

A Brief List Detailing the Posed Problem

Needed: A temporary housing option for at least one woman, possibly with a couple children, for around a one to two month stay.

Must:

- include pantries for food
- include a washroom (in the final project, not prototype)
- include a bed
- include a manual to construct the house
- include a window (2ftx2ft)
- work year round in Ottawa weather
- conduct water and electricity
- include a separate bed for a baby/infant
- be able to accommodate a few suitcases/personal belongings

Ideally:

- Accommodating to disabilities (not necessary but would be nice)
- Something that would last with little repairs
- As simple as possible to take down and construct
- Hold a training session on how to install the house
- Include a fridge
- A television or computer
- Have outlets to plug in different appliances
- Child-safe appliances

Must not include:

- An oven/stove
- Dishwasher
- Carpeting

Problem: There is a lack of shelter space in Ottawa for women and their children.

To aid in solving this problem, a temporary housing option for one woman and any possible children is needed. This housing option should be able to accommodate the woman/family for at least one to two months. A miniature house which can be constructed and destructed easily is ideal.

This miniature house should be easily assembled by a normal resident with the inclusion of a construction manual. It should be able to withstand the different Ottawa climates throughout the year. The house should be able to be constructed on many, if not all types of land found in the Ottawa region. The house should have a pipe connection that can be hooked up to a water source and have safe electrification that can provide lighting and support different appliances. The house will be powered by solar panels laying on the roof of the house. The electricity should be able to power small appliances, as well as heat water in the home. The home should also be automated. The house must have room for a bed, suitable in size for a grown adult and teenager/child, as well as a separate bed for a baby or young infant if necessary. The house should also include room to store any personal belongings the women and/or family might bring along with them, as well as be able to store different necessities such as food. The home must also include a working washroom in which the guest can bathe, as well as a 2ftx2ft window, away from the door, as an extra emergency escape route in case of an incident.

Ideally, the home should be able to last for a couple years with little to no repairs needed. It should be built in a way that is as simple as possible to assemble or disassemble. It would be ideal to hold a hands-on training for the residents on constructing the homes and howing to put them up properly, however, if this is not possible, the manual will suffice. It is ideal that the home is built in a way that is accomodating to any residents who might have disabilities so that there are little to no restrictions on who may reside in the home. The house should have power outlets in order to plug in different appliances and personal gadgets. Ideally, room for a television and/or computer should be included. A small fridge should also be included for the residents to store their food and groceries. Since there is a possibility of children of all ages being brought to live in the house, it is ideal that the appliances are child-safe, when possible.

Due to the lack of space within the home, the insufficient energy being produced by the solar panels from the home, and the need for the home to be easily constructed and deconstructed, an oven and a dishwasher should not be included, as well as other larger appliances which consume more electricity than the home's renewable energy system will provide. When finishing the home, the floors must not be covered with carpeting, as carpeting is difficult to clean and may also trigger different allergies for some of the residents.

In conclusion, there is a great need for more housing as shelters in the region are at full capacity. The housing built should be able to accomodate a large range of women and their children, and should be a suitable and comfortable home for the residents during their temporary stay. The home should power itself, and should have running water, which can be solar heated. The home should also be able to function properly year-round in Ottawa weather, and be easily constructed and deconstructed on different types of terrain, by the average person.