

**Koh Samui**  
Koh Pangan - Suratthani - Thailand

# Contents

## Introduction

Geolocation  
Project site

## Concept

Masterplan

## House type

References  
Technology  
Drawings  
Materials

## Technical Sheets

# Introduction





# Existing site

Ko Pha Ngan is an island in the Gulf of Thailand in southeast Thailand in Surat Thani Province. It is part of the Samui Archipelago. Ko Pha Ngan has two sister islands: the larger Ko Samui to the south and the smaller Ko Tao to the north. Due to its topography, the population hugs the coastline. The mountainous interior is generally inaccessible. More than half the island designated as national park and Ko Pha Ngan has more than 80 km2 of relatively unspoiled rain forest with diverse flora and fauna. It is also considered a spiritual place, with numerous Buddhist temples around the island and a thriving spa, retreat, and meditation industry.



Koh Pha Ngan island



Aerial view of project site with existing diffuse resort



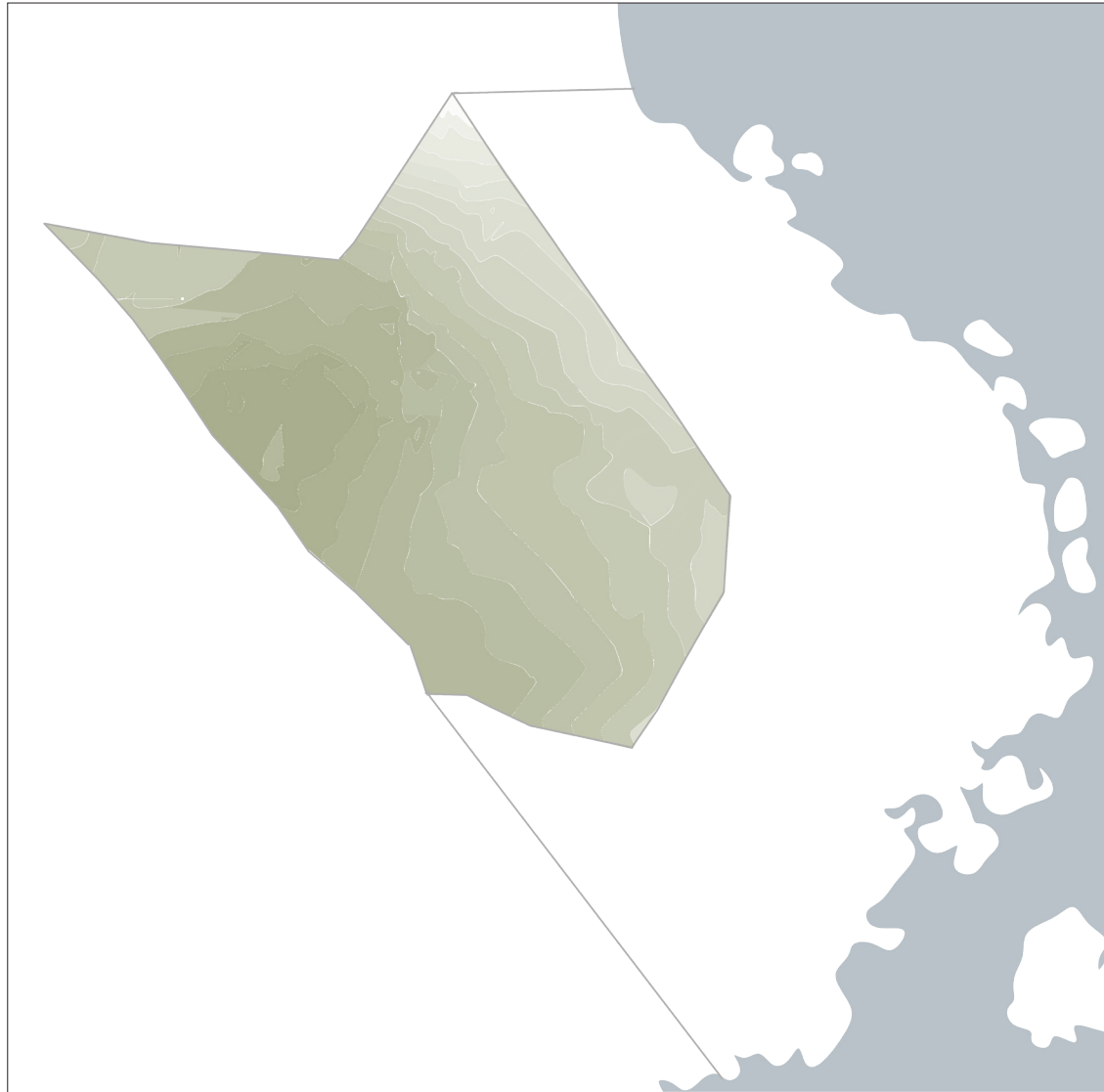






# Concept

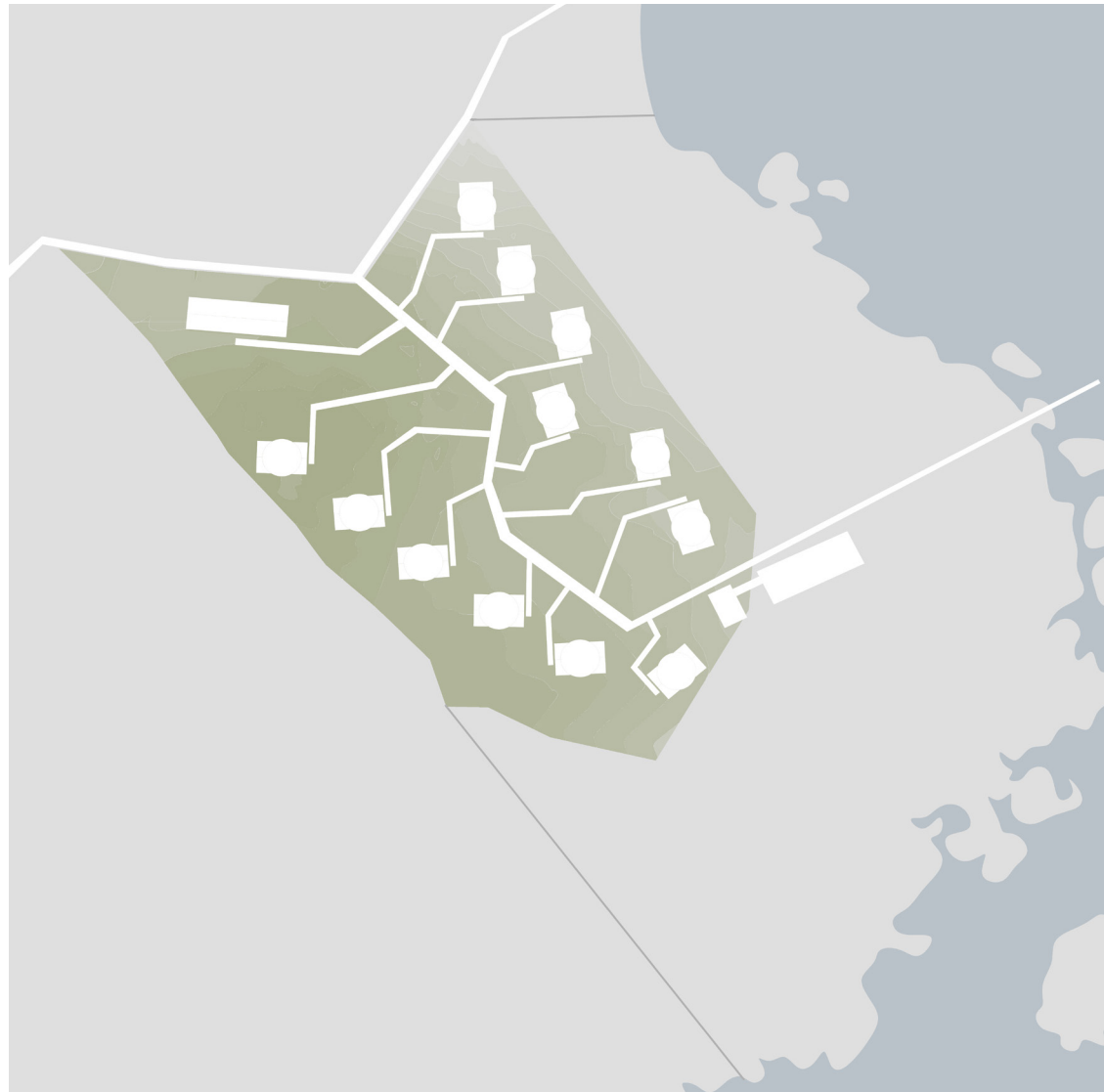




Topography



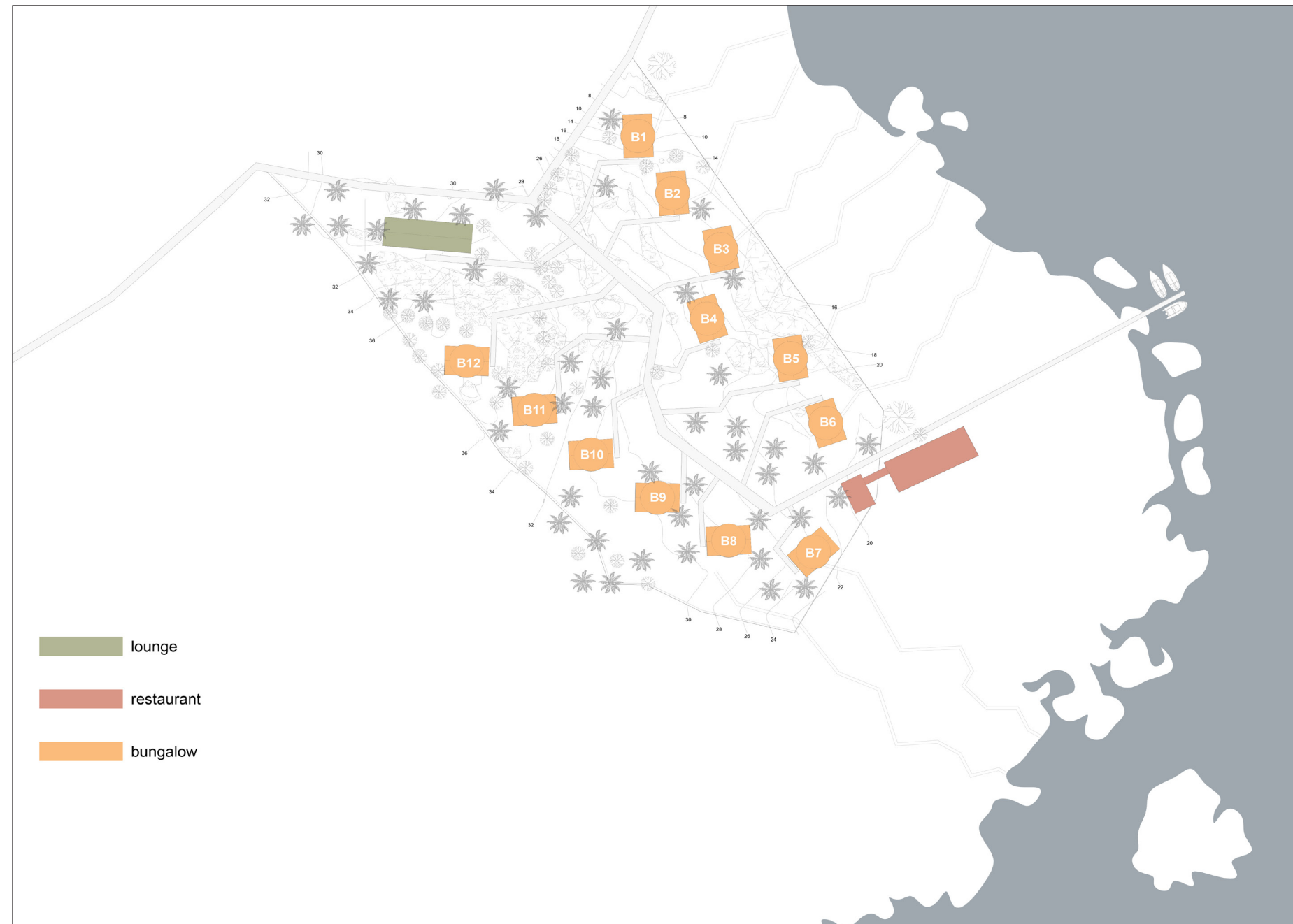
Aerial view of project site with existing diffuse resort



New development



New development position



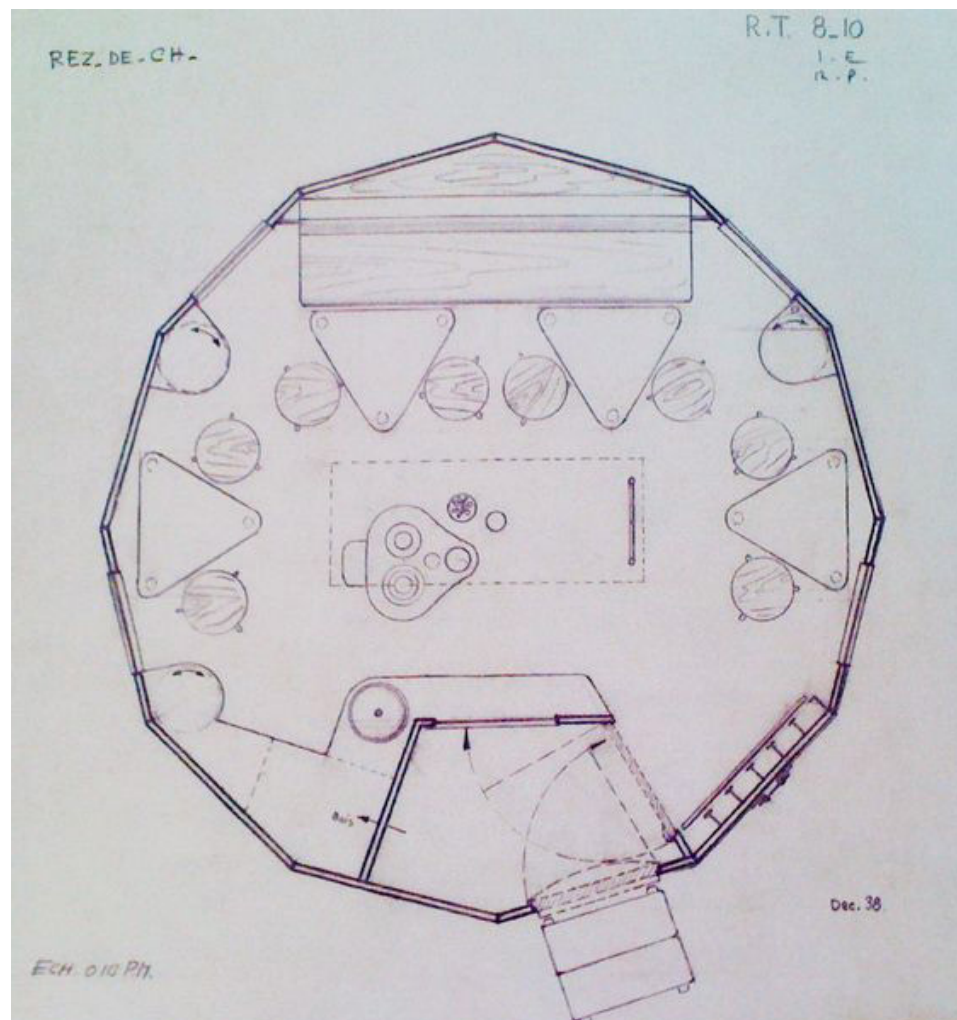






House type

References



**Le refuge tonneau, Charlotte Perriand, 1938**



Navigator movie, 1986, Disney





**Meditation temple, Bangkok**



Installation, Jean Prouvé, Galerie Patrick Seguin, New York





Three priests and their umbrella man



The umbrella





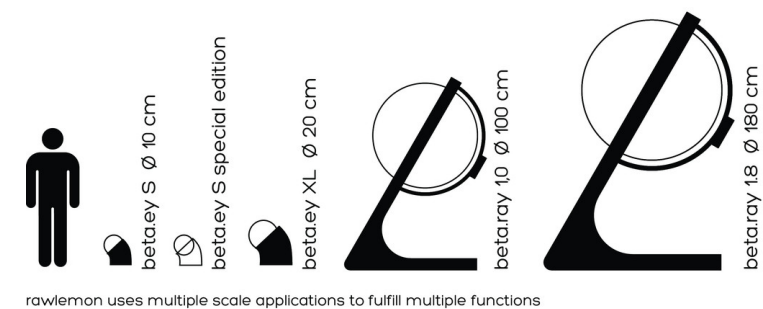
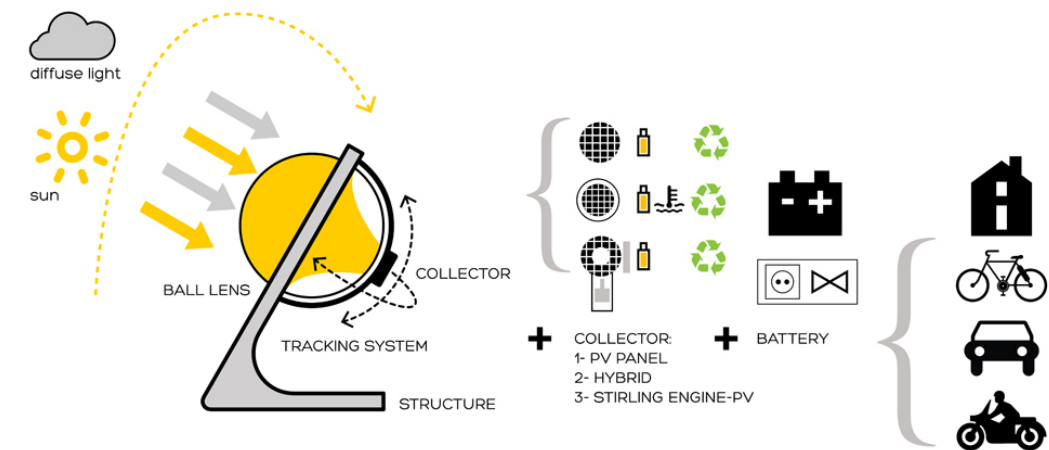
**The columns**



