

THE LINK

connecting with heritage, with nature, with community

Besides giving a second life to already used materials and placing them in a new context, we try to imagine what will happen when we reuse not only material but also the form present in the surroundings.

Placing the familiar form of a pitched gable roof in an area where it is not expected creates an element of surprise and draws attention to such a basic building element, which originates from ancient times. The structure, with its amplified dimension of length, creates a polygon for different kinds of activities underneath it, fostering social interaction, cooperation, and a sense of community among residents. It also provides opportunities for learning about sustainable practices.

ROOF

/ru:f/

As in canopy: a raised covering over something for decoration or protection.

Synonyms: canopy, tent, ceiling, dome, cover, shelter, screen, shield, umbrella, shade, pergola.



Photo: M.Jovic



original photo: Tõnu Tunnel

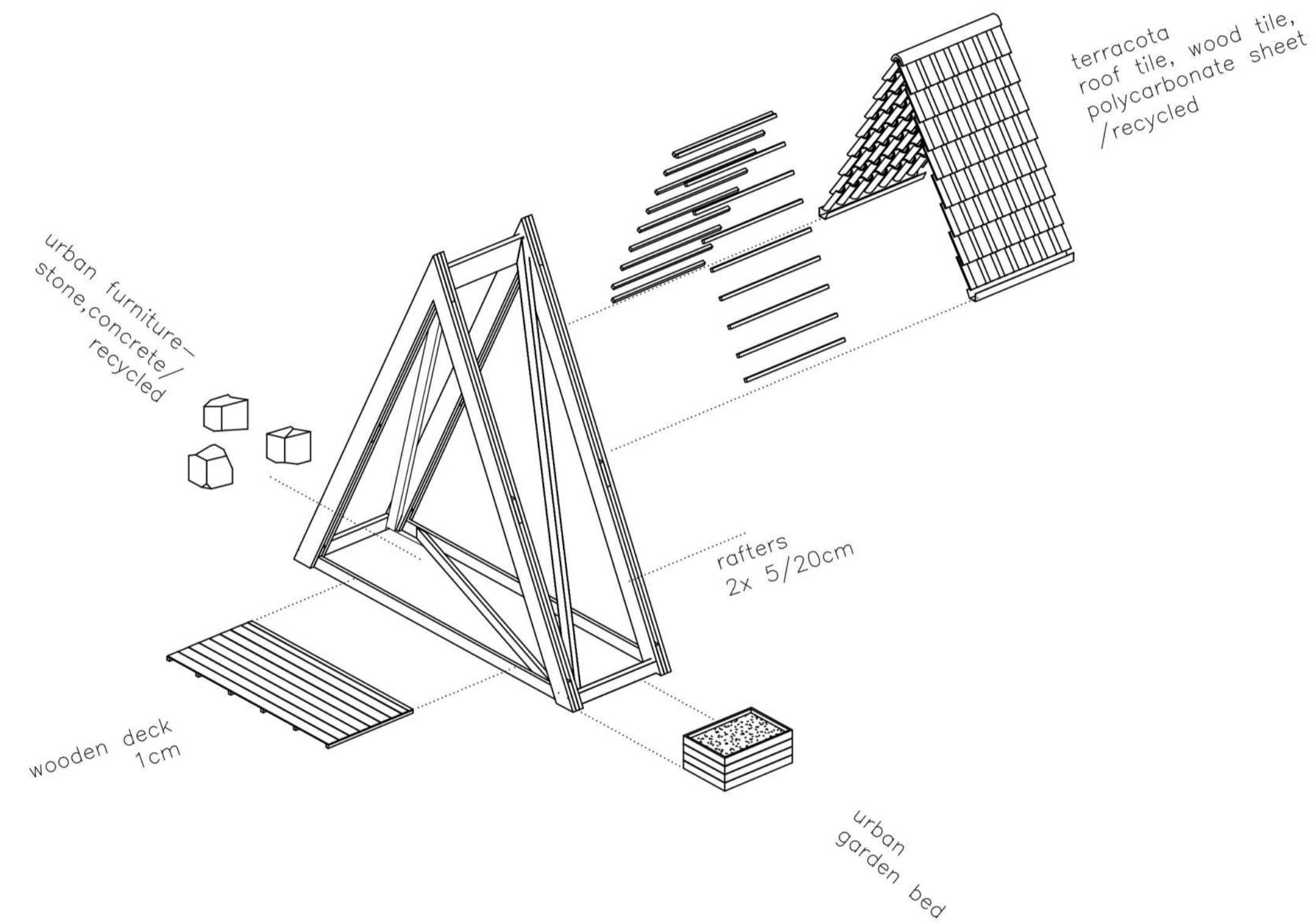
Terracotta roof tiles as a material which is recalling the spirit of old city, also is a resource that could easily be reclaimed, being readily available at both new and old buildings.

