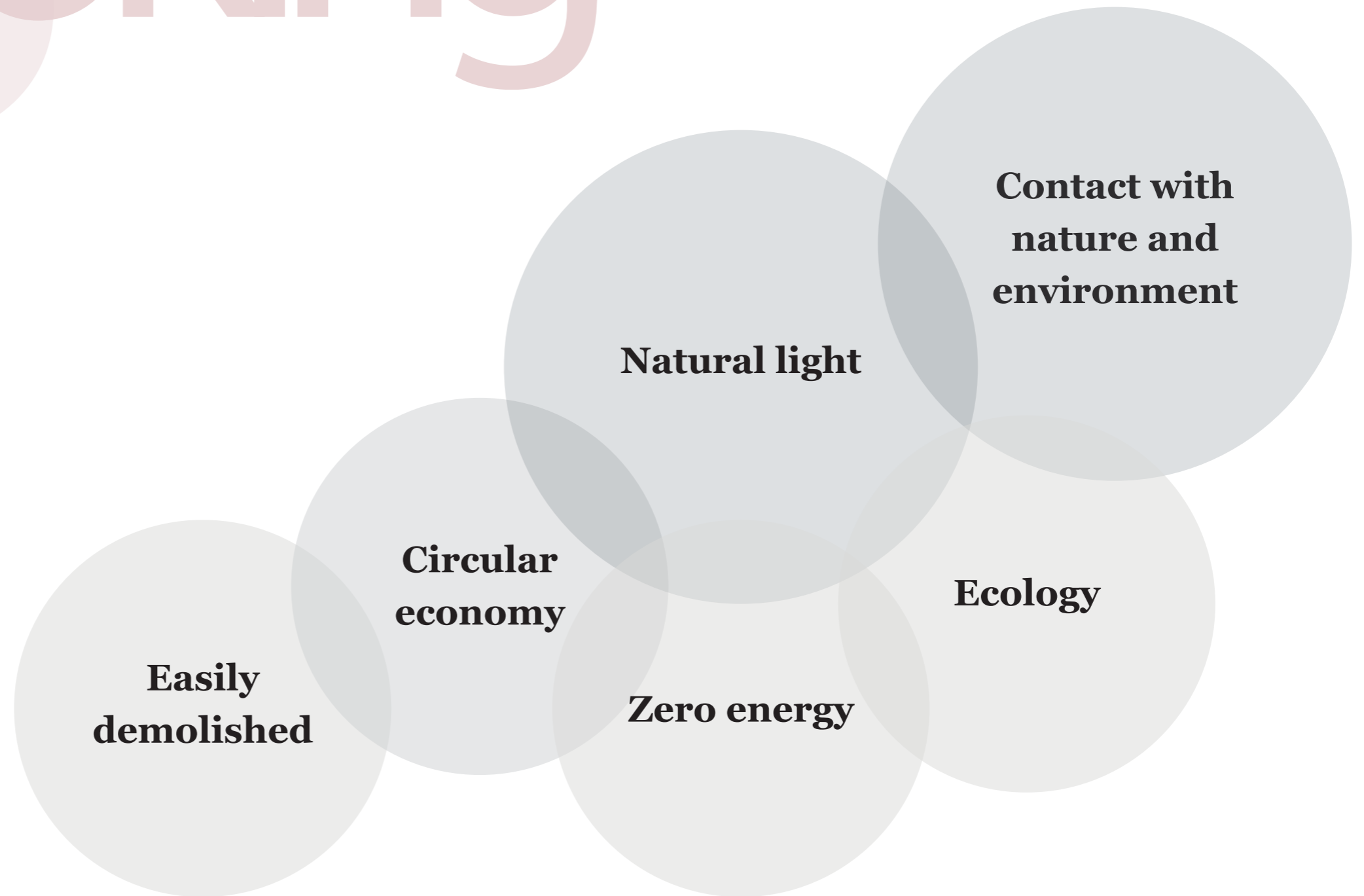
wall construction

- nur-holz insulated (260mm)
- pinewood boards in cross layers
- wood fiber insulation boards
- wood screws from hardwood
- counter battening, ventilated
- carbonated wood facade

floor + foundation

- sill for wall mounting
- cork floor
- treated with linseed oil
- sound insulation+warm surface
- wood formwork
- heating insulation
- solid wood supporting structure
- screw foundation (114x1000mm)

Cooking



needs:

Stove/oven

Fridge

Sink

also:

natural light

free table space

free space to move

storage

rubbish bin

solar panels

15 ° = 90 %

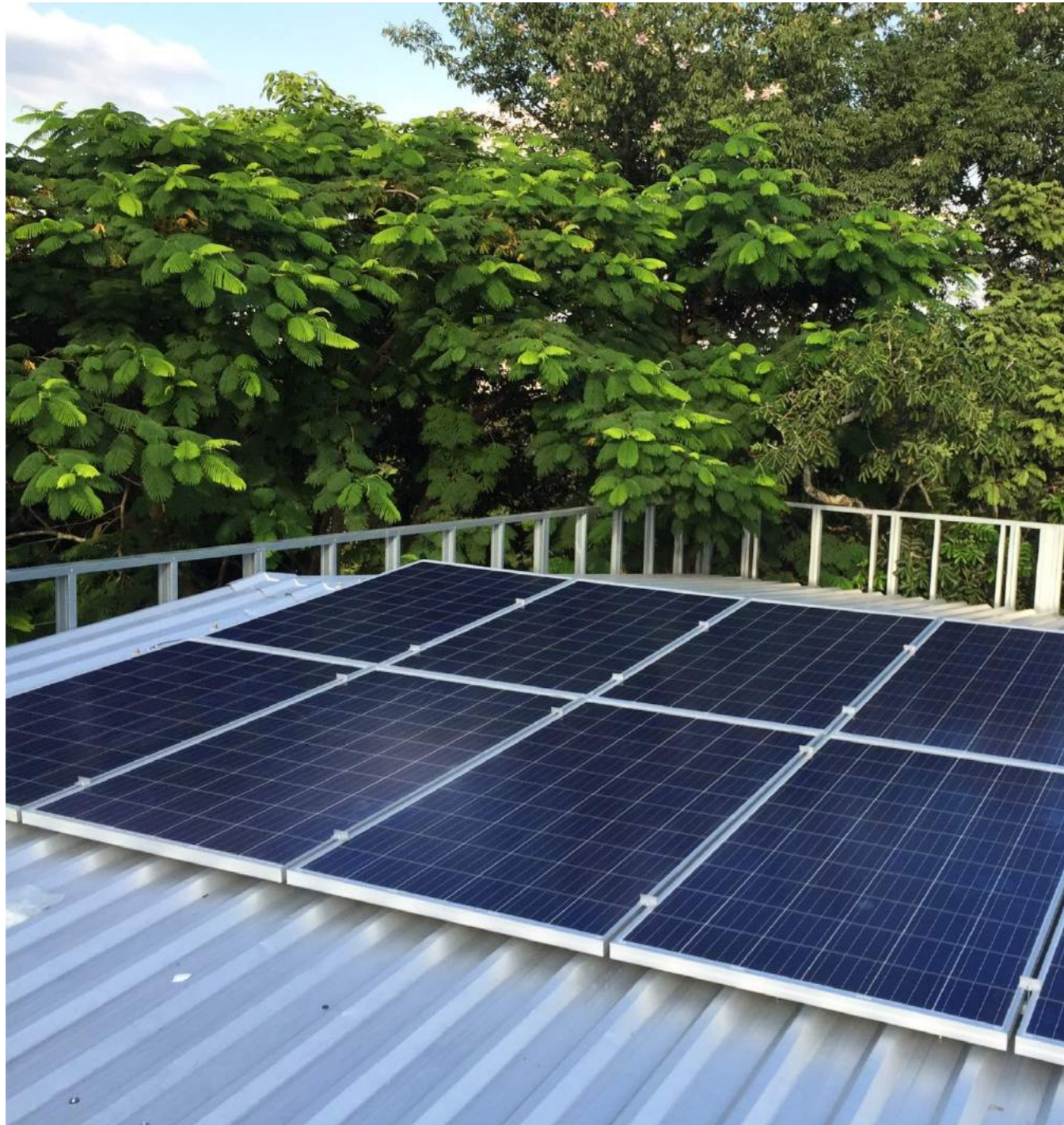


Image: pxhere.com

stove + oven



Image: Hankkija Oy

structure and materials

Roof: Recycled metal, solar panels
gluelam beams

Walls: Recycled non-settling log 240mm
(or logs made from recycled timber?)

Floor: Recycled timber

solar panels
metal roof
20mm crossbars
100mm air-gap
50mm wind-barrier board
350mm gluelam beams
20mm crossbars
20mm interior panel

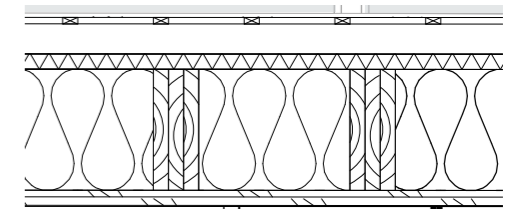
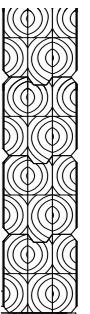