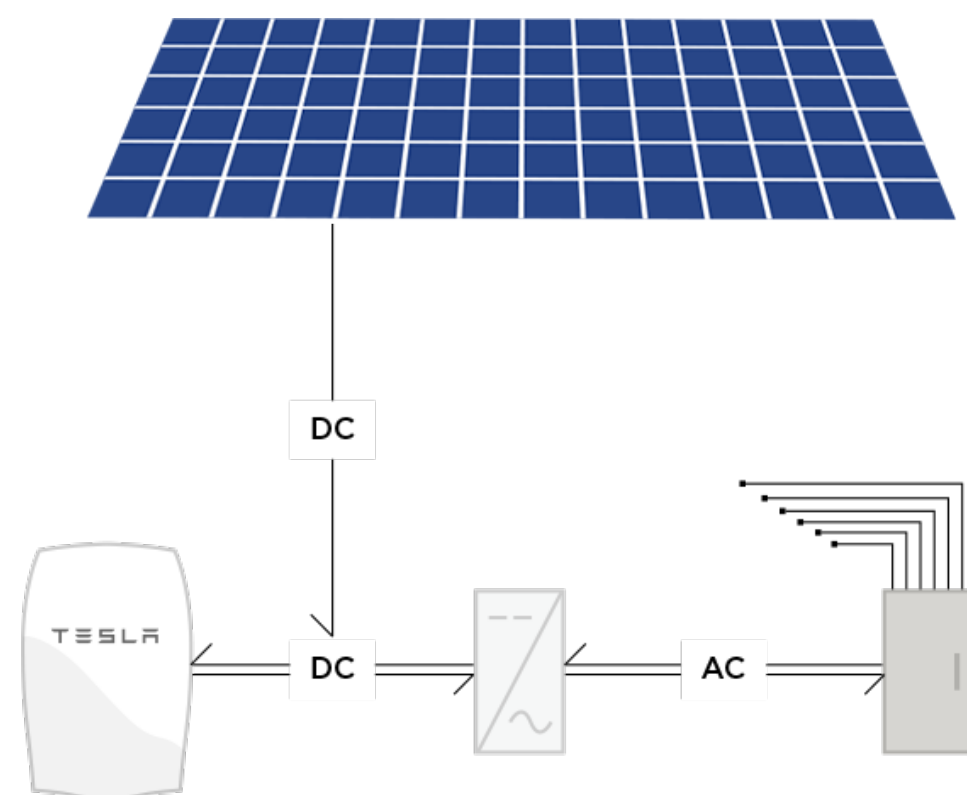
**Solar Cap**

# Technology





Rawlemon solar ball



### How it Works

Home solar installations consist of a solar panel, an electrical inverter, and now a home battery to store surplus solar energy for later use.

### Solar panel

Installed in an array on your roof, solar panels convert sunlight into electricity.

### Home battery

Powerwall stores surplus electricity generated from solar panels during the day or from the utility grid when rates are low.

### Inverter

Converts direct current electricity from solar panels or a home battery into the alternating current used by your home's lights, appliances and devices.

Contained within Powerwall's outdoor-rated enclosure is a rechargeable lithium-ion battery, a liquid thermal management system, a battery management system and a smart DC-DC converter for controlling power flow.

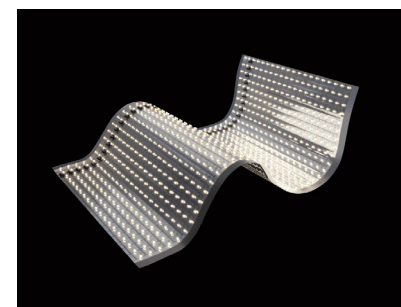
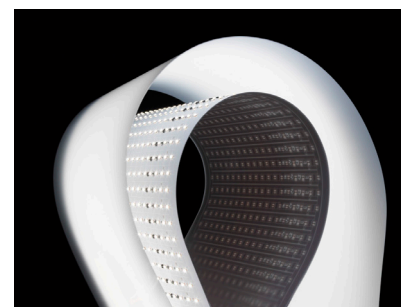
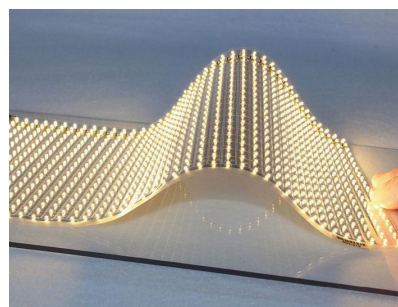
## POWERWALL - Tesla home battery



SQUARE by **COOLEDGE LIGHTNING** is a complete lighting product that can be sized for virtually any installation in three ways:

Multiple SQUARE can be snapped together to expand the area that will be lit  
 SQUARE is flexible and can be wrapped around a column or curved surface;  
 SQUARE can be trimmed to length with a pair of scissors, even while lit.

- Waterproof system IP44
- 120 lumen/watt
- about 50,000 hours of life



## Light Curtains





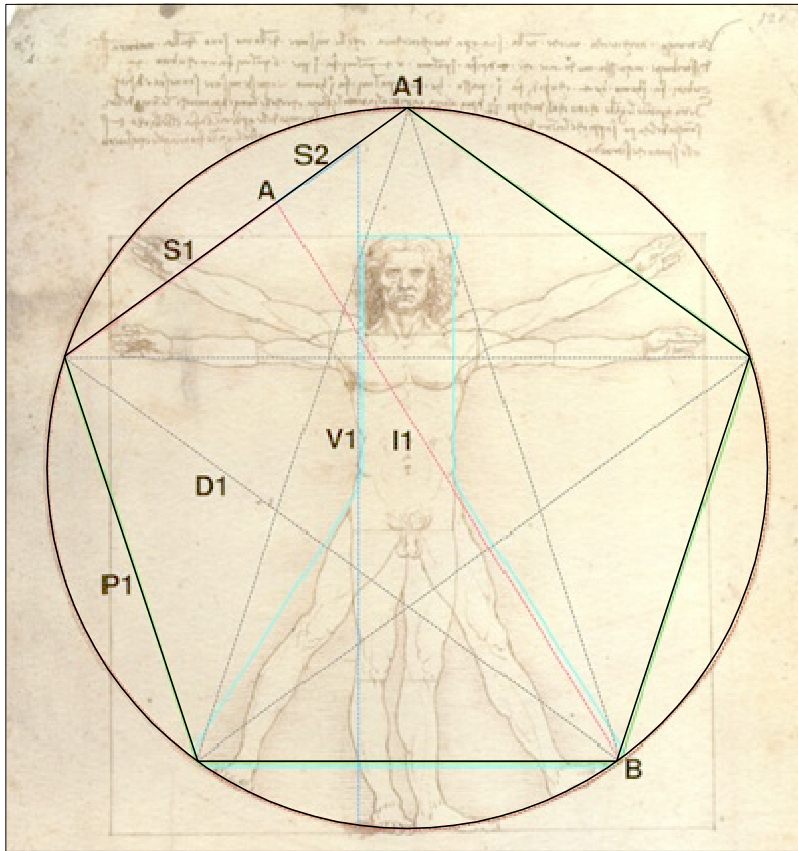
Plastic woven panels



Ropes

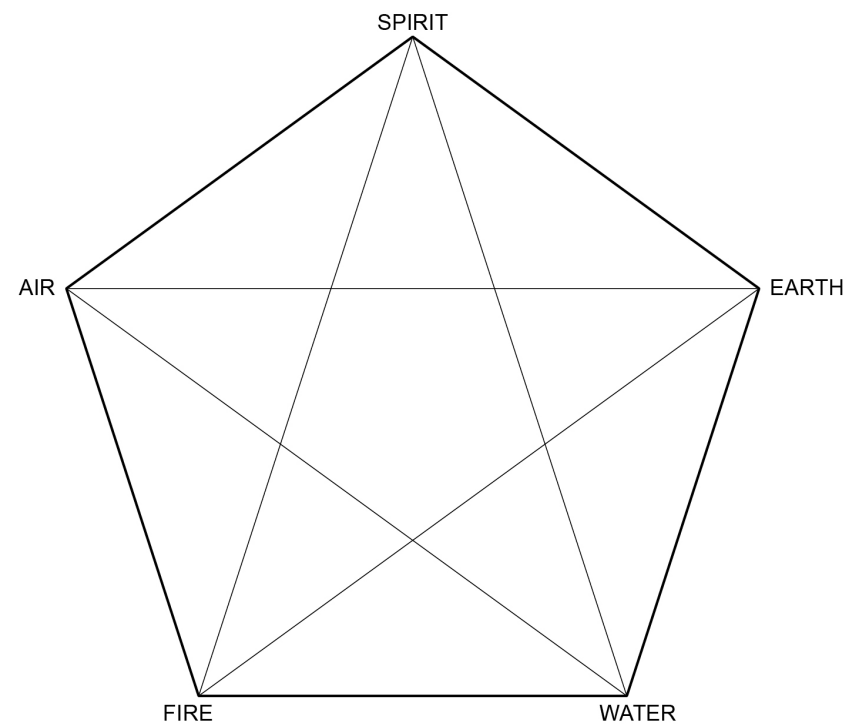


## Drawings and rendering



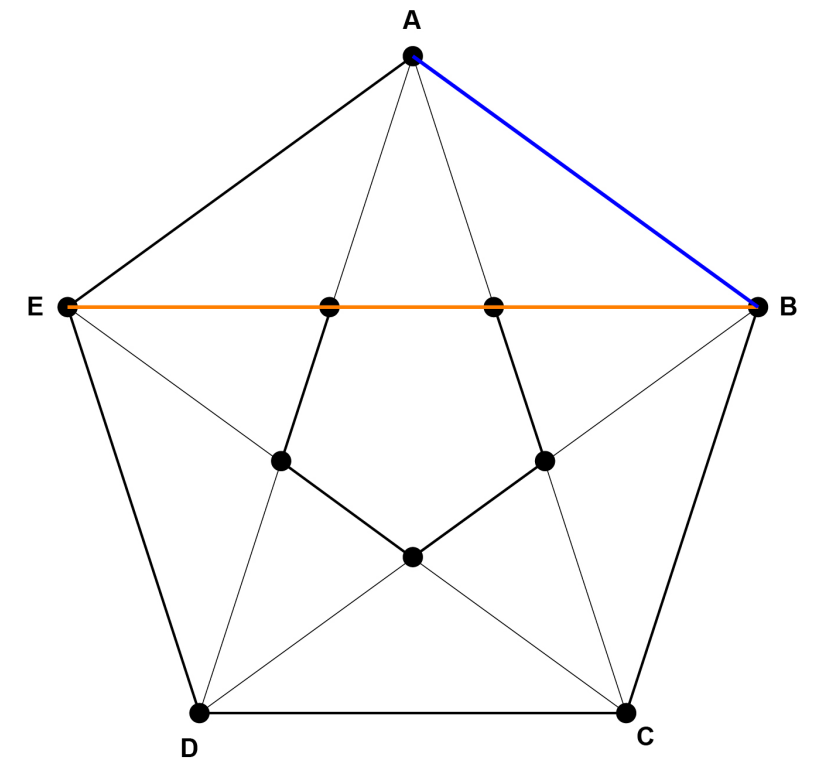
### The pentagon proportions

Vitruvian man by Leonardo da Vinci



### The pentagon and its meaning in antiquity

The five vertex are the five elements of the cosmos and the lines that connect them represent the creation process of humanity.

