Ecology Space

Container

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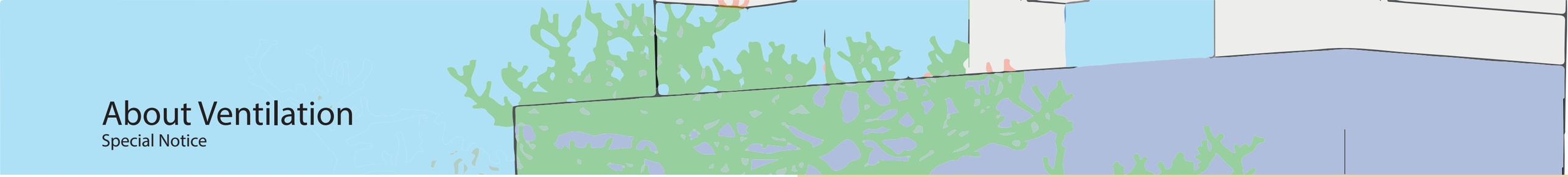
Man Zou



About Ventilation

Special Notice

Ventilation System

Concept Description

The workshop has to implement a powerful ventilation system because it is an industrial space and has to evacuate the air of the machines in production. This system is not included in our plan because it needs to be developed with the fabrication companies and architects, but the designs presented in the pdf take this factor as a pre-requisite for granted.