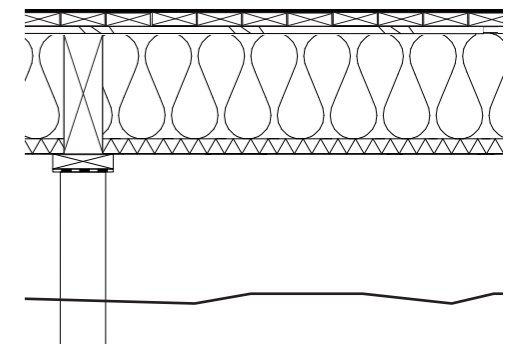
Image: pluspuu.fi/en/structures



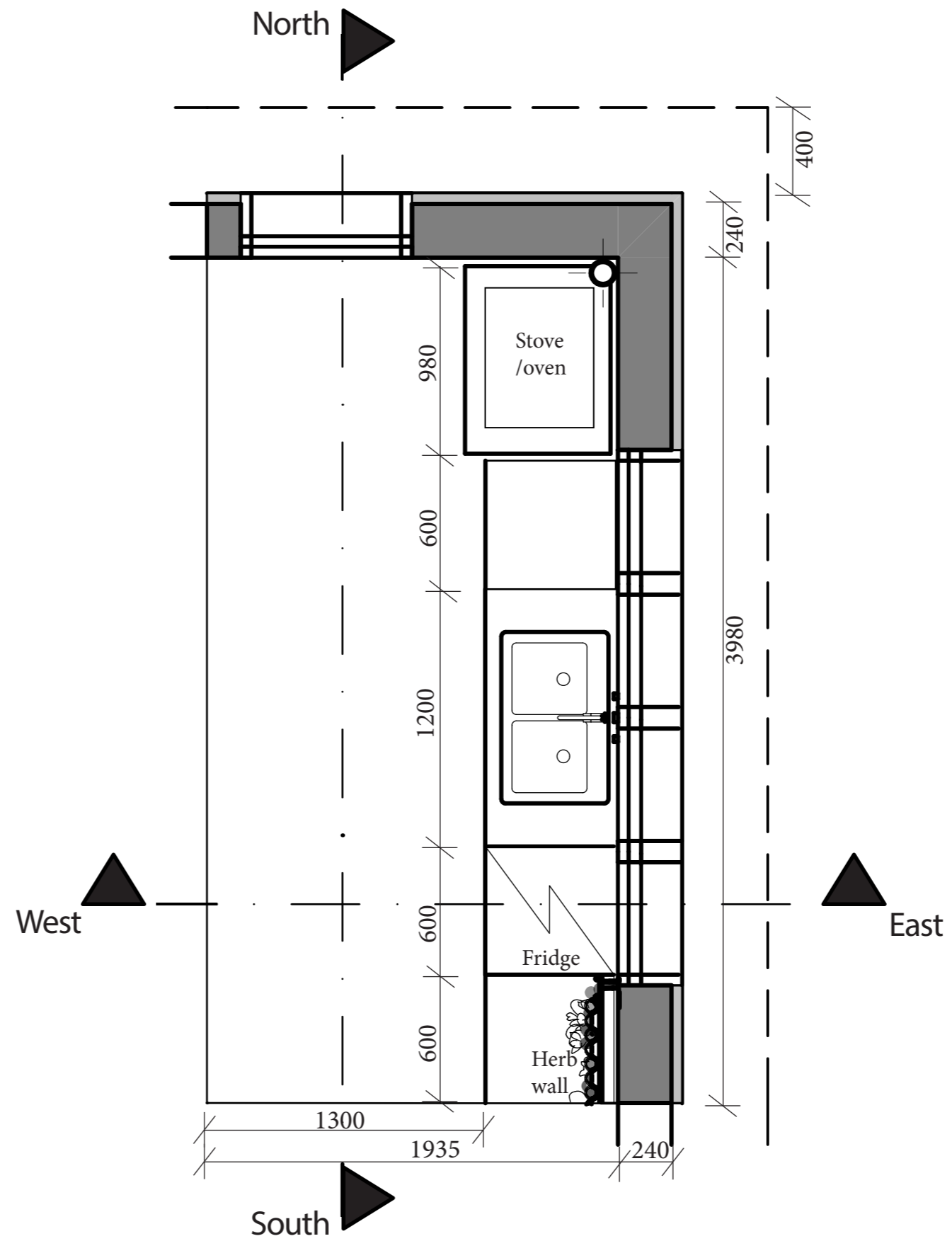
240 mm non-settling log



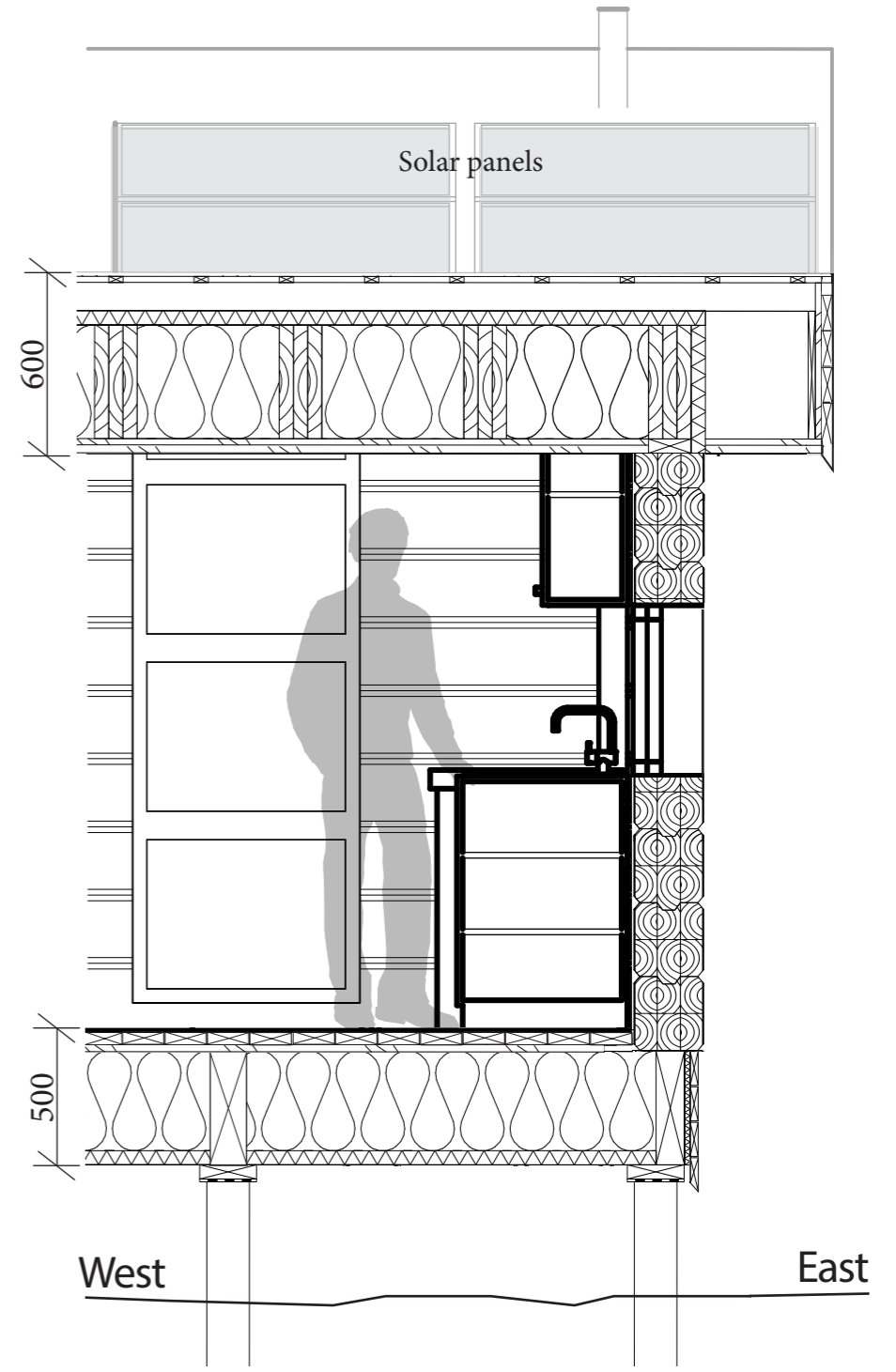
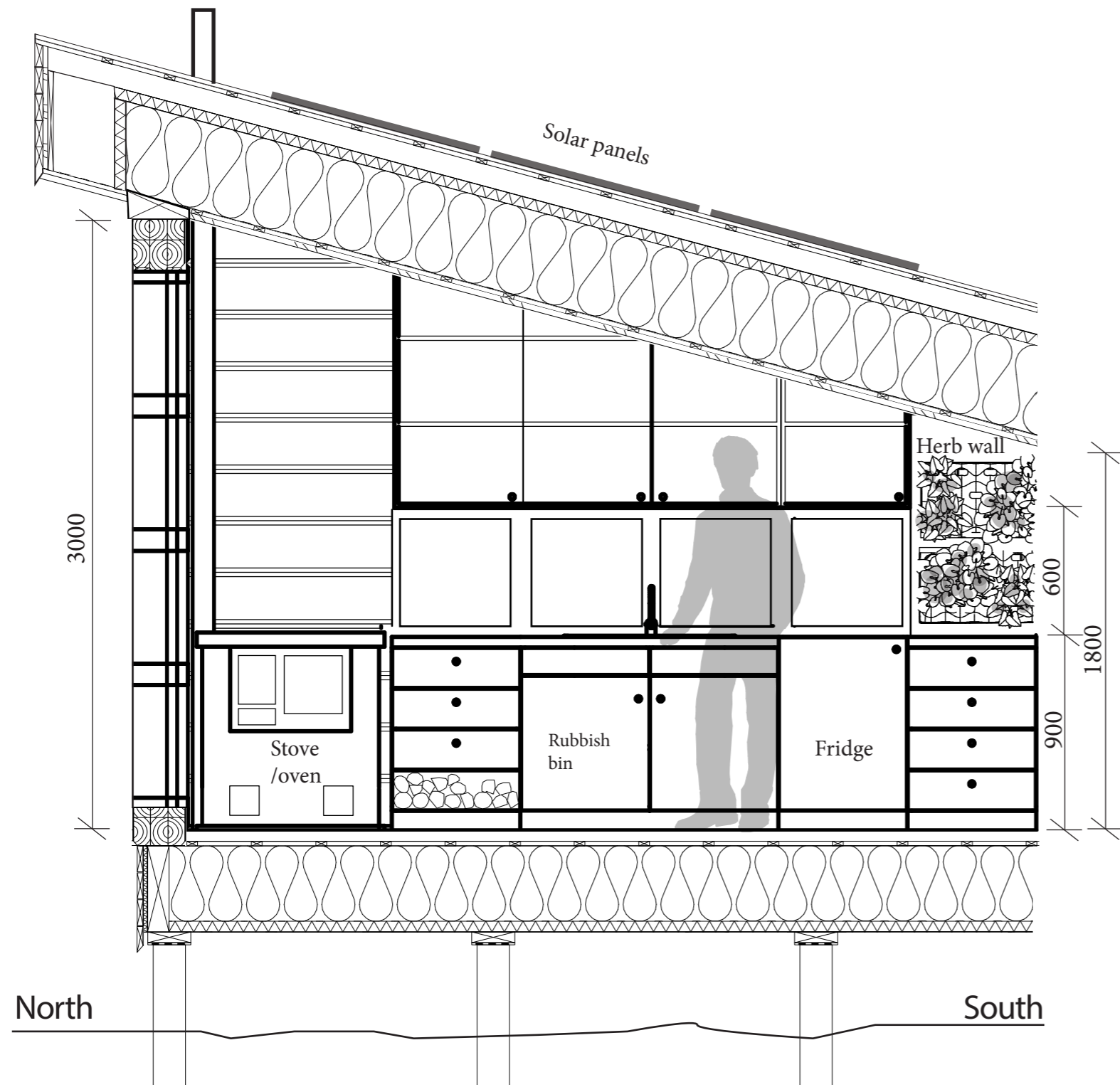
50mm floor timber
20mm crossbars
300mm beams
(50mm wind-barrier board)
concrete pillar foundation



floor plan 1:25

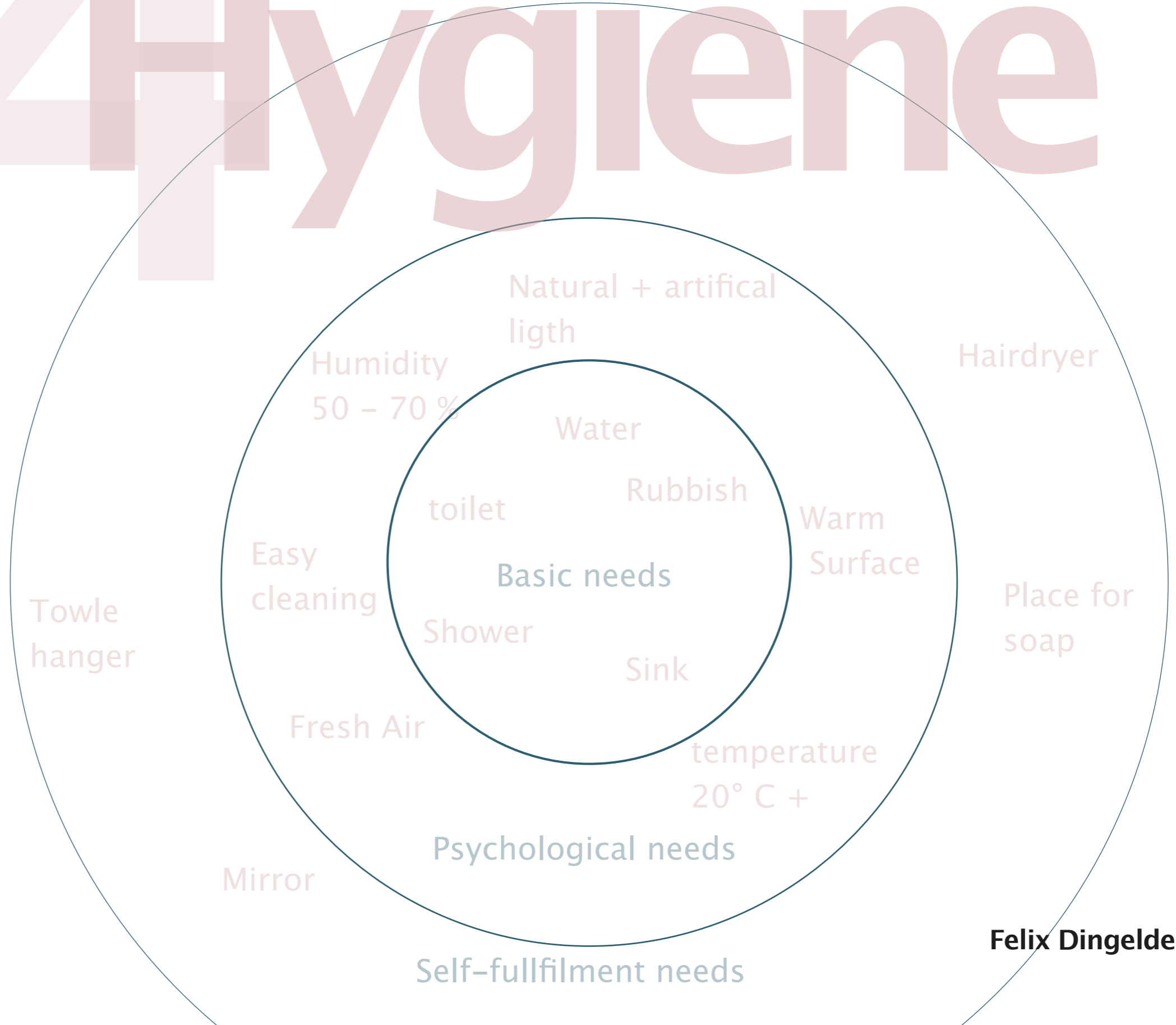


sections 1:25



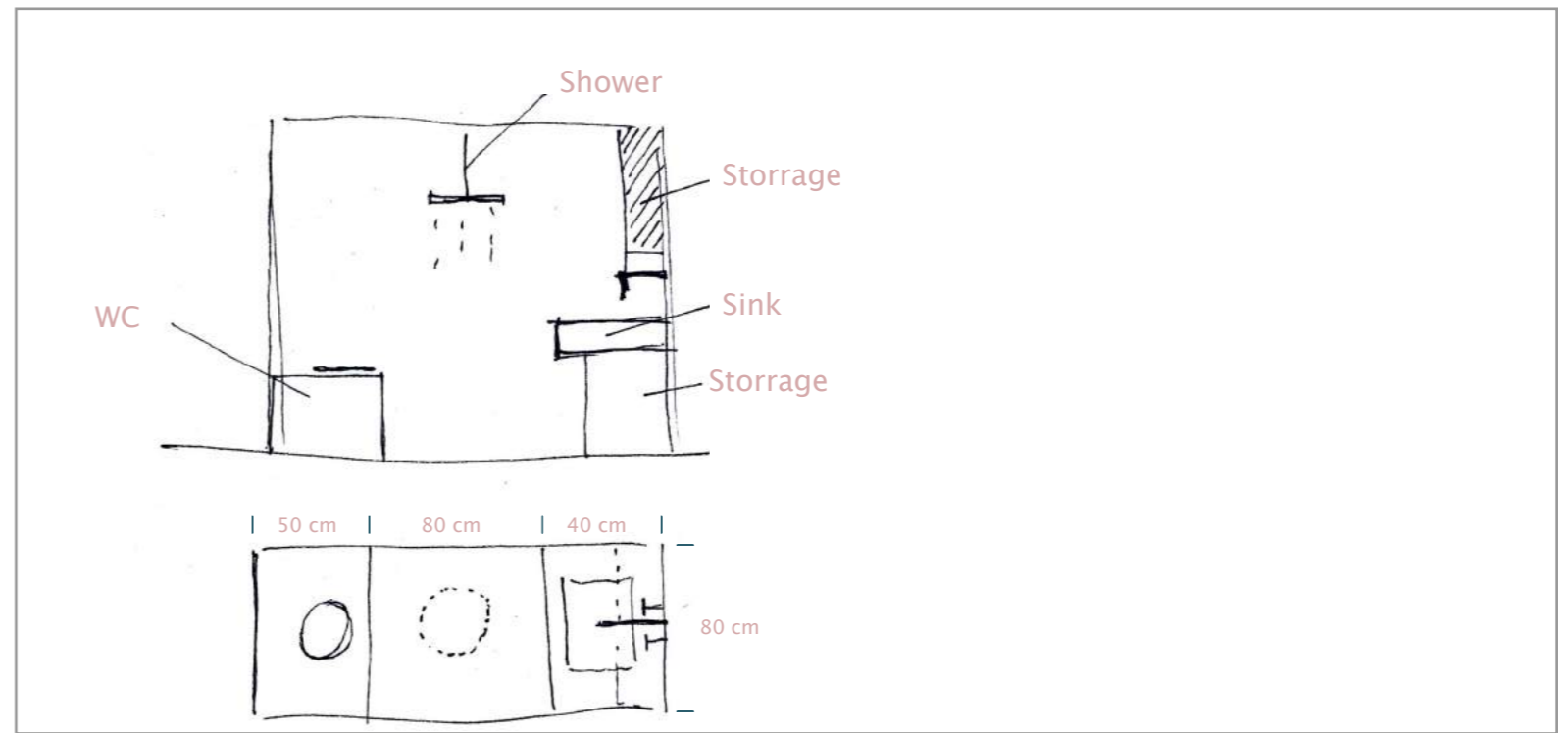
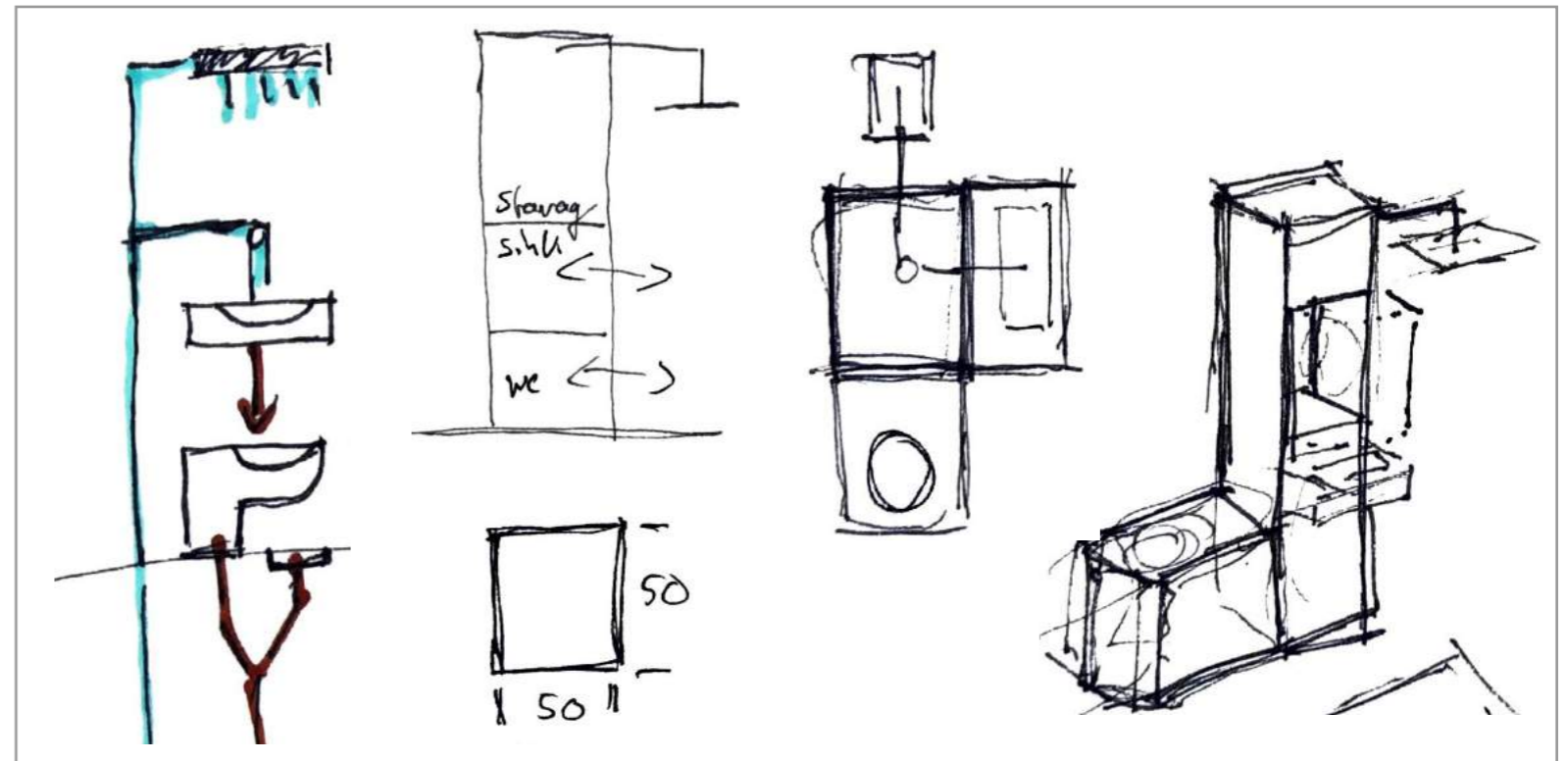
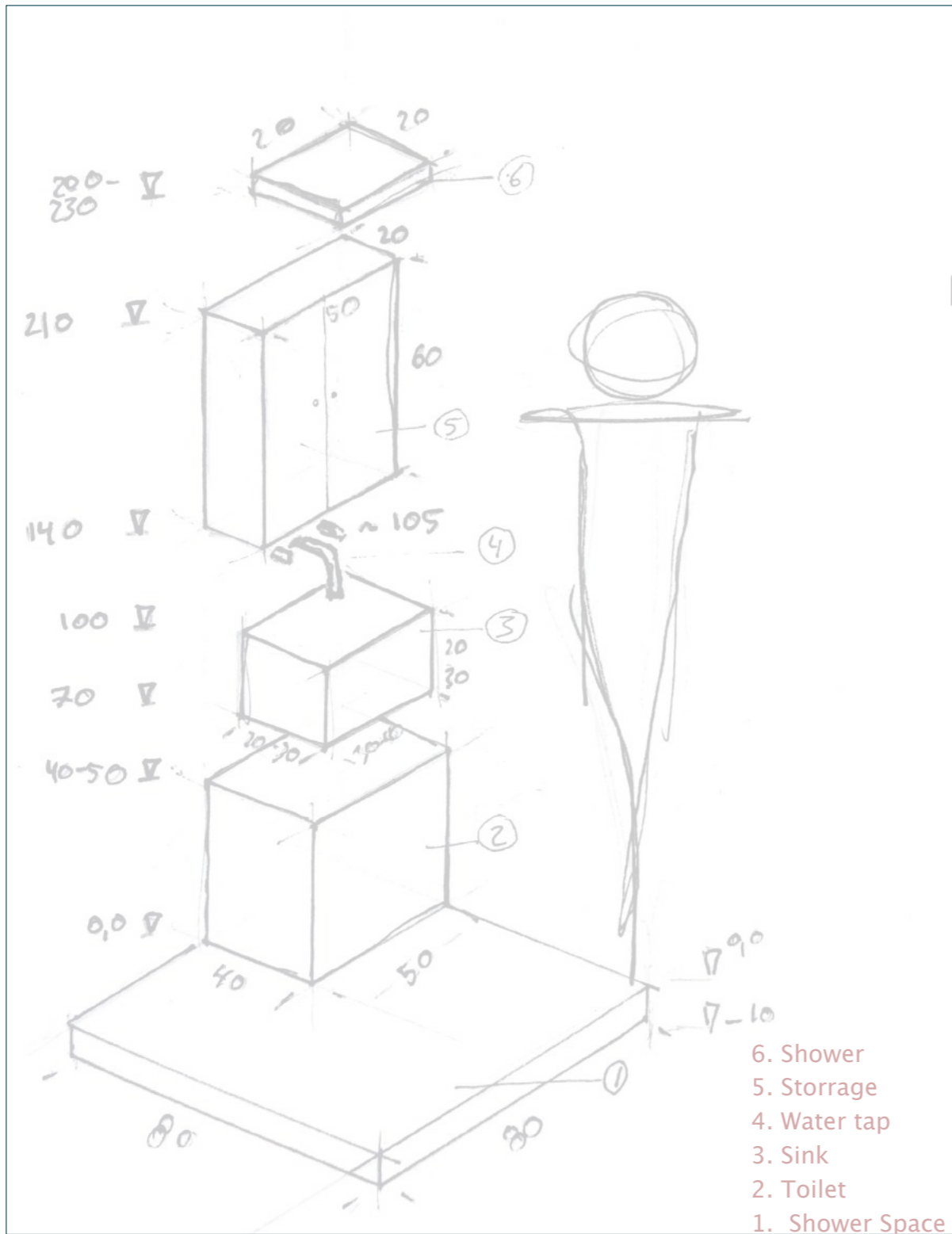