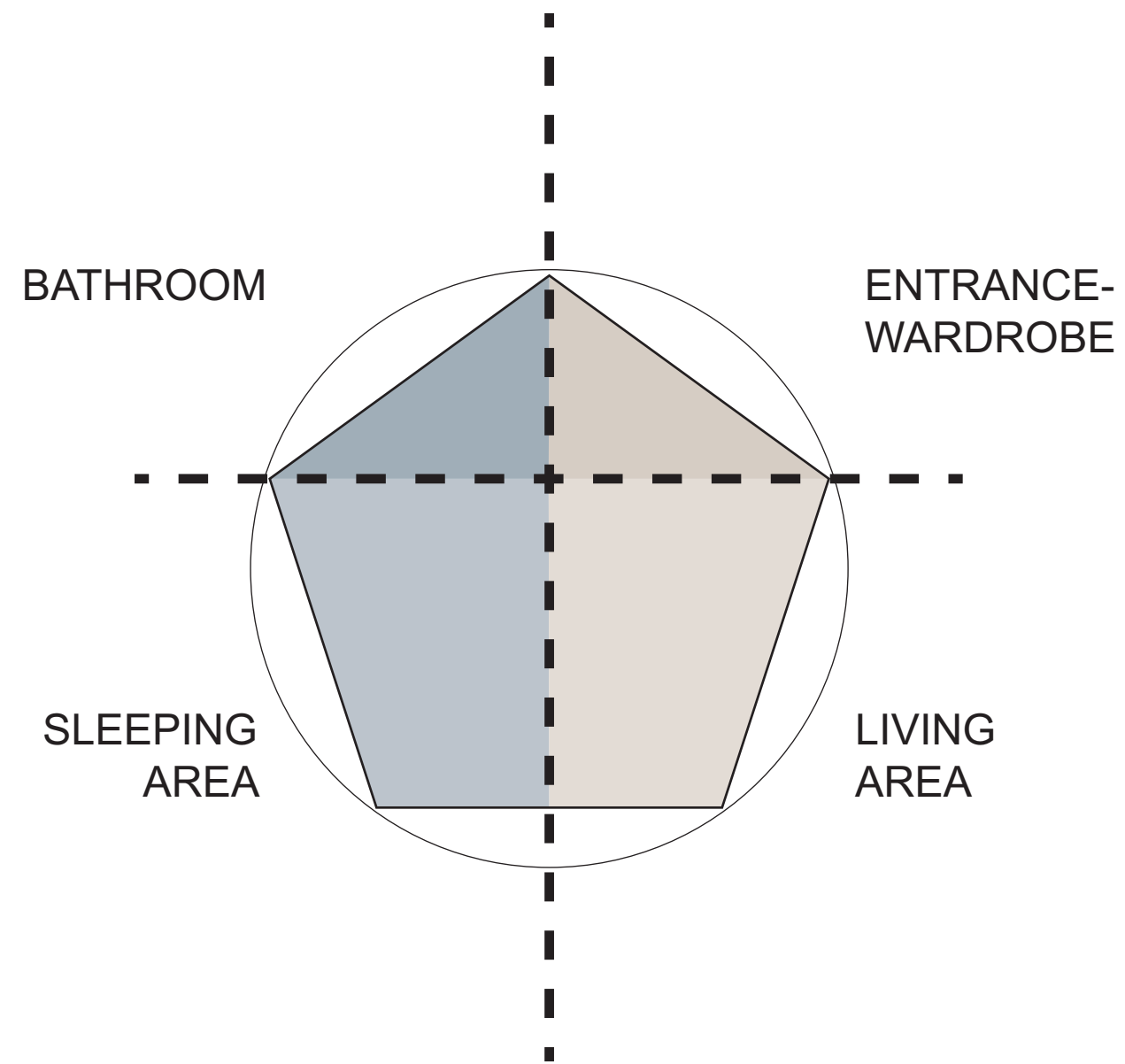
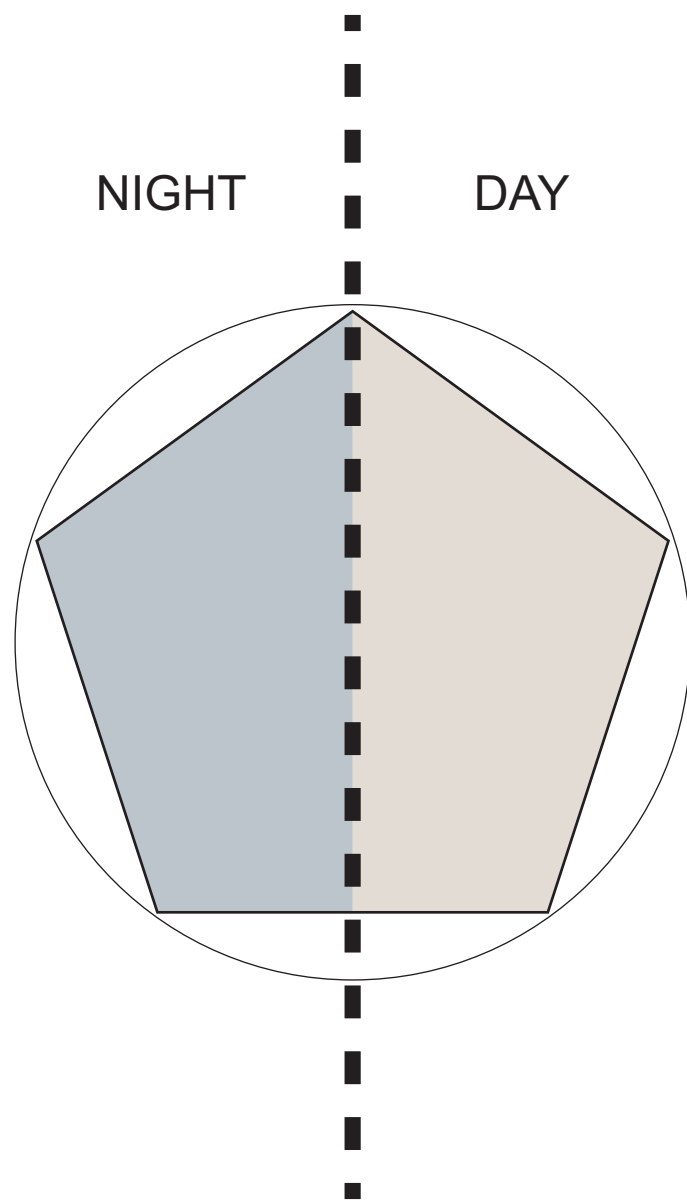


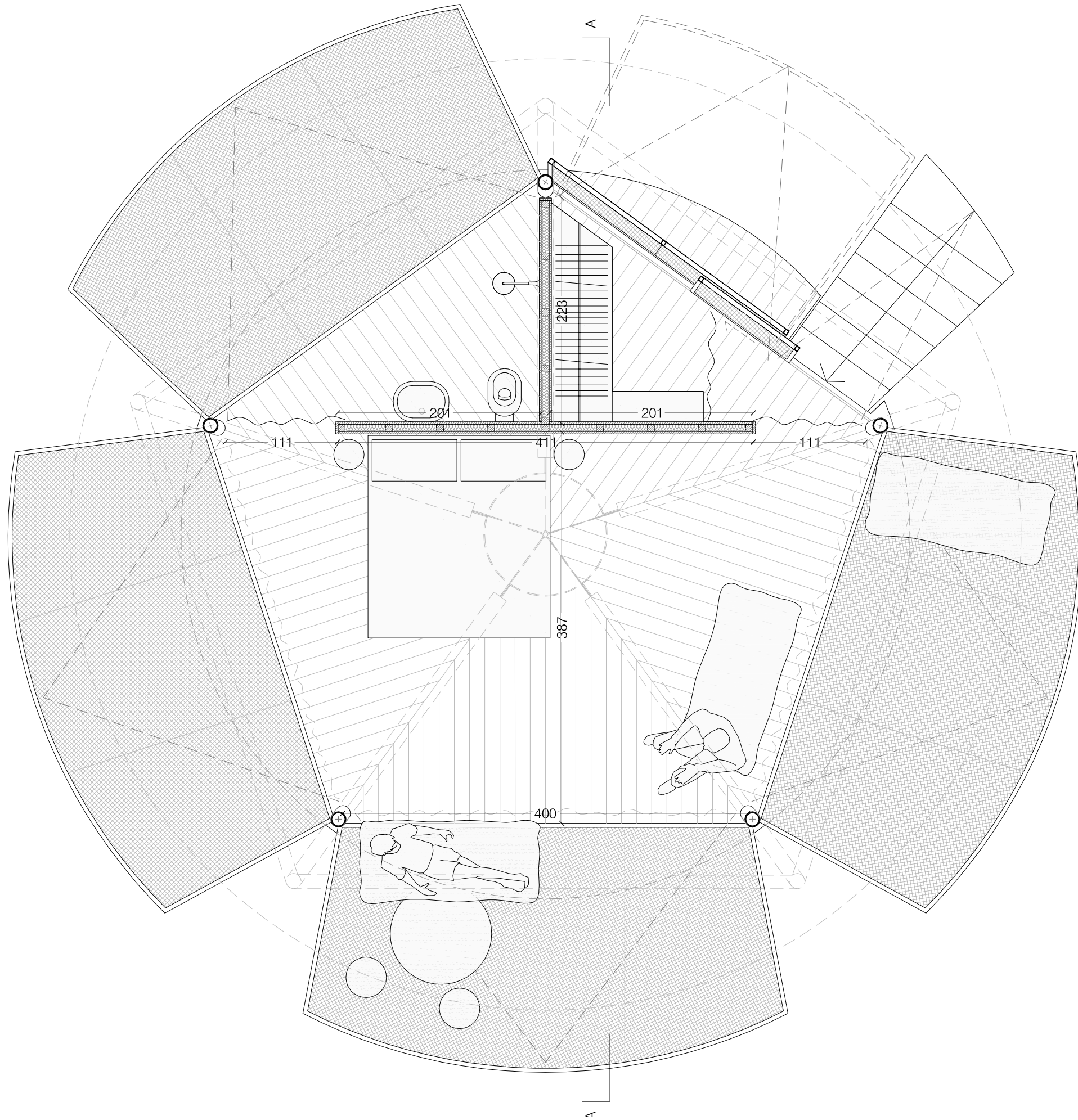
### The pentagon and the aurea section

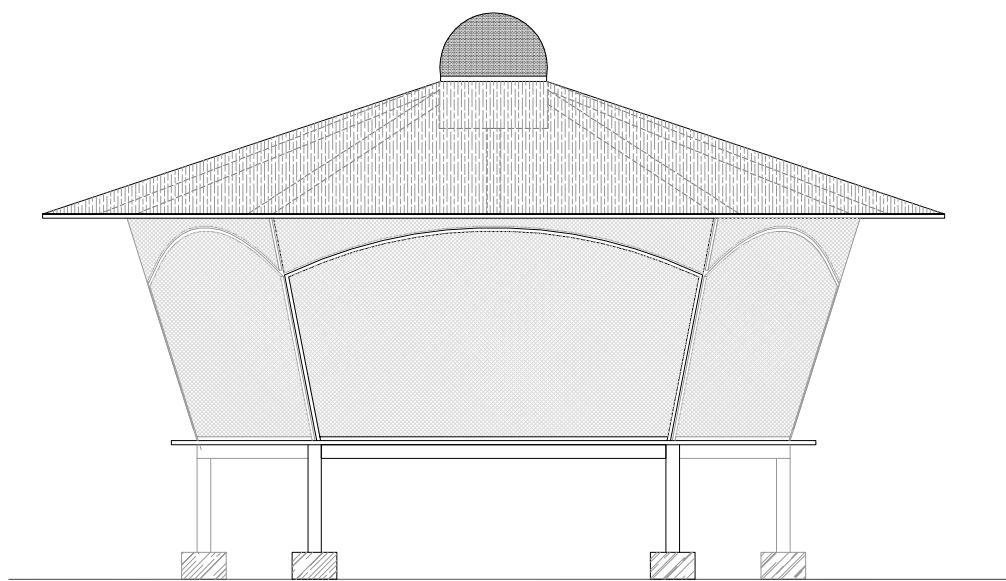
The pentagon is highly related to the aurea sections or "The Golden Number".

Example:

