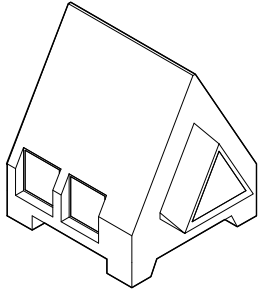


H22 - MIT

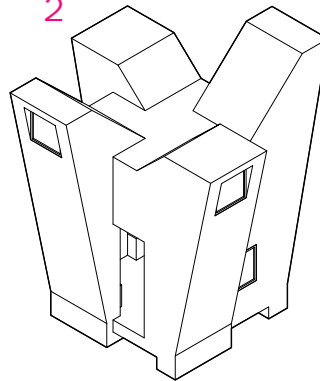
January 20, 2022

1



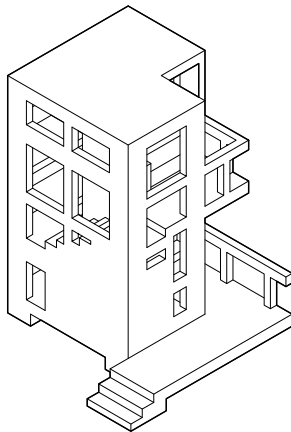
Reflection
100 ft²
9.3 m²

2



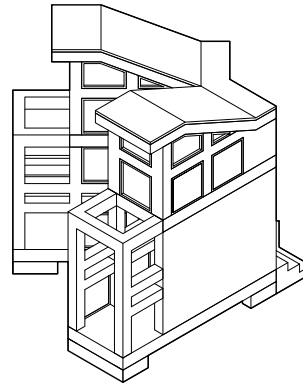
Illumination
100 ft²
9.3 m²

3



Tree House
100 ft²
9.3 m²

4



Expression
225 sq ft
21 m²

Prof. Lawrence Sass
MIT Department of Architecture
lsass@mit.edu

Design Collaborator
Iman Fayad
ifayyad@gmail.com

Design Students

- Seif Eses
- Nina Huttemann
- Erica Liu
- Emily Yanjun Liu
- Stephanie Li
- Nicole A Teichner
- Izzie Waitz
- Myles Sampson

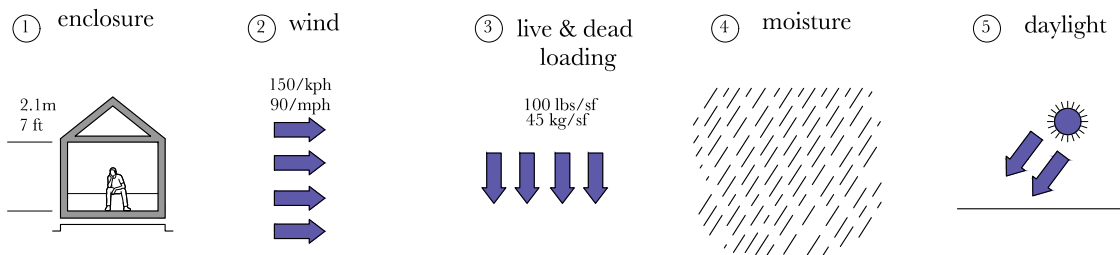
Design Goals

Faculty and Students within the Department of Architecture at MIT will design and construct four small based shelters that will serve as one of many venues within the H22 festival in Sweden summer 2022. These structures designed for Camp Tillasman, set within the forest of Fredriksdalsskogen will explore new ways we can live together in face-to-face in community. Each shelter meets Ikea's five democratic principles:

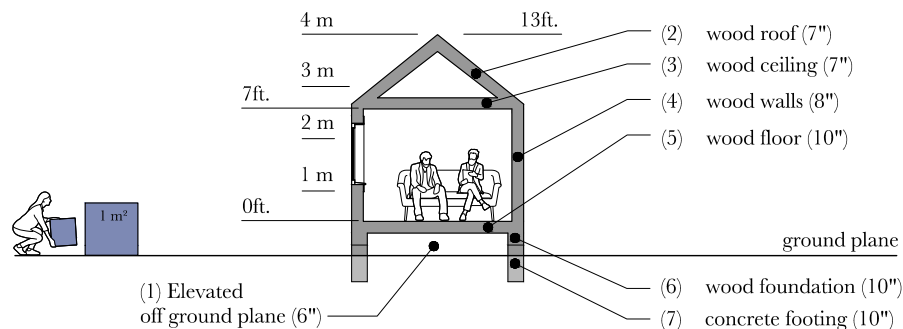
- Forms that support embedding in nature, sunlight, visual reflection and expression.
- Functioning related to shelter titles
- Sustainability by constructing with materials that can be shredded and recycled
- Affordability using digital technologies to prefabricate elements
- Quality is assured through machine manufacturing and design prototyping.

Design work expects to focus on artifact production in favour of social engagement over form. We expect technology to serve as a part of our design process and products in ways that support face-to-face experience. We will generate our designs digitally using 3D CAD modelling, 3D printing tools at MIT. After, building elements we expect to be digitally fabricated in Sweden using computer numerically controlled machines. Students will participate in physical assembly of three of four shelters in Sweden before and during the H22 Festival. Shelter assembly will serve as a performance as well as a product.

