



CULPE - CONCEPT

AFFORDABLE HOUSING

MODIFIED STEEL CONTAINERS
AS A FRAME
OF A SMALL TOWNHOUSE

Culpe-concept

The idea of the Culpe-concept spawned from the low prices and the carrying capacity of standard containers of shipping and other industry.

The standard container can carry a load of 20 tons.

The disposed containers are sold out with reasonable price and though they are not suitable for their primary use they can be recycled in a manner that provides the basis for my proposal.

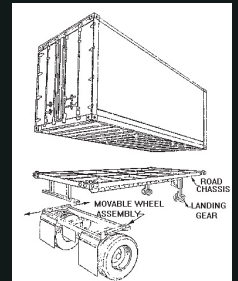
Culpe-concept is a system of steel frame made out of harbor containers with additional openings and construction. (Within the limits of rigidity of the structure)

Using containers as a supporting frame of a small building is cost-effective and the elements can be assembled in a short period of time. The efficiency of the actual building process is the main reason for using prefabricated elements (either space element or constructive element) as a construction.

The principle is to lower the elements to a foundation, attach them and add additional constructions (stairs, roofing etc.) The isolation and the surfaces can be applied on site or in the prefabrication depending on the case.

Dimensions of the used containers (L X W X H):

- | | |
|----------------------|--------------------------------|
| -Bigger (High Cube): | Out: 12193mm X 2438mm X 2896mm |
| | in: 12032mm X 2350mm X 2690mm |
| -Smaller (Basic): | Out: 6050mm X 2440mm X 2590mm |
| | in: 5890mm X 2330mm X 2370mm |



Space-elements include eg.

- bathroom element
- kitchen element
- semi-heated spaces
- elements for living: bedrooms, studies, livingrooms etc.
- technical space elements

Example of a small house is attached to this entry. It shows the basic idea of the construction.

The example is designed with the smaller container unit as a supporting steel frame. It is designed for a small family and is ideal for a narrow building lot. The container is presented in red to show the dimensions and applicability.

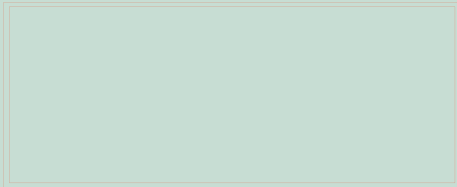
Larger houses can also be designed with combining elements. One of the principles is to use the spaces between the containers as larger rooms instead of just using space elements next to each other.

Parts of the system can be combined with different kinds of building projects eg. bathroom element can be attached to any kind of apartment as a space element.