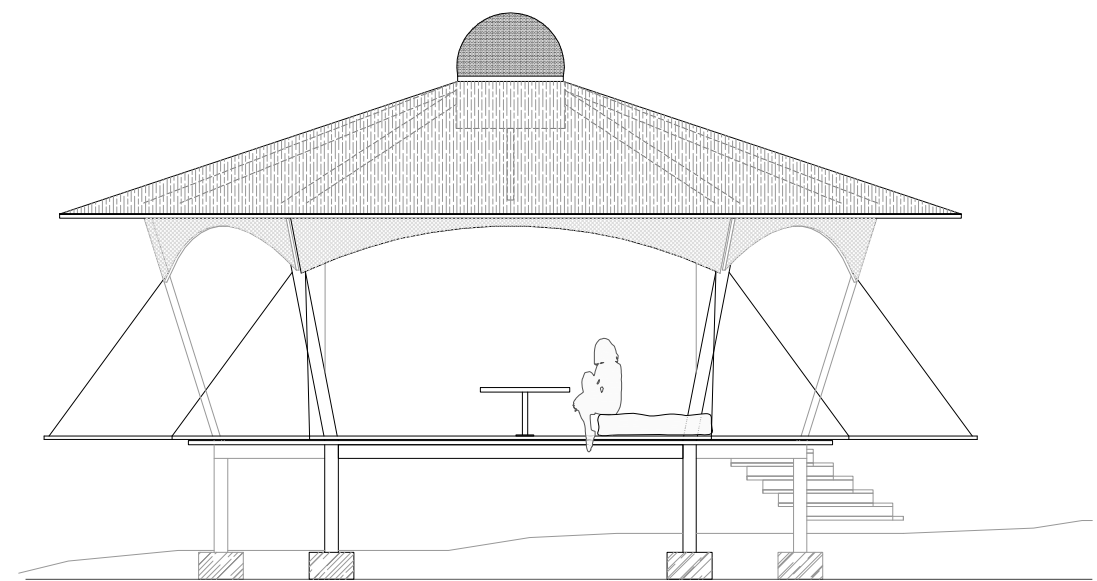
$$EB / AB = 1,61803398874989.....$$





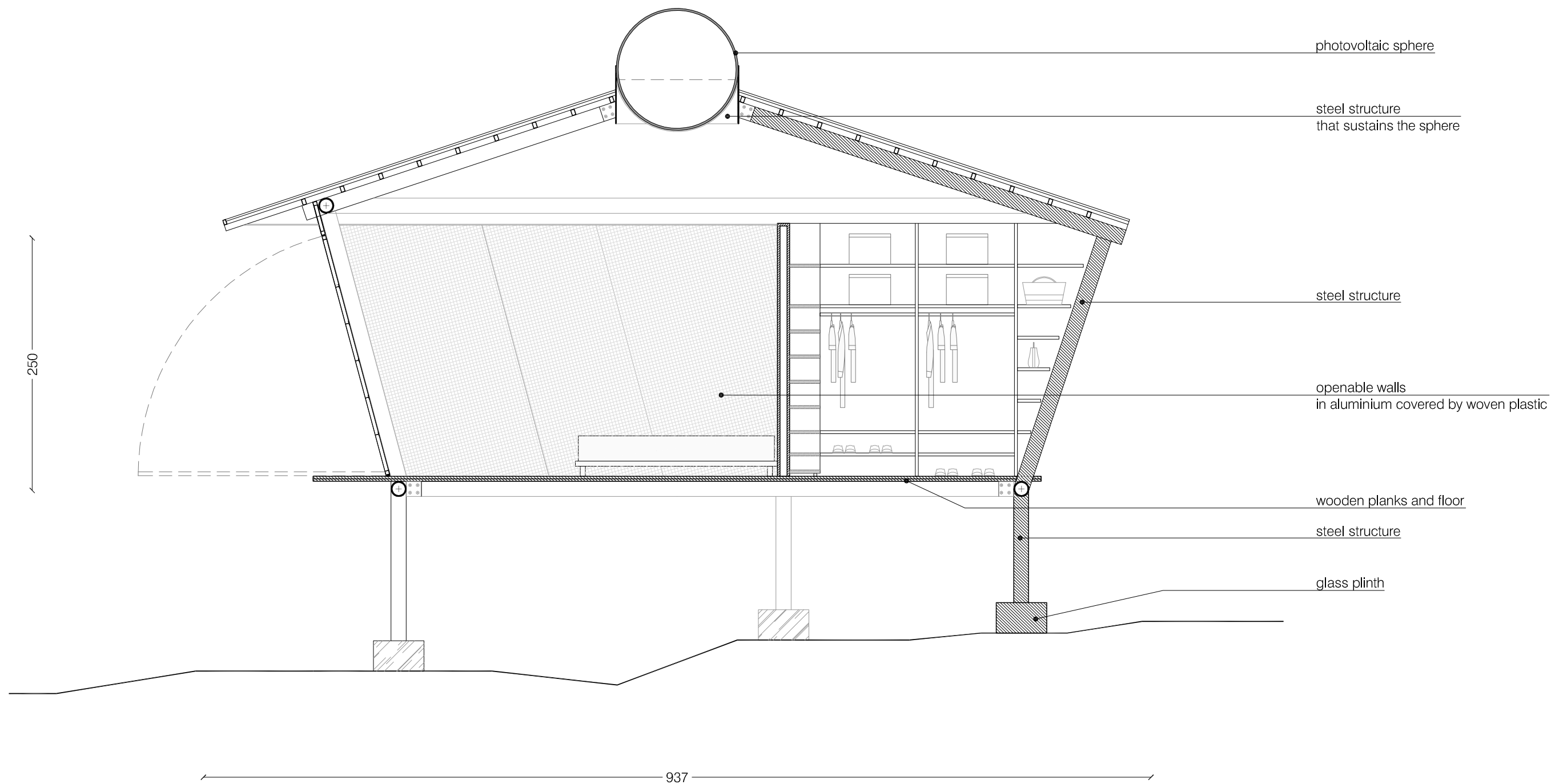


FACADE- *closed configuration*

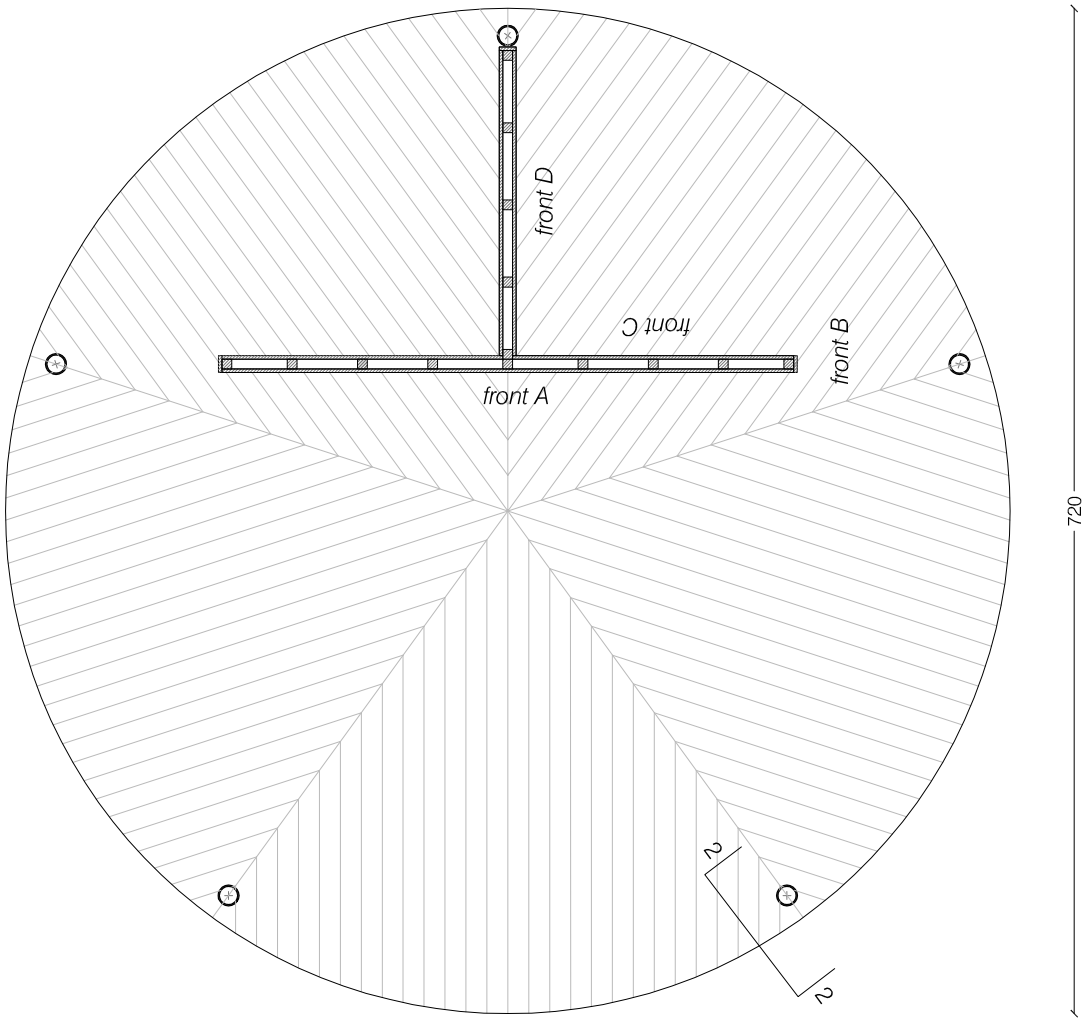
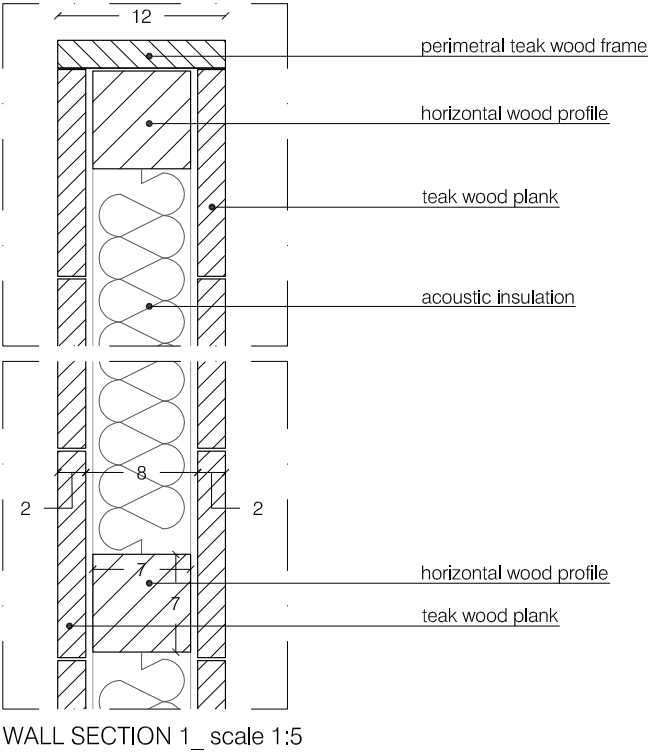
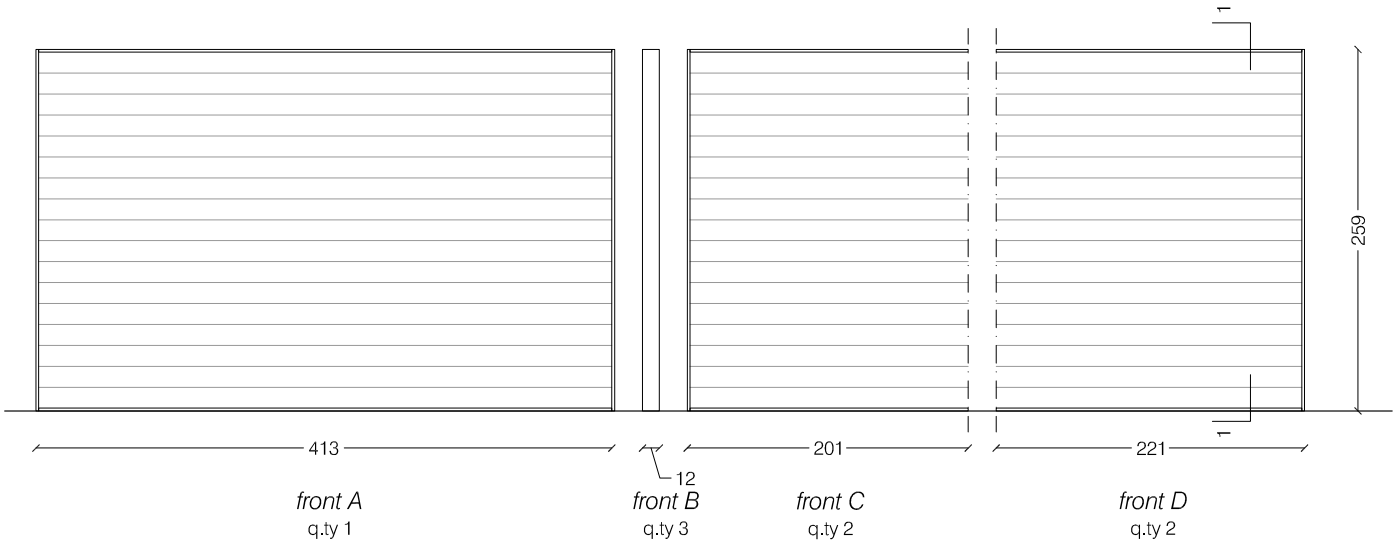


FACADE- *open configuration*

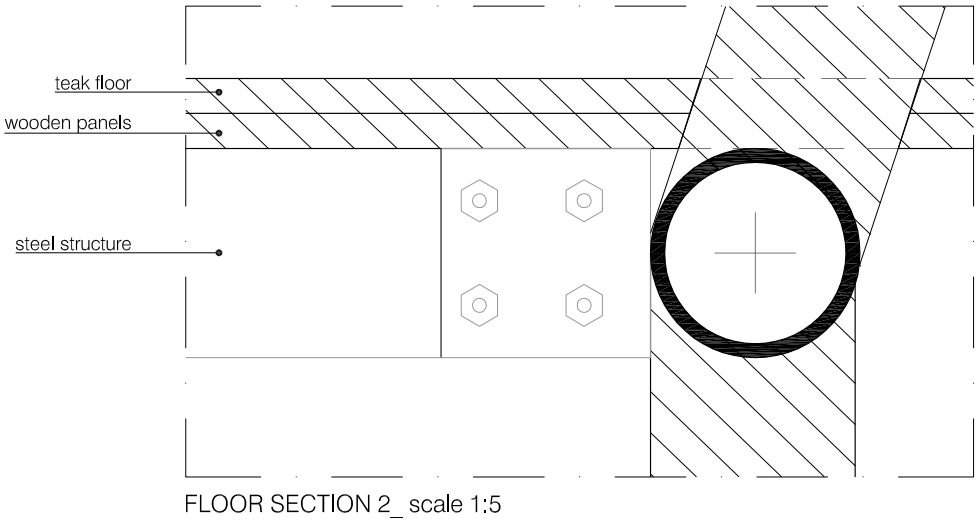




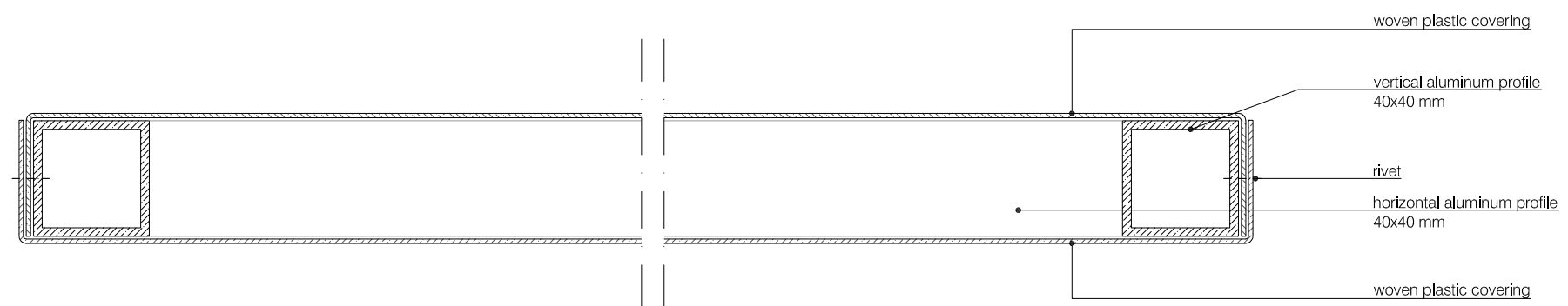
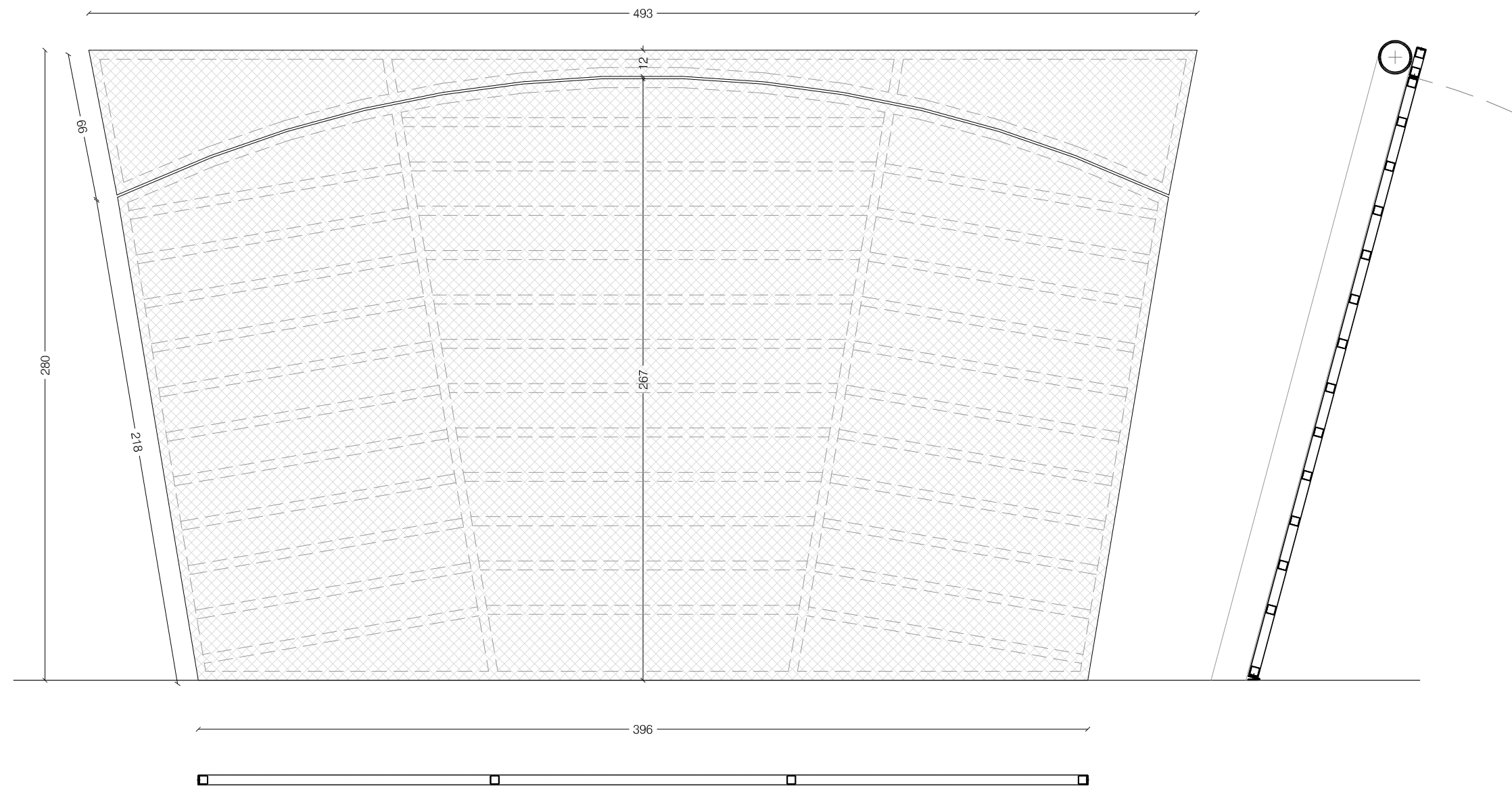
INSIDE WALLS:  
teak wood planks, dim. cm 150/415-200/1,5