Core Factors



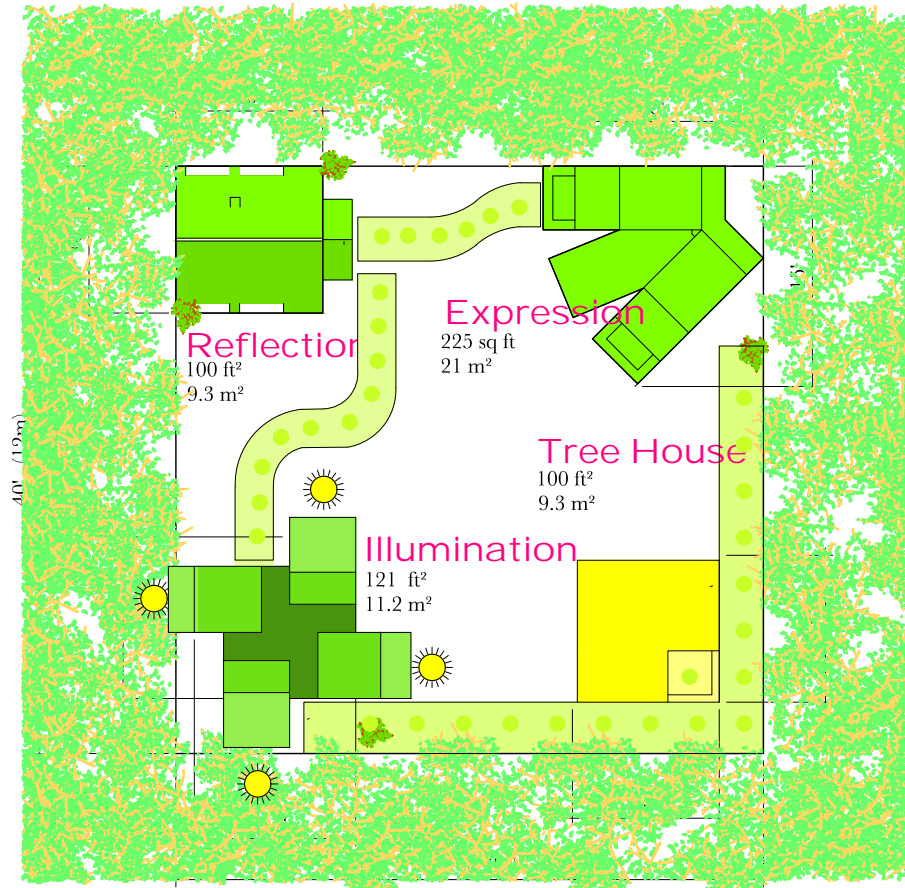
Geometric Guidelines



Site Design

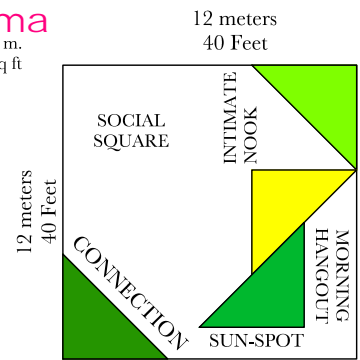
144m²/1550 sqft

12m x 12m
40' x 40'