Solar Air Heaters

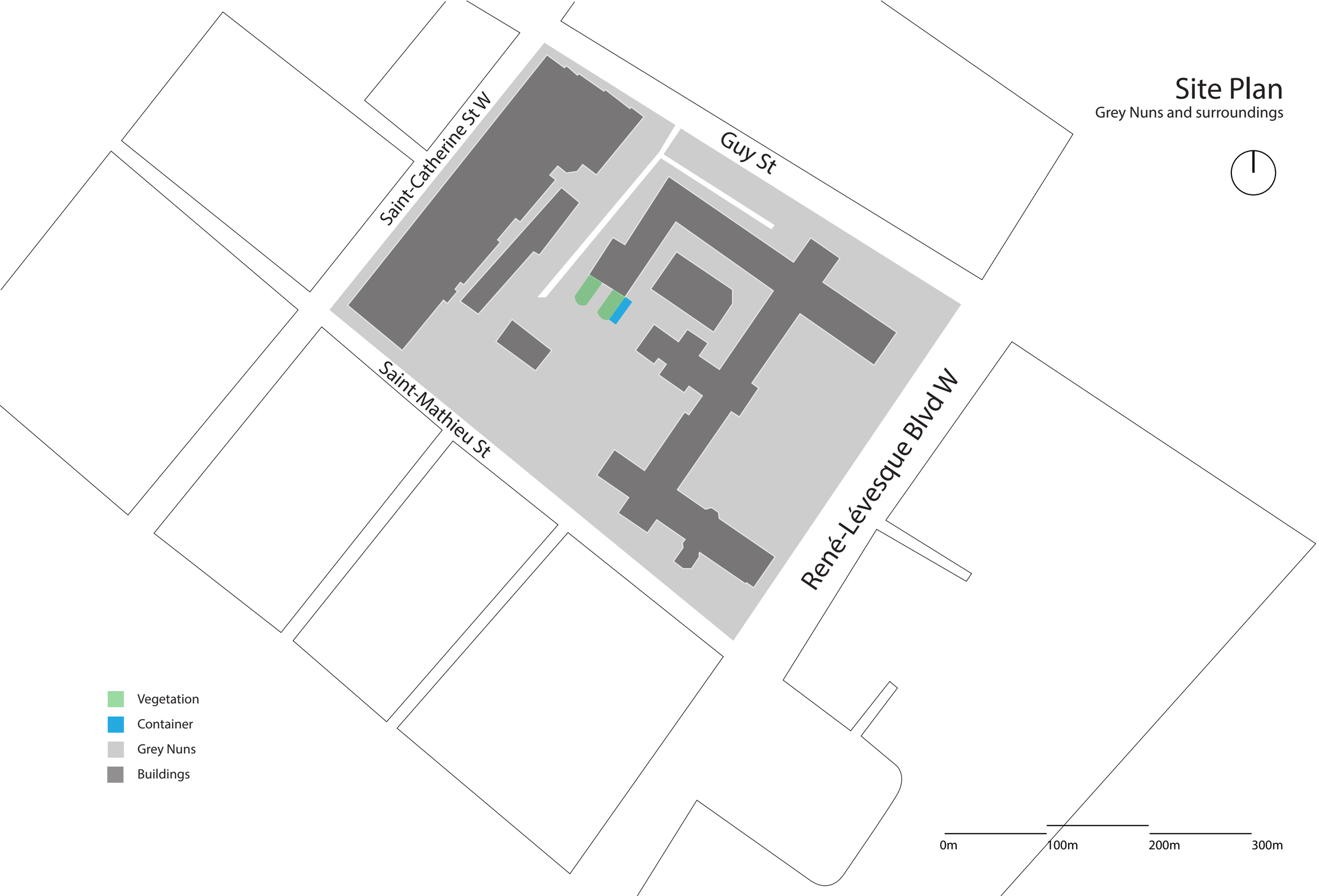
Concept Description

Since there is already a complete and functionning ventillation system, the solar air heaters will not be in charge of bringing new air and its function is to increase the heat inside the container.

The tubes for cold air is relatively close to the ground to make sure the coldest air in the container is directed towards the heating pannels.