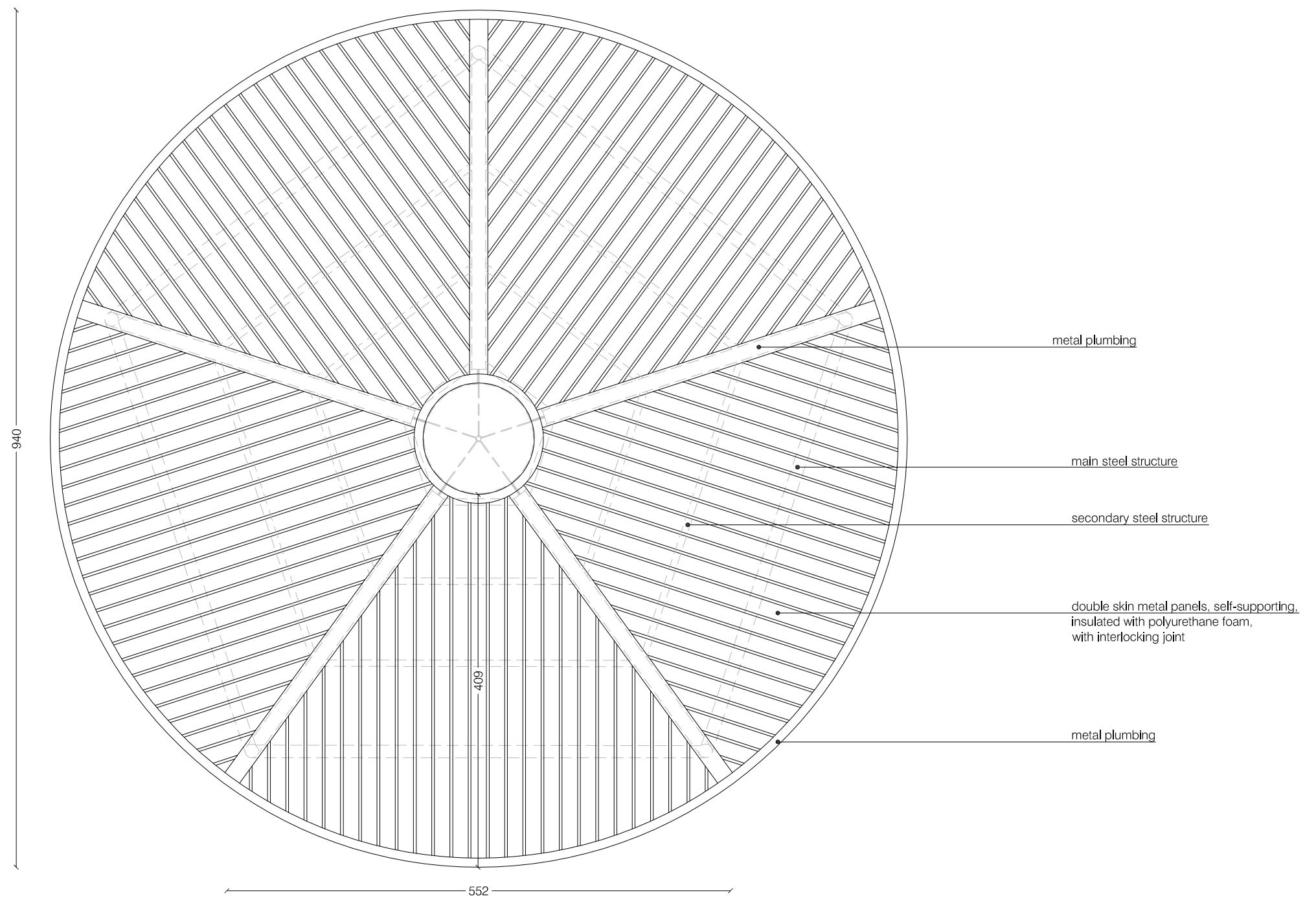
FLOOR PATTERN:  
teak wood planks, dim. cm 150/360-25/1,5  
quantity: 41 sqm



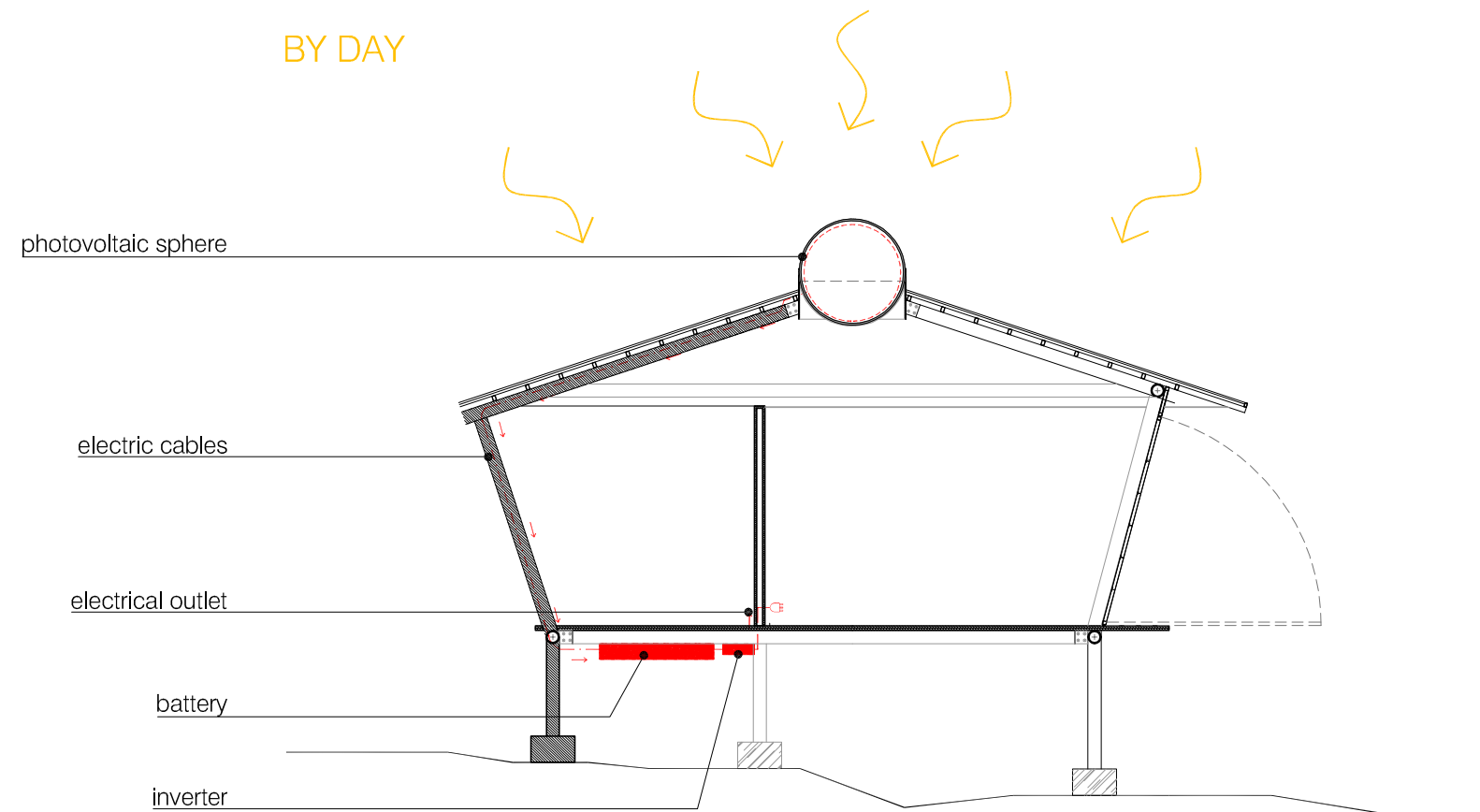
NB: wooden panels to be provided between structure and floor  
quantity: 41 sqm











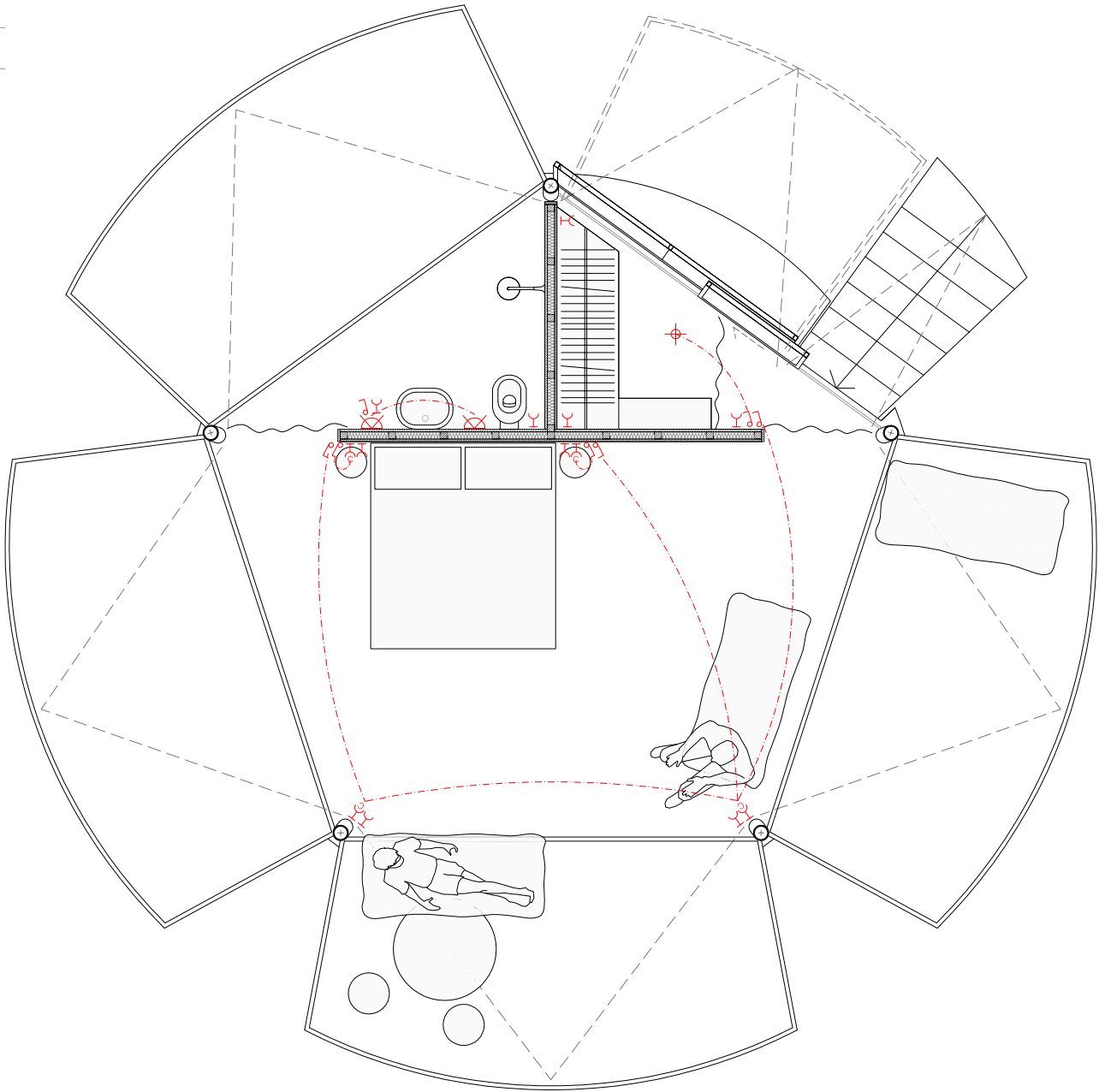


PANELS QUANTITY: around 70 sqm  
 ROOF TILT ANGLE: 18°



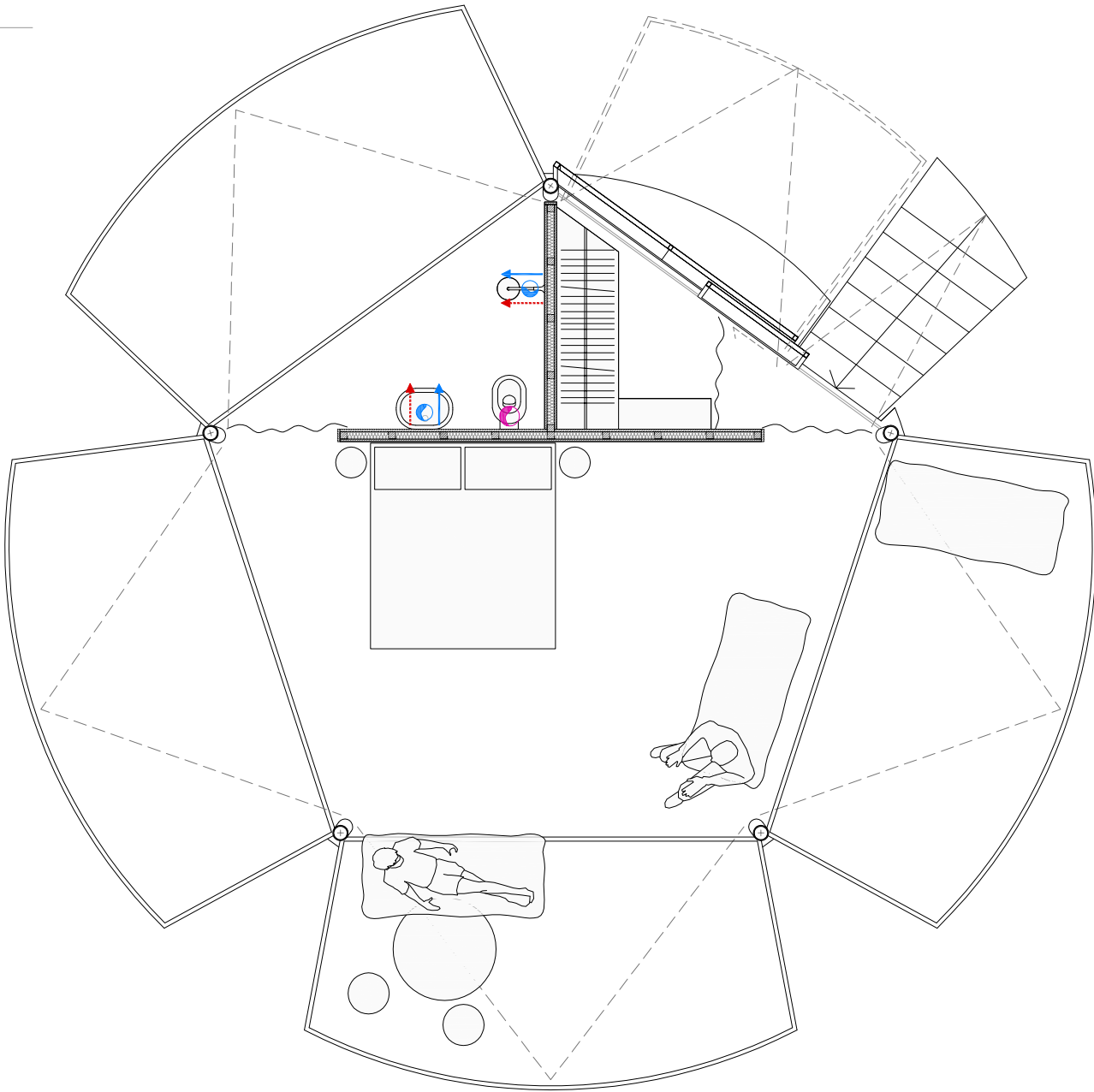
ELECTRICAL KEY NOTE:

	SWITCH H 105 cm
	SOCKET H 30 cm
	CONTROLLED SOCKET H 30 cm
	CONNECTION
	ceiling LIGHT
	wall LIGHT