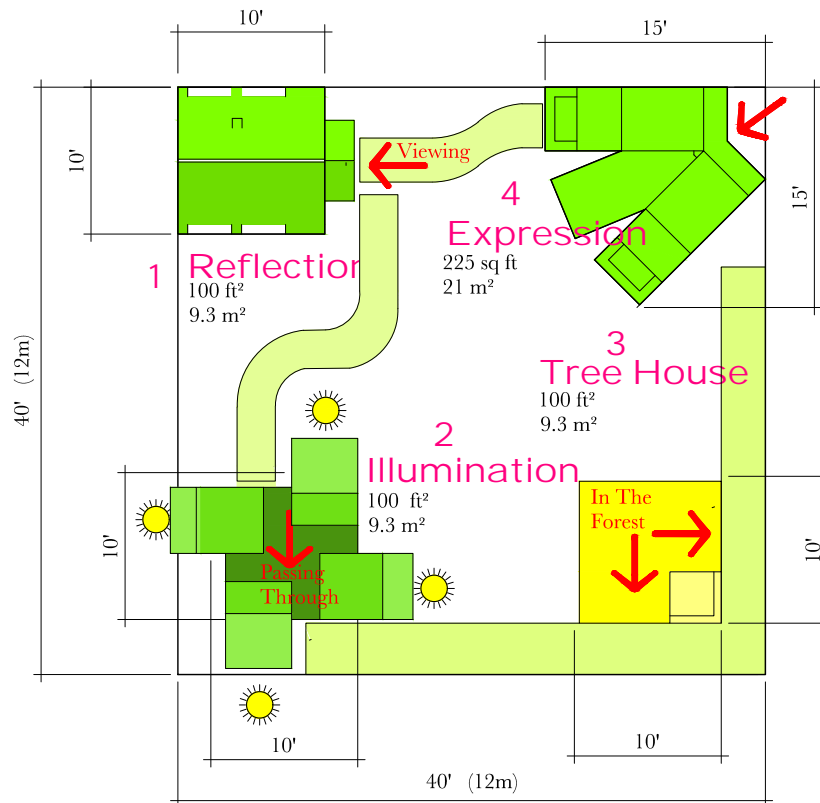


Project Schema

144 sq m.
1500 sq ft



Site Dimensions



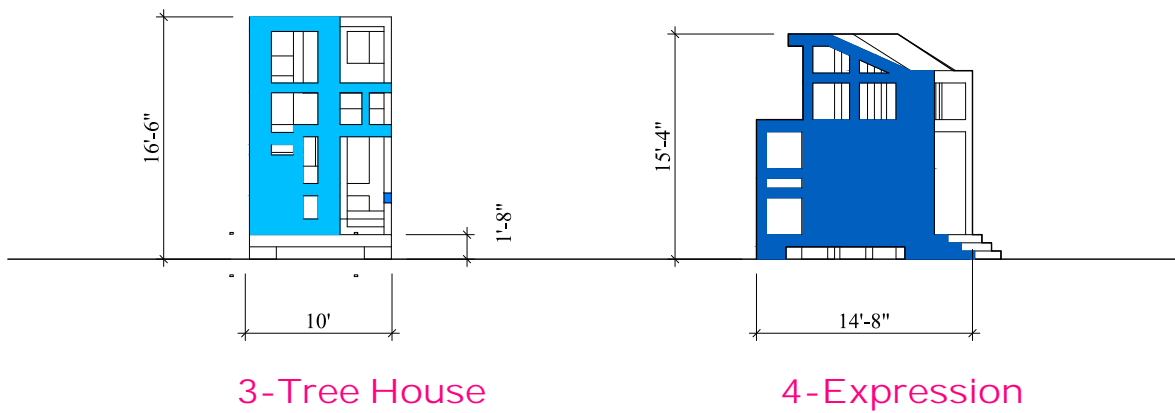
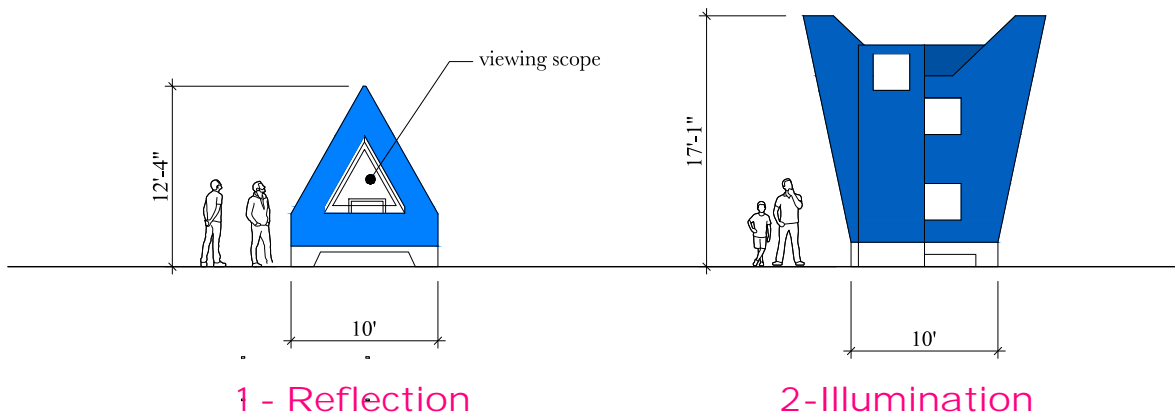
Summary of Shelters

Four small shelters

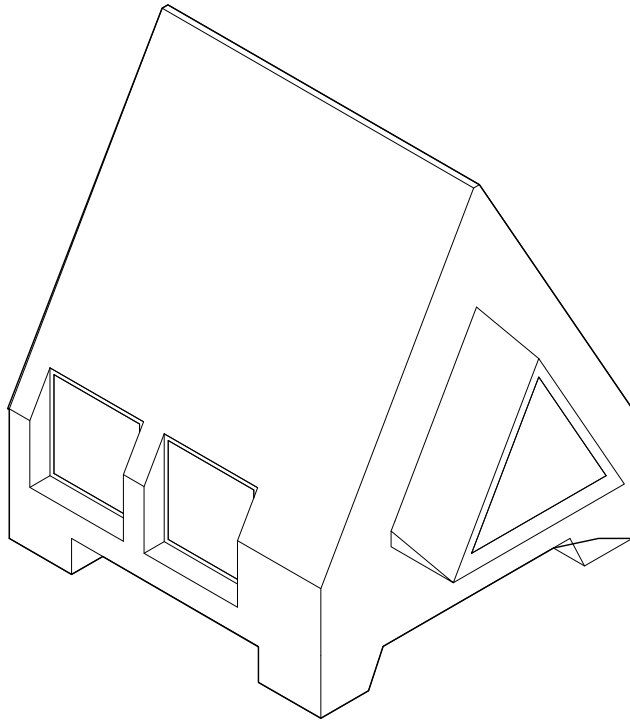
- Shelter 1 - Viewing & engaging in the forest by view scope and mirrors
- Shelter 2 - Pass through & reflection space with lighting from above
- Shelter 3 - Embedding in the forest from above
- Shelter 4 - Entry and Exit - Place to write a reflective quote.

