portable crisis housing

CitySense 2011

Group 9 Team D

why?

Darfur Conflict, Sudan
2003- 2011

3 million people displaced

350, 000 people deprived of humanitarian support

4 million people dependent on international humanitarian assistance

Hurricane Katrina, New Orleans, LA
August 2005

300,000 homes destroyed

More than 1 million people displaced

80% of New Orleans was under water

Earthquake, Haiti
January 2010

3,000,000 people need emergency aid

2,000,000 people have been left homeless

Only 200,000 out of the 3,000,000 affected have recieved aid

Tsunami, Japan
March 2011

350,000 homeless

495,000 in temporary shelters

180,000 were forced to evacuate

self-sufficient shelter

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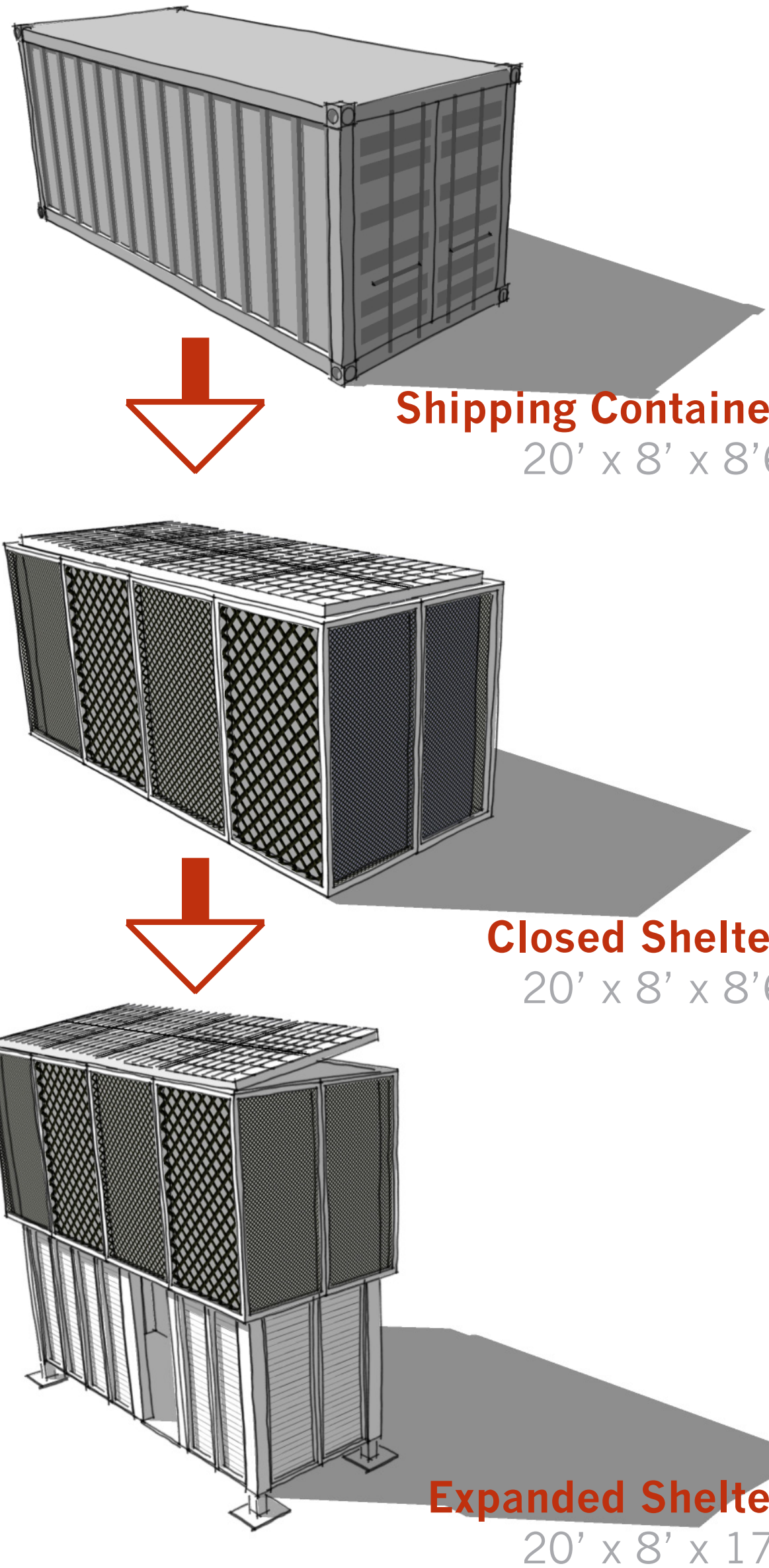
what?