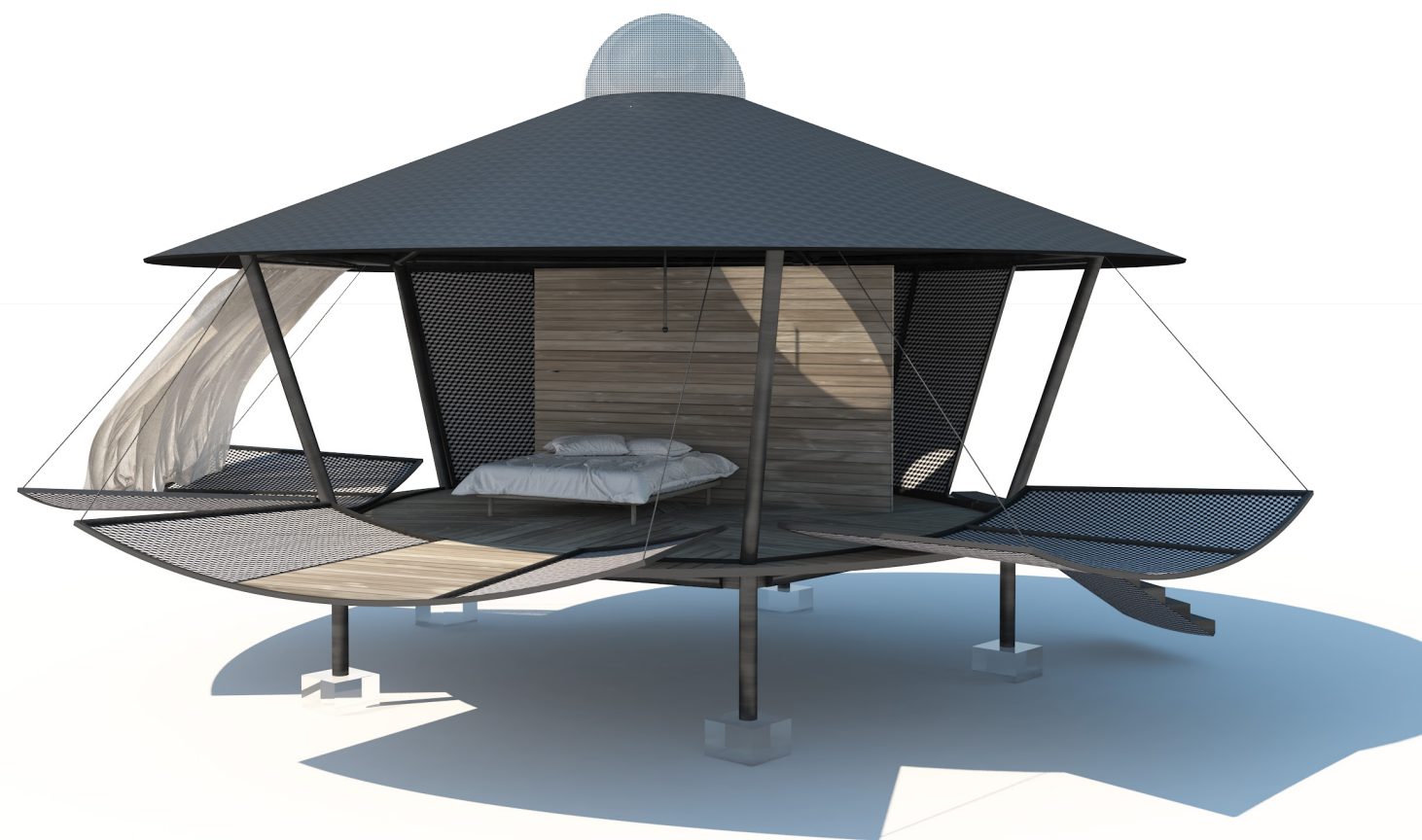
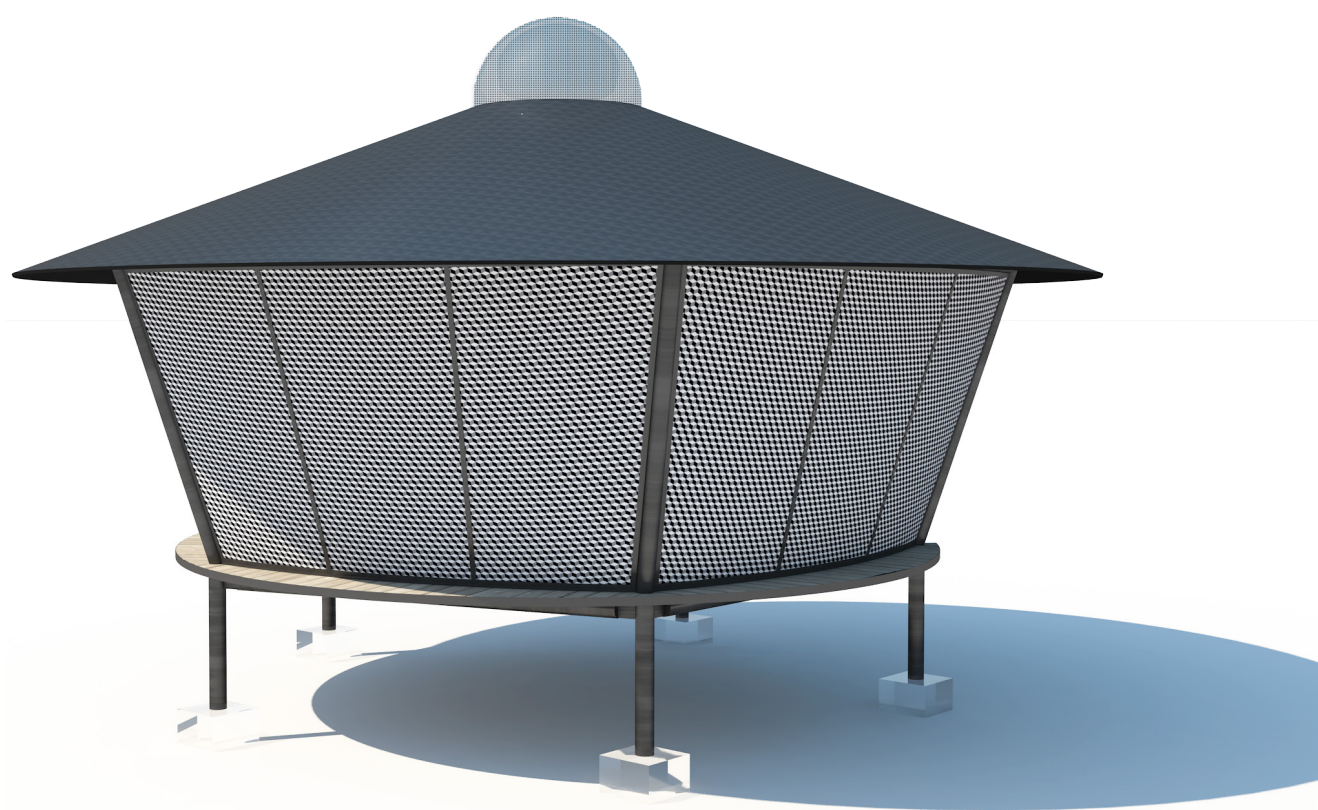
PLUMBING KEY NOTE:

- HOT WATER
- COLD WATER
- STOPCOCK
- DRAIN PIPE BLACK WATER
- DRAIN PIPE WASTE WATER







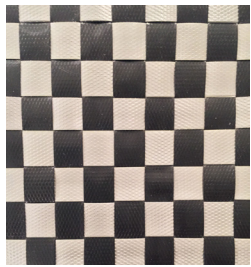




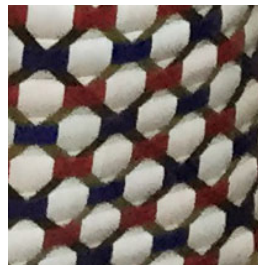




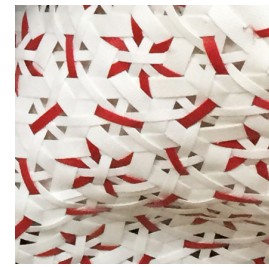
## Materials



Plastic woven\_1



Plastic woven\_2



Plastic woven\_3



Plastic woven\_4



black aluminum frame



black waxed steel



teak



linen

## Technical sheets



**Raw Lemon**  
photovoltaic sphere

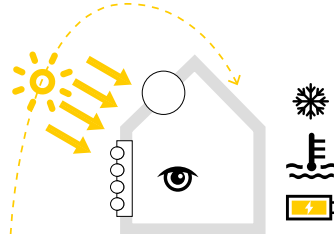
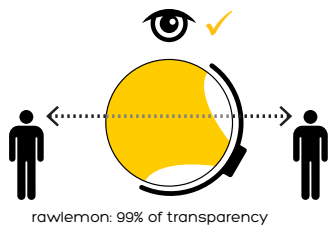
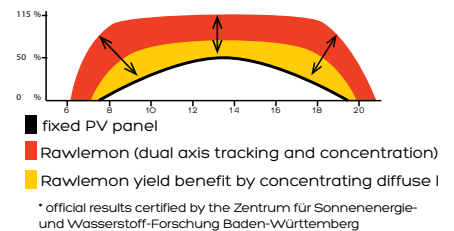
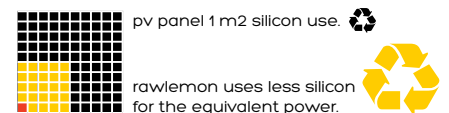
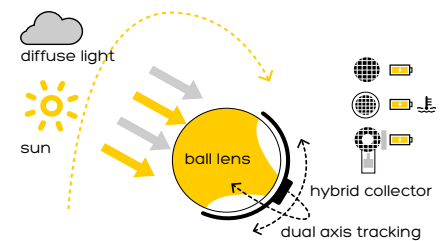
**rawlemon**  
powered by **rawtics**

## The future is not green it's transparent!

Welcome to the next generation of sustainable solar energy...

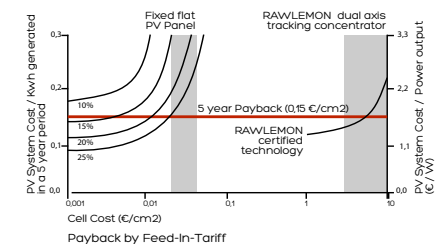
Ever since Archimedes, scientists have known that a crystal lens exposed to the sun concentrates incoming light to a focal point. We based the design of the new Rawlemon devices on this simple optical phenomenon. The perfect geometry of the sphere, combined with our patented dual axis tracking system, naturally provides the optimum angle to concentrate light on our collectors all day long, traveling with the sun.

- Up to 95% more energy conversion by using dual axis tracking. (Central Europe)
- Minimum 15% improved yield surplus by concentrating diffuse light.
- Hybrid usability for electricity and thermal energy.
- At least minimum 75% less cell surface.
- Lowest carbon footprint.
- First concentrator solar module to allow a full building integration.
- No weather impact.
- Maximum 99% of transparency.



By combining spherical geometry principals with our dual axis tracking system, Rawlemon can reach up to 70% yield surplus compared to a conventional PV panel, when both are placed in vertical set-up (As certified by the 'Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg'). This allows for Rawlemon products to be integrated anywhere and everywhere. At the same time, we reduce the cell surface to 1%, which offers a revolutionary perspective on producing sustainable and low cost energy. Rawlemon is able to concentrate diffuse

light. From economical point of view, this is a unique opportunity to produce solar energy where conventional systems fail. Rawlemon products vastly extend the geographical map of solar energy. On a cloudy day, Rawlemon produces 4 times more energy than a conventional system! In addition to increase/optimum solar performance, Rawlemon offers revolutionary benefits for users, designers and architects. Unlike any existing solar technology, Rawlemon products and their dematerialised aesthetic allow for 99% transparency, full building integration with

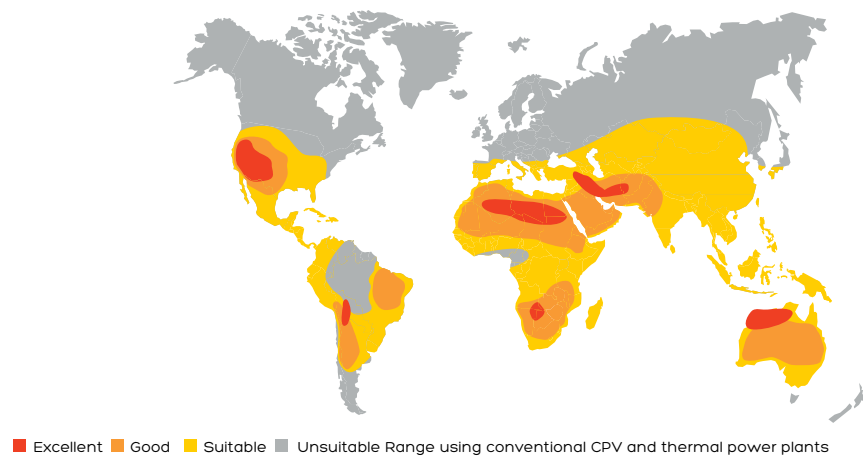


no weather impact thanks to the patent pending dual axis tracking system by Rawlemon. More over, it gives the possibility to connect both standard and hybrid collectors in order to convert electricity and/or thermal energy. Rawlemon products offer reversible self-sufficient system. Our next step for the future is to apply this technology to the emission of light creating new and exciting possibilities for lighting sources and media, such as a transparent, self-sufficient, video wall. Our ultimate goal is to minimize the foot print renewable energies leave on our environment in this multimedia world.

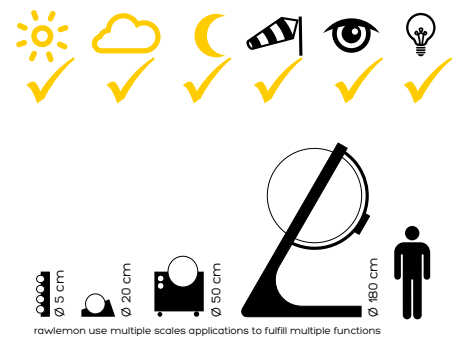
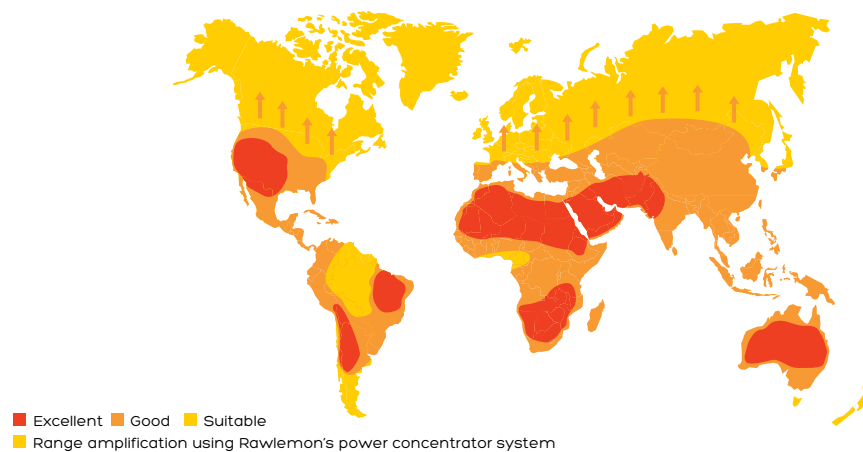


# Rawlemon keeps producing energy where others leave off...

Suitability for conventional CPV and thermal power plants.



Suitability for solar hybrid power plants with rawlemon  $\beta$ -torics technologies.



Our family of applications is growing,  
so check it out, at: [www.rawlemon.com](http://www.rawlemon.com)



**rawlemon**  
powered by **rawtics**

## Unconventional Transparent Power Generators Mobile Stand-Alone Power Generator Station

**rawlemon's** revolutionary spherical solar concentrating system leads the way in state-of-the-art ecological design, producing efficient energy in any region of the world, thanks to its ability to concentrate any light. Like all **Rawlemon** products, the **KS1000-1800** outdoor generator features a breakthrough patented micro dual axis tracking unit for full environmental integration, with the lowest possible weather impact that won't break your budget.

**KS1000-1800** comes with a hybrid collector to convert daily electricity and thermal energy at the same time. While reducing the silicon cell area to 25% with the equivalent power output by using our ultra transmission Ball Lens point focusing concentrator, it operates at efficiency levels of nearly 57% in hybrid mode. At nighttime the Ball Lens can transform into a high-power lamp to illuminate your location, simply by using a few LED's. The station is designed for off grid conditions as well as to supplement buildings' consumption of electricity and thermal circuits like hot water.

**KS1000-1800** is easy to transport and install. The support frame includes all the plugs you need to connect to the local grid and holds a security protection panel behind the collector.