Across the world, many old buildings are being demolished, resulting in significant material waste. Our goal is to identify locally available ceramic tiles, either from demolitions or new construction spares. Some companies are already engaged in this process, collecting material waste from demolition sites, often for free, in exchange for clearing the site.

New constructions also tend to have an oversupply of ceramic tiles, as it is challenging to estimate the exact quantity needed. This often results in surplus materials, which we can also utilize, so we can ask the citizens to contribute to the construction of this canopy.



Photo: C. Crudu



For the seating arrangements, we plan to utilize concrete blocks sourced from demolished buildings or construction sites. These blocks will be strategically placed throughout the canopy in various configurations.

The seating elements will vary in size, offering multiple layouts as you navigate the canopy. You can choose to sit next to others or by yourself, with options to sit on the sides or in the center, depending on your preference.

Additionally, we will provide a table for those enjoying a snack while waiting for the bus, facilitating community gatherings and meetings.



Youtube screenshot/chavil
—Raising a Black Nomadic Tent: Nomad life Iran

The entire structure of the canopy is constructed using locally sourced wooden elements. We have selected this sustainable material to form the main framework, ensuring it meets both static and safety requirements. Timber is a natural choice, as it is commonly used in traditional roofing.

In addition to its sustainability, building with timber can significantly speed up the construction process. Timber requires minimal processing before and after installation, which enhances efficiency. Its lightweight nature makes it easy to handle and manipulate, eliminating the need for complex foundations. Timber can be easily customized on-site and offers excellent durability.

We also plan to involve local craftsmen in the construction process to leverage their expertise and foster community involvement. This readily available material is not only accessible but also cost-effective compared to other building materials. Timber's durability can be further enhanced if necessary, and it provides biophilic benefits by fostering a connection with nature. Sourced from renewable resources, timber is a viable and valuable asset for our canopy project.

Wood shingles – Similar to terracotta roof tiles, wooden shingles are echoing a traditional roofing technique. We propose two methods for sourcing this material.

Firstly, it can be obtained from demolished buildings as premanufactured shingles. Companies already collect this material waste for free in exchange for clearing sites and sell it at very low fees. In less developed countries, this type of material waste is often chipped into small pieces and burned to produce heat and electricity, but it can be used in a more sustainable manner.

Secondly, we can use raw wood sourced from various places such as construction sites, demolitions, manufacturing processes, or consumers. We plan to organize wood crafting workshops where the local community can participate in producing the shingles. This approach not only recycles the material but also involves city residents in the process, contributing to the canopy's identity.



Photo: M. Jovic



Photo: Rodeca GmbH
<https://www.archdaily.com/997035/up-cycling-polycarbonate-trapezoidal-and-corrugated-sheets-from-waste>

Polycarbonate – This is the modern material we use for the roof and it shapes it with some triangular forms, inserted in the traditional opaque tile roof. Its purpose is to revealing the inner structure, giving the chance to the people to see it also from the outside of the canopy.

We have been looking for a transparent material that could be sustainable and reused, and we found out that polycarbonate has a lifecycle of about 20 years when it comes to facade and after that it should be replaced so it could end up in another building.

Also, there is a company called Rodeca, that produces translucent building elements has an innovative product using recycled polycarbonate, and it could be made entirely with post consumer material and recycled materials.

As plastic can be recycled in many ways, polycarbonate is a high quality raw material, that could be recycled and after recycling it could be used again as a raw material mixture for completely different purposes, and if needed it could be turned into moldable granules after use.

By integrating green elements into the canopy, positioning them along the sides and between the floor structure, we are creating a small-scale urban garden, fostering community engagement and providing a more natural and unique experience for those interacting with the construction.

Urban gardens offer numerous benefits, including mitigating the urban heat island effect and improving air quality. They positively impact biodiversity and provide social advantages by connecting citizens and bringing them closer to nature.

To support these green elements, we will implement a water collection system. Water tanks will be placed near the drainage pipes to collect and distribute water as needed. This sustainable solution ensures that the plants receive adequate water, enhancing the overall efficiency and effectiveness of the garden.