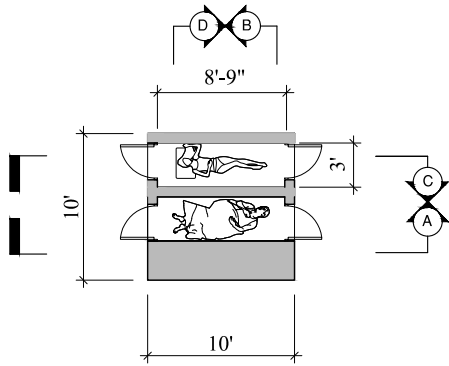
Each shelter contains:

- A raised floor for walking and sleeping
- Space for two people
- Social Element/Ability
- Elevated off the ground plane by 10" (25cm)

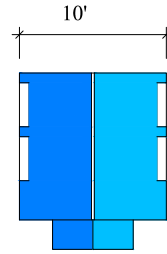


Reflection

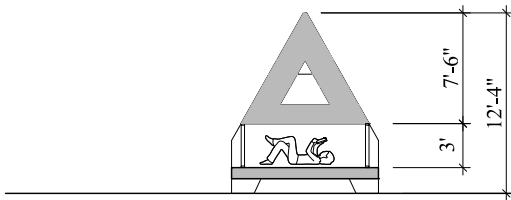




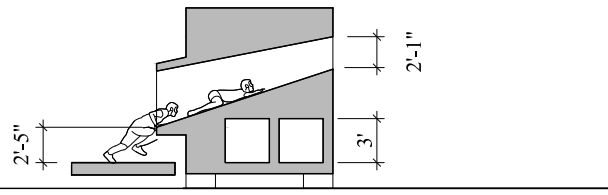
Ground Floor



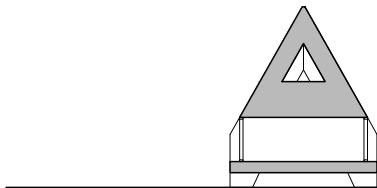
Roof



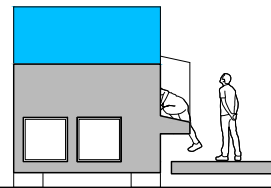
Section A