**Applications:** Off-Grid Energy / Building Integration / Electric Devices

### Technical datas

- Lens Design
- Numerical Aperture
- Electrical Data
- Thermal Data
- Combined Efficiency
- Capacity Per Day
- Battery Capacity
- AC/DC Management
- Connections

- Dual Axis Tracking
- Control Unit

- Light Energy
- Weight
- Dimensions
- Wind resistance

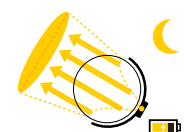
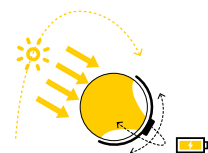
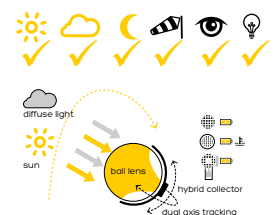
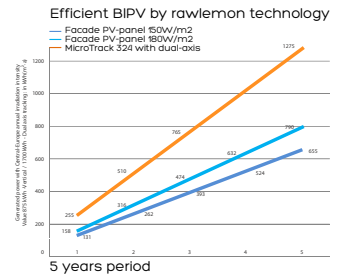
### KS 1000

Acrylic-Polymer ball lens, water filled  
10 Diameter  
180 W (220W/m<sup>2</sup>) with basic Silicon  
275 W (350W/m<sup>2</sup>)  
57% (Hybrid)  
1.1 kWh max.  
0.5 kWh  
120 V / 220 V - Client Specific Options  
Collector Header/Return Lines, 220V/16A  
Din-Socket  
Low inertia DC microdrive  
Tracking sun/moon, positioning LED beam  
200 lm - up to 500m Spot with LED's  
700 kg (Water - 524 l)  
2.15 x 130 x 180 Meter  
Up to 120 m/s

### KS 1800

Acrylic-Polymer ball lens, water filled  
18 Diameter  
560 W (220W/m<sup>2</sup>)  
890 W (350W/m<sup>2</sup>)  
57% (Hybrid)  
3.4 kWh max.  
0.5 kWh  
120 V / 220 V - Client Specific Options  
Collector Header/Return Lines, 220V/16A  
Din-Socket  
Low inertia DC microdrive  
Tracking sun/moon, positioning LED beam  
300 lm - up to 800m Spot with LED's  
3.350 kg (Water - 3.055 l)  
3.90 x 2.40 x 3.15 Meter  
Up to 120 m/s

**rawlemon**  
powered by **rawtics**  
[www.rawlemon.com](http://www.rawlemon.com)



rawlemon © 2013





**rawlemon**  
powered by **rawtics**

## Unconventional Transparent Power Generators Mobile Stand-Alone Power Charger Station

**rawlemon's** revolutionary spherical solar concentrating system leads the way in state-of-the-art ecological design, producing efficient energy in any region of the world, thanks to its ability to concentrate any light. Like all **Rawlemon** products, the **β.ray** outdoor charging station features a breakthrough patented micro dual axis tracking unit for full environmental integration, with the lowest possible weather impact that won't break your budget.

**β.ray 1.0 – 1.8** comes with a hybrid collector that charges and stores energy. While reducing the silicon cell area to 25% with the equivalent power output by using our ultra transmission Ball Lens point focusing concentrator, it operates at efficiency levels of up to 57% in hybrid mode. At nighttime the Ball Lens can transform into a high power lamp to illuminate your location, simply by using a few LED's. The stand-alone charging station is perfectly designed for electro mobility as well as to supplement buildings' energy consumption.

**β.ray 1.0–1.8** is easy to transport and install. The support frame includes all the plugs necessary to connect electric vehicles and holds a security protection panel behind the collector.

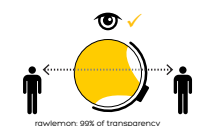
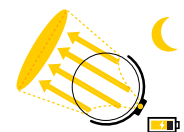
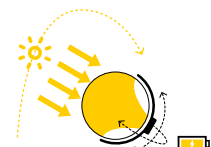
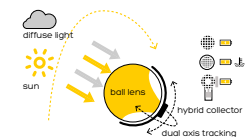
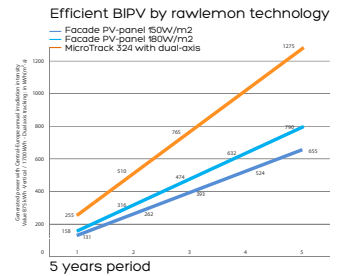
**Applications:** Electric Bicycles / E-Motorcycles / E-Cars / Building Integration / Electric Devices

### Technical datas

	β.ray 1.0	β.ray 1.3	β.ray 1.8
• Lens Design	Acrylic-Polymer ball lens, water filled	Acrylic-Polymer ball lens, water filled	Acrylic-Polymer ball lens, water filled
• Numerical Aperture	10 Diameter	13 Diameter	18 Diameter
• Electrical Data	180 W (220V/m <sup>2</sup> ) with basic Silicon	292 W (220V/16A DIN-Socket Silicon	560 W (220V/m <sup>2</sup> ) with basic Silicon
• Thermal Data	275 W (350W/m <sup>2</sup> )	465 W (350W/m <sup>2</sup> )	890 W (350W/m <sup>2</sup> )
• Combined Efficiency	57% (Hybrid)	57% (Hybrid)	57% (Hybrid)
• Capacity Per Day	11 kWh max.	18 kWh max.	3.4 kWh max.
• Battery Capacity	18 kWh	3.6 kWh	5.4 kWh
• AC/DC Management	120 V / 220 V - Client Specific Options	120 V / 220 V - Client Specific Options	120 V / 220 V - Client Specific Options
• Connections	Collector Header/Return Lines, 220V/16A Din-Socket	Collector Header/Return Lines, 220V/16A DIN-Socket	Collector Header/Return Lines, 220V/16A Din-Socket
• Dual Axis Tracking	Low inertia DC microdrive	Low inertia DC microdrive	Low inertia DC microdrive
• Control Unit	Tracking sun/moon, positioning LED beam	Tracking sun/moon, positioning LED beam	Tracking sun/moon, positioning LED beam
• Light Energy	200 lm - up to 500m Spot with LED's	200 lm - up to 500m Spot with LED's	300 lm - up to 800m Spot with LED's
• Weight	700 kg (Water - 524 l)	1400 kg (Water - 1150 l)	3350 kg (Water - 3055 l)
• Dimensions	2.15 x 130 x 180 Meter	2.80 x 170 x 230 Meter	3.90 x 240 x 3.15 Meter
• Wind resistance	Up to 120 m/s	Up to 120 m/s	Up to 120 m/s

The basic system of one ball lens can, optionally, be customized to host a multiple array of up to 3 ball lenses in one support frame. Set-up time takes from 4 hrs. onwards. For a totally off-grid position, the water capacity for full fill needs to be delivered in a tank.

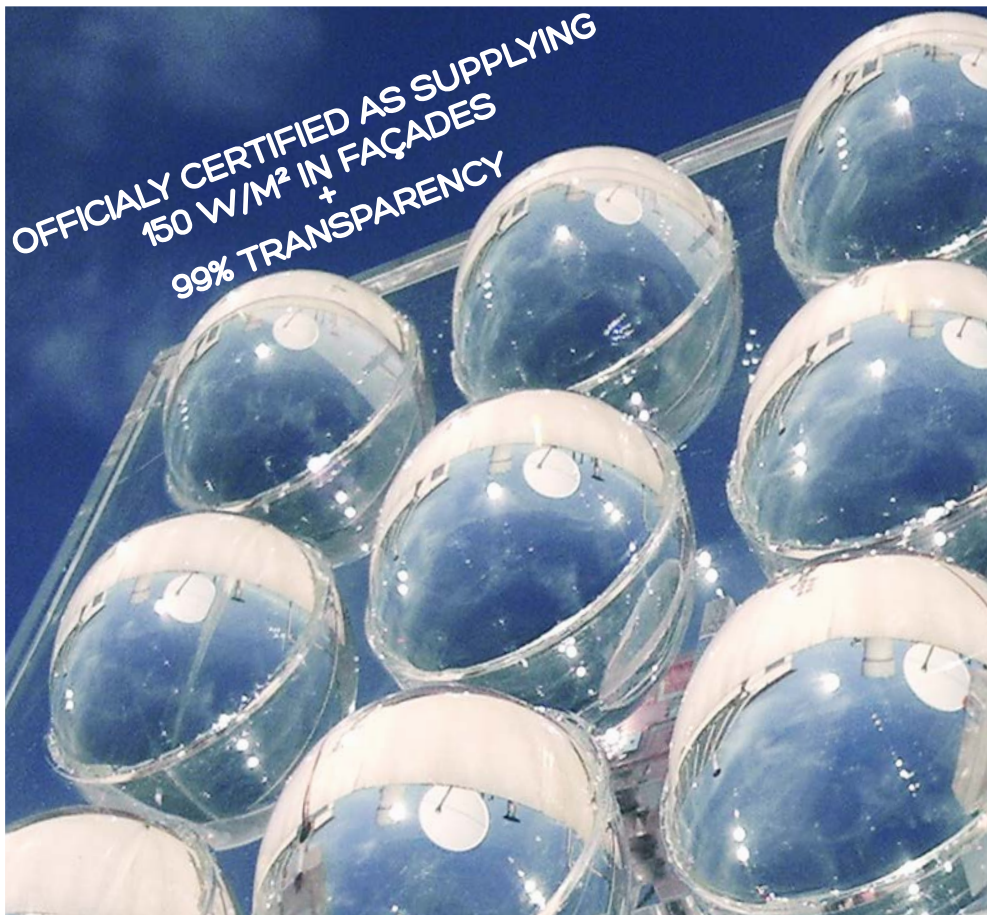
**rawlemon**  
powered by **rawtics**  
[www.rawlemon.com](http://www.rawlemon.com)



rawlemon © 2013







## rawlemon powered by rawtics Unconventional Transparent Power Generators MicroTrack CPV power module

rawlemon's revolutionary spherical solar concentrating system leads the way in state-of-the-art ecological design, producing efficient energy in any region of the world, thanks to its ability to concentrate any light. Like all **Rawlemon** products, the **MicroTrack** features a breakthrough patented micro dual axis tracking unit for full environmental integration, with the lowest possible weather impact that won't break your budget.

**MicroTrack**, combines three products – a revolutionary concentrator photovoltaic module, a full transparent ball lens screen with multimedia LED video wall, and a breakthrough, micro dual-axis tracking unit assembled with Multi-Junction high efficiency solar cells – into one full building integrated photovoltaic module.

**MicroTrack** comes with the new **β.torics** technology that allows the module to be placed at any inclination and on any surface of a building simply by tracking the sun using optical tracking.

This system has been officially certified as supplying  $150\text{W/m}^2$ , and simply by using dual axis tracking can **double** the energy production of any existing building integration system known to man.

**Test our prototype yourself to believe it!**

**MicroTrack** is the world's most transparent photovoltaic module! While featuring Multi Junction High Efficiency Solar Cells (each 5mm x 5mm, smaller than the nail on your pinky!), we reduce the cell area to 1% per  $\text{m}^2$ .

As it is virtually transparent it therefore decreases the carbon footprint of cell production by 99%. Besides full daylight transmission, the cells absorb the transfer of heat into the building. That provides maximum building energy efficiency and decreases the burden of costly air conditioning and the additional thermal insulation lessens excessive internal heat loss, which finally reduces the carbon emissions of the buildings.

**MicroTrack** also features an optional built-in multimedia LED technology that can be set up as a media façade. The stunning LED video wall display features full color LED's projected by **MicroTrack**'s ultratransmission ball lenses with a pixel pitch of 50 mm diameter that support light-trapping. Perhaps most importantly, it's powered by the sun to be the most energy-efficient module.

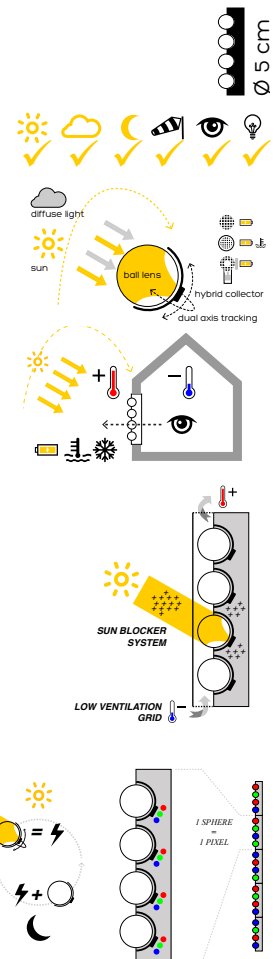
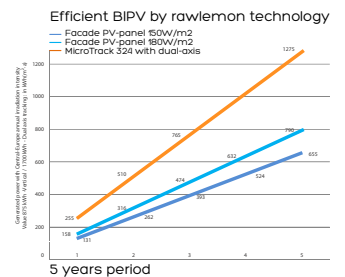
**MicroTrack** is an unrivalled, powerful, protecting self-sufficient video wall module which, due to its high performance efficiency, results in the same pay back rate as a conventional PV-Panel.

### Technical datas MicroTrack 324

- Lens Design
- Numerical Aperture
- Cell Type
- Electrical Data
- Voltage
- Current
- Dual Axis Tracking
- Elevation Track
- Azimuth Track
- Control Unit

- Video Wall
- Weight
- Dimension

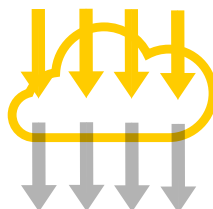
Acrylic-Polymer ball lens  
50 mm Diameter per ball lens  
Multi-Junction solar cell  
48 W ( $150\text{W/m}^2$ )  
148 V  
0.32 A  
Low inertia DC microdrive  
0° - 75°  
0° - 180°  
Sun position calculator  
LED beam positioning  
RGB / unique color LED  
116 kg  
729 mm x 452 mm x 73 mm





# rawlemon

the first company in history to  
concentrate diffuse light.



**rawlemon**  
powered by **rawtics**

C/ Olivera 8, local  
08004 Barcelona Spain  
[post@rawlemon.com](mailto:post@rawlemon.com)  
[press@rawlemon.com](mailto:press@rawlemon.com)  
[www.rawlemon.com](http://www.rawlemon.com)

rawlemon 2013 ©



# **Tesla**

## Powerwall home battery

# Specs



## Technology

Wall mounted, rechargeable lithium ion battery with liquid thermal control.

## Models

10 kWh \$3,500

For backup applications

7 kWh \$3,000

For daily cycle applications

## Warranty

10 years

## Efficiency

92% round-trip DC efficiency

## Power

2.0 kW continuous, 3.3 kW peak

## Voltage

350 – 450 volts

## Current

5.8 amp nominal, 8.6 amp peak output

## Compatibility

Single phase and three phase utility grid compatible.

## Operating Temperature

-4°F to 110°F / -20°C to 43°C

## Enclosure

Rated for indoor and outdoor installation.

## Installation

Requires installation by a trained electrician. DC-AC inverter not included.

## Weight

220 lbs / 100 kg

## Dimensions

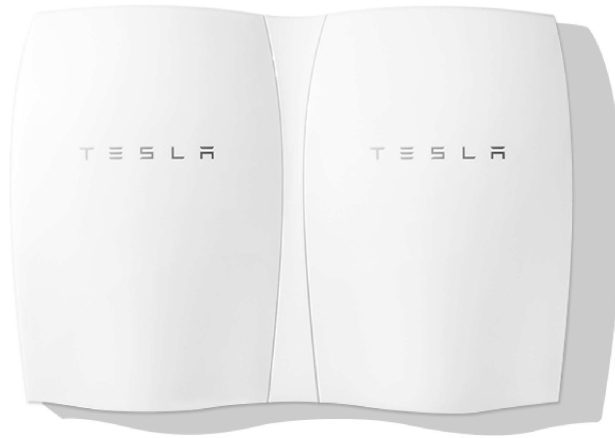
51.2" x 33.9" x 7.1"

1300 mm x 860 mm x 180 mm

## Certification

NRTL listed to UL standards

# Capacity



Multiple batteries may be installed together.

Powerwall comes in 10 kWh weekly cycle and 7 kWh daily cycle models. Both are guaranteed for ten years and are sufficient to power most homes during peak evening hours. Multiple batteries may be installed together for homes with greater energy need, up to 90 kWh total for the 10 kWh battery and 63 kWh total for the 7 kWh battery.



# How it Works

Home solar installations consist of a solar panel, an electrical inverter, and now a home battery to store surplus solar energy for later use.

## Solar panel

Installed in an array on your roof, solar panels convert sunlight into electricity.

