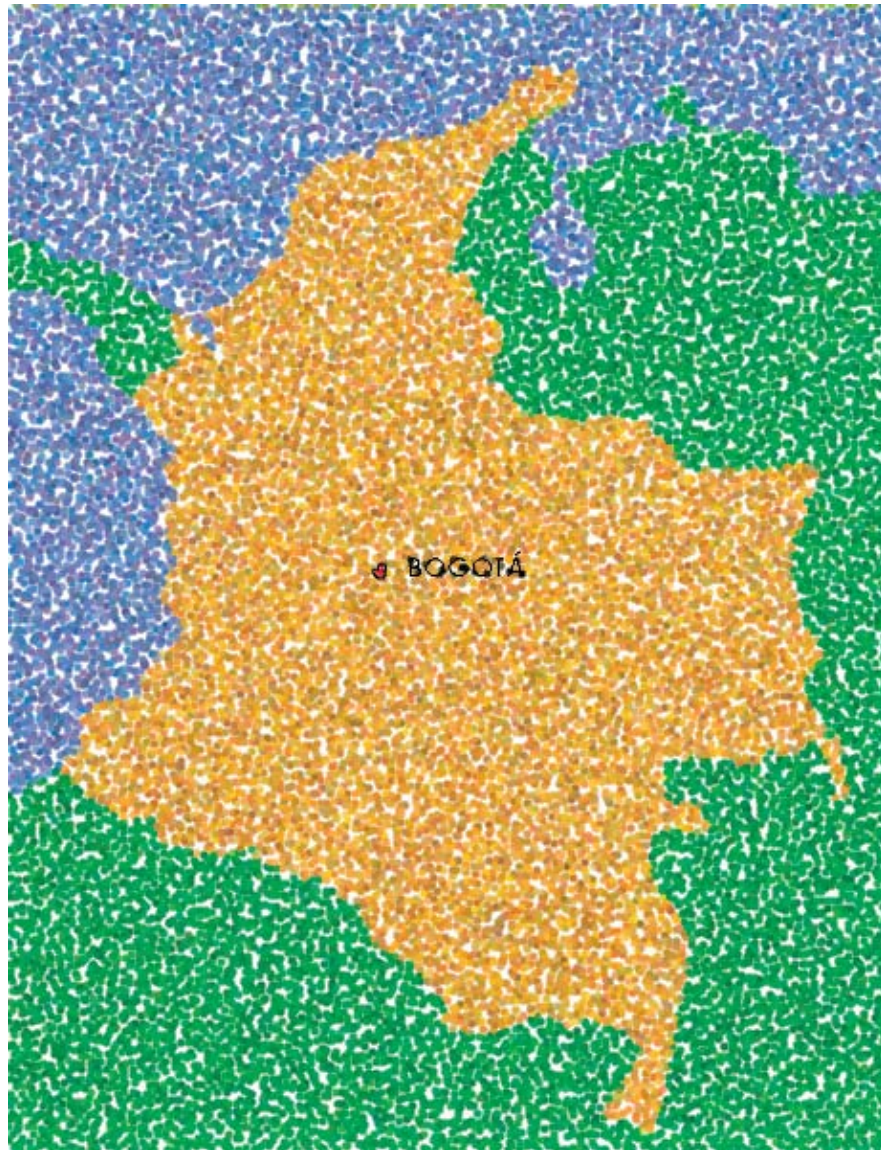


Centro Gente - Bogota, Colombia



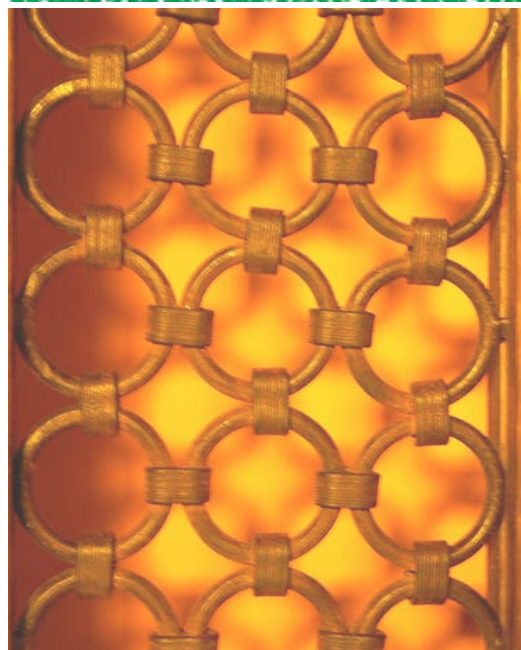
Intent

Our structure is inspired by the people of Colombia. Bogota is a colourful city, with much culture and diversity. Populations include European immigrants, Indigenous Natives, Africans and Middle Easterners, and there are over 85 distinct cultures in Colombia.

For this project, we have decided to represent these multi-cultural backgrounds with the use of colour in our design of the shipping container. The concept is further defined by using a variety of material texture in the design: bamboo, reclaimed wood from wood crates, and translucent acrylic as a backdrop for light/image projections.

The way the structure folds in and out makes it a modular system, which is playful, and opens up an otherwise rigid rectangular shape. We would like to physically open the space with this gesture, and invite the community to come and use the centre's resources. Our objective is for this to be a place that promotes learning and interaction.

Our centre is called "Centro Gente", which means "People Centre".



Centro Gente - Bogota, Colombia

Sustainable Design

Bamboo is a common building material in South America, used by both the rich and the poor. Guadua is a species of bamboo that is a local material of Colombia, and because of large amounts produced, it is readily available there. Also, bamboo is a sustainable building material because it is rapidly renewable, unlike wood lumber.

In our design, we are using bamboo as the roof surface for water run-off and as shading from the sun. The ability of locally skilled craftsmen to weave and construct the bamboo components is another factor taken into account, in terms of environmental and social sustainability.

As the air quality of the container space will be affected by the use of computers and technology, we have provided several openings on three sides of the container, and a shaded space above the container for mobile computer use. We have integrated natural ventilation in the design. However, when temperature and humidity rises, we propose the occupants use a small air-conditioner unit powered by a solar cell source.

The translucent screen at one end of the shipping container allows for visual projection presentations for class use or community events. The design of the interior adapts well as a social space, as desks fold into the wall shelving for more gathering space. Meanwhile, the top of the container can serve as another gathering space, perhaps one more casual, such as a refreshment area.

In the horizon

We envision a combination of these modular containers in clusters of 3 or 4 so that there can be more than 60 people using the technology centre at once. As joined platforms and canopies will create new spaces and nooks; it is our hope to see the containers brought to life by the people using them.