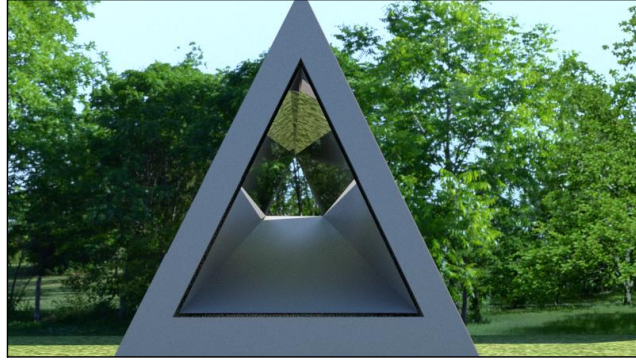
Section B



Section C



Section D

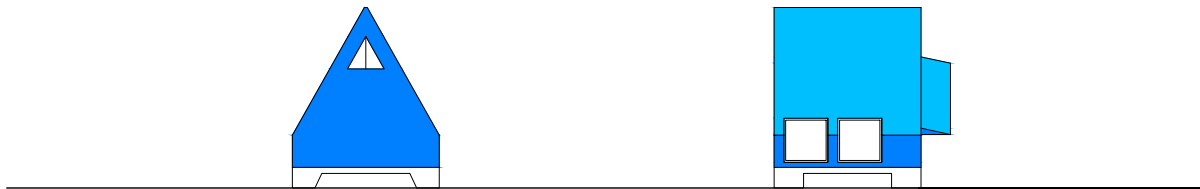


View through kaleidoscope



South Elevation

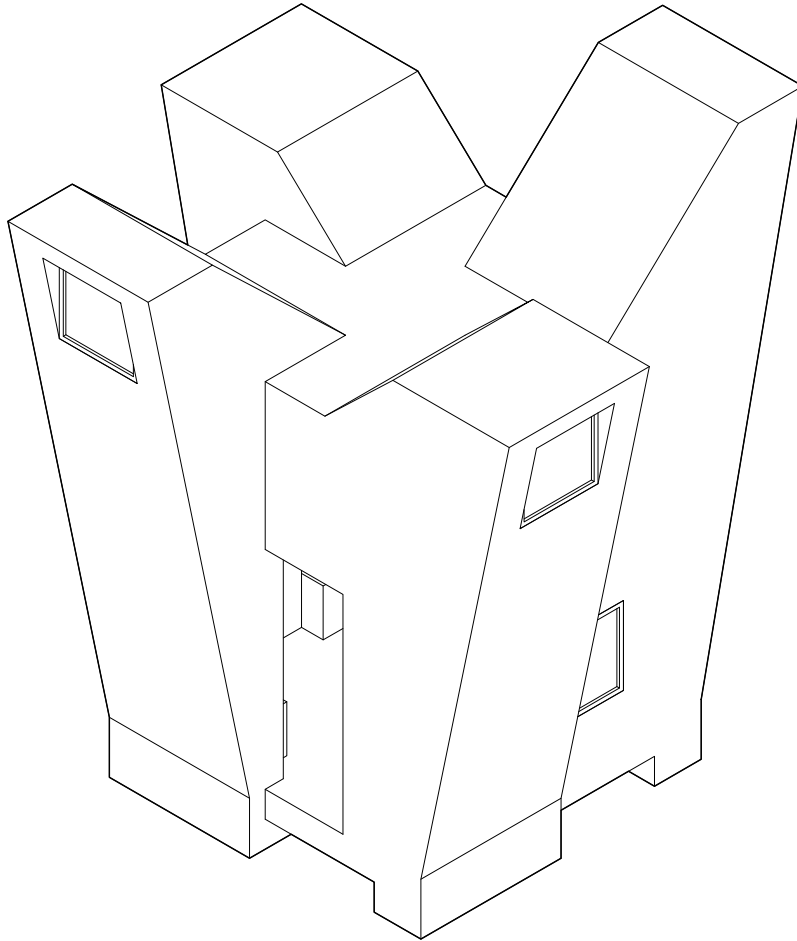
East Elevation

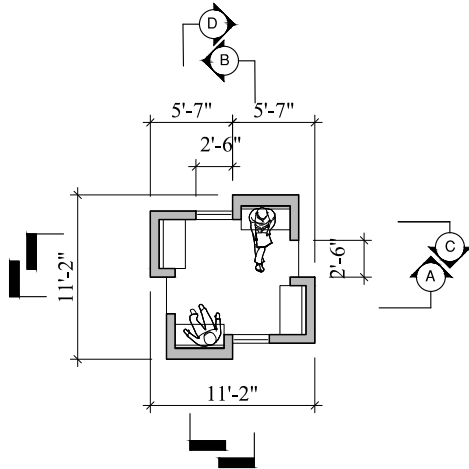


North Elevation

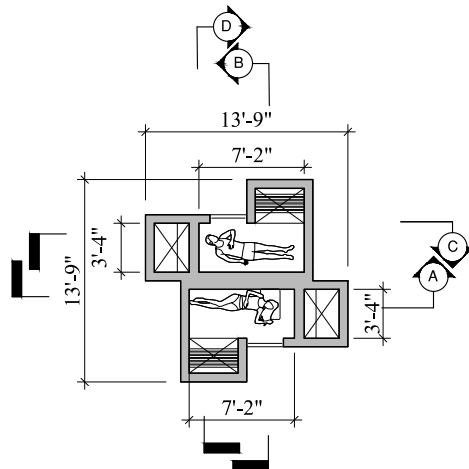
West Elevation

Illumination

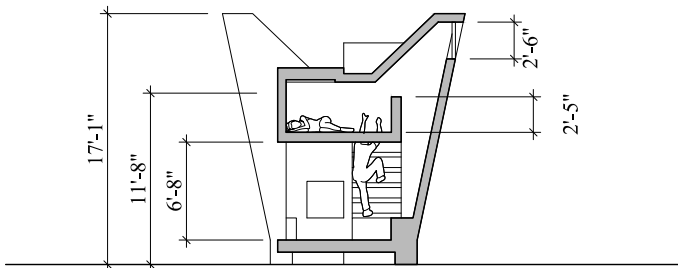




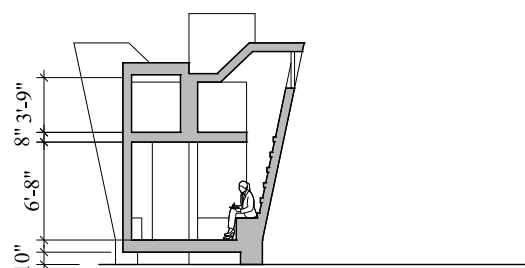
Ground Floor



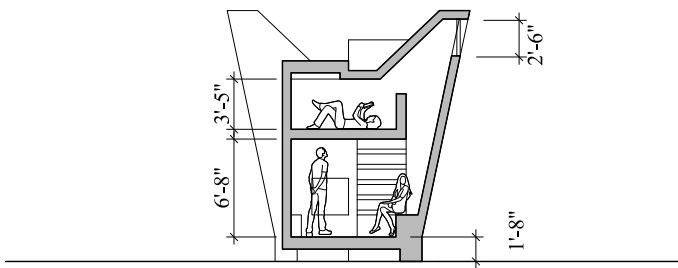