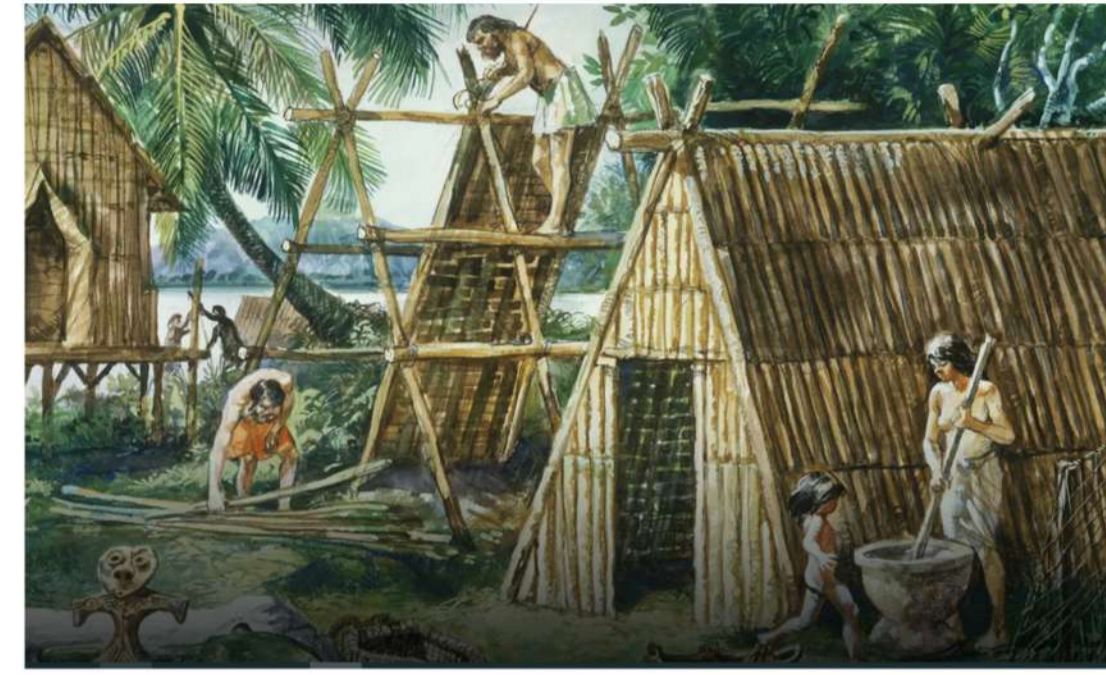


colour palette of the old city of Tallin



google maps screenshot

Inspired by the steeply pitched roofs of Tallinn's old city, which is located near the site of the Balti jaam station, we aimed to capture that essence and transport to the given plot. Drawing from the materials used in the old city, we incorporated a vibrant color palette to infuse a lively spirit and establish a connection between the historic district and the transit area.



UNSPECIFIED - CIRCA 1900: Prehistory, Neolithic, Japan. Reconstructed late Jomon period settlement. Drawing. (Photo By DEA PICTURE LIBRARY/De Agostini via Getty Images)/detail



Youtube screenshot/chavil
 -Raising a Black Nomadic Tent: Nomad life Iran

Civilizations from the ancient times began developing sloping roofs for functional reasons, primarily to ensure proper rainwater drainage. This led to the creation of pitched roofs supported by truss systems.