Design Intent

Centro Gente - Bogota, Colombia



Centro Gente - a place for people

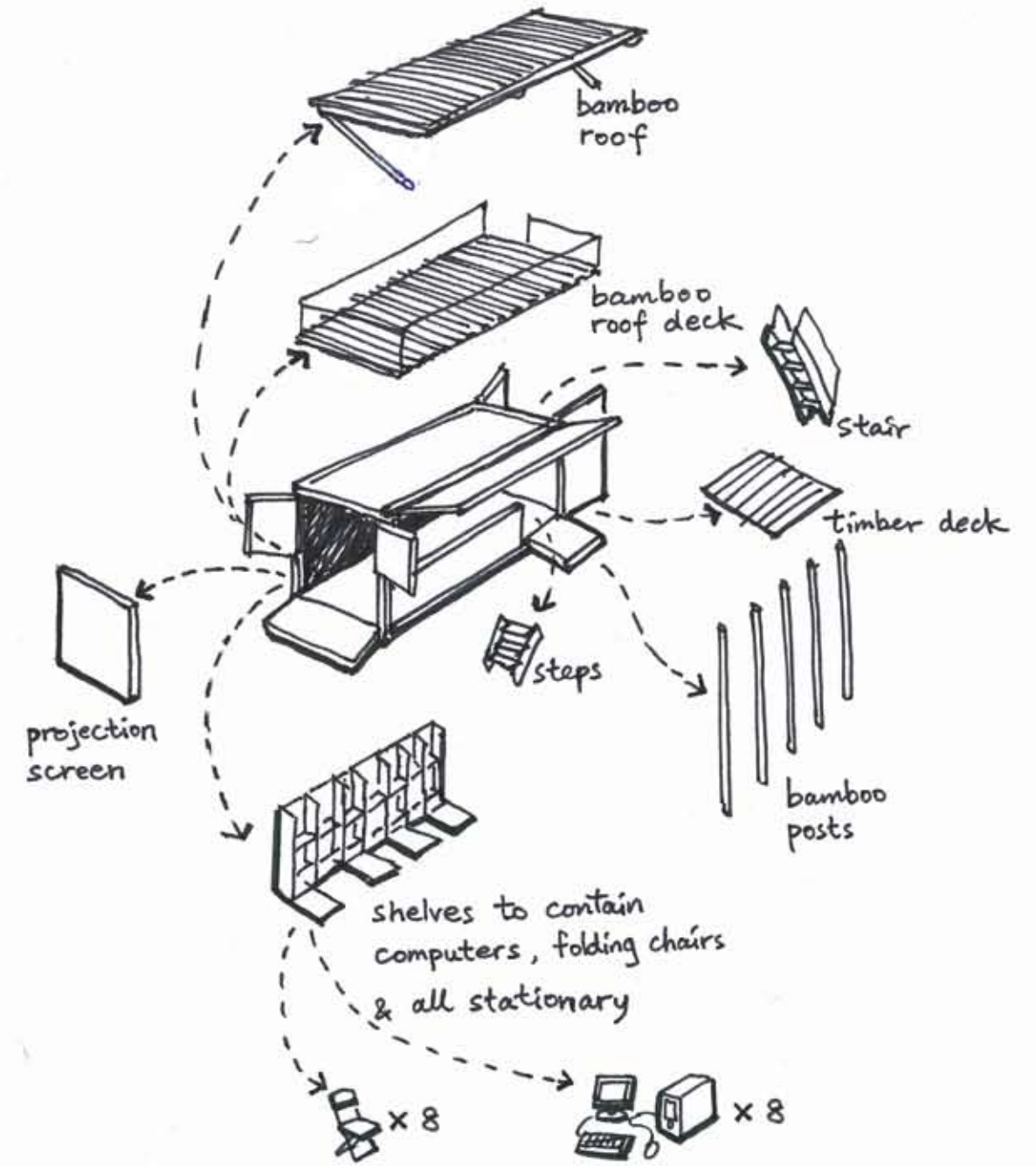
Centro Gente - Bogota, Colombia



MOBILE

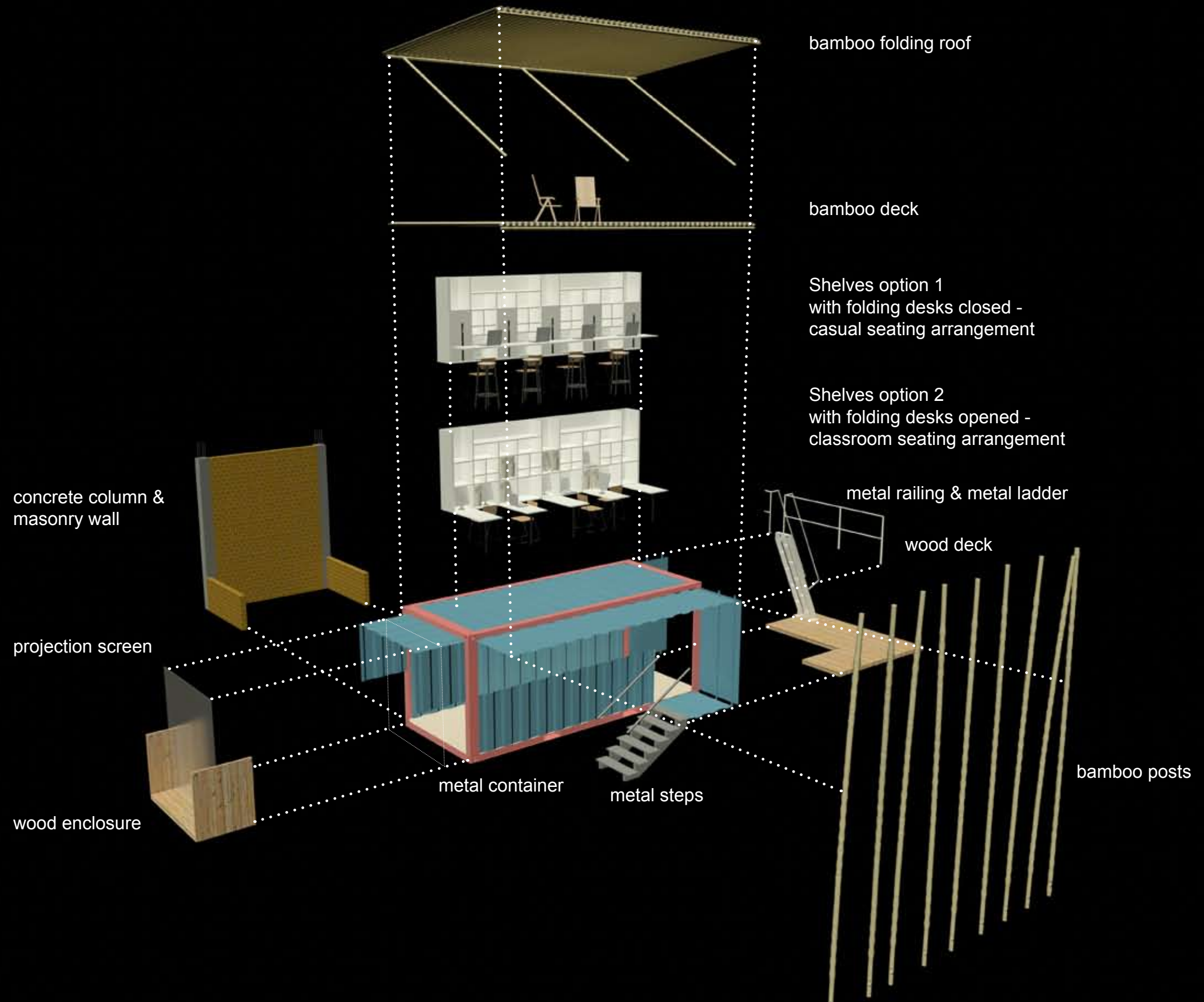


ON SITE



UNFOLDING

Centro Gente - Bogota, Colombia



Centro Gente - Bogota, Colombia

Climate of Colombia

The Climate of Colombia is characterized for being tropical and isothermal as a result of its geographical location near the Equator presenting variations within five natural regions and depending on the altitude, temperature, humidity, winds and rainfall. The diversity of climates in Colombia is characterized for having tropical rainforests, savannas, steppes, deserts and mountain climate.

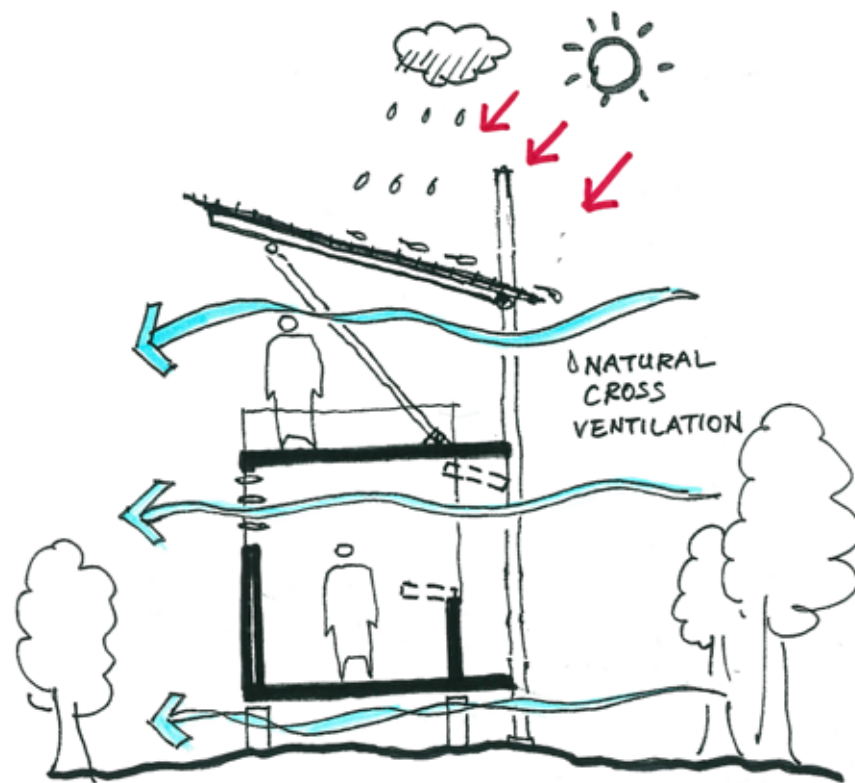
The design of the modular can be modified for different climate situation. e.g. addition of insulation and glazing on external walls. The various positions of the folding roof can also shade the sun and heat depending the seasons, different time of the day and the climate.