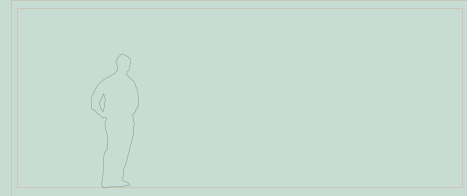
BASIC CONTAINER

Out: 6050mm X 2440mm X 2590mm

In: 5890mm X 2330mm X 2370mm



PLAN

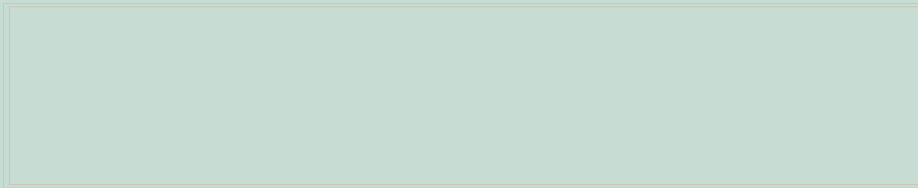


SECTION

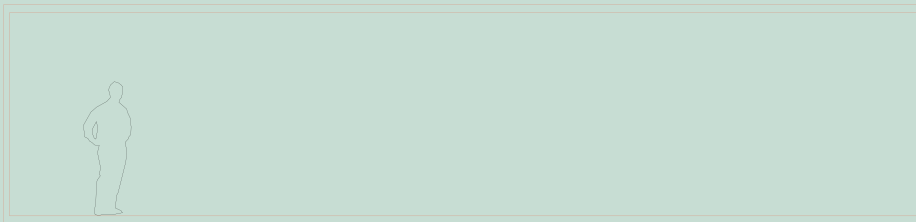
HIGH CUBE

Out: 12193mm X 2438mm X 2896mm

in: 12032mm X 2350mm X 2690mm



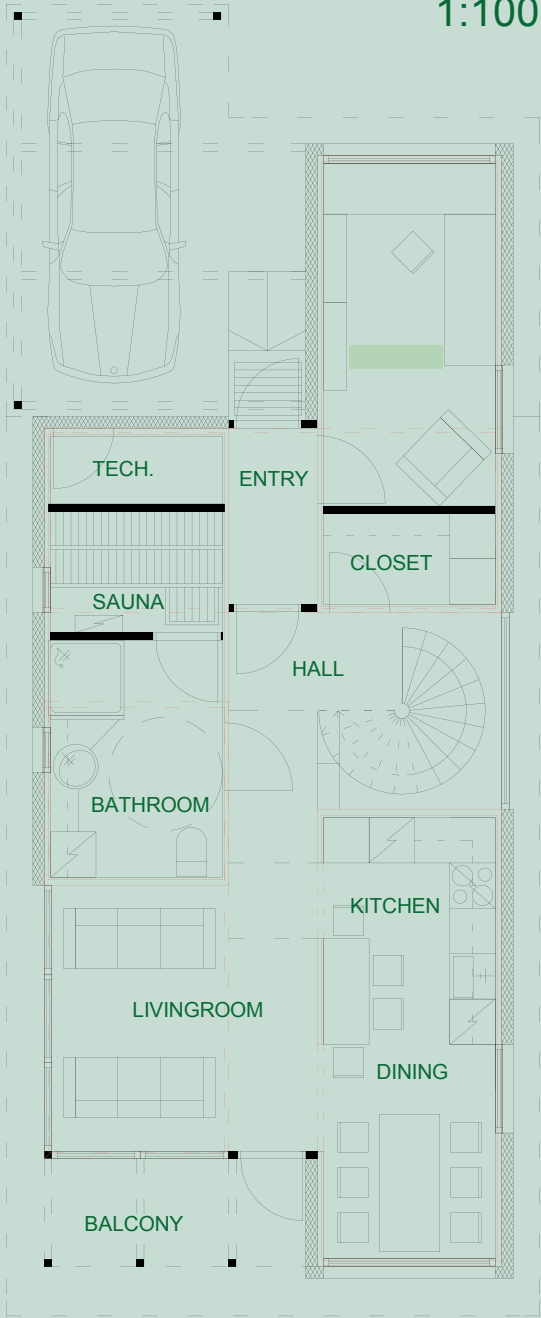
PLAN



SECTION

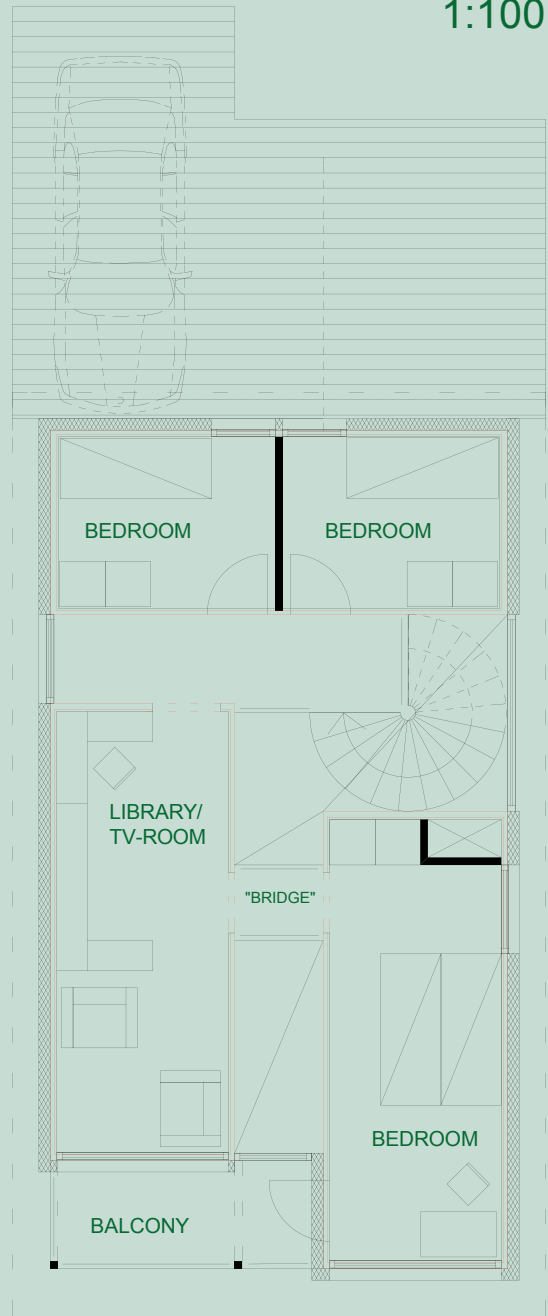
EXAMPLE
(container marked with red line)

GROUND FLOOR
1:100



EXAMPLE
(container marked with red line)

1ST FLOOR
1:100



SKETCH -3D-images of a possible composition