04 Hygiene



dimensions :

basic functions



<https://silocity.space>

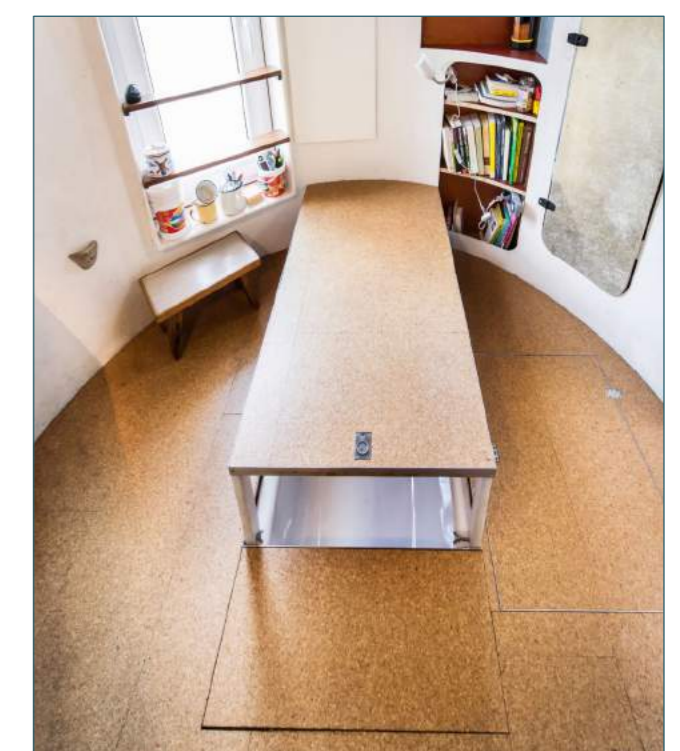
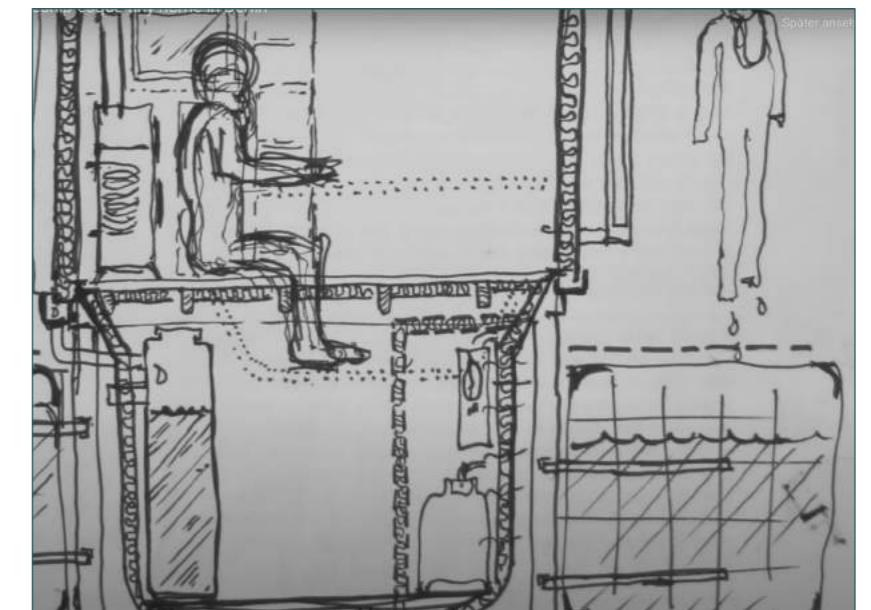
[submarine-a-spaceship-nope-its-home/](https://www.facebook.com/silocity)

<https://www.facebook.com/silocity>

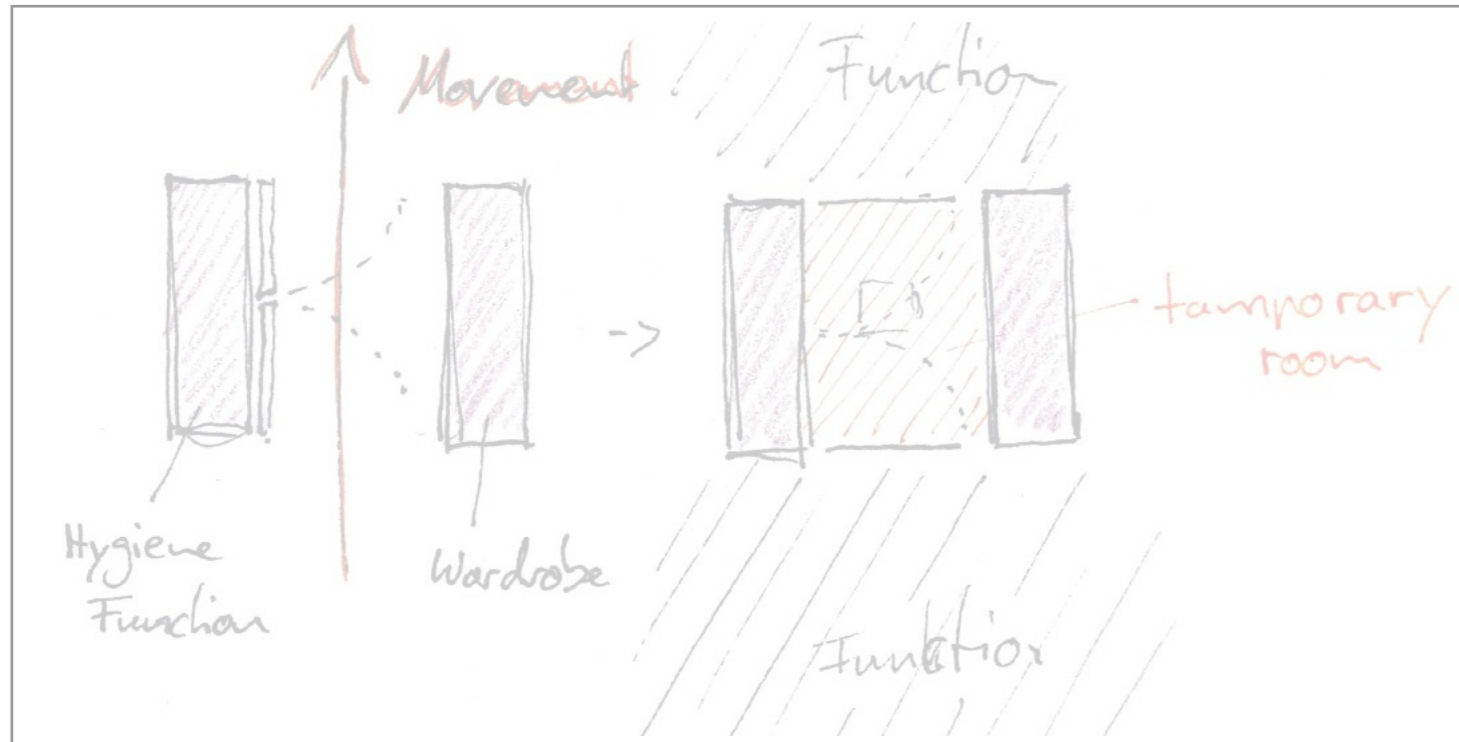
<https://hackaday.com/2018/03/11/is-that-a-mars-habitat-a->

SILO

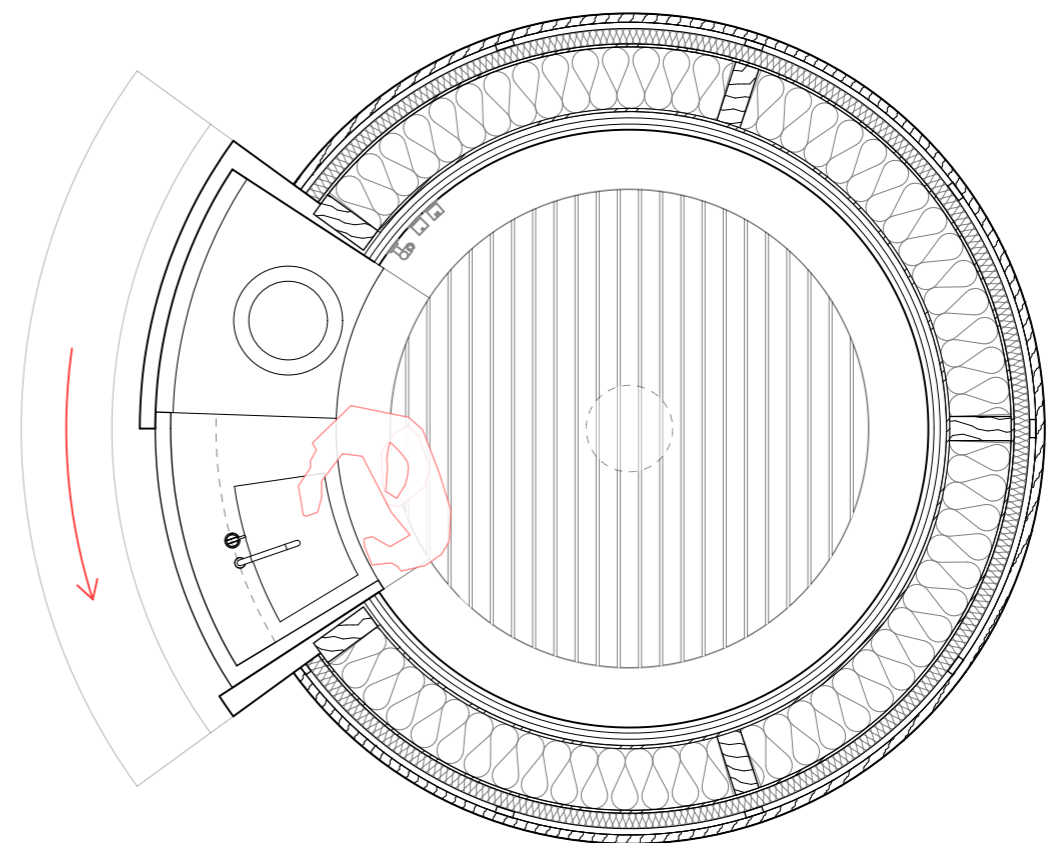
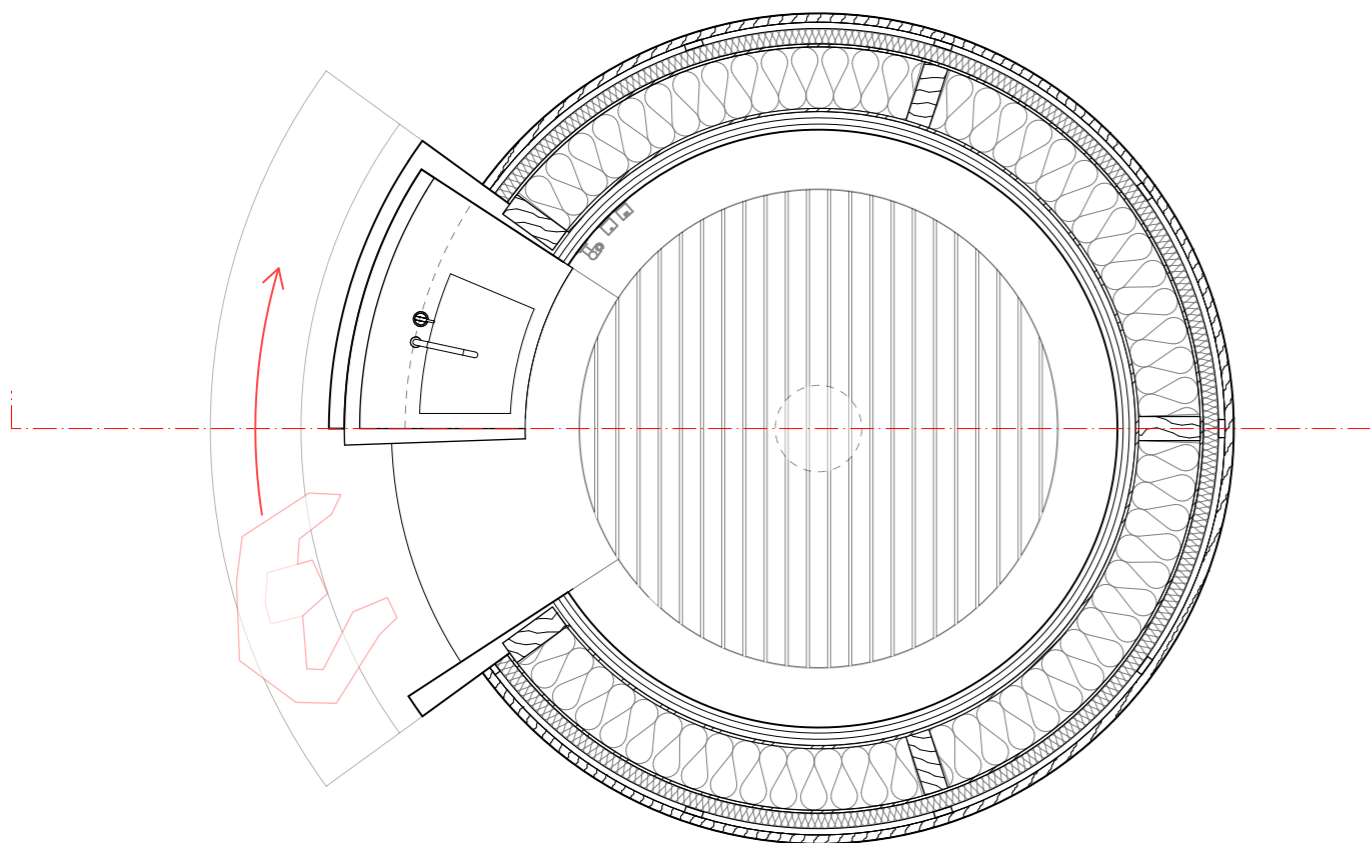
Jan Körbs, Berlin 2017