Tropical Rainforest

e.g. central region of the Magdalena river and the pacific coast

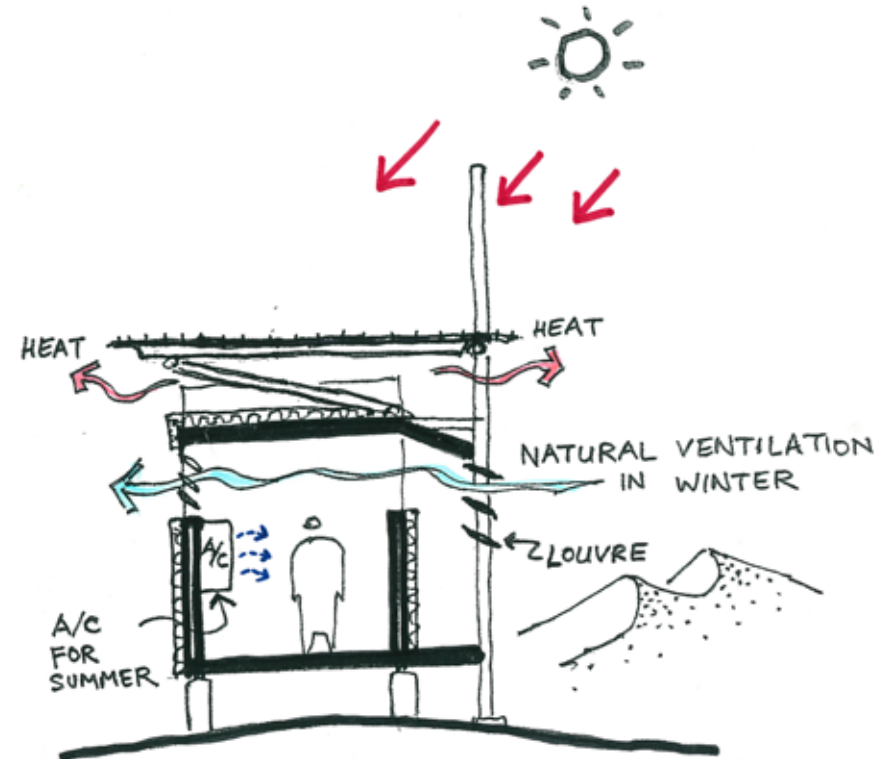
- Hot
- High humidity
- Heavy rainfall



Tropical Desert

e.g. region closed to the Guajira and Tatacoa deserts

- Very Hot
- Dry
- Little rainfall

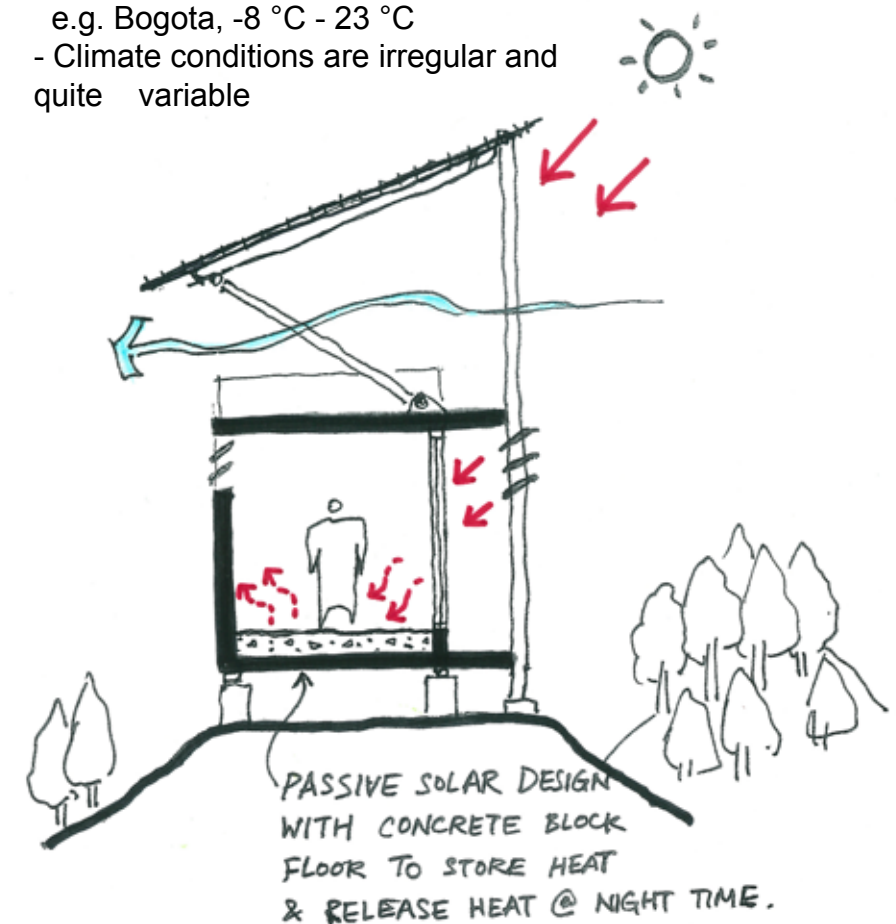


Tropical Mountain Climate

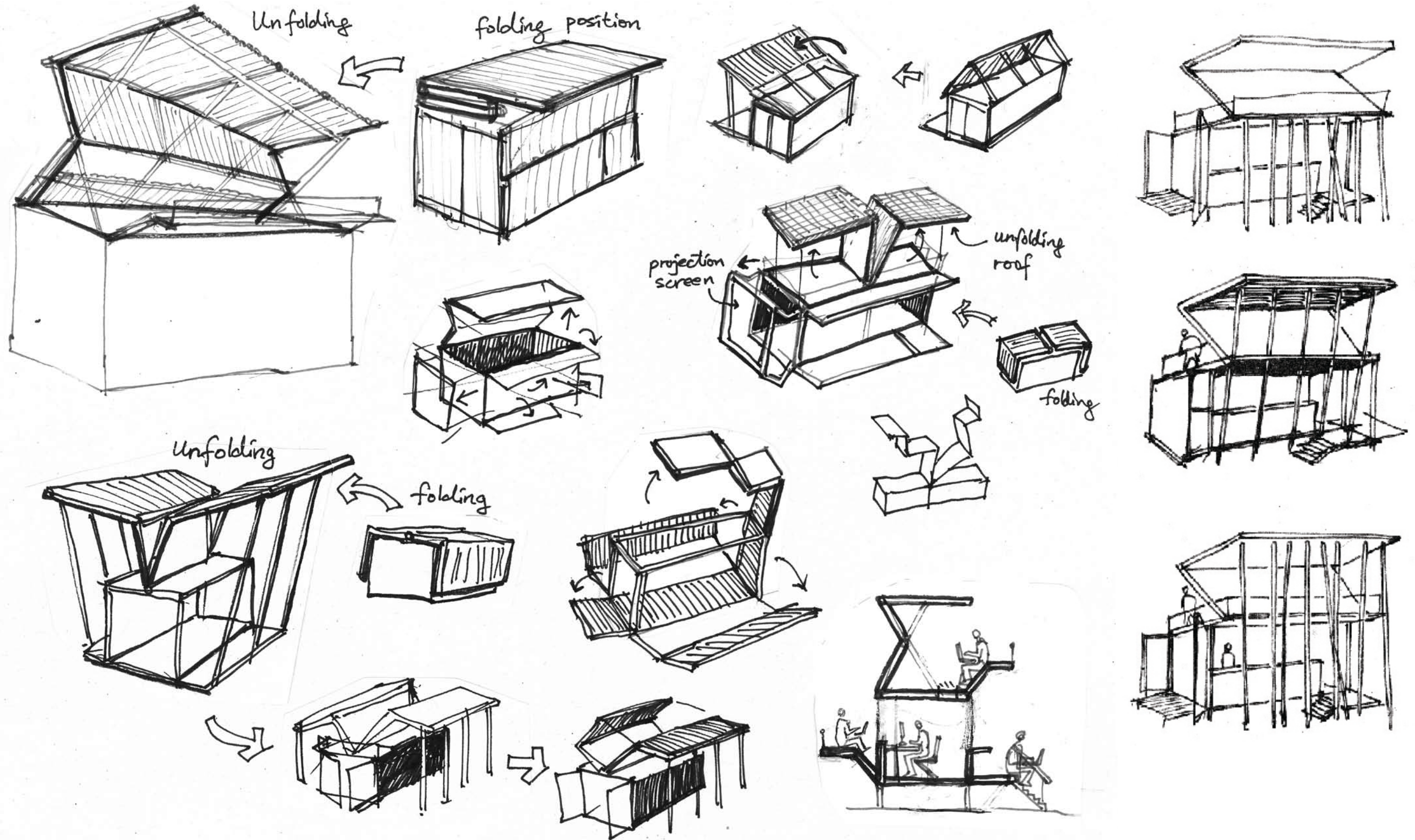
Depending on the altitude, the higher the altitude over sea level, the lower the temperate.