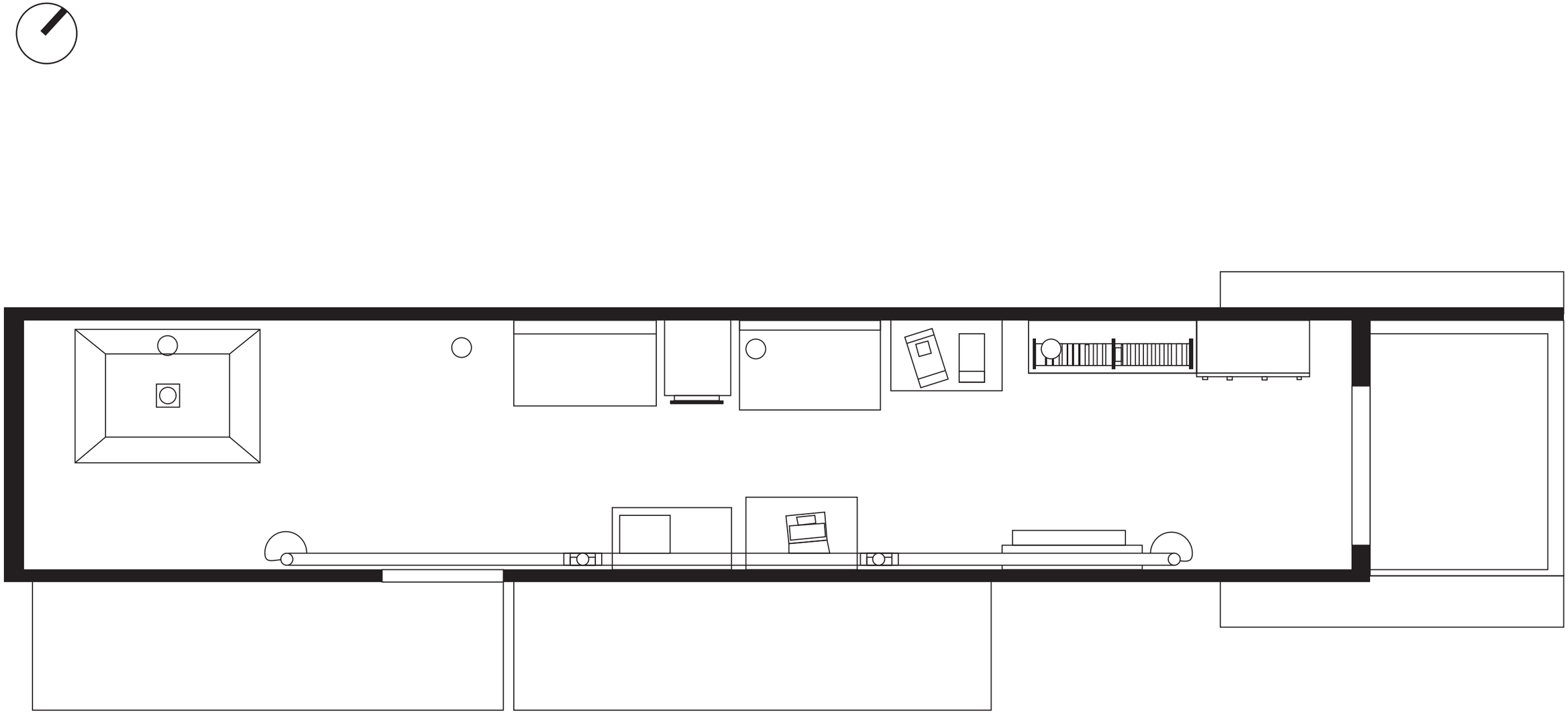
Site Plan

Grey Nuns and surroundings



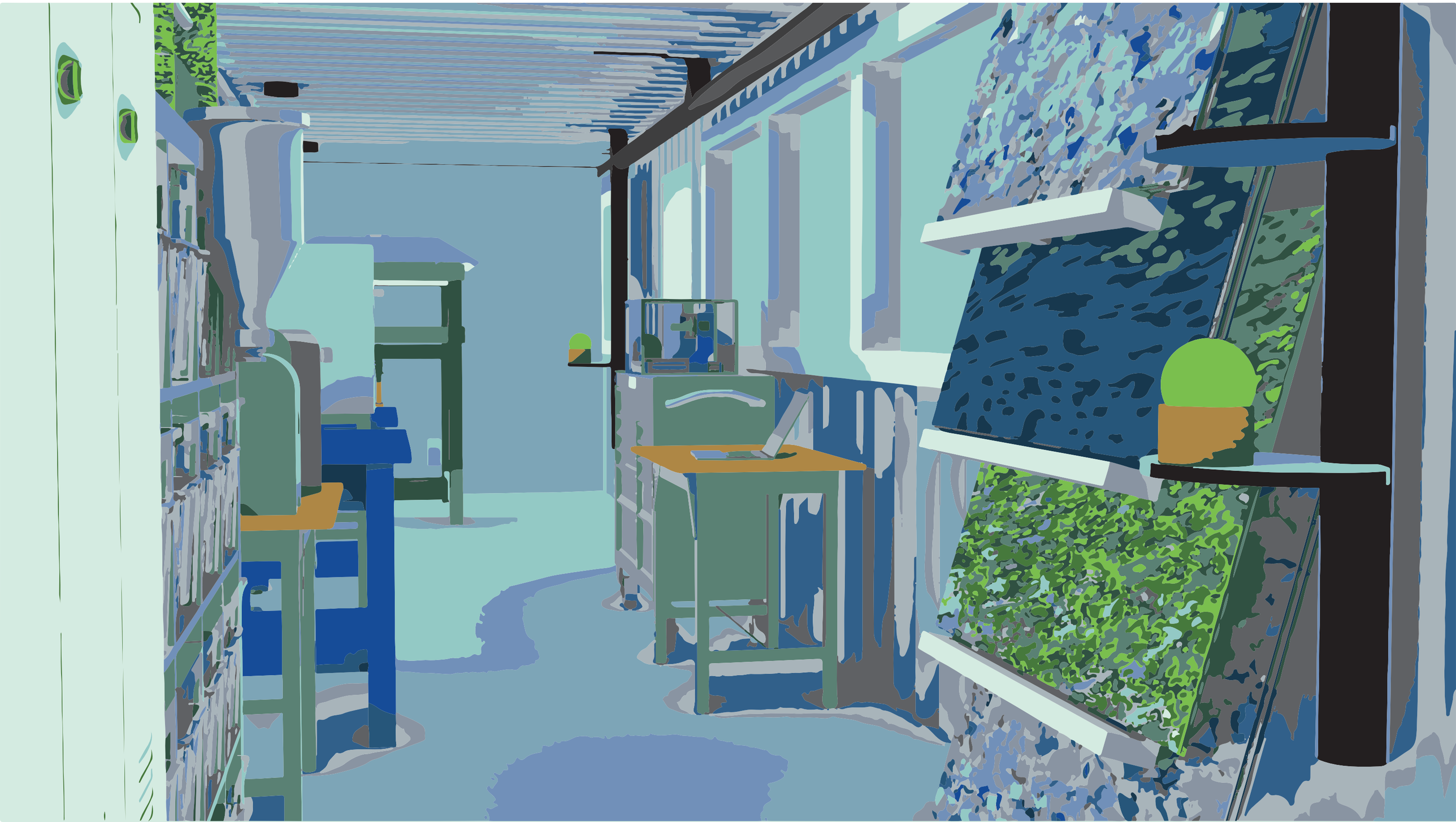
Floor Plan