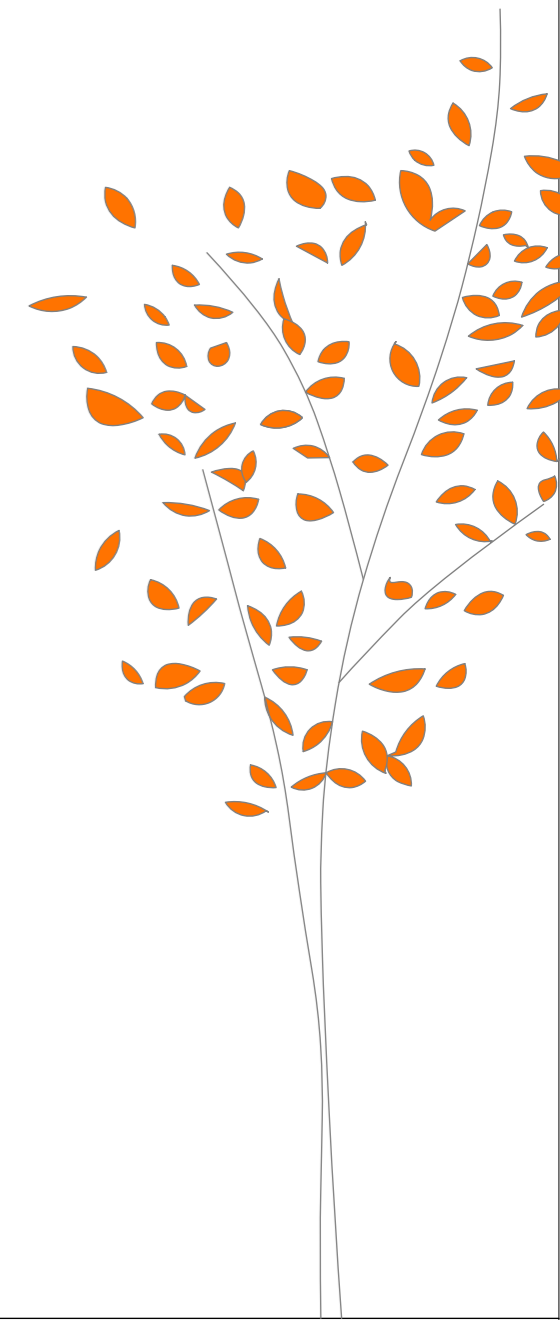
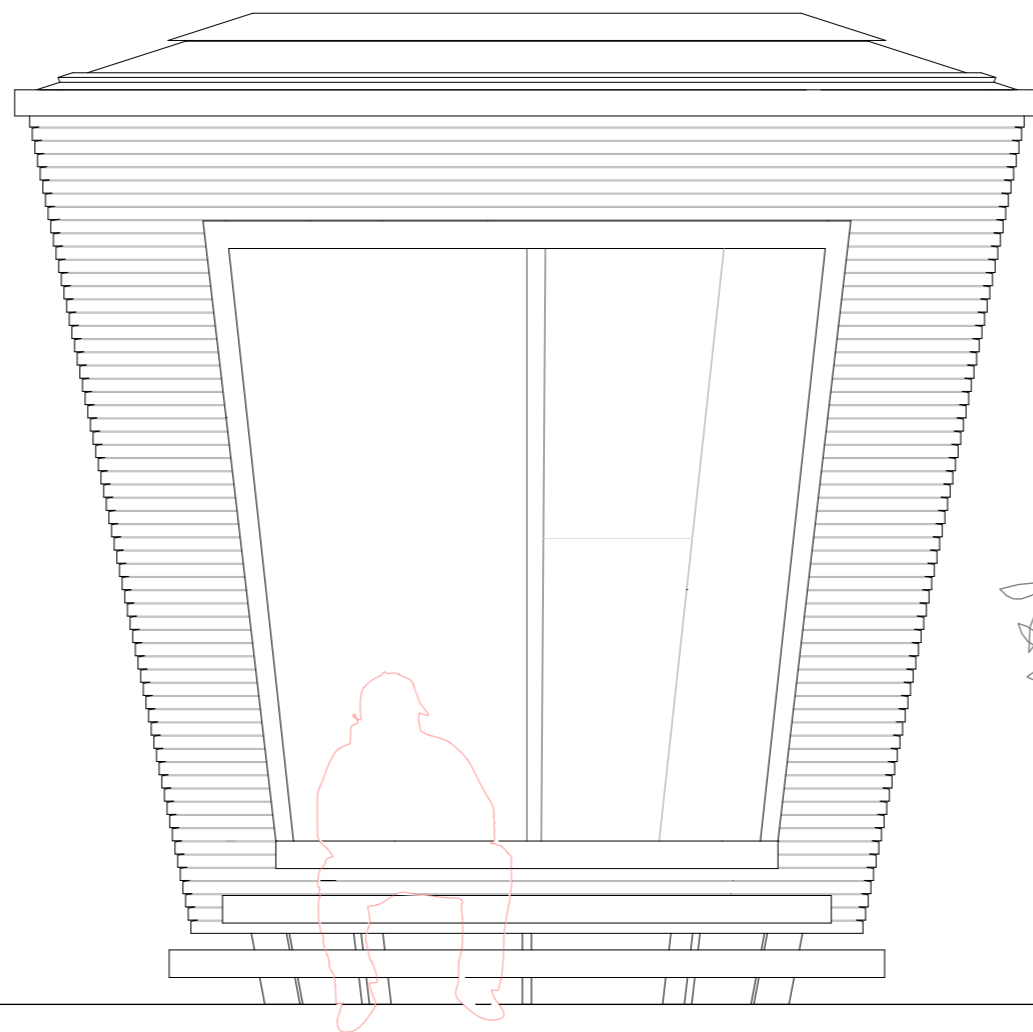
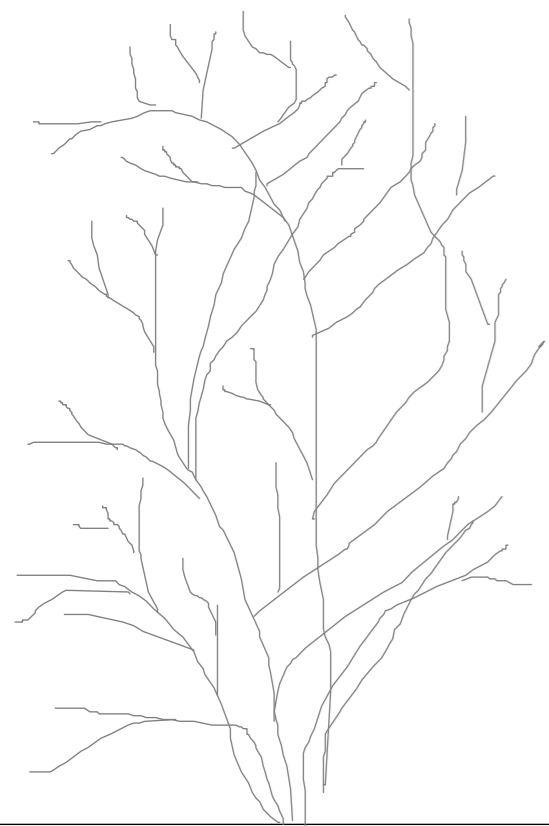


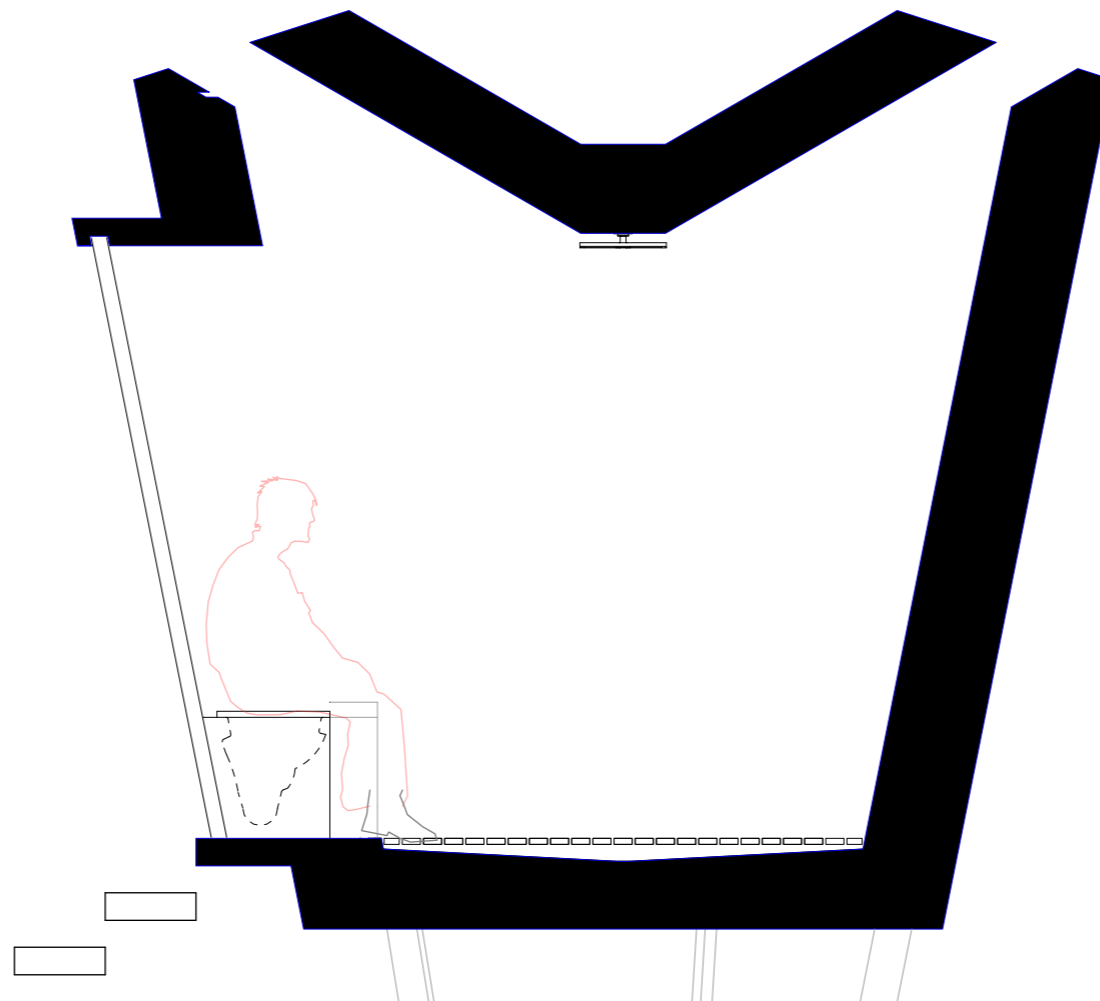
creating space :



<https://www.youtube.com/watch?v=R5kApf8ciKs>

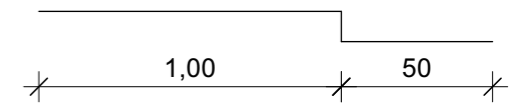


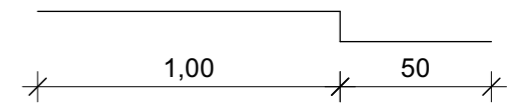
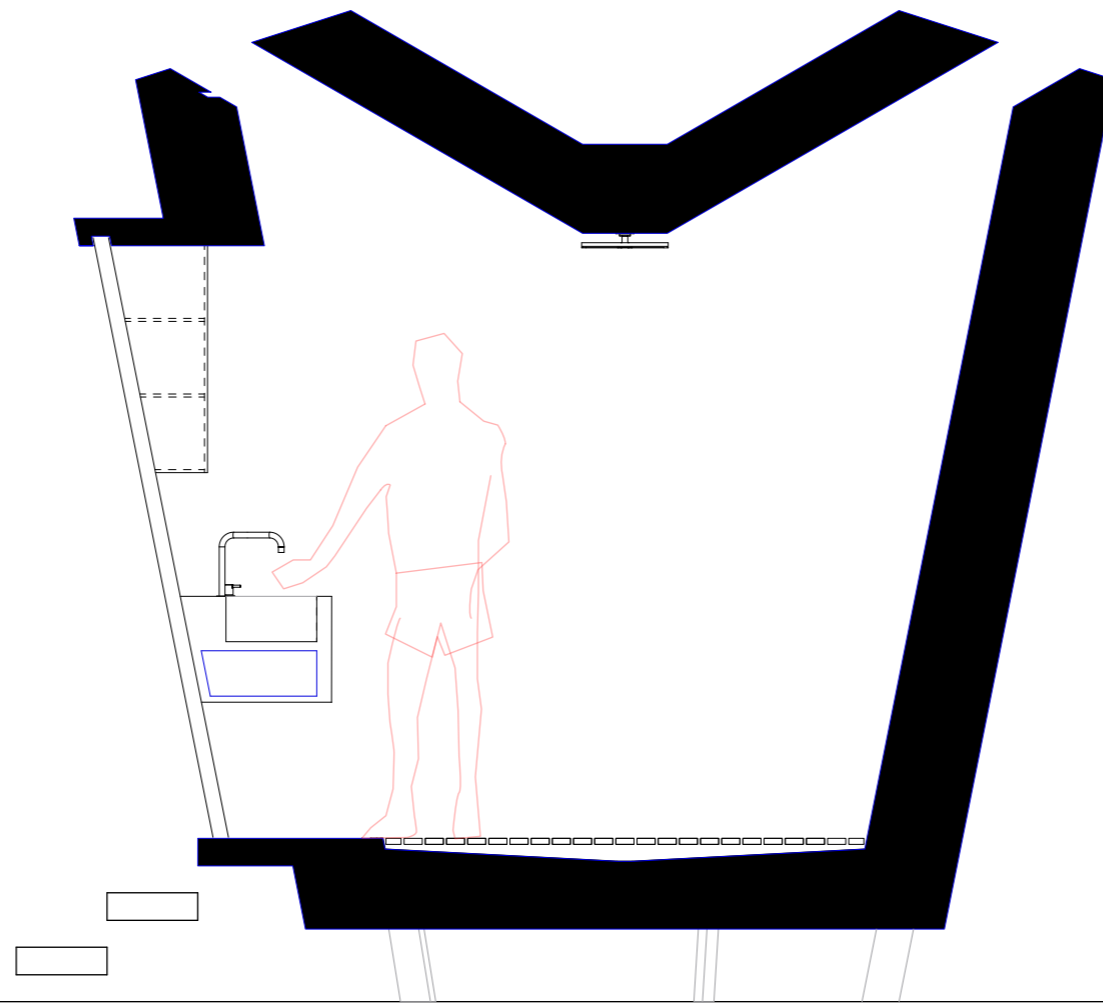