e.g. capital city Bogota (at cold climate thermal floor)

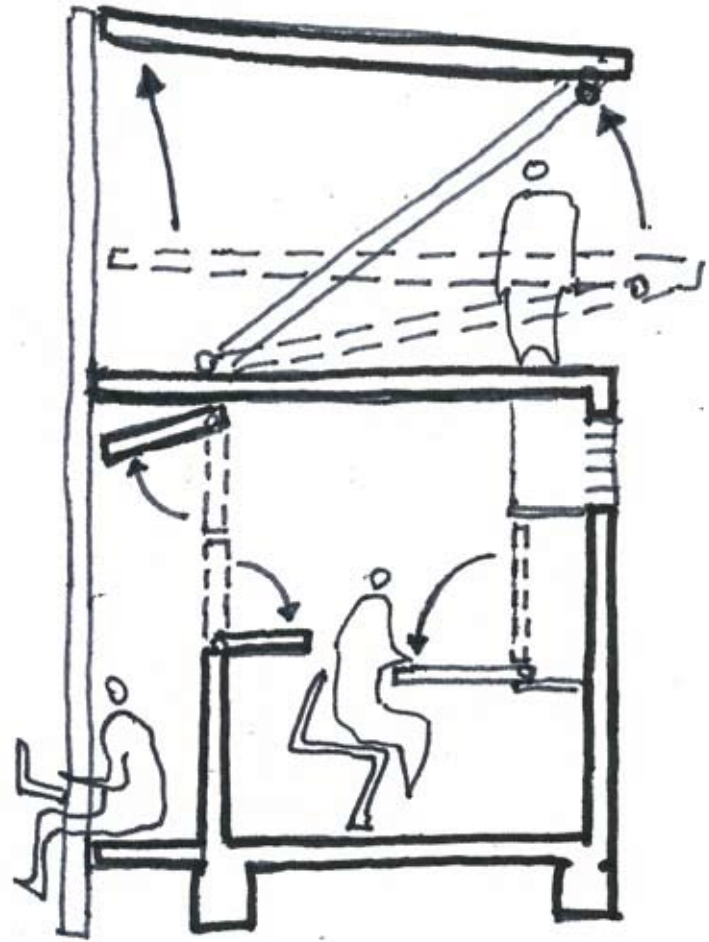
- depending on altitude, e.g. Bogota, -8 °C - 23 °C
- Climate conditions are irregular and quite variable



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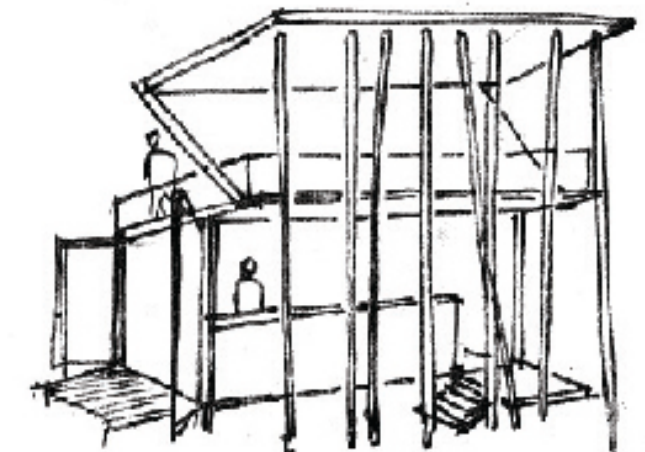
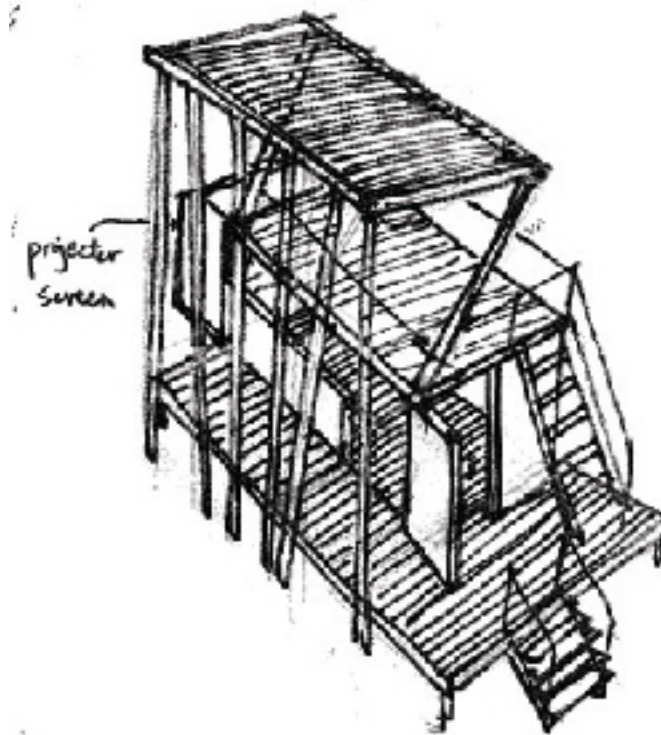
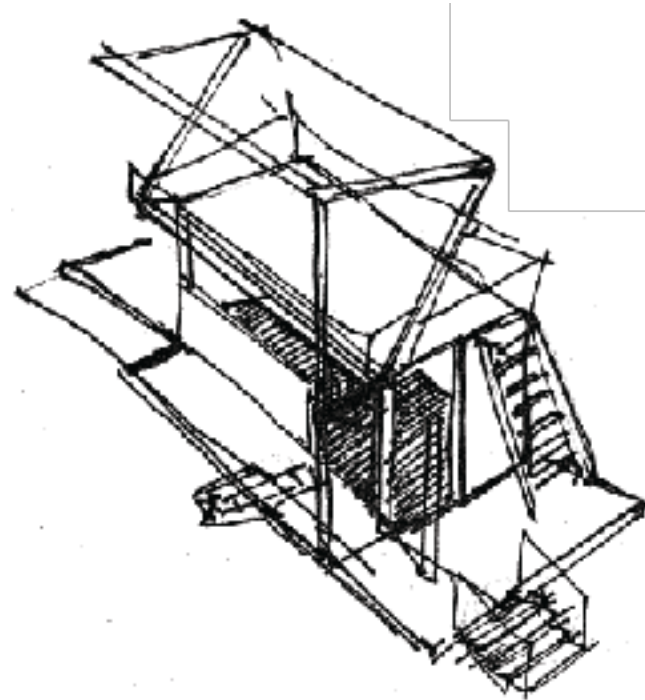
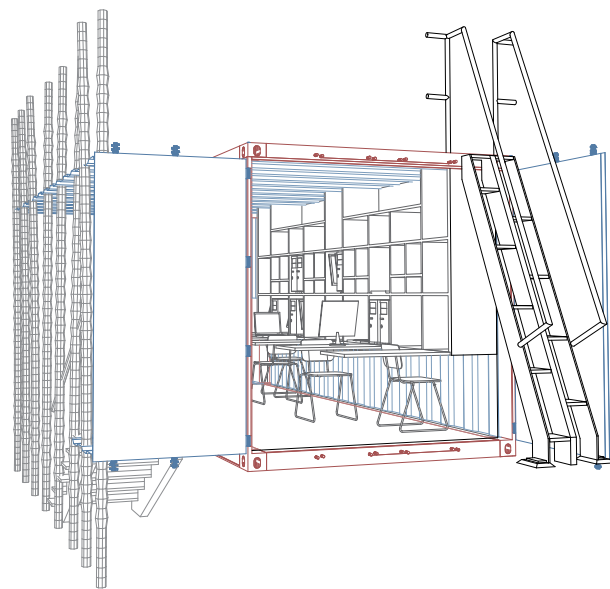


Left: View of the interior.