<https://www.pinterest.ca/pin/306807793366906826/>



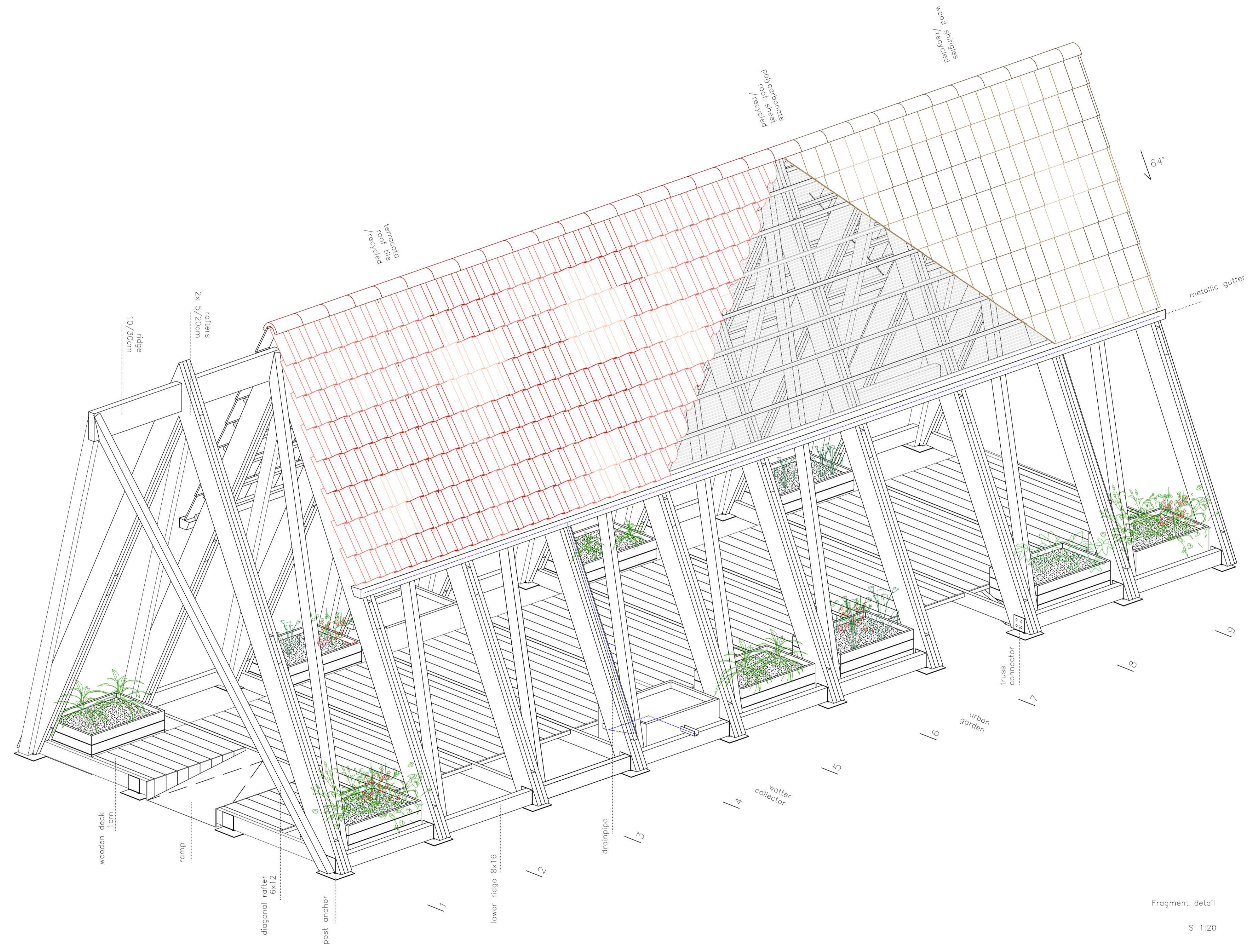
Roman water basins in the ancient town of Cuicul, UNESCO world heritage site

Rainwater harvesting systems are a sustainable tool for water management. Given that our proposed design features a sloping roof that lays on the ground, we recognize the need to ensure proper rainwater drainage.

By capturing and storing rainwater, we can provide a valuable resource for irrigation, reduce dependence on groundwater, and manage stormwater by reducing runoff.