Container



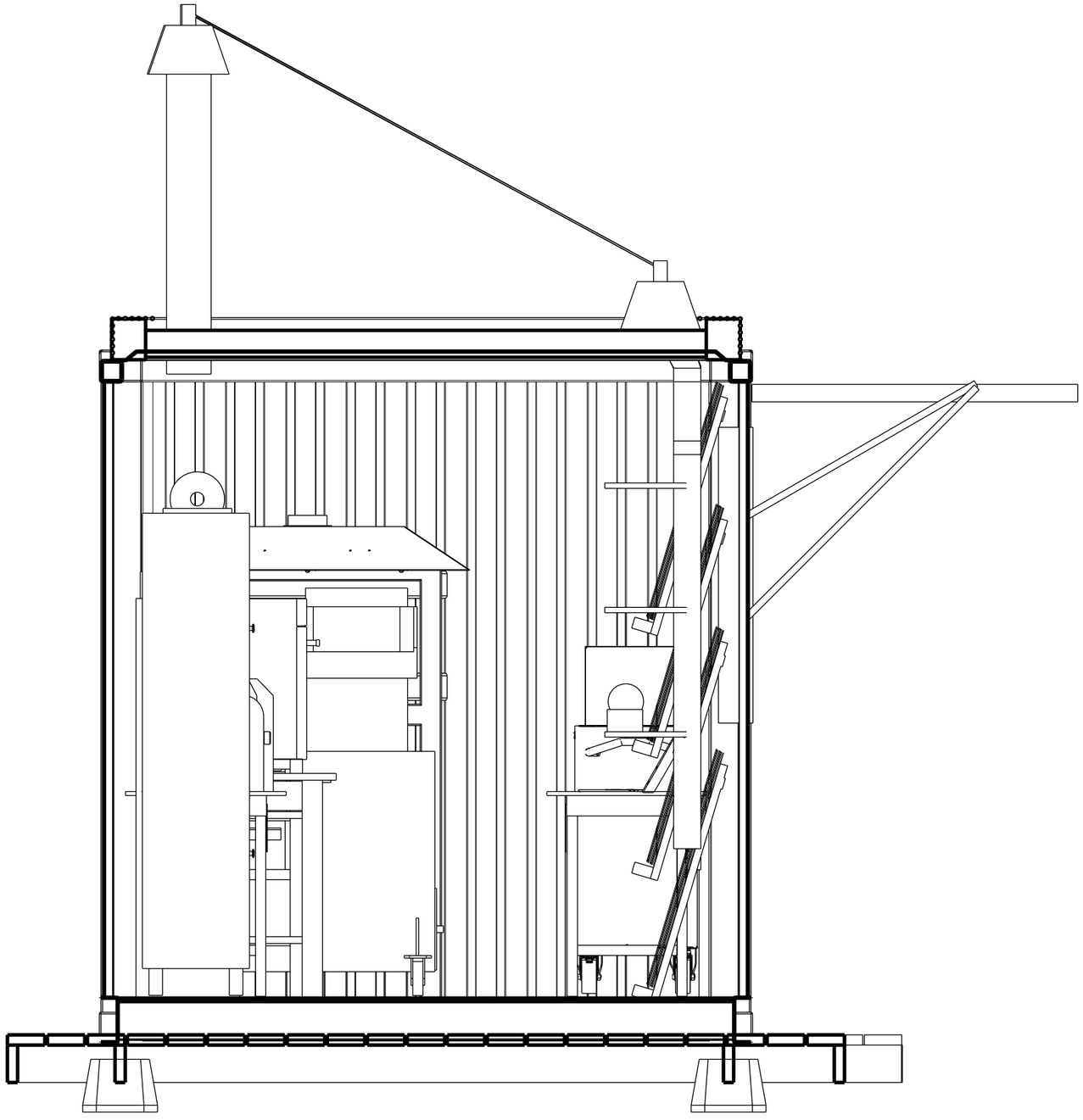
Interior Perspective View

With solar air heater tubes



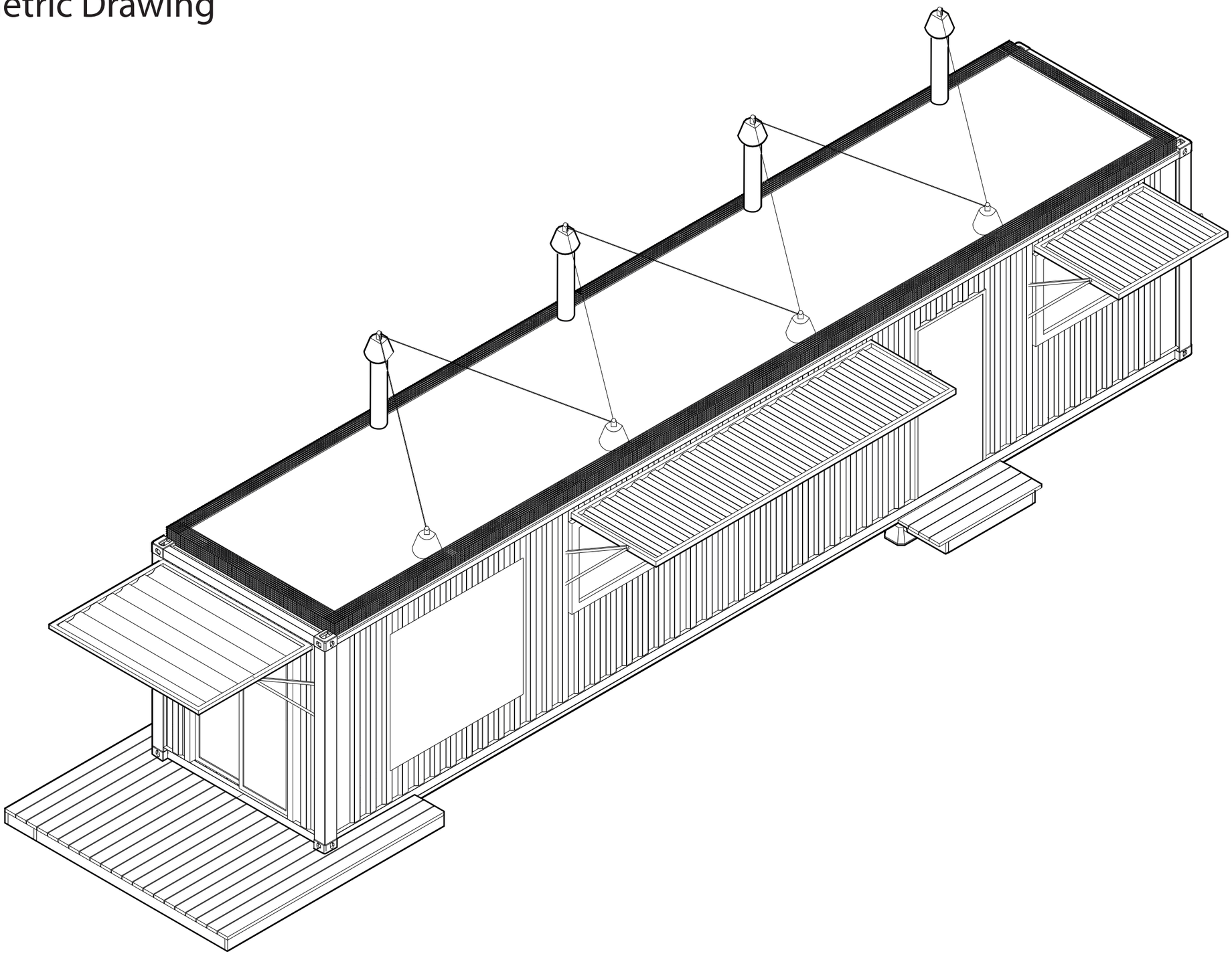