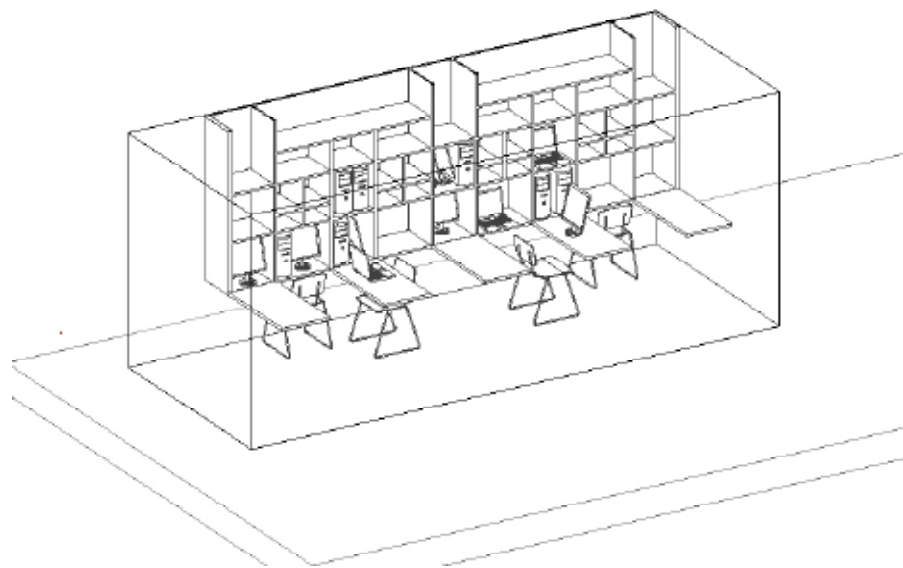
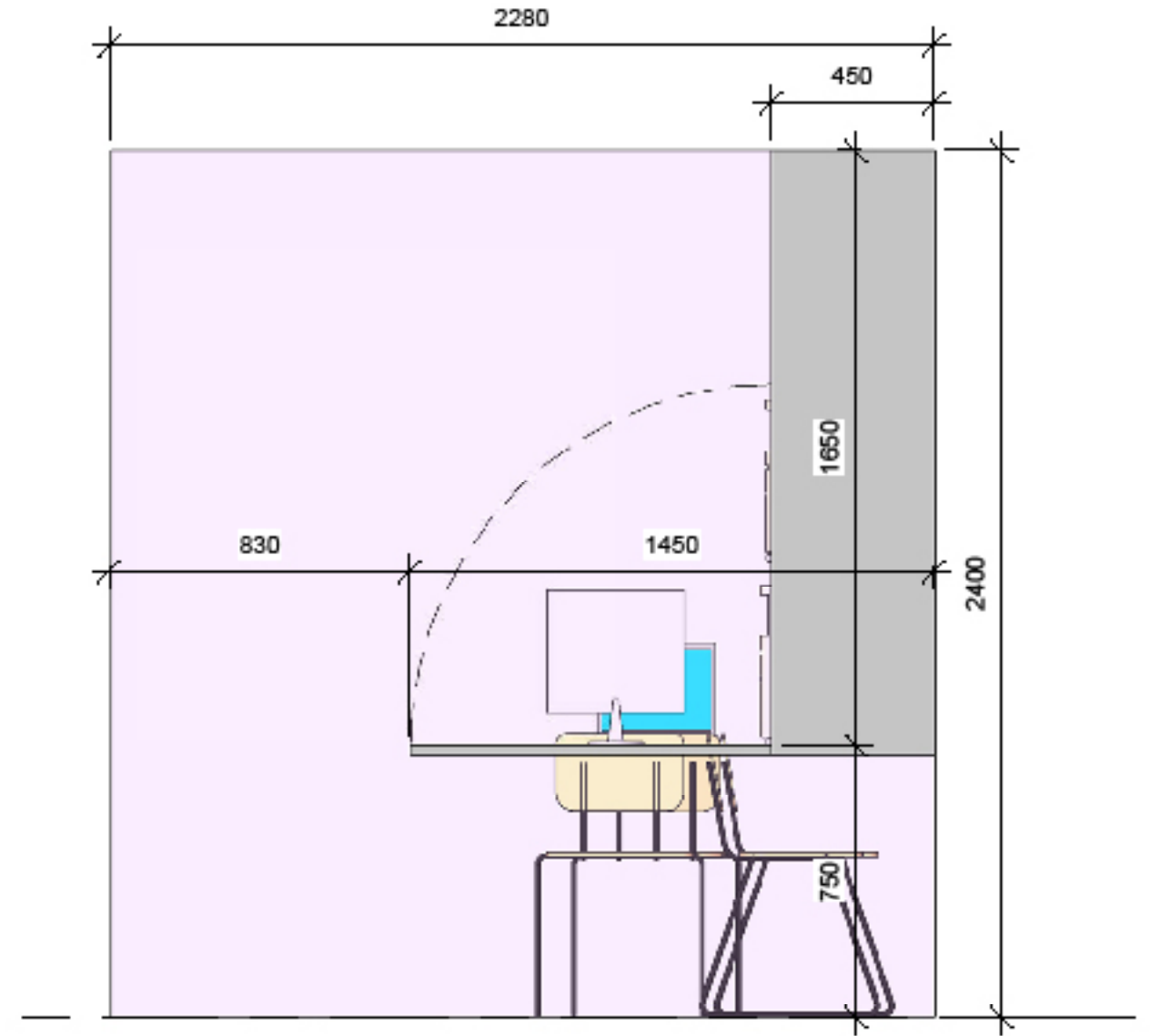
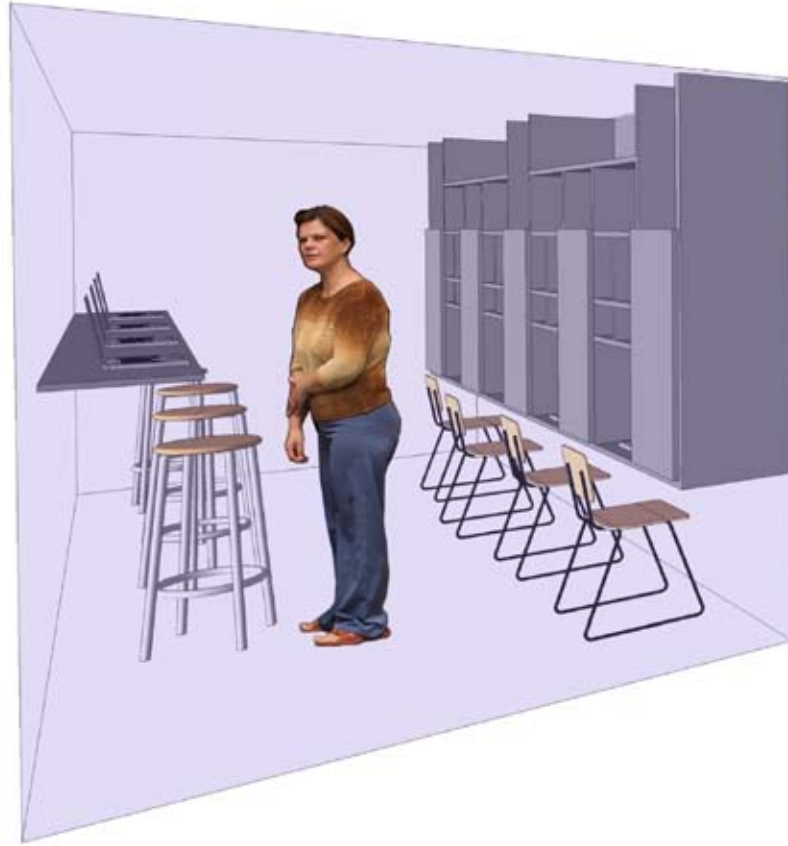
Tables fold up or down for workspace or community gatherings. Shelving unit holds computer units, monitors, books and multi-media to provide a library space for users.

