

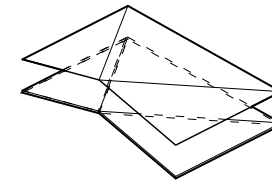
FLOORPLAN
SCALE: 1:50

the ANCHOR-PIER HOUSE

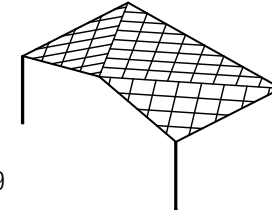
Laura Rushfeldt
MIT 1K House Project

Material List

Synthetic Rubber
Double-fabric insulation

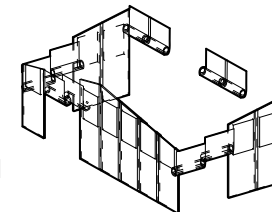


Steel Cables



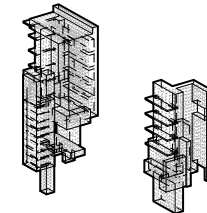
Roof \$179

Double-fabric Curtains
Clear Plastic Tarp



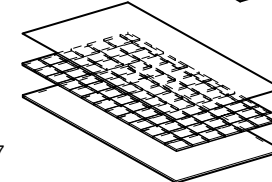
Curtains \$121

Reinforced Lightweight Concrete



Program Anchors \$372

Synthetic Rubber
Concrete Pavers
Double Bubble Insulation

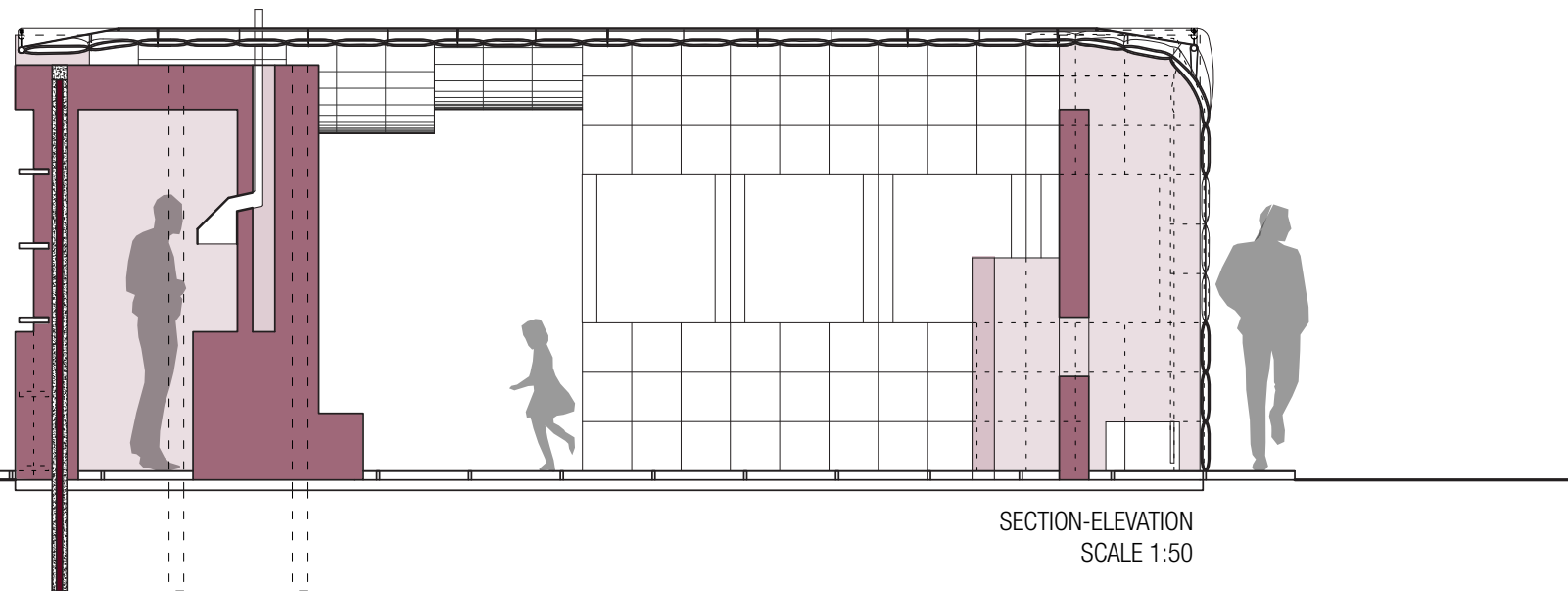


Floor \$217

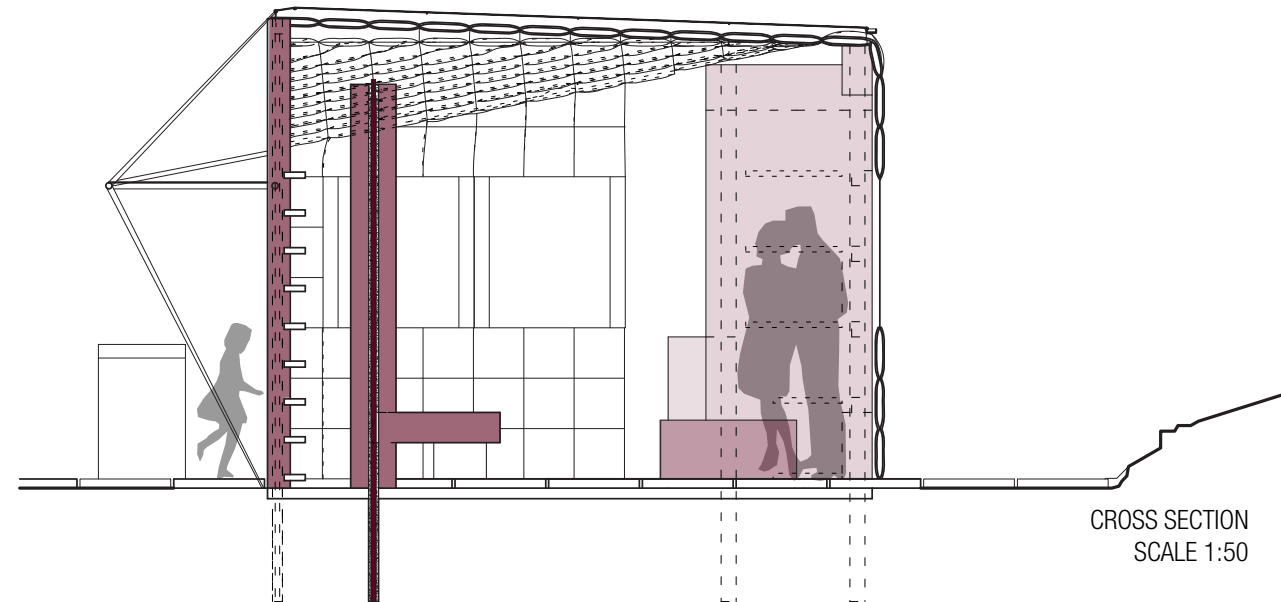
The concept for this house uses built-in services and spaces specific to household programs. Lightweight Concrete is the material system for the anchor wall. Lightweight concrete replaces aggregate and cement with by-products from industrial processes: foamed slag from steel production and fly ash powder from energy-producing coal plants. The use of these materials has 3 benefits: recycling a waste product, eliminating much of the cost in concrete mix, and creating a lighter and more insulating final concrete product.

The other systems in the house can be much lighter, cheaper and more transient due to the investment in the anchors. The roof is a lightweight network of cables suspended from the piers. The roof is equipped with a grid of velcro to secure the perimeter enclosure and hooks which hang interior partitions. These partitions are composed of two layers of insulating felt. Loose cellulose filled-pockets provide additional insulation. These curtains can be taken down and reconfigured as desired by the residents of the house. In cold temperatures, placing the curtains in a tighter configuration around the kitchen pier conserves more of the stove-generated heat. In warmer temperatures, a looser more open configuration provides more ventilation and airflow especially for night cooling.

The flexible enclosure allows the house to grow with increasing family size. It also allows the house to shift seasonally: the more transient enclosure systems can be swapped according to seasonal climates, and opened for additional exterior living space around the perimeter.



SECTION-ELEVATION
SCALE 1:50



CROSS SECTION
SCALE 1:50