Section Drawing

Front



Isometric Drawing

Summer

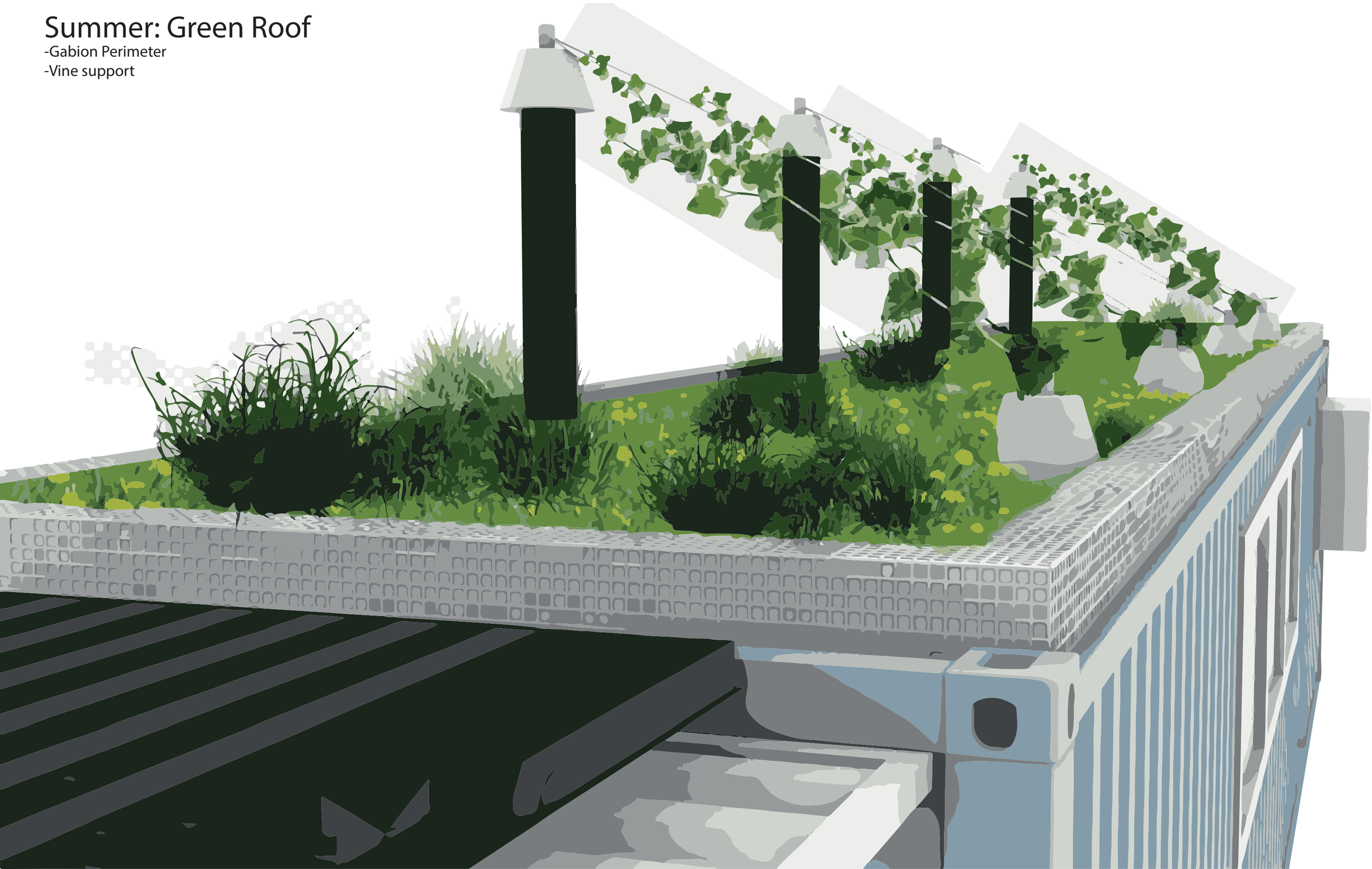


Perspective View

Day in summer