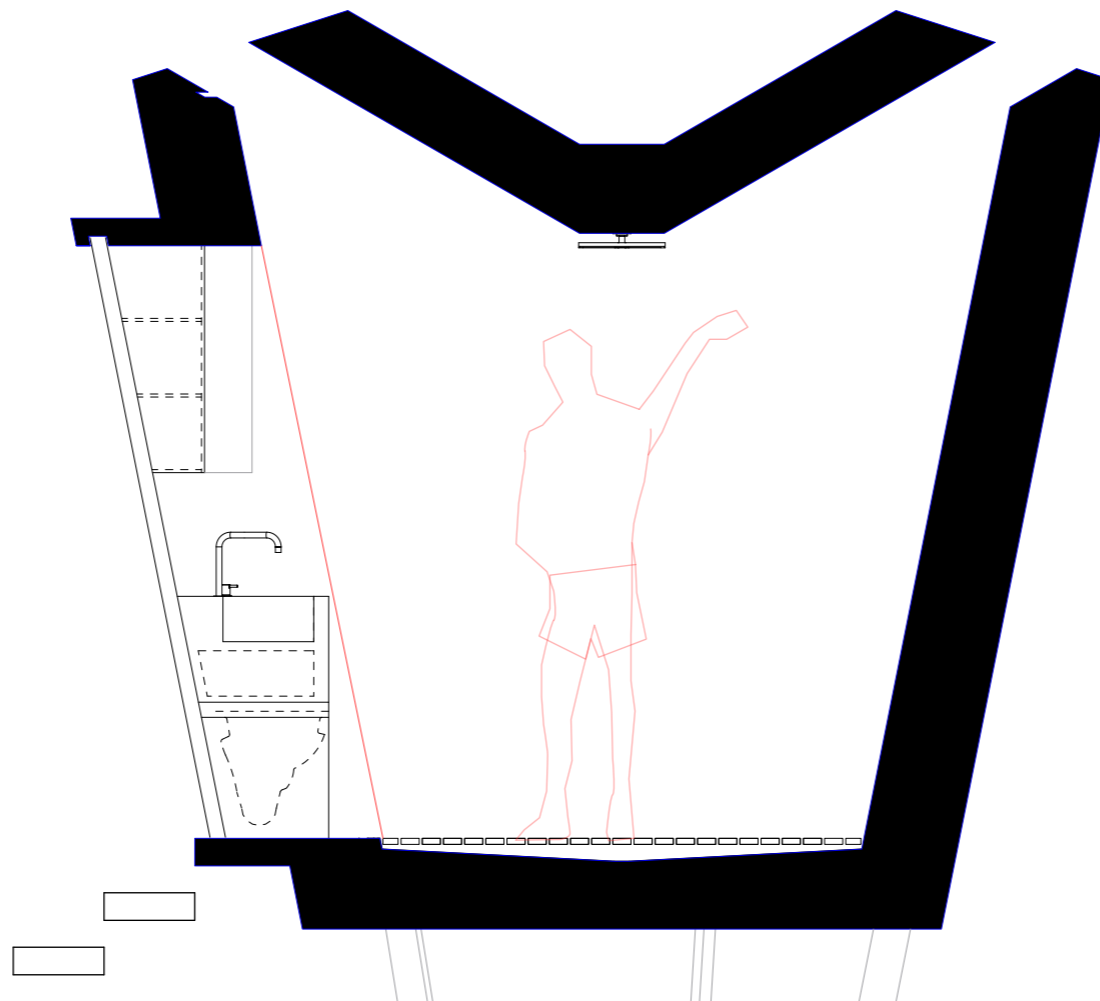


M 1/25

TOILETE

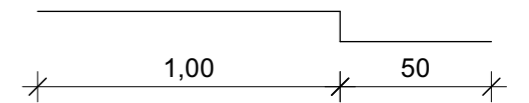


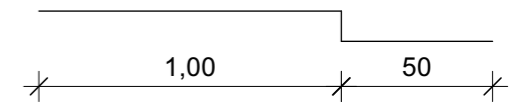
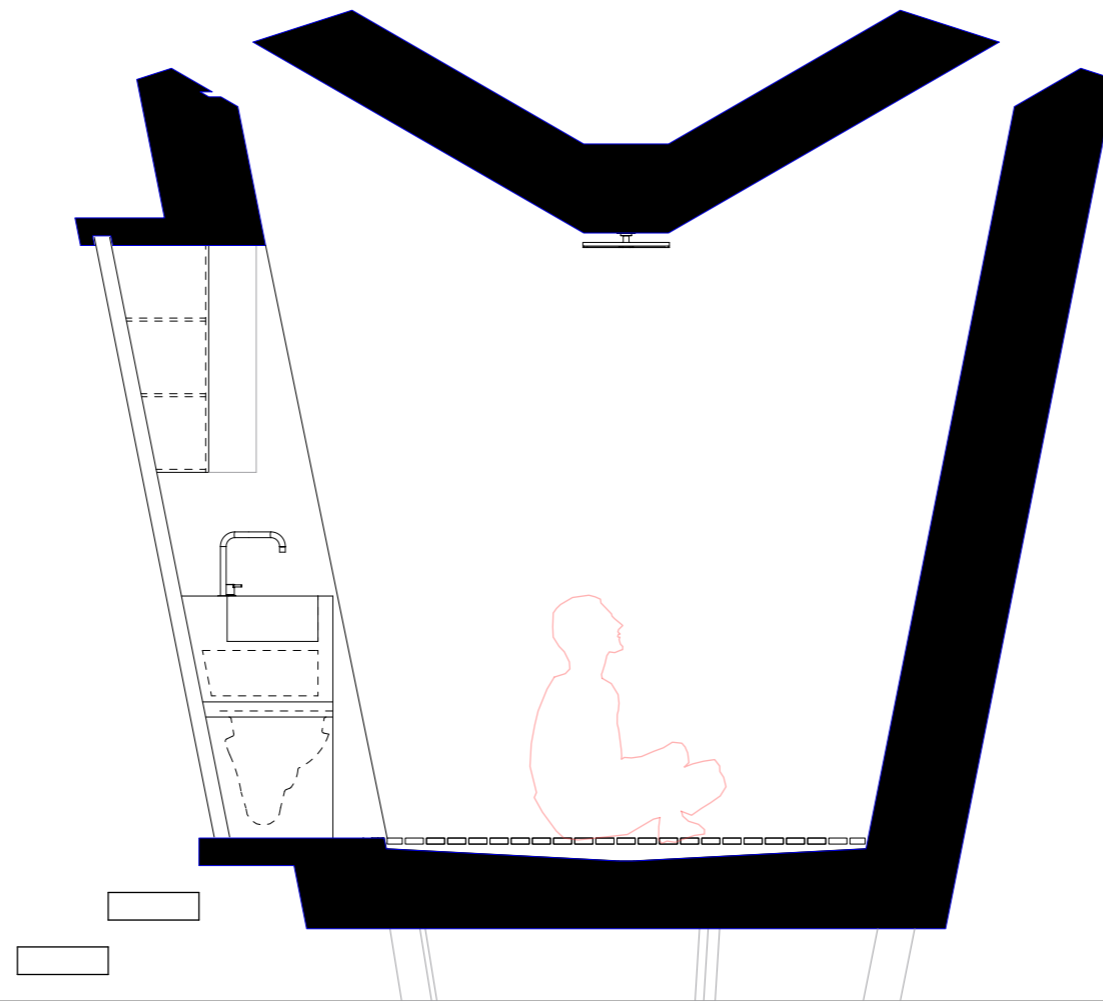


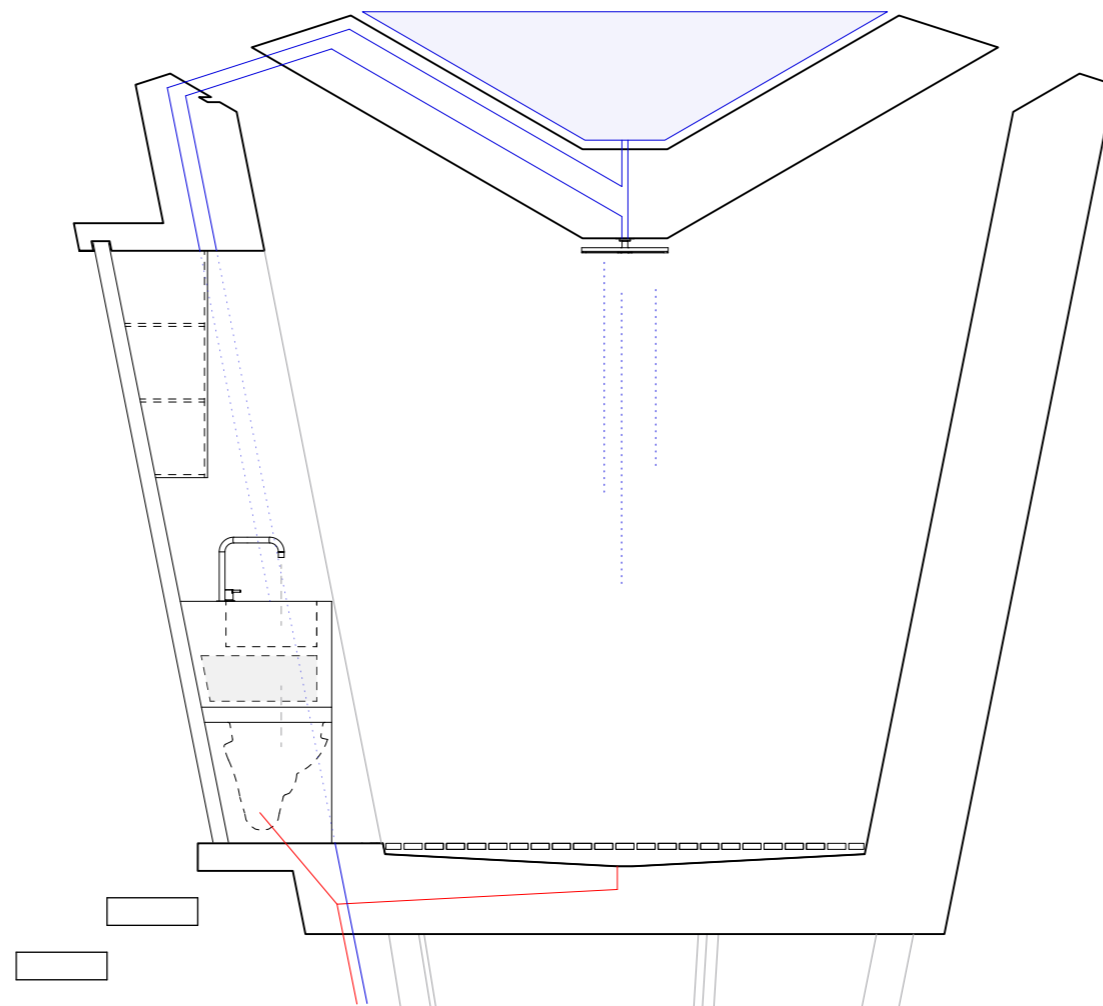


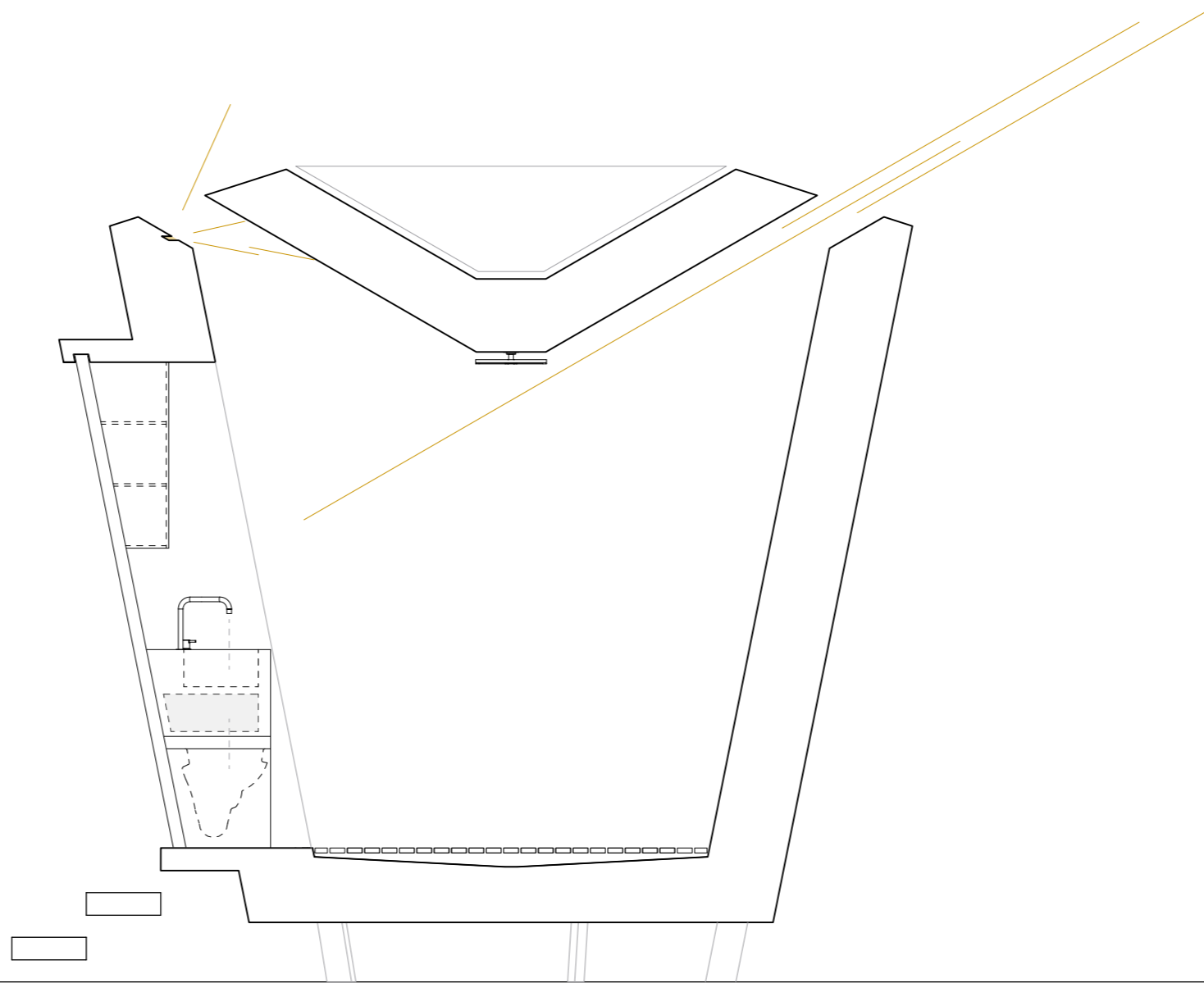
M 1/25

SHOWER



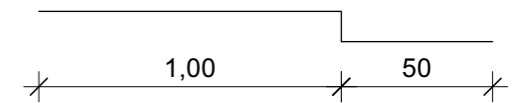


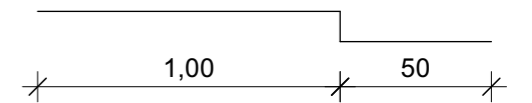
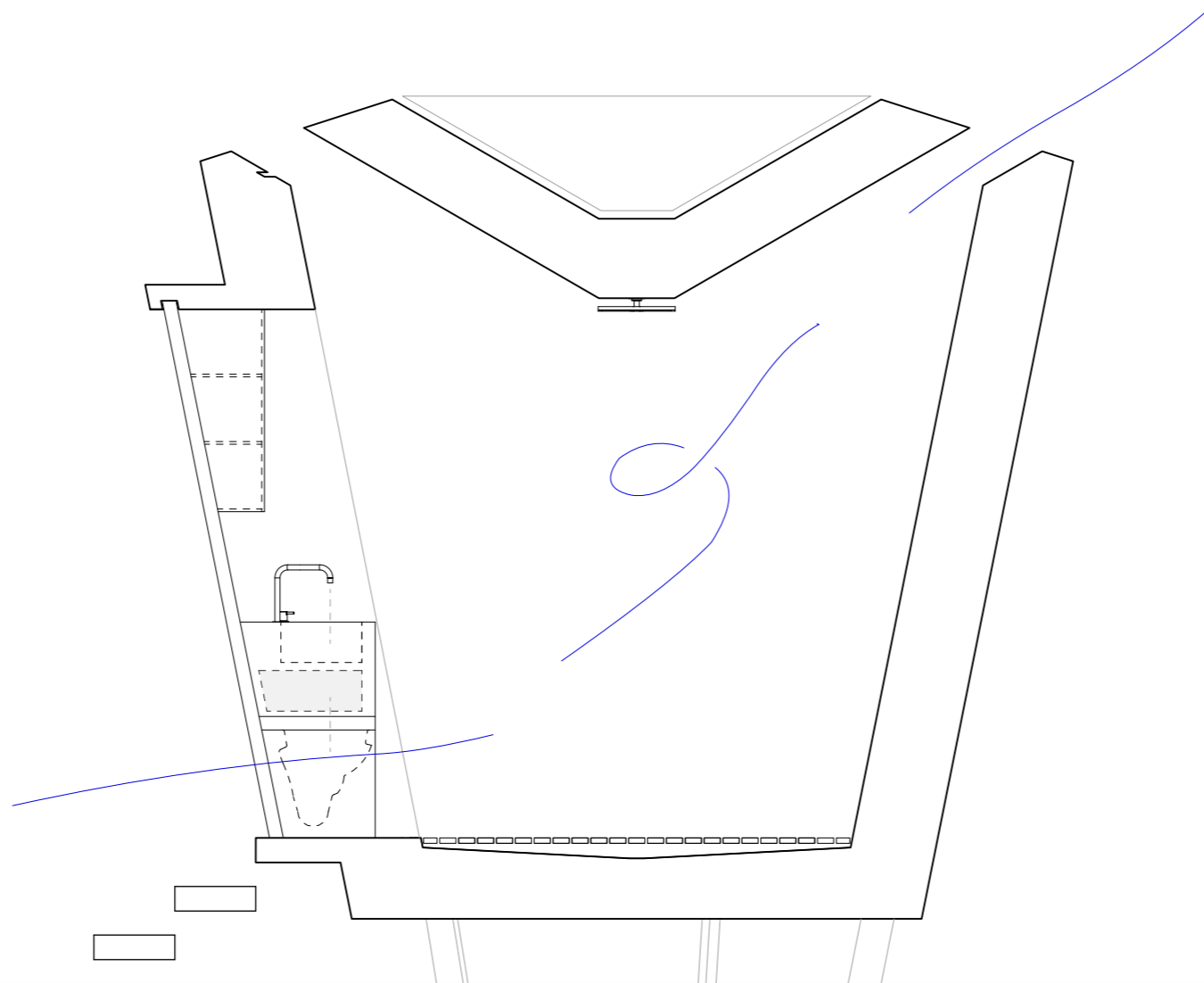




M 1/25

NATURAL / ARTIFICIAL LIGHT







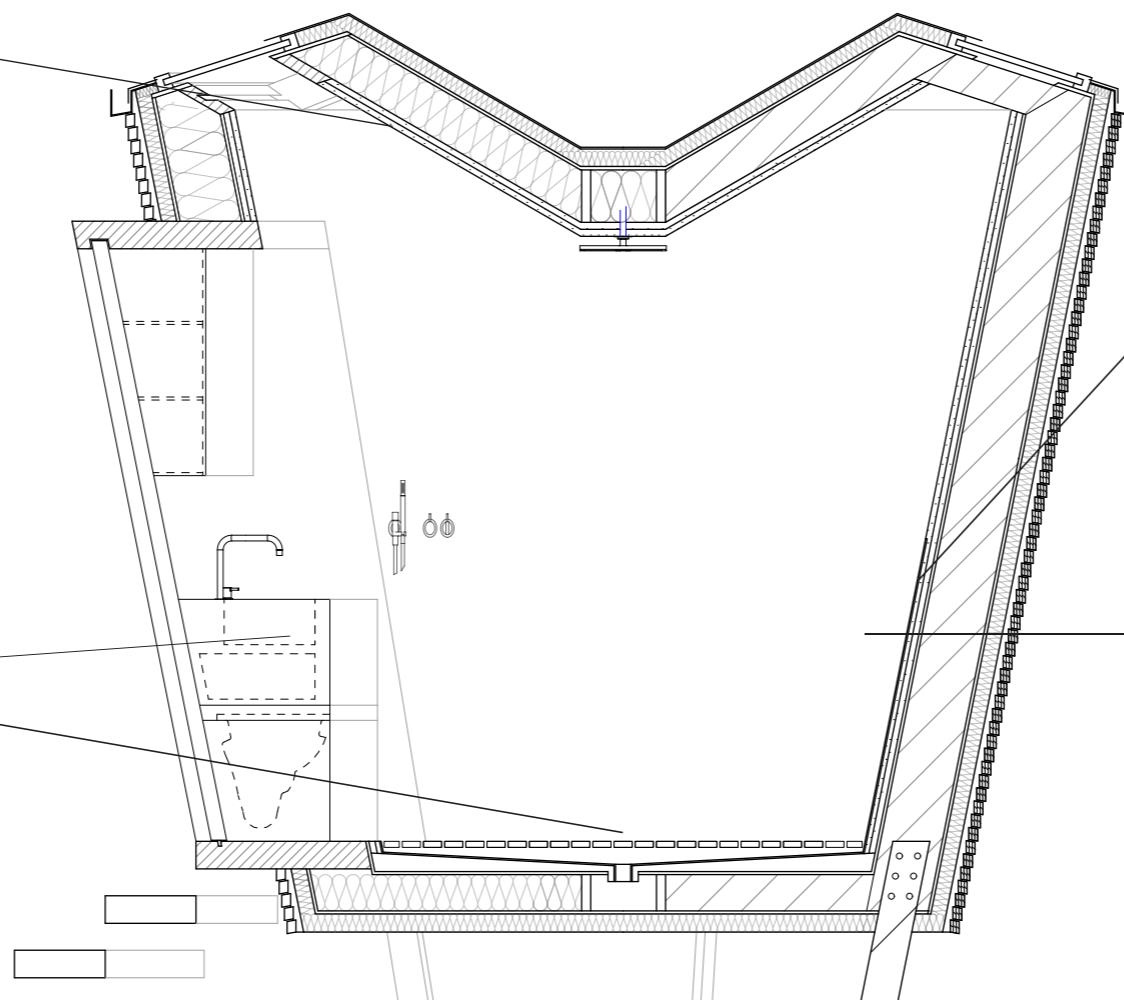
clay plaster



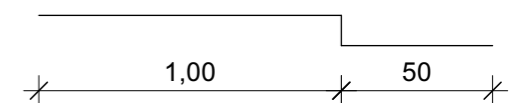
Clay casein filler are possible on all surfaces. Used on floors, walls and furniture results in an extremely robust and high quality surface. The putty was developed in our company and is produced by a special process and stabilized with casein. Casein is a milk protein which, when broken down with lime, forms a durable, strong and natural adhesive. The casein filler of the fixtures is sanded, impregnated with linseed oil and polished with a wax obtained from the leaves of the carnauba palm, which grows in Brazil and is the hardest known natural wax. This makes the surface waterproof, hard and easy to maintain.