Below: Preliminary sketches.

Hand and model drawings show concept development of modular components that create multi-use spaces for the technological community centre.



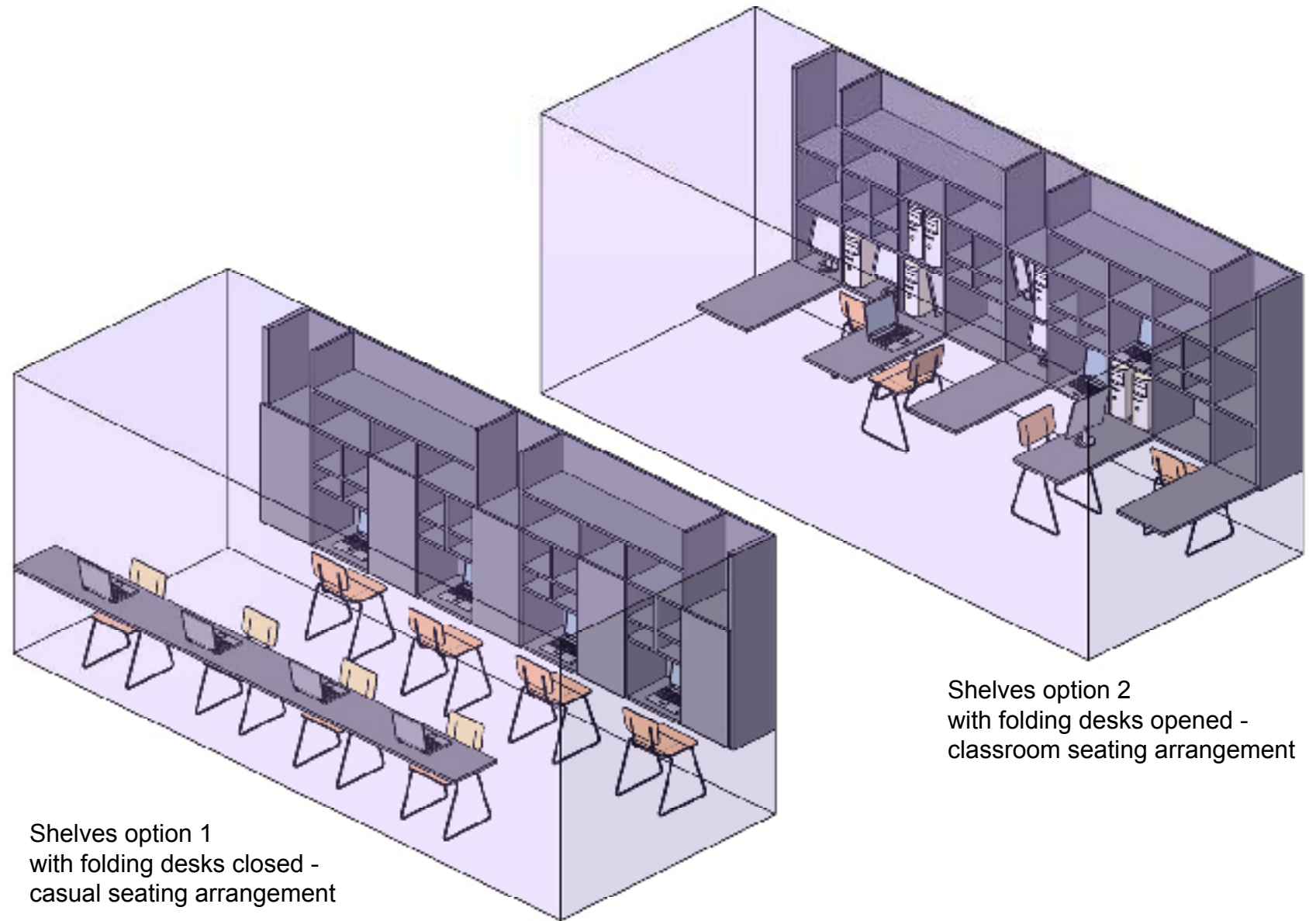
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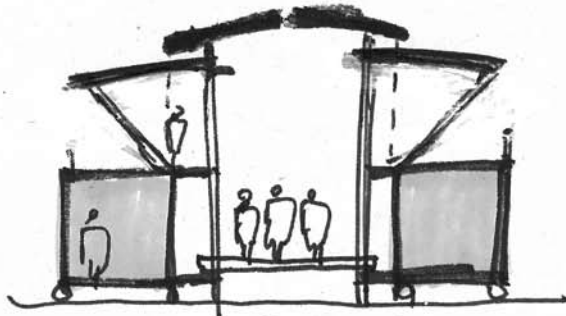
Interior view of shelves
with folding desks opened



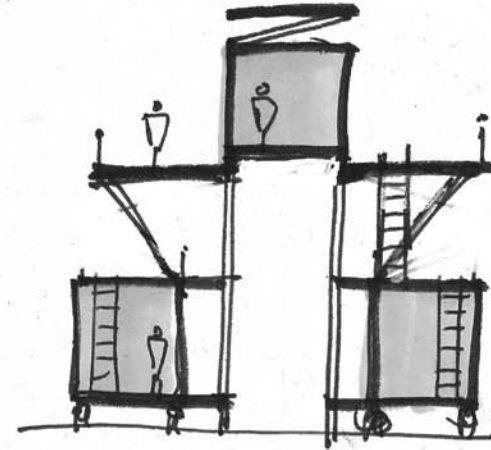
Shelves option 1
with folding desks closed -
casual seating arrangement