Summer: Green Roof

-Gabion Perimeter
-Vine support



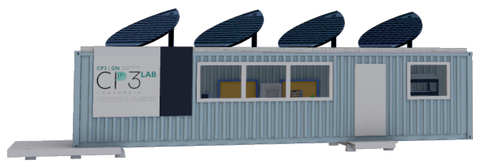
Perspective View

Night in winter

Sun Study & Winter Installation

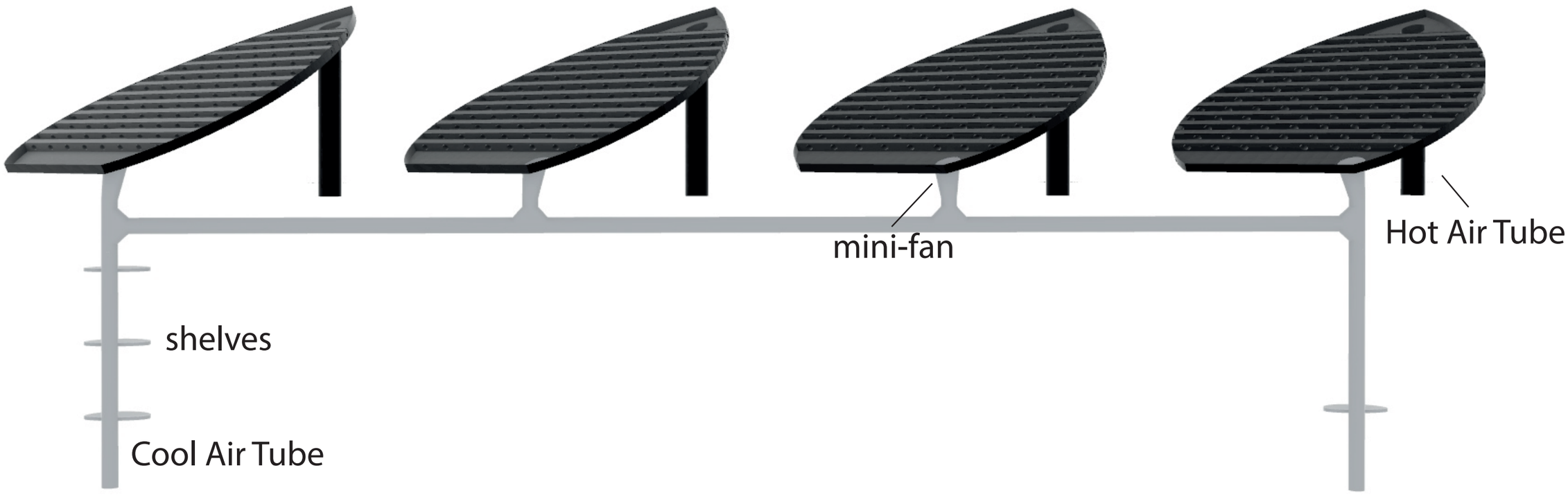
In winter, the marquise will be taken off to allow maximum solar heating.