Our proposal is in response to the aforementioned crises; as well as in anticipation of similar disasters in the future. Our design consists of a shelter that is the same dimensions as a regular shipping container. This makes it highly portable and able to be sent to any part of the world, at any time. The main premise is that when the shelter is brought to its intended site it becomes a two-story housing system. The outer shell becomes the top story; it features an elevating roof that houses solar panels as well as a system for collecting and reusing rainfall. The solar panels are able to rotate to orient properly at any time. The elevating roof can also let in various amounts of shade or light. Our design reduces the energy demand of crisis housing and creates a self sufficient relief shelter.



spatial distribution

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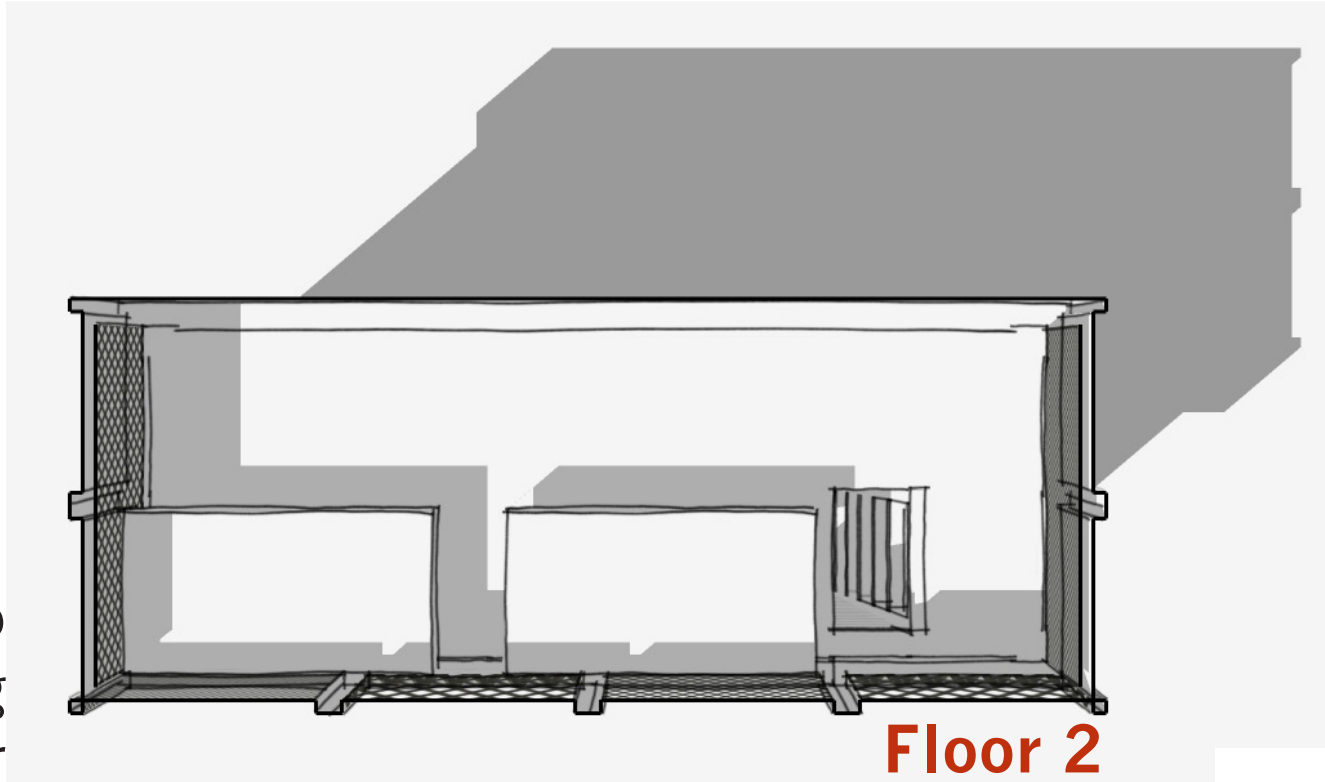
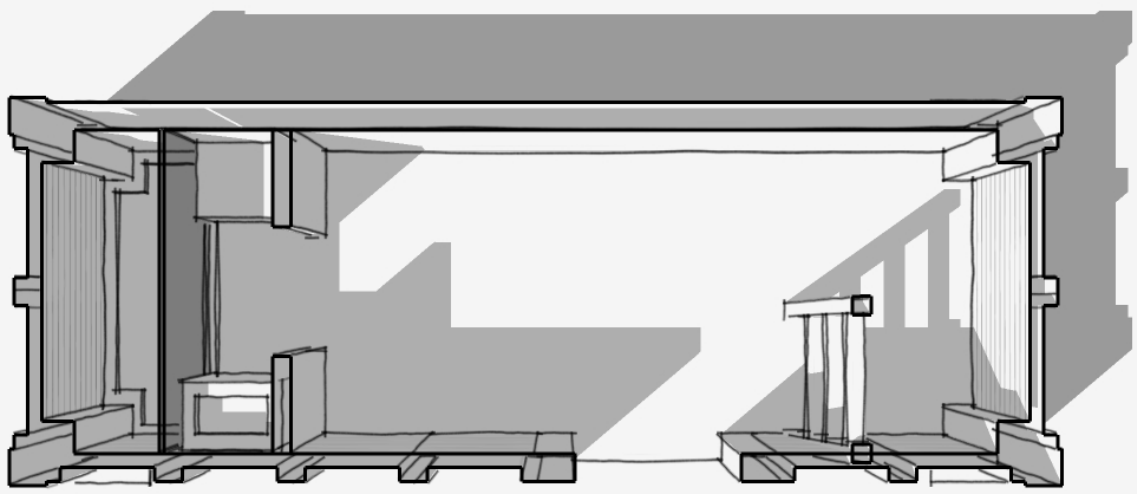
how?