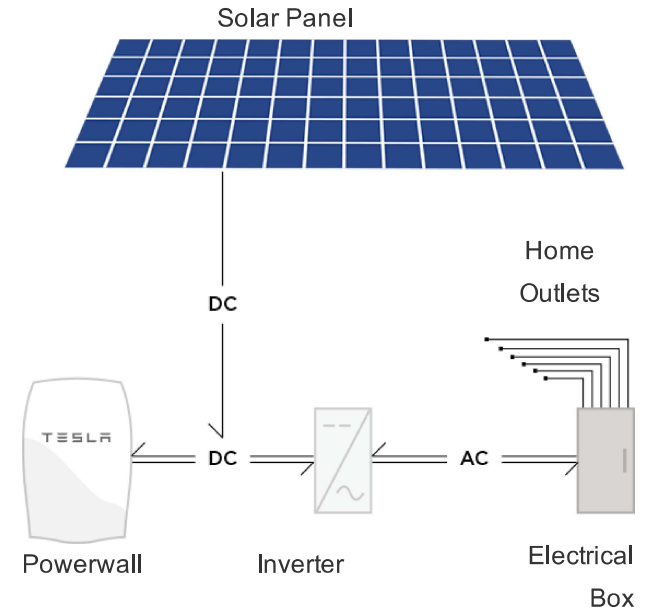
## Home battery

Powerwall stores surplus electricity generated from solar panels during the day or from the utility grid when rates are low.

## Inverter

Converts direct current electricity from solar panels or a home battery into the alternating current used by your home's lights, appliances and devices.

Contained within Powerwall's outdoor-rated enclosure is a rechargeable lithium-ion battery, a liquid thermal management system, a battery management system and a smart DC-DC converter for controlling power flow.



# Wostman eco toilet

# EcoDry™

## MANUAL

Note, please read the instructions before ordering or starting installation.

### How it works

#### Porcelain

Porcelain is much more hygienic and easier to keep clean than other materials such as plastic or similar. And of course – it lasts much longer.

#### Urine hose

A urine hose is mounted below the urine bowl. Urine separation makes the faeces dry, and provides a odorless experience. Water flush is possible in the urine bowl.

#### Drop pipe 200 mm

Black 200 mm (OD) drop pipe of polyethylene. The surface of the pipe is smooth, that dirt does not stick to. Long length means that the waste is not visible.

#### Urinary Drain 50mm(OD)

Urine drainage from the floor down to the urine receptacle.

#### Urine Container

The urine is collected easily in a can. Mix 25% urine and 75% water for use as plant nutrients.

#### Water connection

If water supply is possible, use R15 1/2".

#### Ventilation

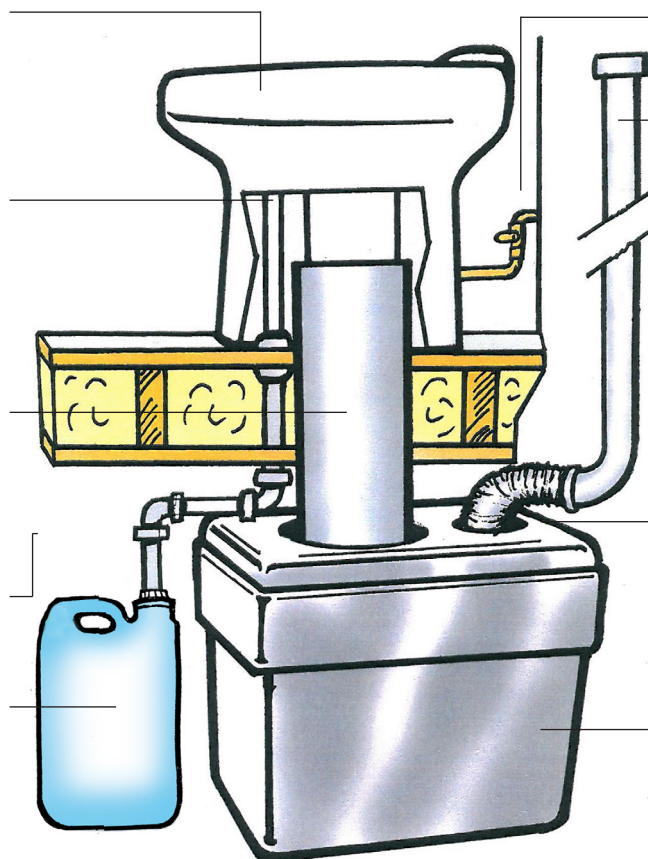
Evacuates odors and airborne bacteria above the roof.

#### Fan

A fan is mounted on the lid. Makes the waste dried out, easy and smooth.

#### Dry waste

EcoDry "BOX" of 100 liters placed under the floor, where solids and paper ports. After 3 months the waste is dry, odorless and weighs only 10-20 kilos. The content is then transferred to a compost latrine for composting. The box is emptied about 1-2 times per year. A big plastic bag is suitable to put in the BOX to collect the waste.

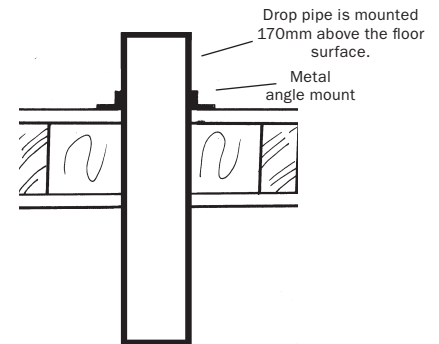
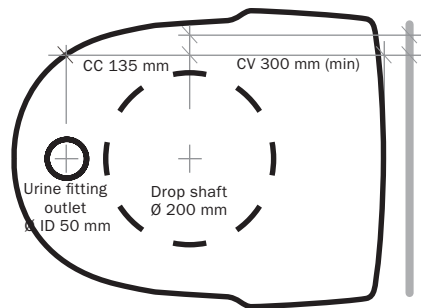
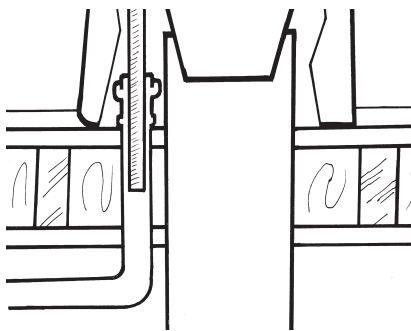


### Details:

Water supply:	Flexible stainless steel hose. 1/2", R15
Water flush:	Water flush possible in the urine bowl.
Power water flush:	9V battery (lasts about a season). Solenoid flushes as long as the button is pressed. Battery eliminator can be selected as options.
Dimensions:	Height 450 mm, width 395 mm, depth 580 mm (note the new higher standard = 450 mm)
Urine outlet:	50 mm OD
Assembly:	Toilet is glued to the floor using wetroom silicone. Toilet is stable and should not be screwed.
Drop shaft:	200 mm (diameter). Black polyethylene. (is not included when purchasing only toilet).
Toilet Seat:	Standard white plastic seat included.



# Example installation WC



## 1. Find exact location

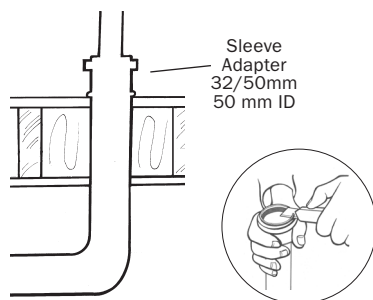
- Check that the holes don't hit heating coils, etc.
- Does the waste barrel fit beneath the floor? How deep down does it need to be?

## 2. Mark and cut holes

- Mark holes as described above.
- Cut up the holes

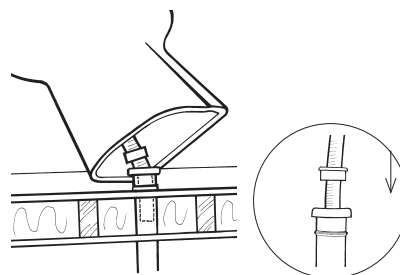
## 3. Mount the drop pipe

- Adjust the length of the 200mm pipe. Should stick up about 170 mm above the floor. Let it stand down as far as the collection barrel requires. (so that the "box"/device can be pulled out, without the pipe gets stuck in the bottom part.)
- Fix the pipe to the floor with angles. (Note, the 200 mm pipe can not be glued.)
- Seal the gap between the floor and drop pipe with silicone.



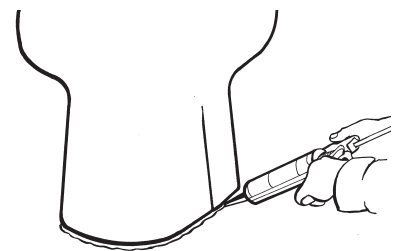
## 4. Install urine drains

- 50 mm OD PP pipes, through the floor and proceed to the urine receptacle.
- Slide the white sleeve adapter down to the floor and seal it with silicone.
- Some brands of 50 mm pipe, has a high edge. In that case – cut edge with a knife so plastic bus tion may come down enough (Located on the urine tube).



## 5. Stick down the urine hose

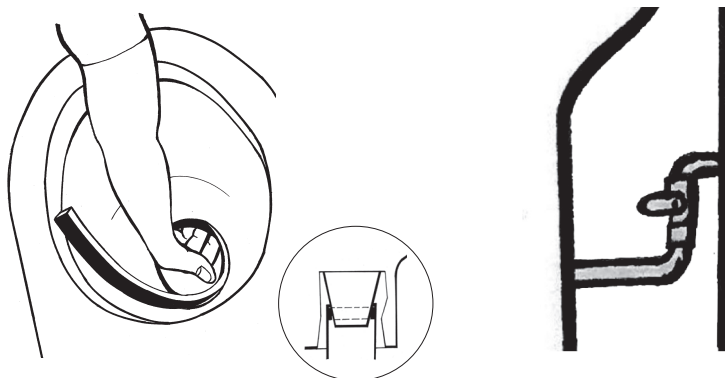
- Cut the urine hose to about 30 cm. (Must be too long and knit into the 50 mm pipe.)
- Rest chair on the side, so that urinary hose going to stop in.
- Insert the hose
- Push the white plastic bushing on the urine hose down (50mm). Should seated properly.



## 6. Place and glue toilet

- Put down the toilet so it fits the 200 mm - pipe.
- Place a string of silicone around the toilet. Even with a damp finger.





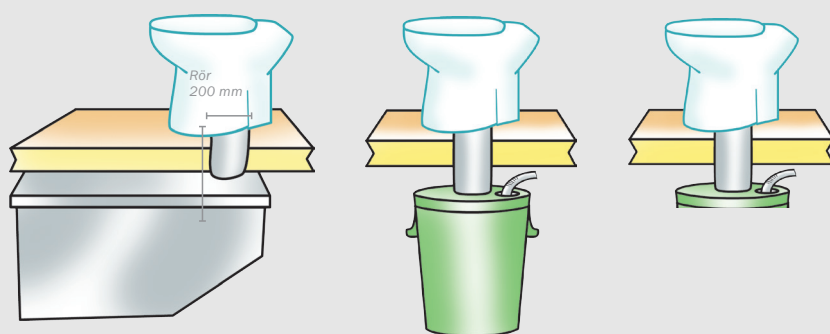
## 7. Mount the seal strip

- Put the seal strip (included) between the drop shaft and the porcelain.
- Seals and making the ventilation working properly, and prevents bacteria and odors coming up to the toilet.

## 8. Water supply – if possible

- Install a ballcock on the wall 20 cm above the floor.
- Screw on EcoDry's water connection R15.
- If water connection doesn't exist, rinse urine bowl manually with a little water.

## Other opportunities with EcoDry

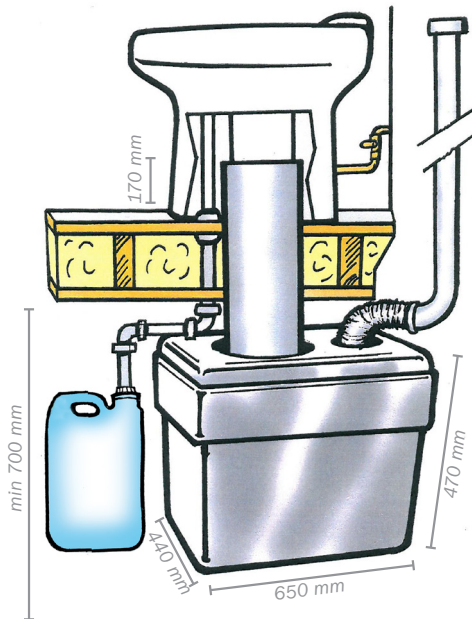


### Fits many collection devices!

EcoDry toilet can be used for many different collection units or your own solutions. Switching to EcoDry porcelain toilet is an easy way to get a higher standard!



# Collection units



## EcoDry Box

The most comfortable option. Only the toilet is visible in the toilet area. High capacity and easy management. Fan included, which makes the waste completely dry. The whole processing is done outdoors, or under floor.

### Assembly:

Follow the section "Mounting toilet". Should be about 70 cm between the joists to the surface the box is on. Good space around the box to provide urine receptacle on. The length of the drop shaft protrude 17 cm above the floor, and should not stick longer inside the box than to Boxlådan can be easily "pulled out" to empty. Connect the fan vent. hose to pipe up over the roof. Make holes in urinkär- let, and connect the drain urine / urine tube.

**Material:** Polyethylene

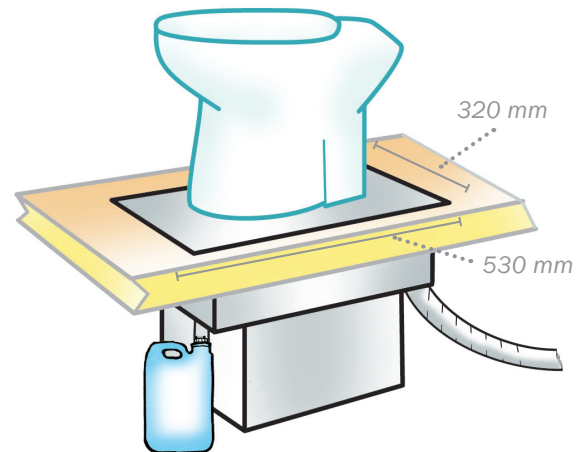
**Capacity:** 100 liters

**Drain:** approx 1 time / season

**Time until the waste is dry:** approx 3 months

**What's included:** toilet seat, toilet lid, solid waste containers (Box with lid), nedfallsrör 75cm, fan (Mounted), flexible vent.slang 1m.

**What is needed:** any extension of urinary drainage, ventilation, receptacle for urine, possibly ballofix.



## EcoDry Low Container

Compact solution that is lowered to the floor. Suitable when the space under the floor is limited. The toilet is mounted on the metal top of the container. Emptying is done by folding up the toilets forward.

### Assembly:

Read also instructions on page 2. Comes with toilet glued to the top of the container. Cut a hole in a square 530 x 320 mm. Lower down the drain / toilet in the hole and connect to the ventilation and urine containers.

**Material:** Stainless

**Kapacitet:** 28 liters

**Dump:** quarterly

**Time until the waste is dry:** approx 3 months

**What's included:** toilet seat, toilet lid, solid waste containers, fan (mounted), drop shaft (mounted), flexible vent. Hose 1 m.

**What is needed:** urinary drainage, ventilation, receptacle for urine, possibly ballofix.

# Owners manual:

## Care:

### – Drain fecal material

Emptying the box/containers waste in a latrine compost. The longer the waste may be in the Box/Container the drier and easier the waste becomes. 3 months is appropriate. Use large plastic bag/trash bag.

### – Emptying the urine container

The urine container (depending on size) is probably emptied more frequently. Keep track of this time. Then use the urine as well fertilizer by mixing 75% water, 25% urine.

### – For winter

If you do not use the toilet in the winter, turn off the water and drain all the water. Empty by flushing once after the water turned off. Tighten loose the flexi hose from the ballofix, otherwise the solenoid valve can freeze.

### – Flush the urine drains in toilet - seat

If you do not have the water flush installed, flush the toilet manually with a cup of water.

## Spare parts:

- Solenoid
- Flush equipment