Shelves option 2
with folding desks opened -
classroom seating arrangement

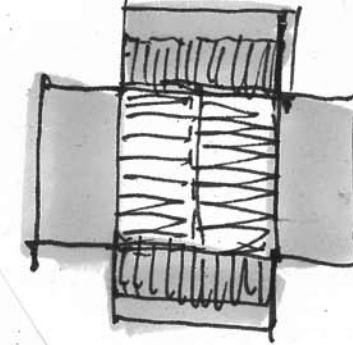
Centro Gente - Bogota, Colombia



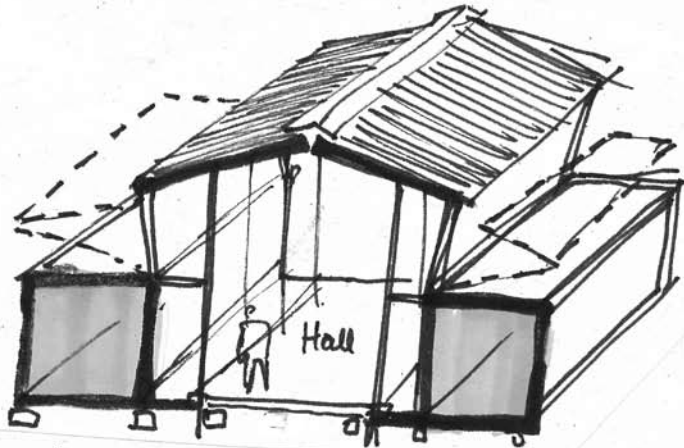
SECTION
2 x MODULES



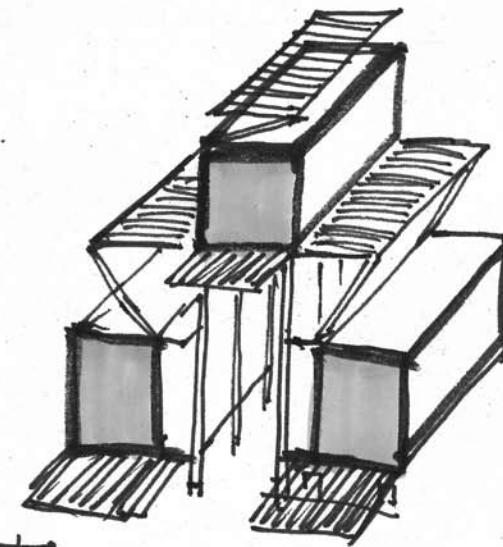
SECTION
3 x MODULES



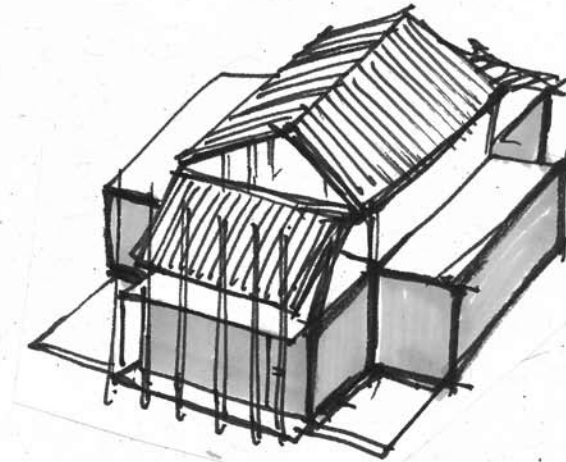
ROOF PLAN
4 x MODULES



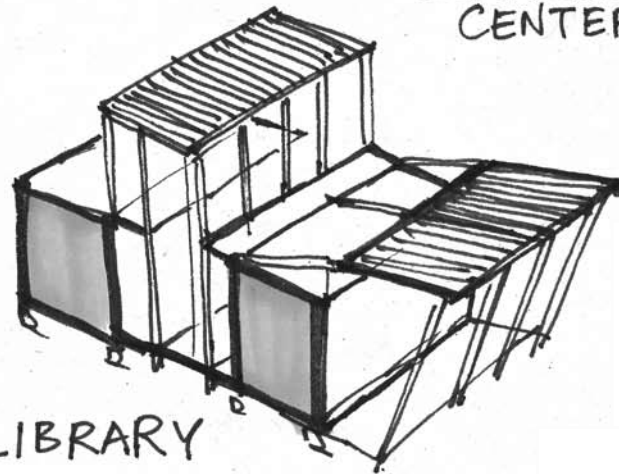
COMMUNITY CENTER



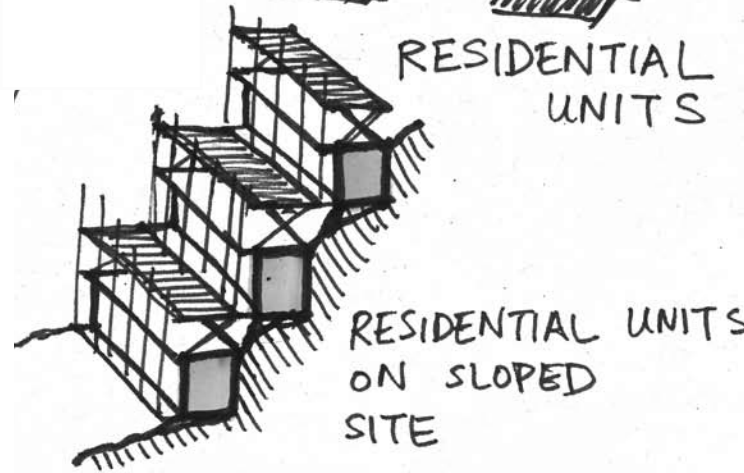
RESIDENTIAL UNITS



ASSEMBLY HALL

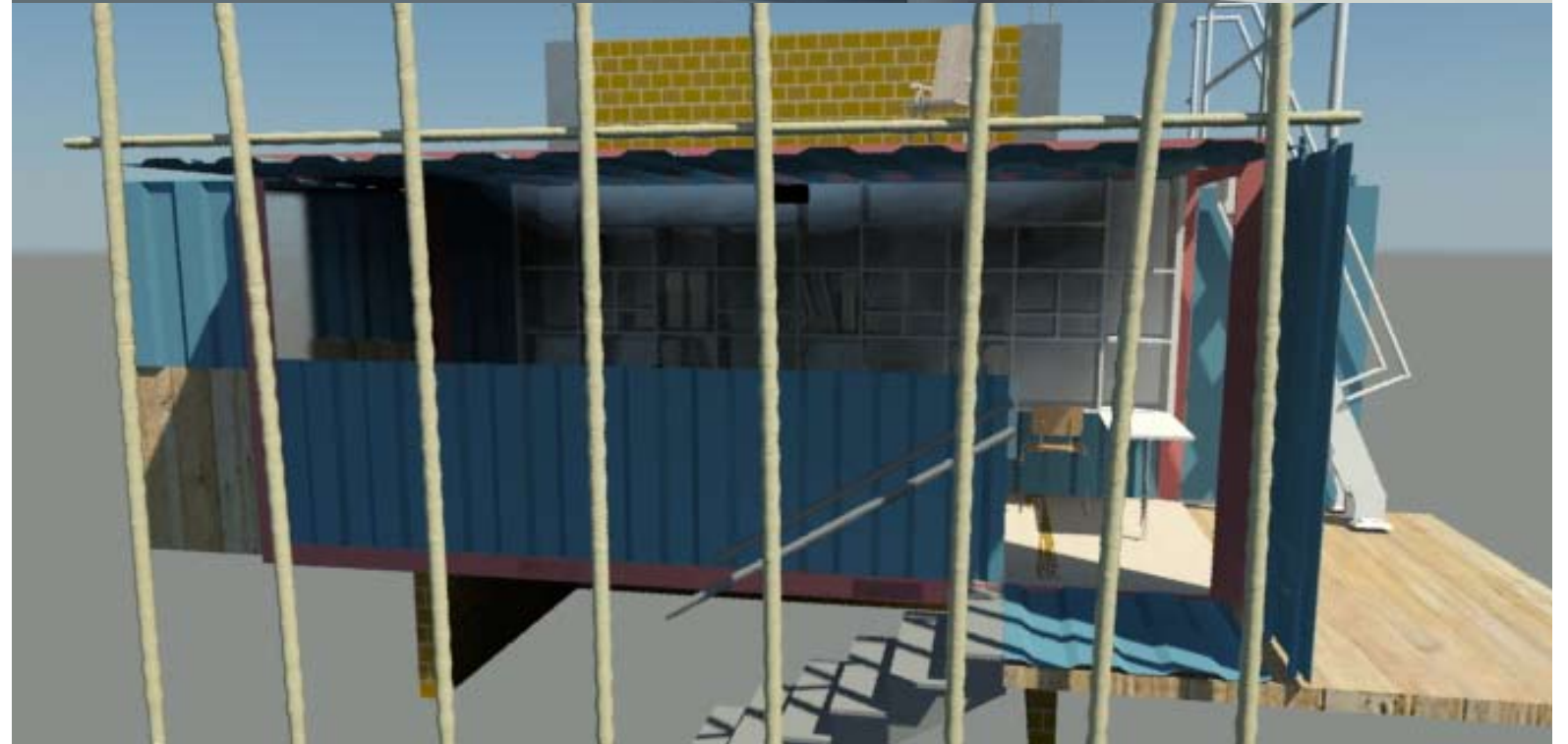
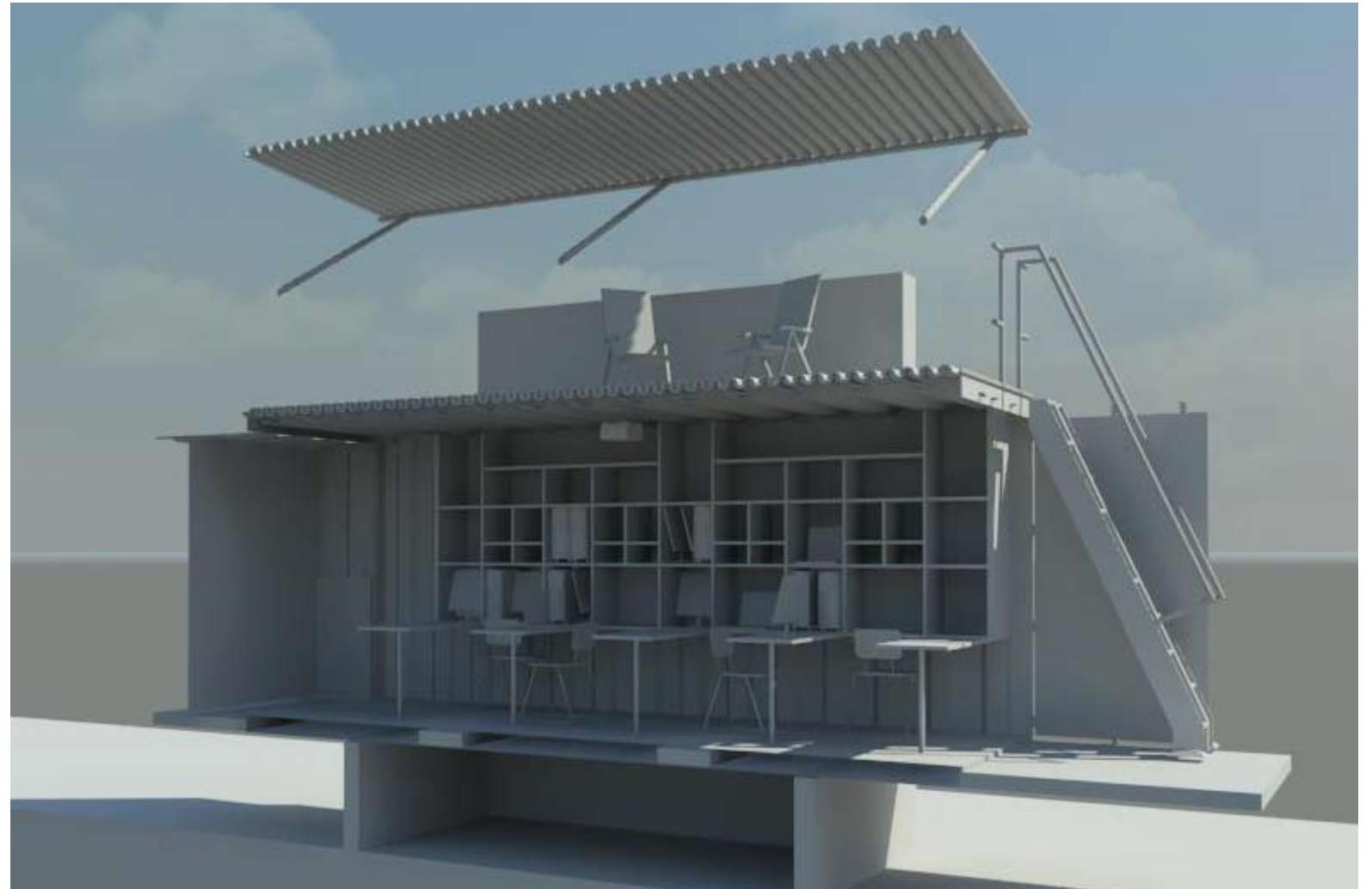