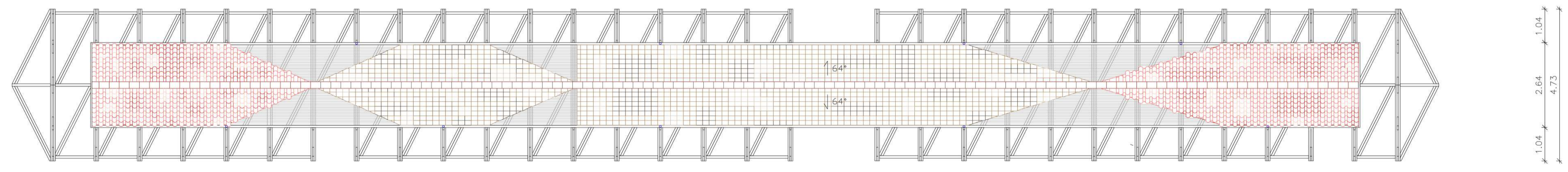
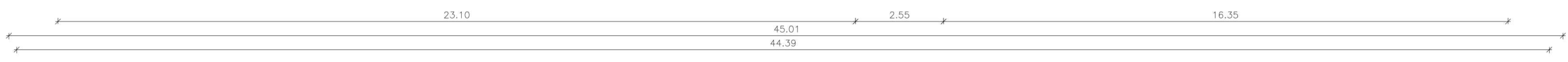
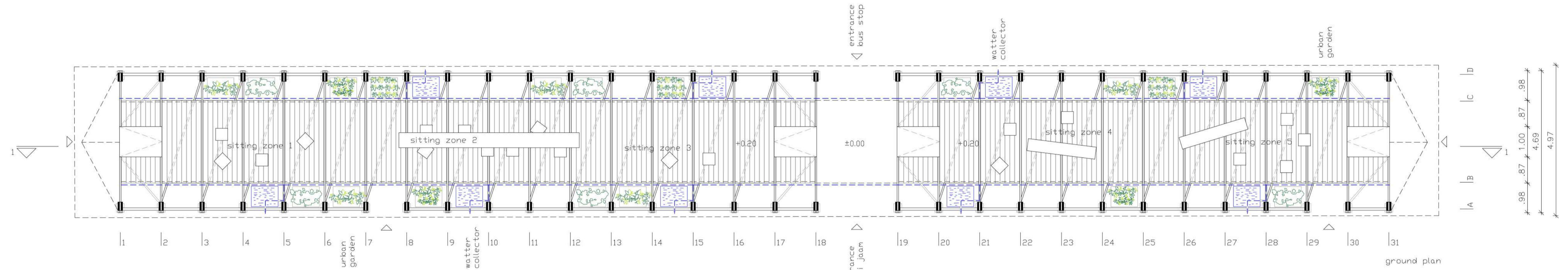
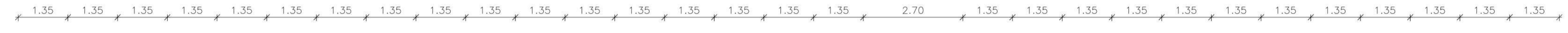
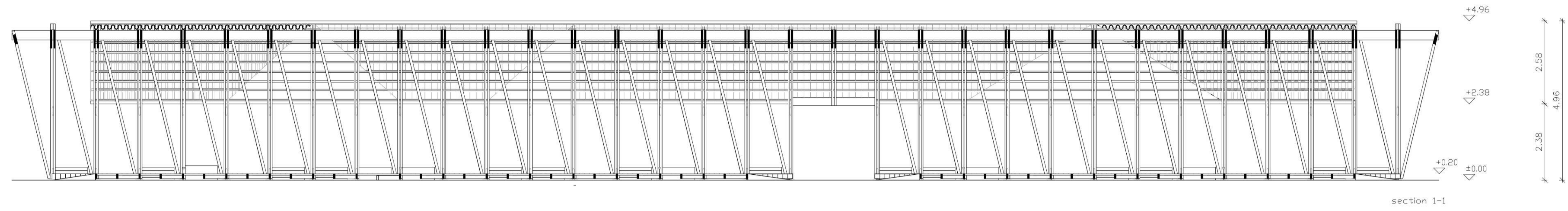
Incorporating the capacity to collect rainwater led us to consider urban gardening, which is essential for fostering sustainable urban living.

In this context, we aim to transform an unused space in our canopy into a community area that offers educational opportunities about agriculture and sustainability.

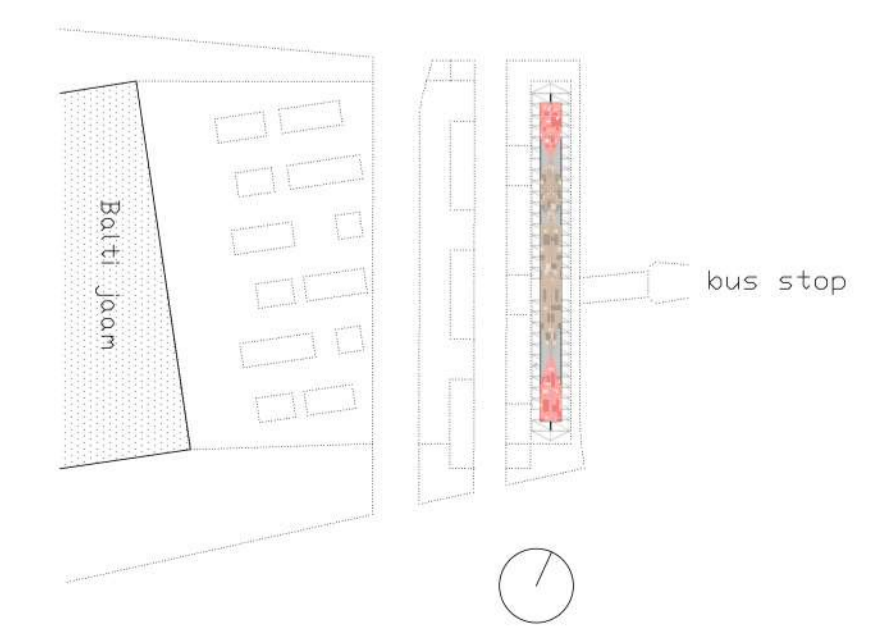
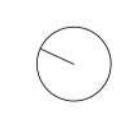


Fragment detail

S 1:20



S 1:75





West Elevation