Morning



Noon

Afternoon



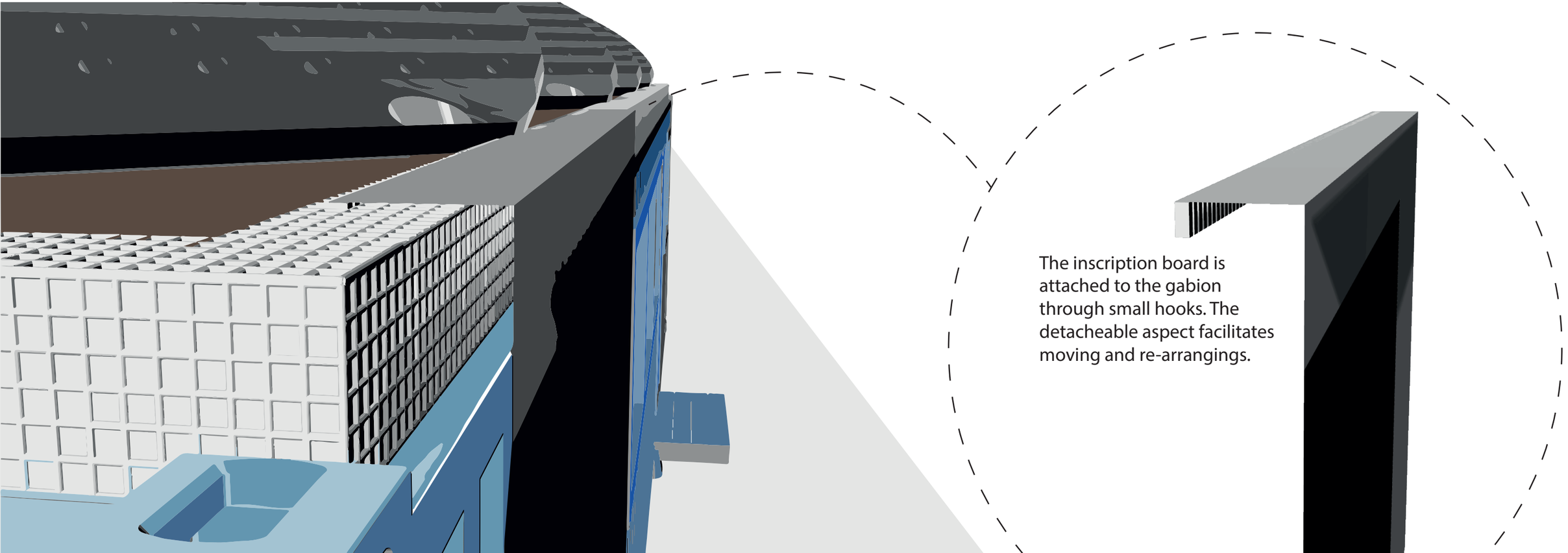
Structure View

Winter Installation

Inscription

Details

The inscription board contains a rectangular shape painted with chalk-board paint, so we can write our operating hours and other informations on it.
Fixative spray may be applied if we want to keep the chalk writting for a longer term.



Sustainable Description

Concept Description

Our ecology space is a CP3 workshop made from recycled containers. Two major concepts will be incorporated with it to adapt to seasonal changes. In winter, solar air heaters will be installed on the roof to help heat the interior and to decrease energy waste related to heating. A mini-fan in each tube will blow the air up to the heating panel and hot air will be returned to the room. In summer, the roof-top will have a vegetation area delimited by a range of gabion perimeter that will allow water evacuation while containing the dirt. The tubes for the solar air heater will be connected with ropes to be used as support for vines. Marquises are installed on top of each window to cast shadow on the glass to reduce heating, insulation films will be applied to each window to help the interior cool down. Finally, the green roof will also act as an insulation layer against sunlight.

The inscription panel for CP3 could be disassembled and be placed anywhere on the container's wall while the use of a blackboard prevented paper waste. Information regarding opening hours or notifications could be written on the blackboard.