Roof Deck



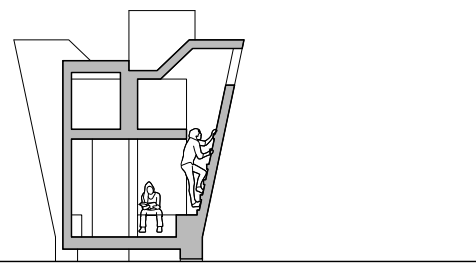
Section A



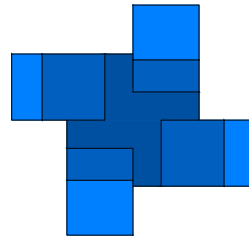
Section B



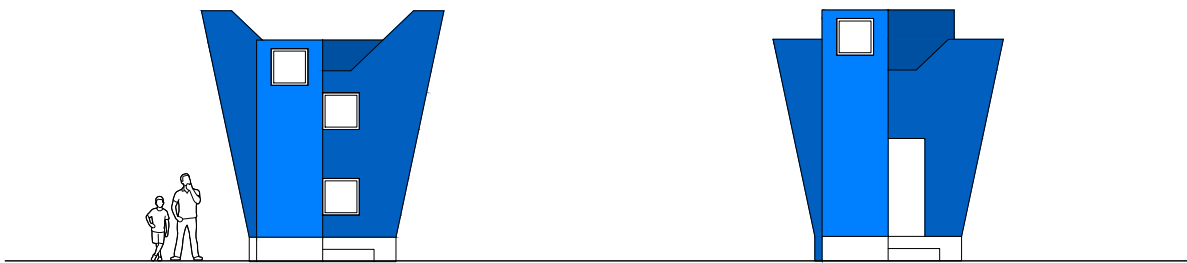
Section C



Section D

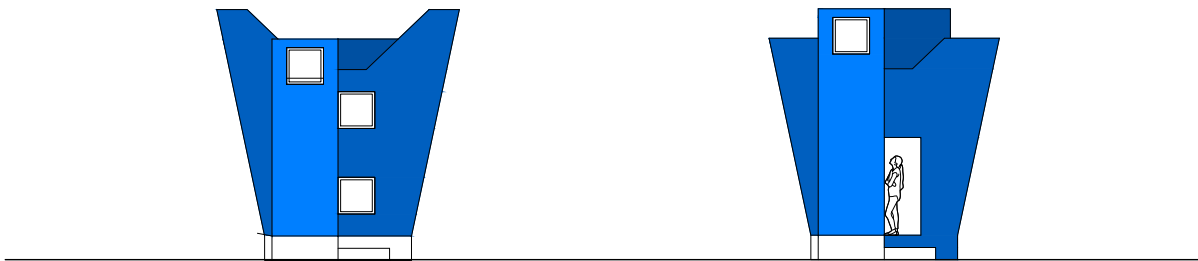


Roofing



South Elevation

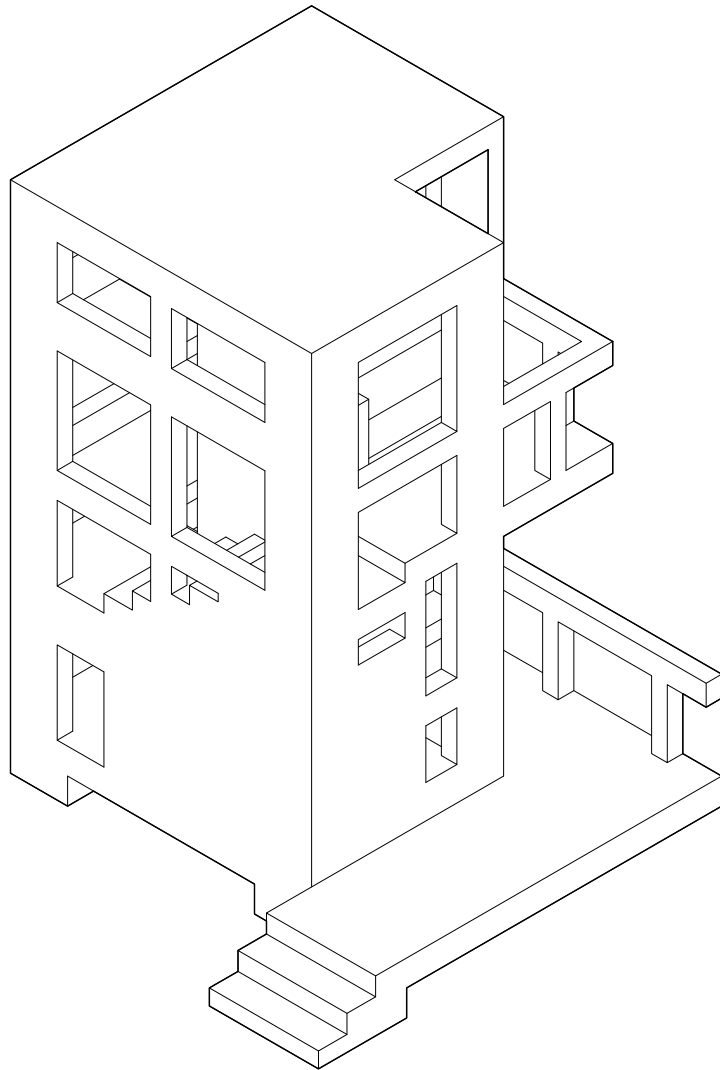
East Elevation

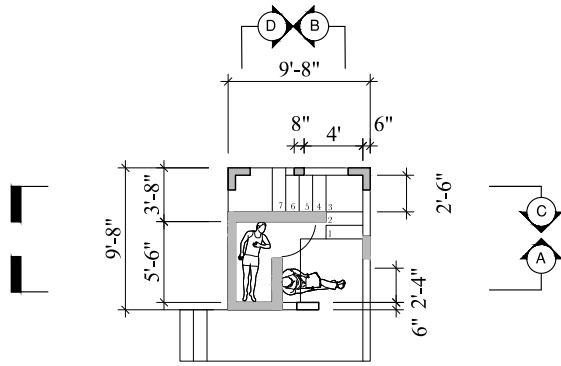


North Elevation

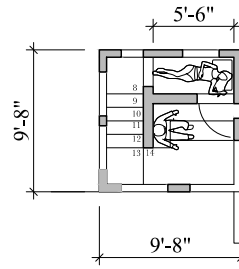
West Elevation

Tree House