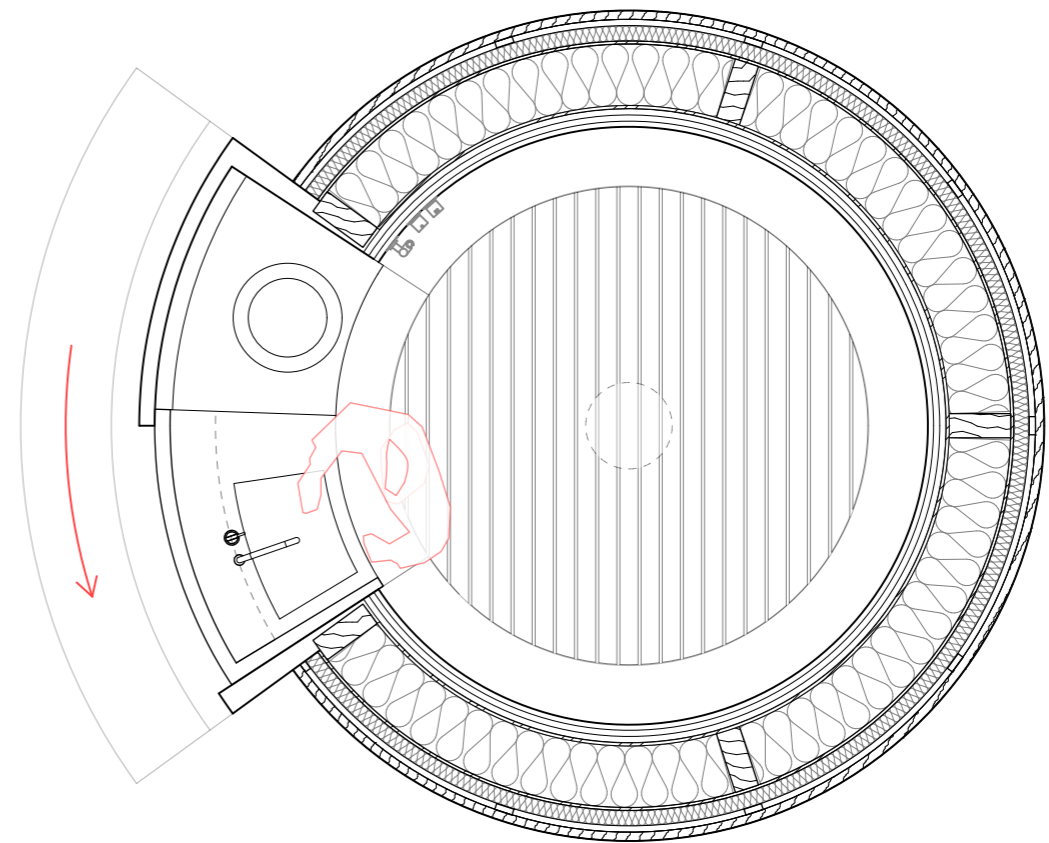
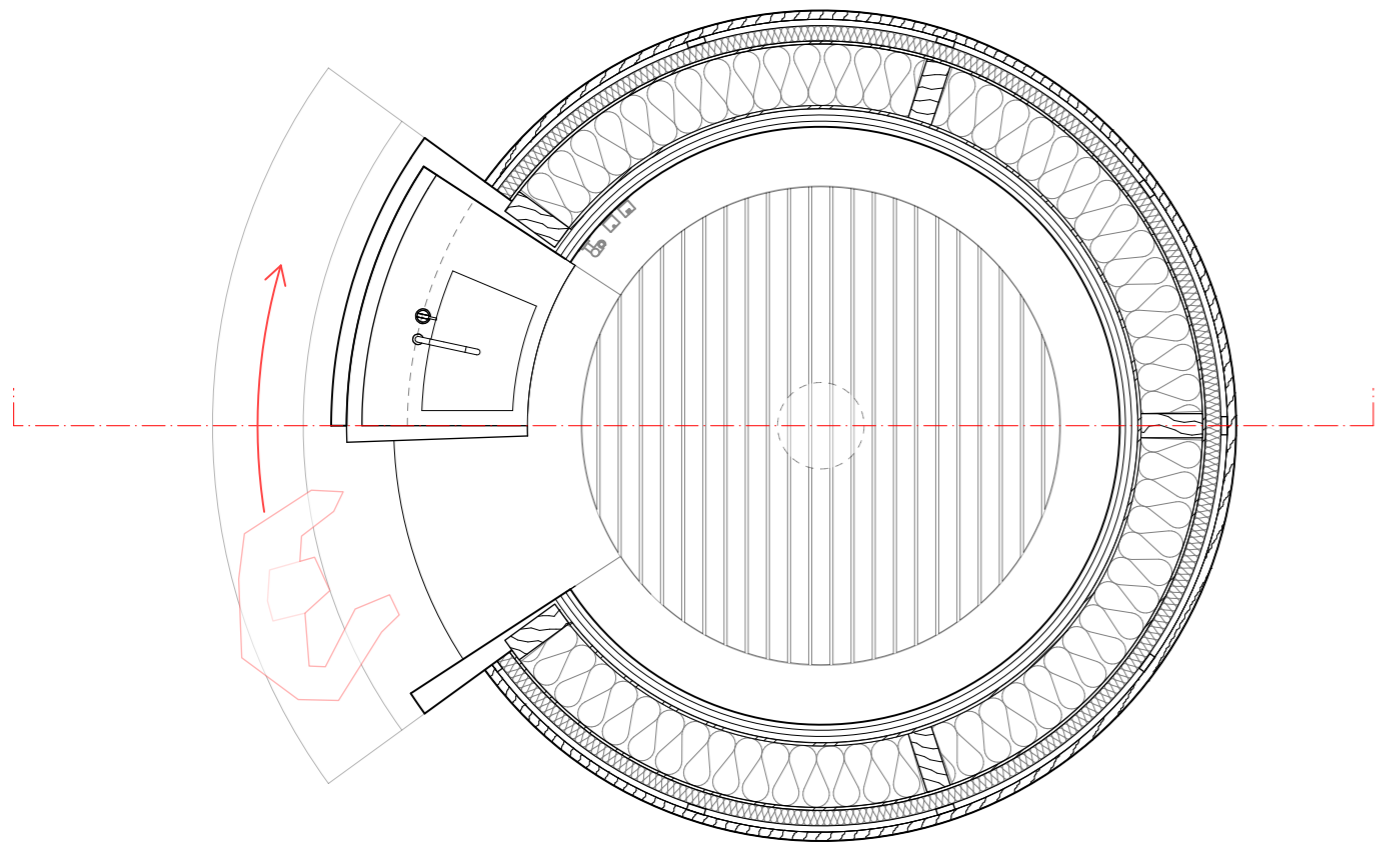
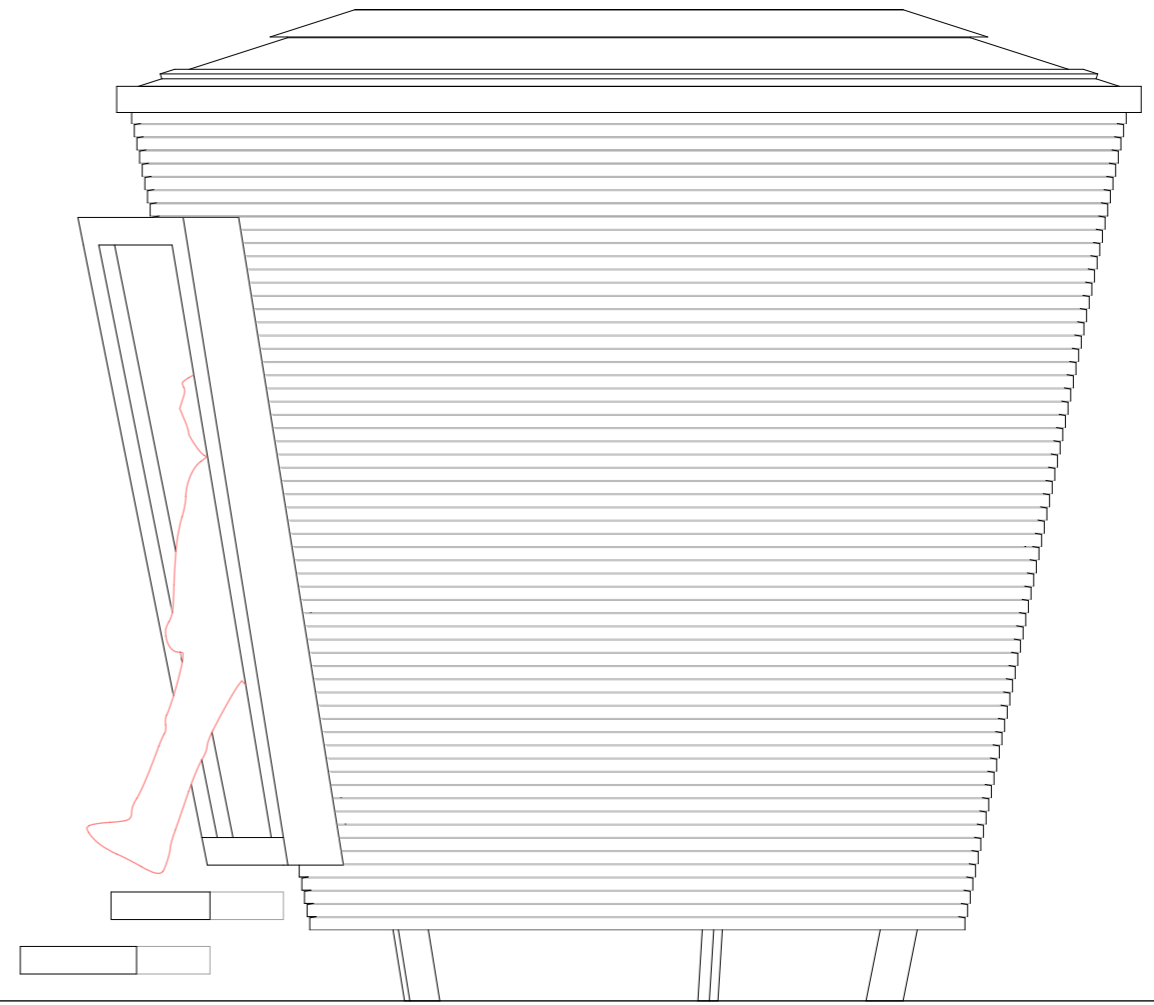
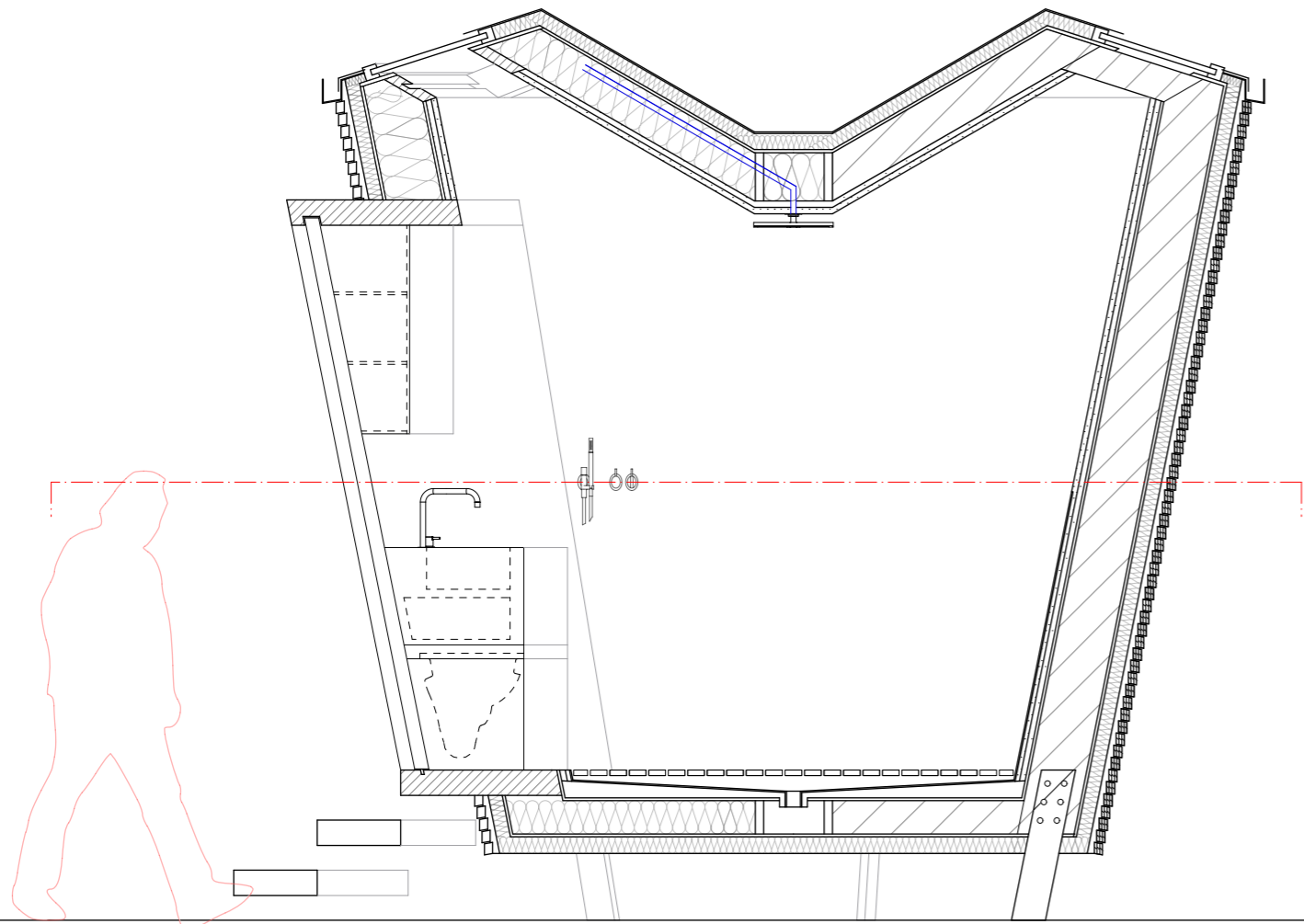


furniture: oak
floor: oak 60 / 20



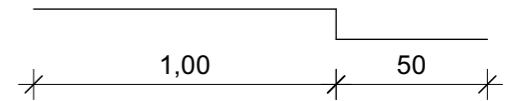
- clay casein filler 0.5 mm
- clay plaster 20 mm
- clay building board 20 mm
- vapour barrier
- wood substructure 10 mm
- wood structure + insulation 200/ 80 mm
- wood substructure 10 mm
- Insulation outer layer 50 mm
- windshield
- back ventiilation 30 mm
- wood facade + Substructure 30 mm