LIBRARY



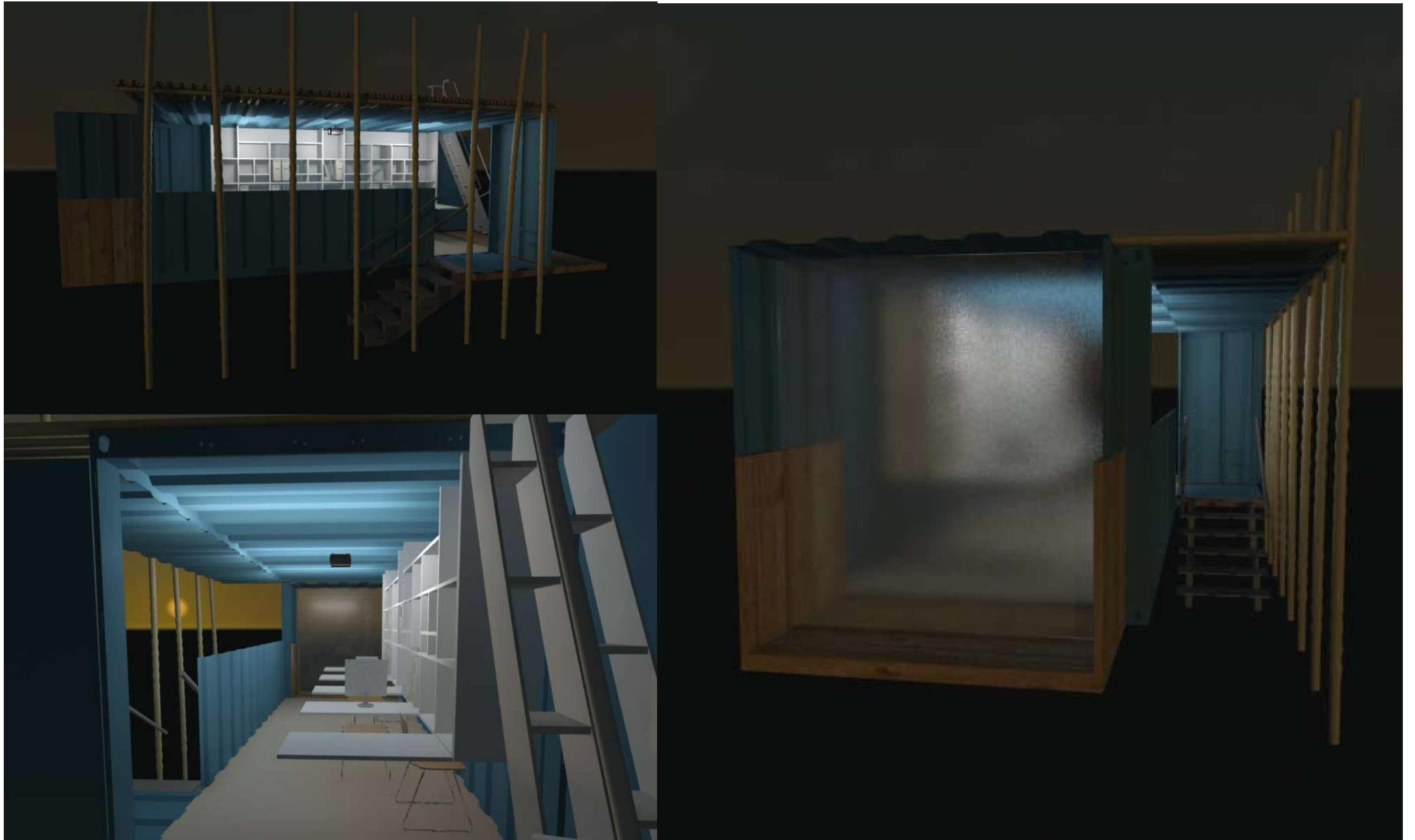
RESIDENTIAL UNITS
ON SLOPED
SITE

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Perspective Views

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Night Views

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The walls of the container are cut and folded out to open up “the box” and allow for the activities to spill out of the container. Wireless technology can allow a user to walk about freely and engage the outdoor spaces such as the deck and the rooftop patio. Ideally, the unfolding action of the metal container could be achieved through the use of hinges which will allow for the container to be opened up during the hours of use, and then be folded back and closed up at the end of the day. However, if the costs are too high, the module can be assembled in it’s open configuration; and then be repackaged and closed up if needed to be moved to another site.

Perspective View

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Elevation

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As a framework for construction, the contain module will sit on a concrete and masonry foundation. Much of the local building is done in phases. By sitting the module on an common construction method, it will help facilitate future expansion and addition. The rebar is left sticking out of the concrete so that future additions can be easily accomodated by local builders.

Perspective View

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open configuration

closed configuration



Computer equipment is stored inside a shelving/cabinet style unit fixed to the side of the container. This provides security as well as storage solution. In the closed configuration, shelves act as desks while cabinets act as storage. The cabinet doors then fold down to become larger workstation tables in the open configuration.

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closed configuration

open configuration



In the closed configuration, the floor area becomes more suitable for presentations. A side table can also be folded up to accommodate wireless laptop use as well as a side table for drinks and snacks. Wireless technology will also allow for users to freely roam the premises and not confine them to within the container.

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Bamboo Canopy Roof

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The projection screen wall is protruding slightly beyond the framework of the container. This allows for a larger picture and to expand the space of the small container interior. The screen wall is a translucent glass/plastic/fabric that can transmit the projection through to the other side (the outside). Acting as an interactive media facade, passerbys on the exterior can witness the activities of the participants within the module; and the participants on the inside have the opportunity to “broadcast” themselves on the projection wall to the public.

Projection Screen Wall

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above ground addition in a residential neighbourhood



Context & Potential Site

Centro Gente - Bogota, Colombia

in a park



Context & Potential Site

Centro Gente - Bogota, Colombia

above ground addition in a commerical neighbourhood



Context & Potential Site

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infill lot



Context & Potential Site