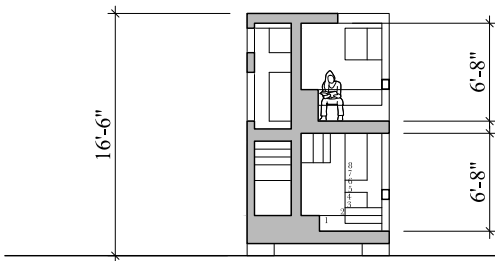




Ground Floor



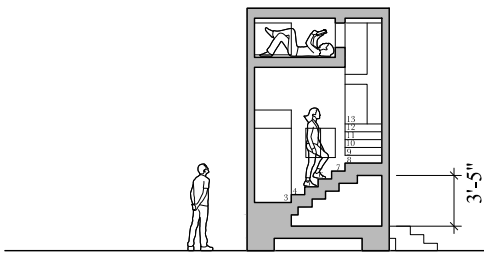
Roof Deck



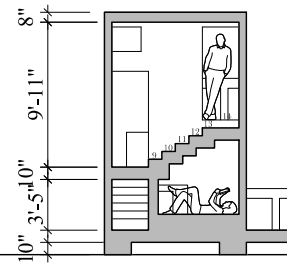
Section A



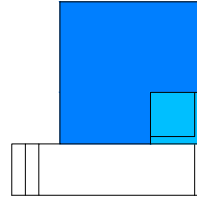
Section B



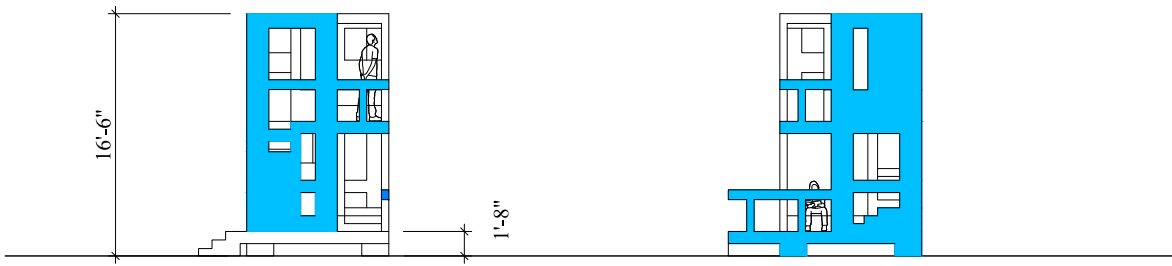
Section C



Section D



Roof Deck



South Elevation

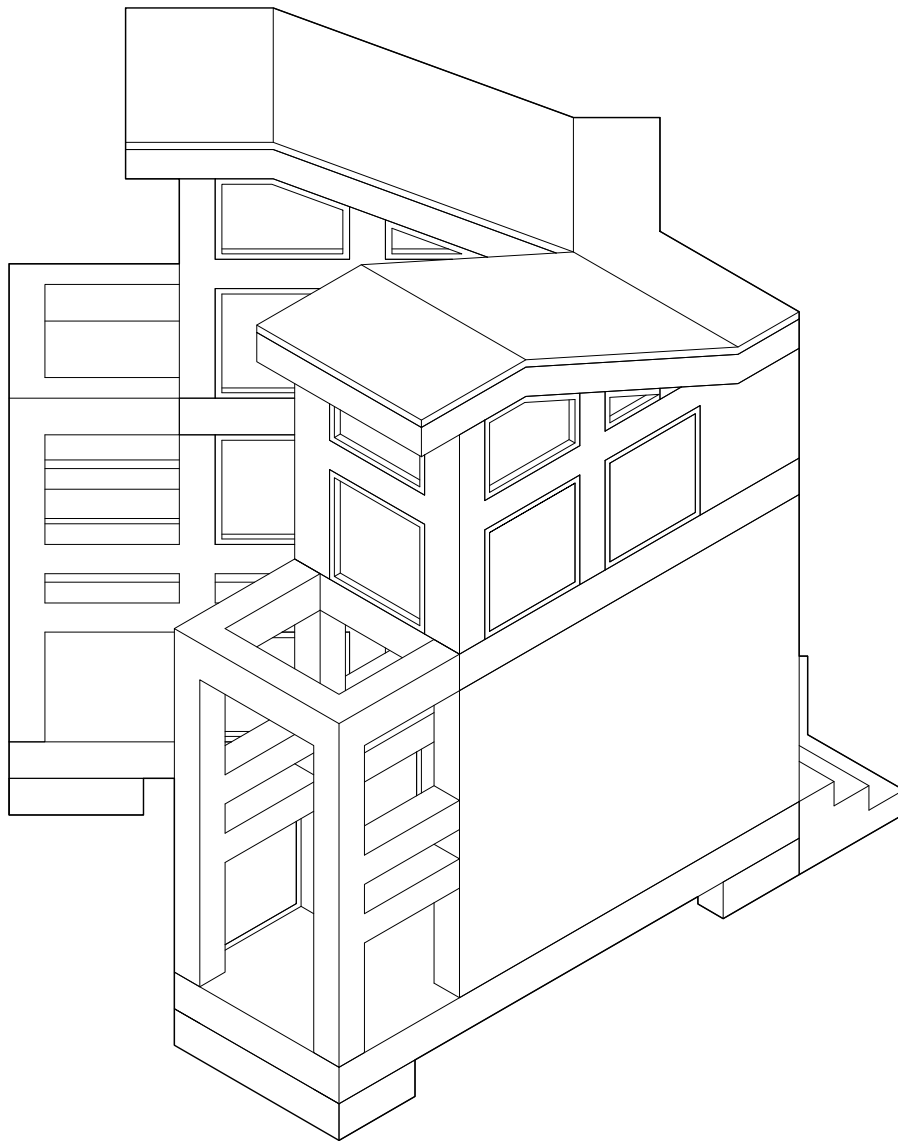
East Elevation

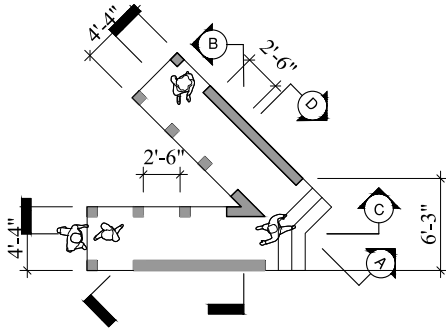


North Elevation

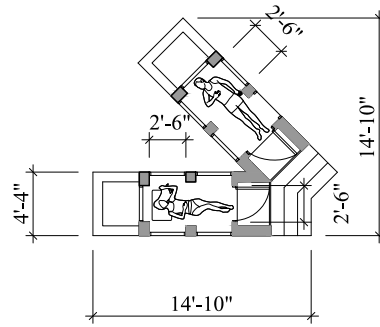