M 1/25

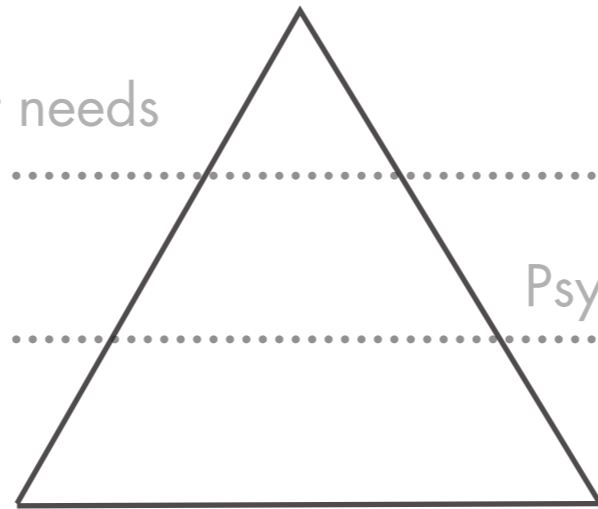
PROJECTION



@Working

Self-fulfilment needs

Psychological needs



Yanqi Feng

needs for an Architect

Basic

*storage

- painting
- book
- material
- model
- paper
- drawing tools

*drawing

- desk for computer
- sitting chair
- big desk for hand drawing

*natural light

Psychological

*space sense

- daylight
- artificial light
- atmosphere

good view

demonstrate

- portfolio
- painting
- idea
- model

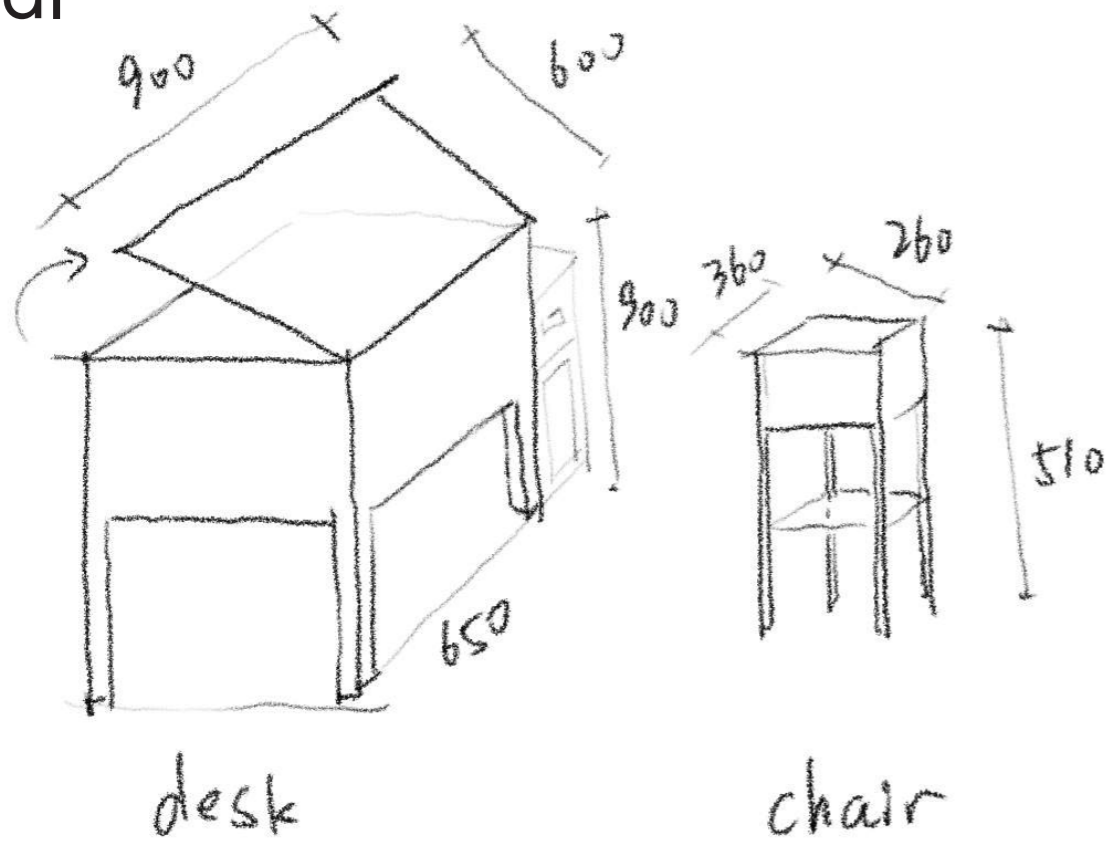
Self-fulfilment

(exterior space)

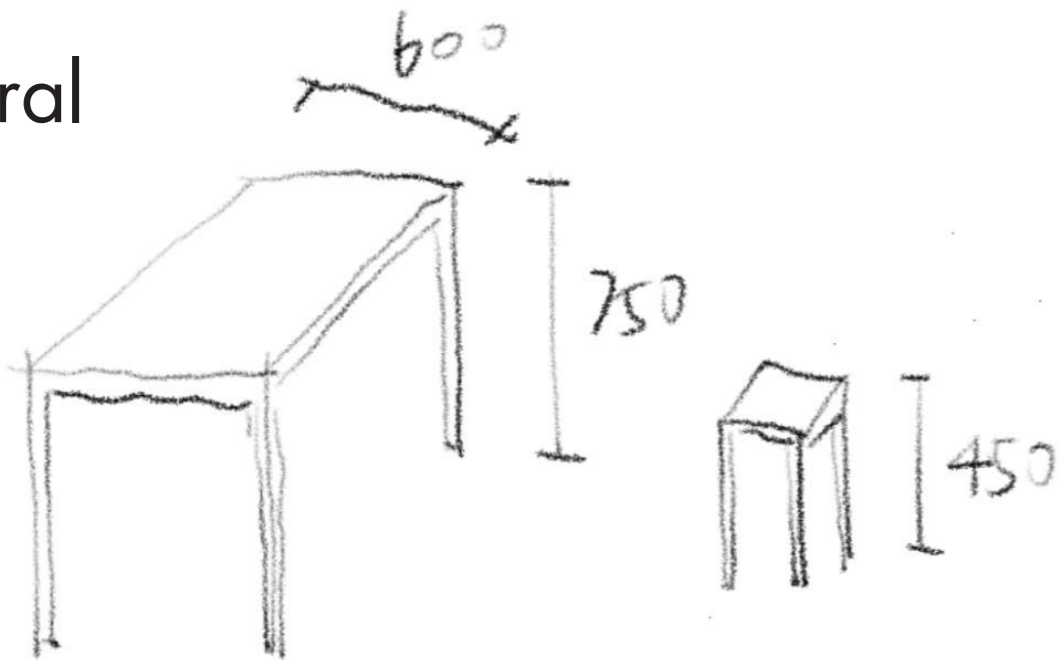
- thinking
- relaxing

About Table

special

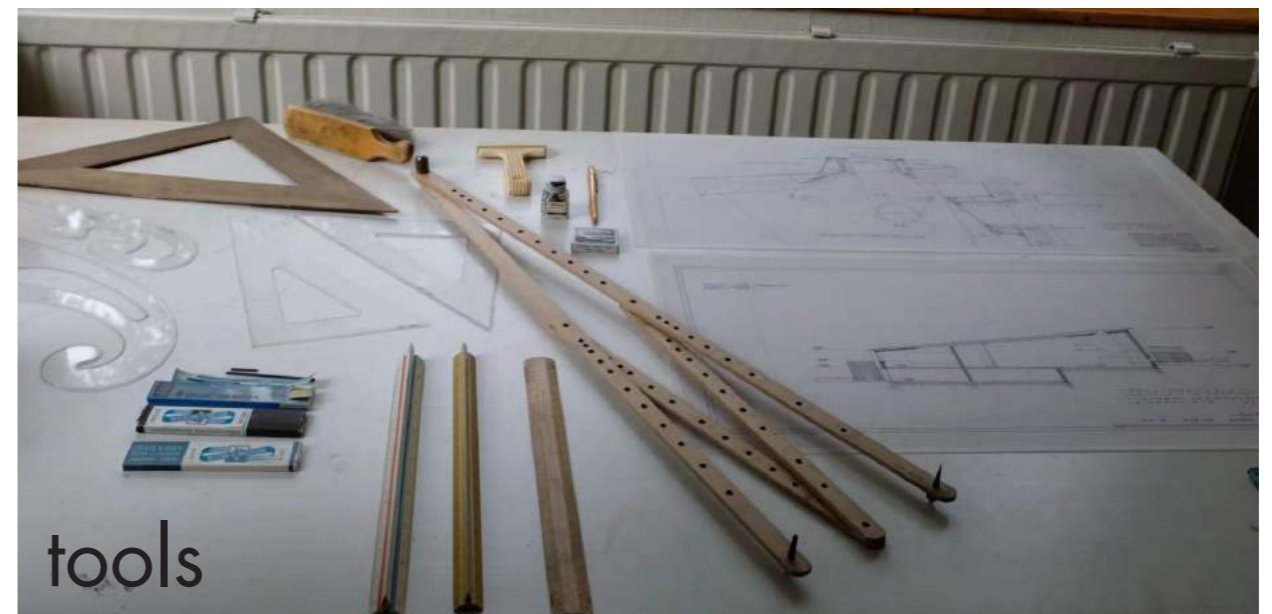
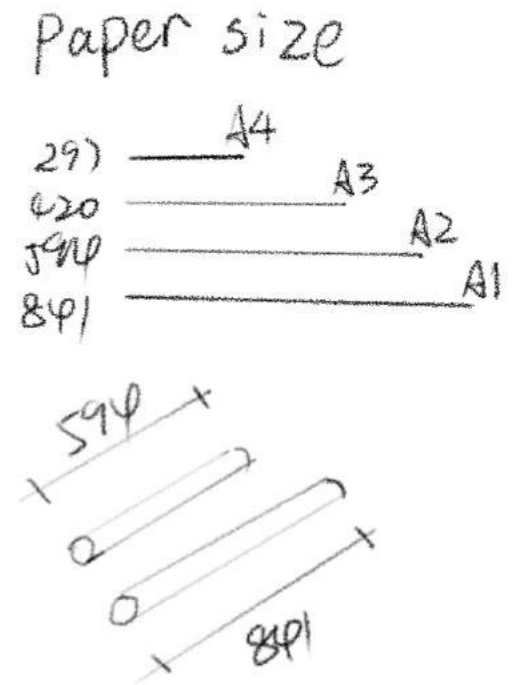
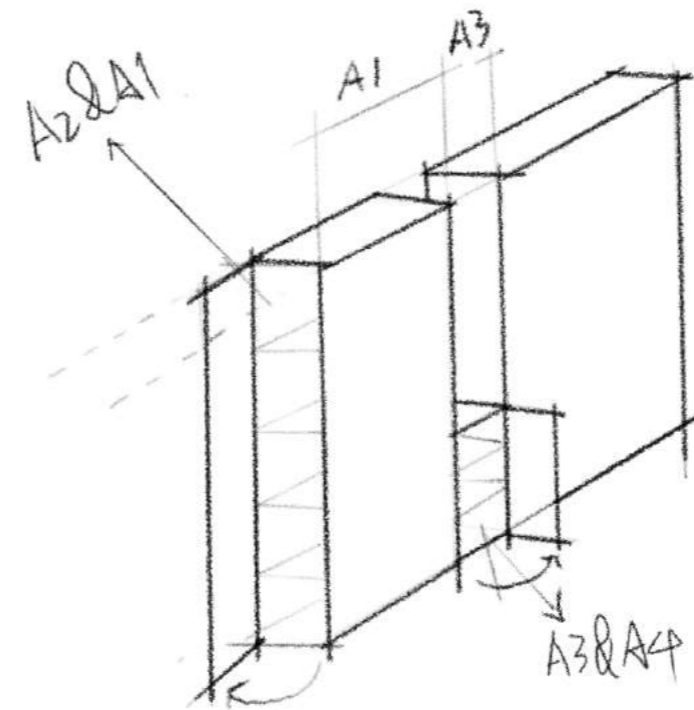


general



About Storage

different size



Working system

① skylight



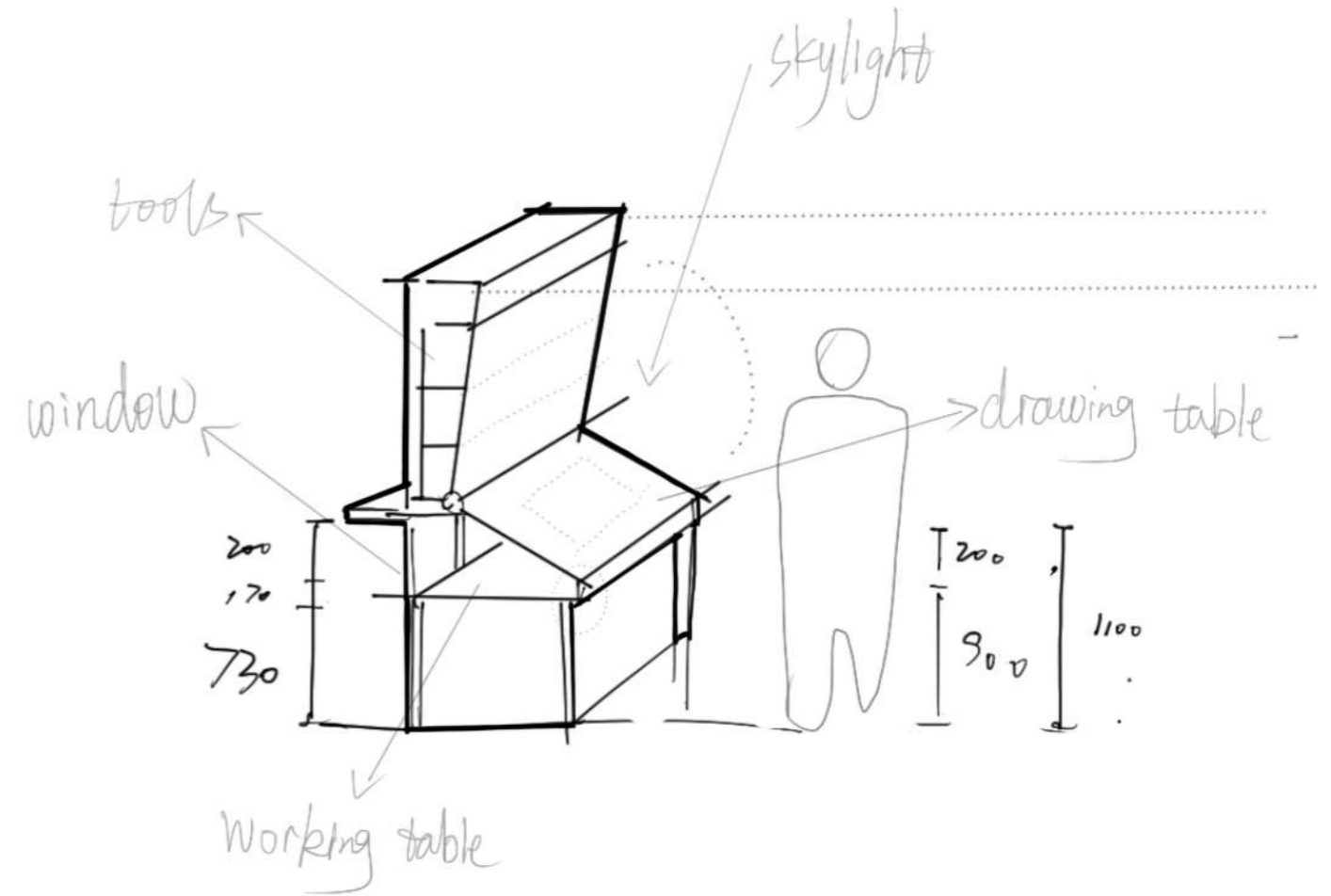
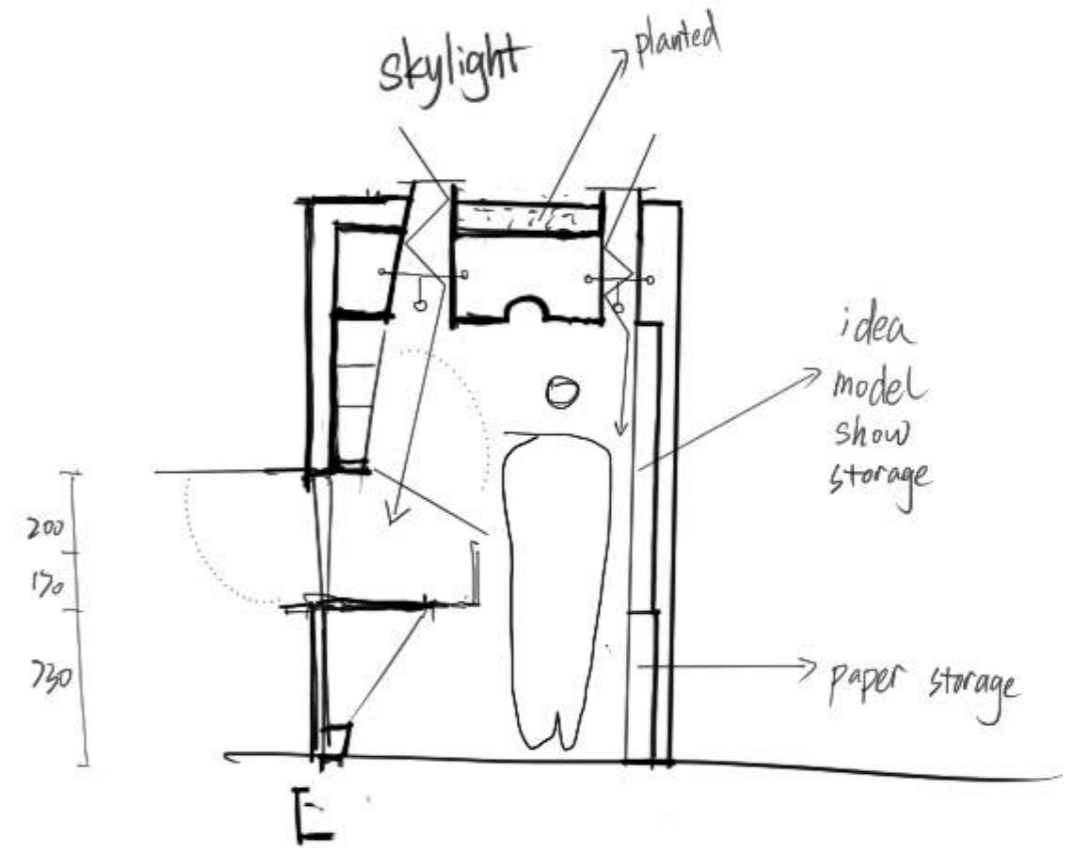
② window