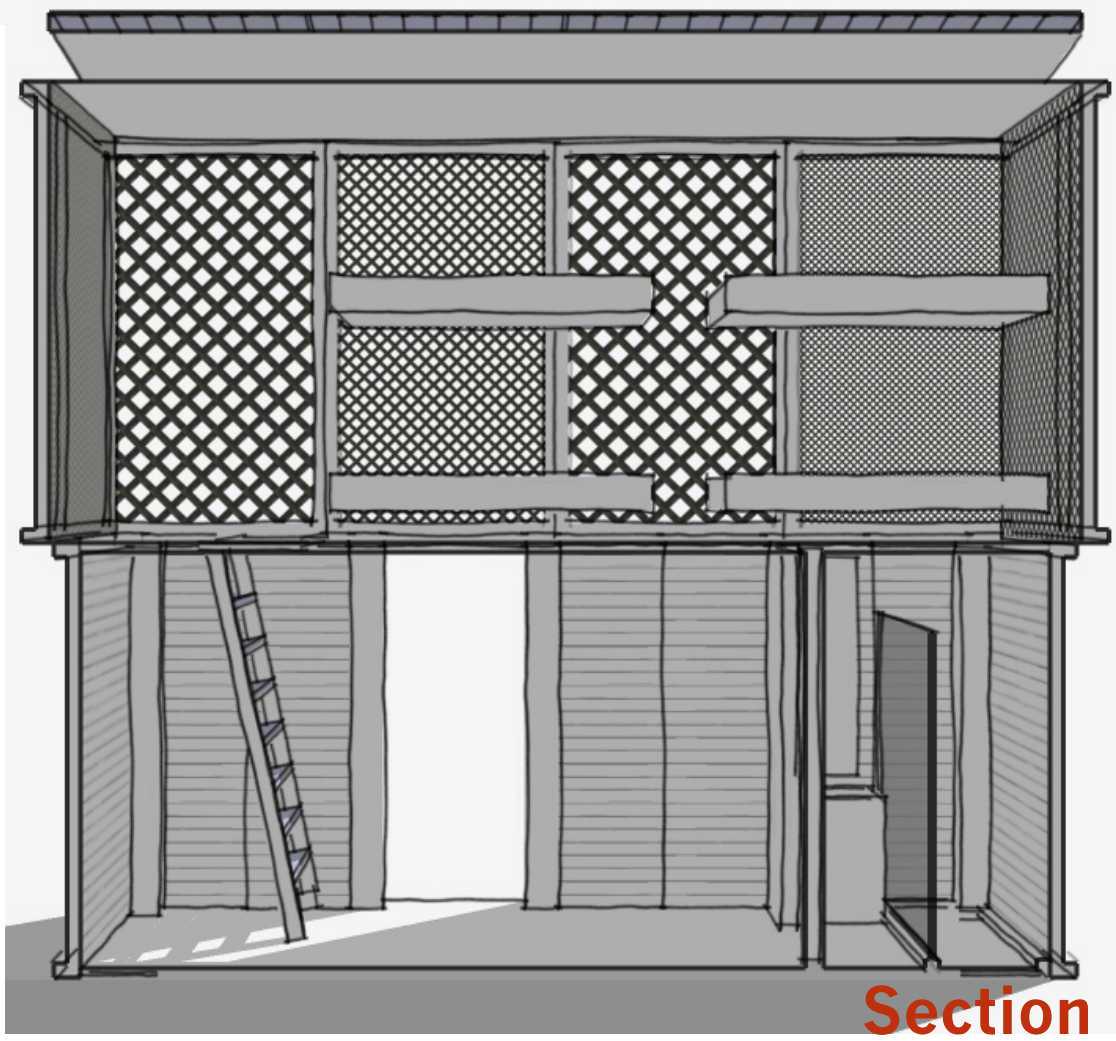
The house is based on two floors, the top housing beds that can be folded for more space when needed and the bottom containing a sectioned off bathroom. The use of space could be tailored to the need of the situation; the first floor could house living spaces or appliances such as a kitchen area and fridge. The top floor also could be used as a more private space in addition to housing beds. The second floor would have panels on the wall that can be open or closed to let in as much light as needed. A ladder will be used to move between floors.



Floor 2



Floor 1



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