West Elevation

Expression

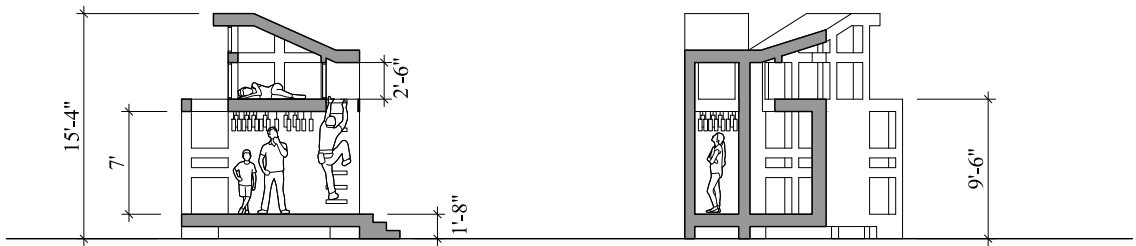




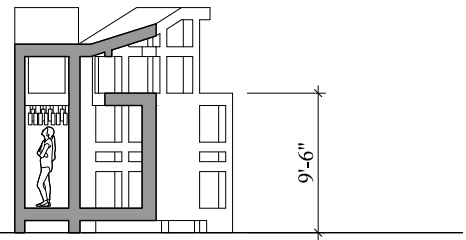
Ground Floor



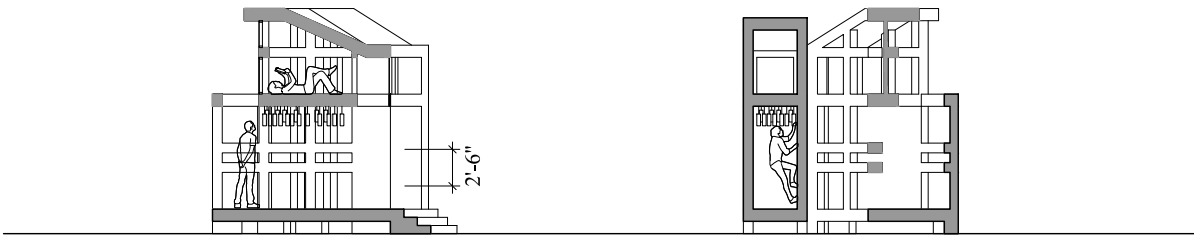
Roof Deck



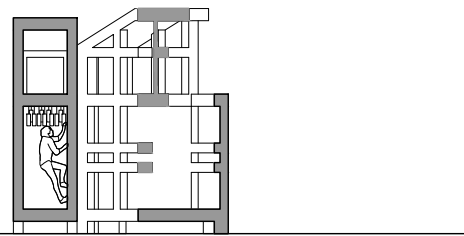
Section A



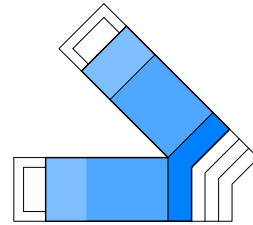
Section B



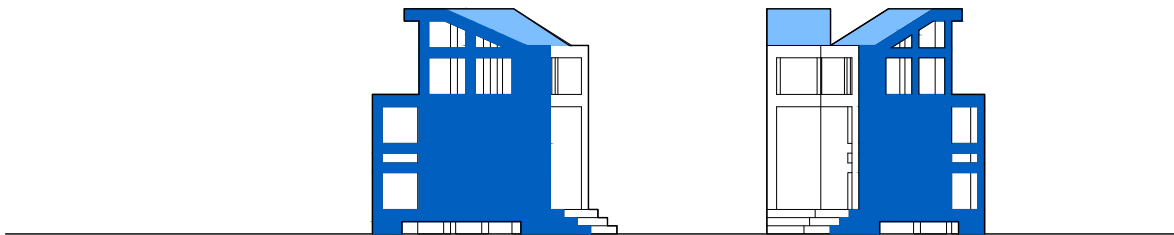
Section C



Section D

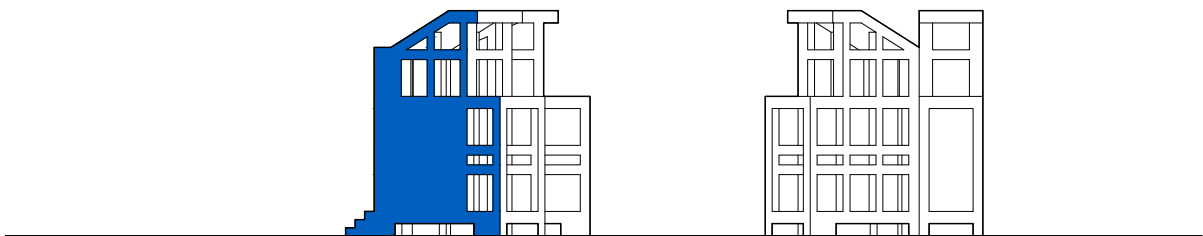


Roof Deck



South Elevation

East Elevation



North Elevation

West Elevation