③ table



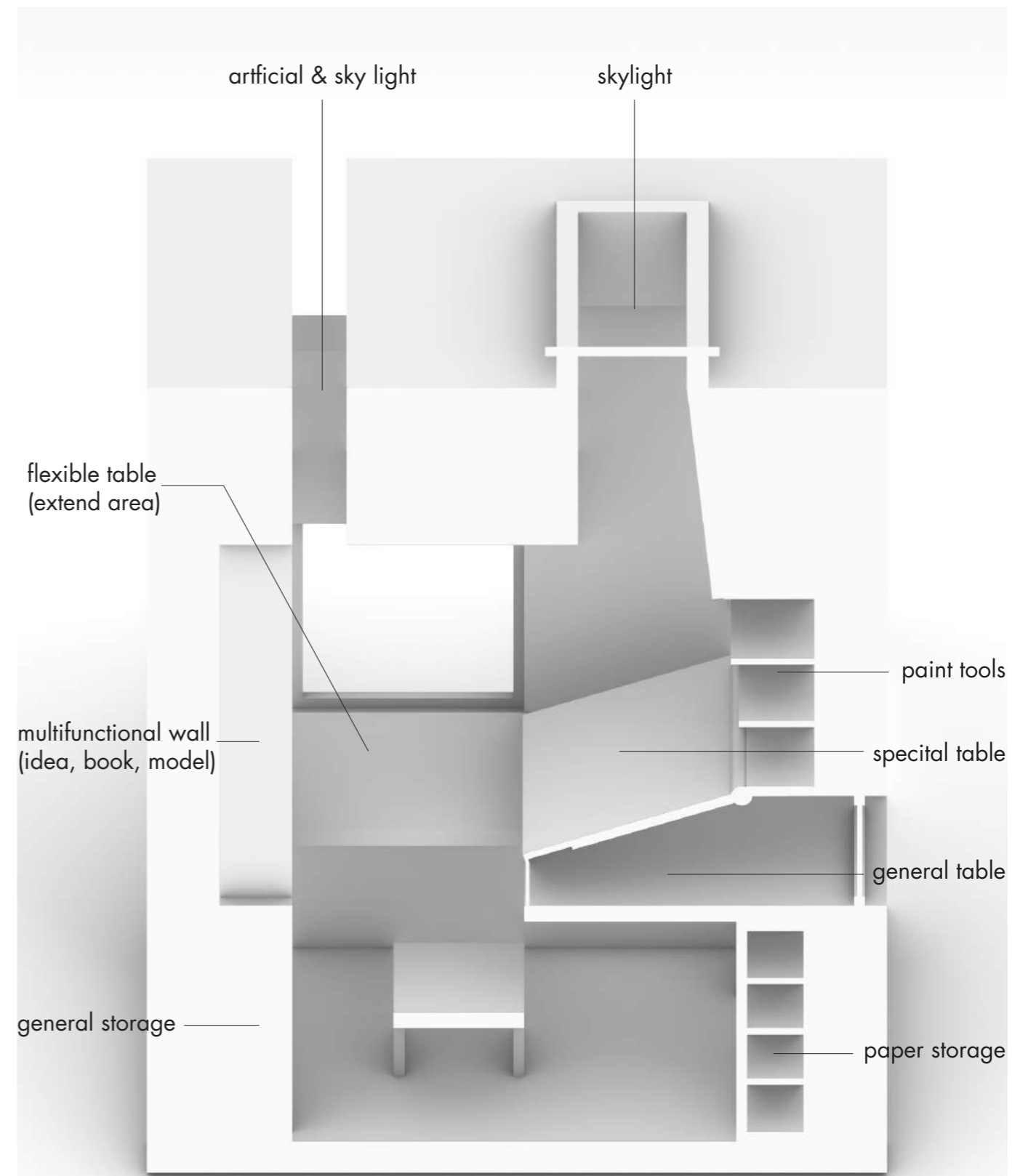
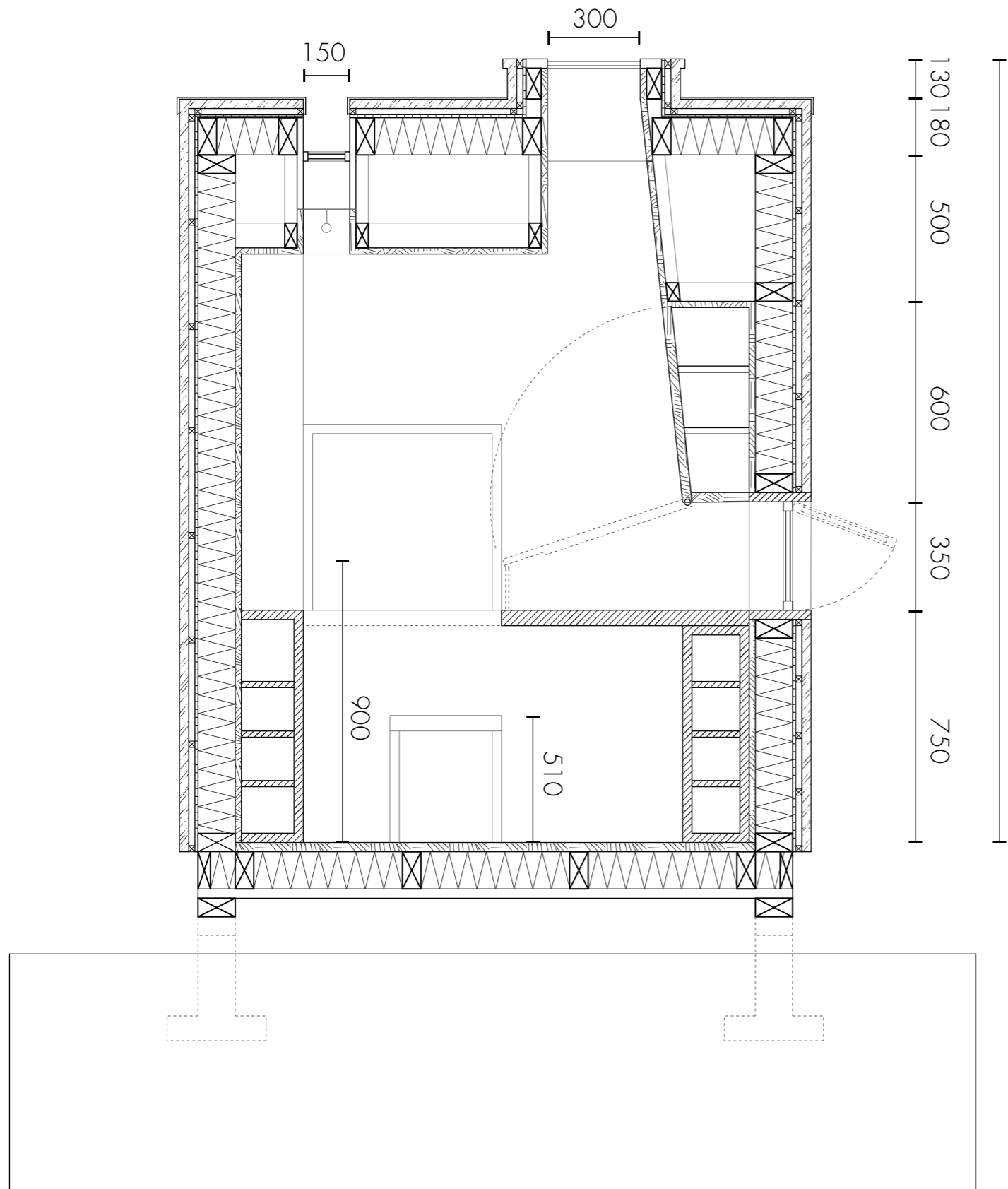
④ storage



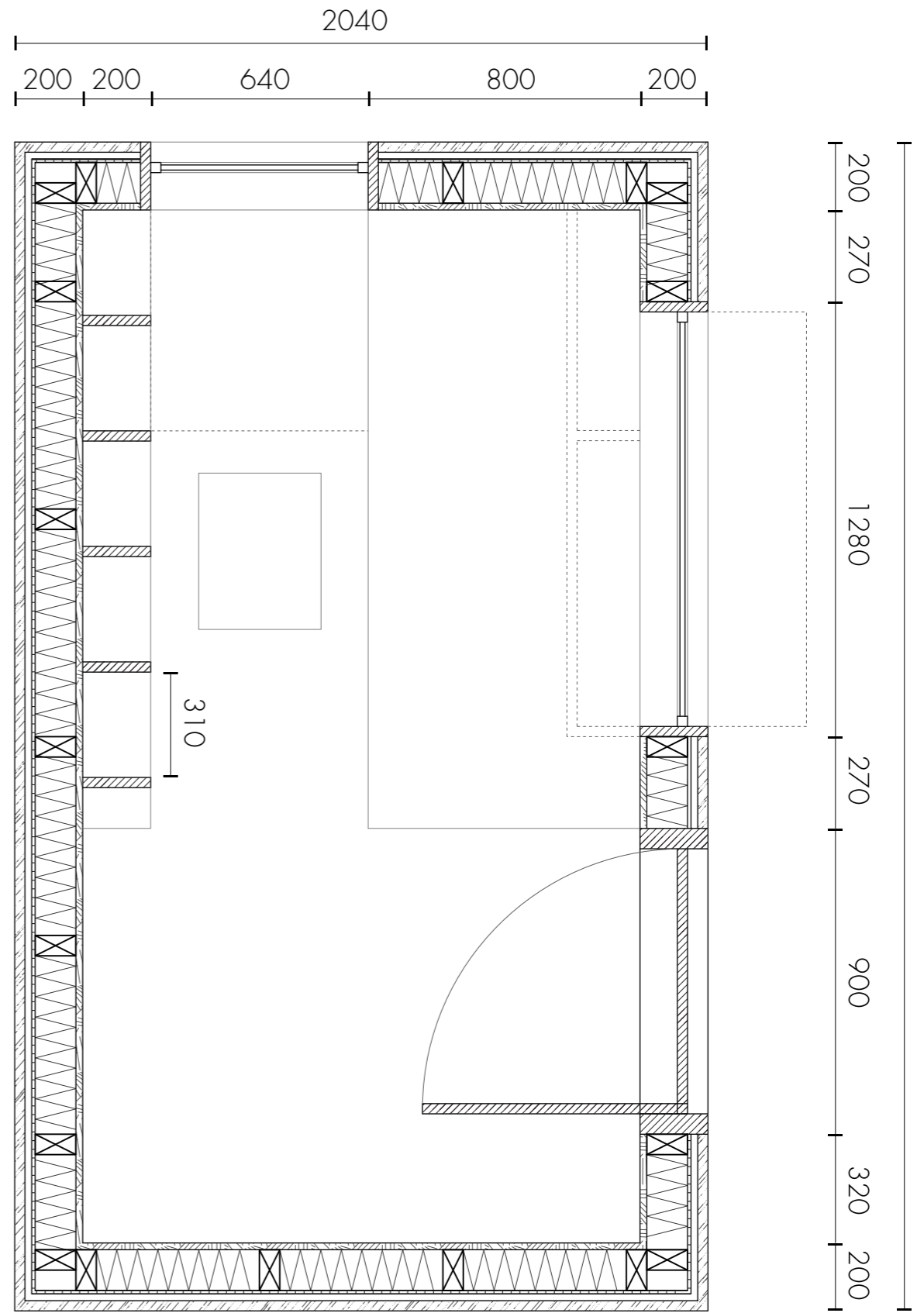
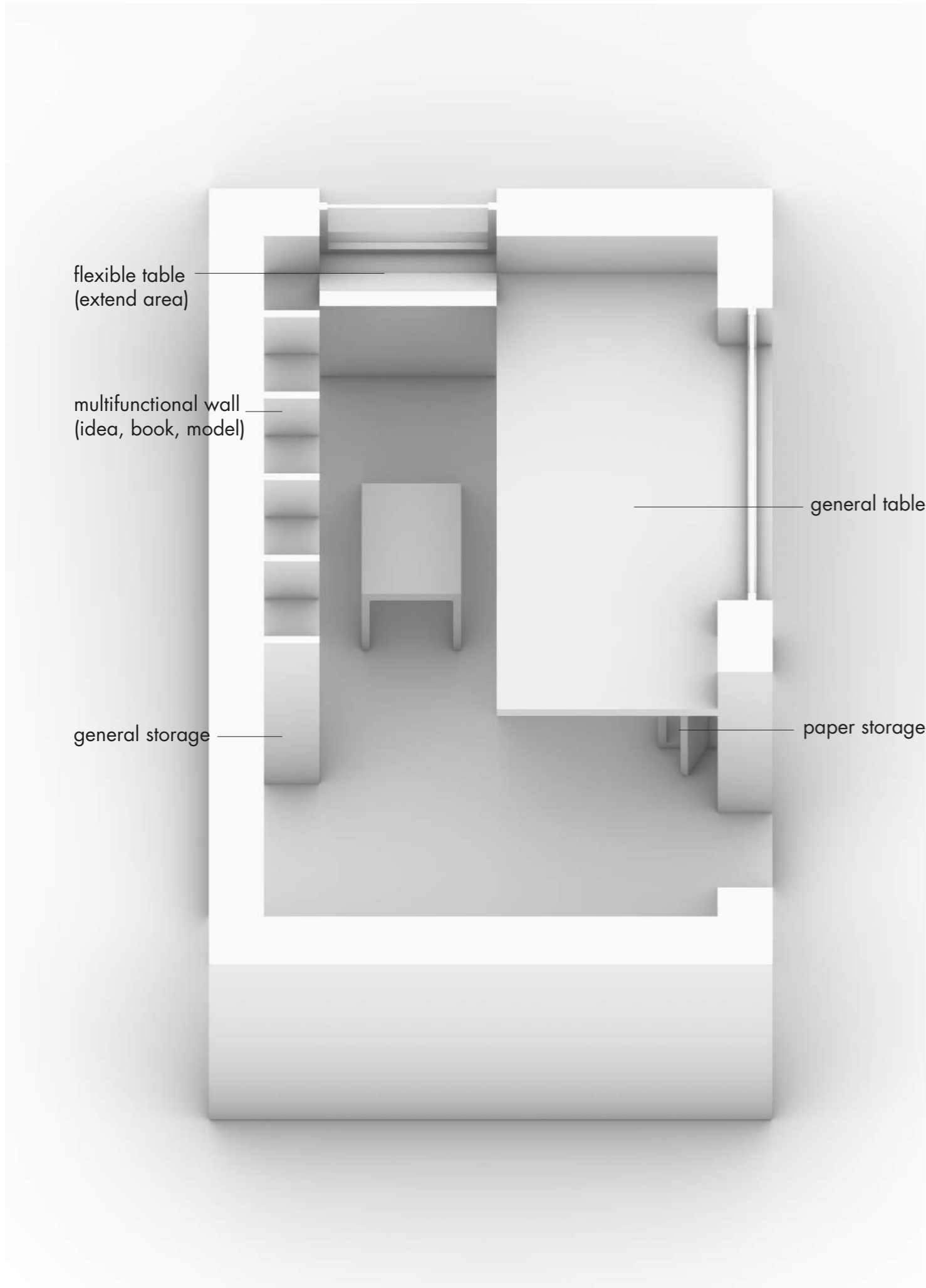
Basic elements of building
- roof, floor, wall, window, door



Various of Needs



Section



Plan

Materials



larch timber



birch plywood



birch

