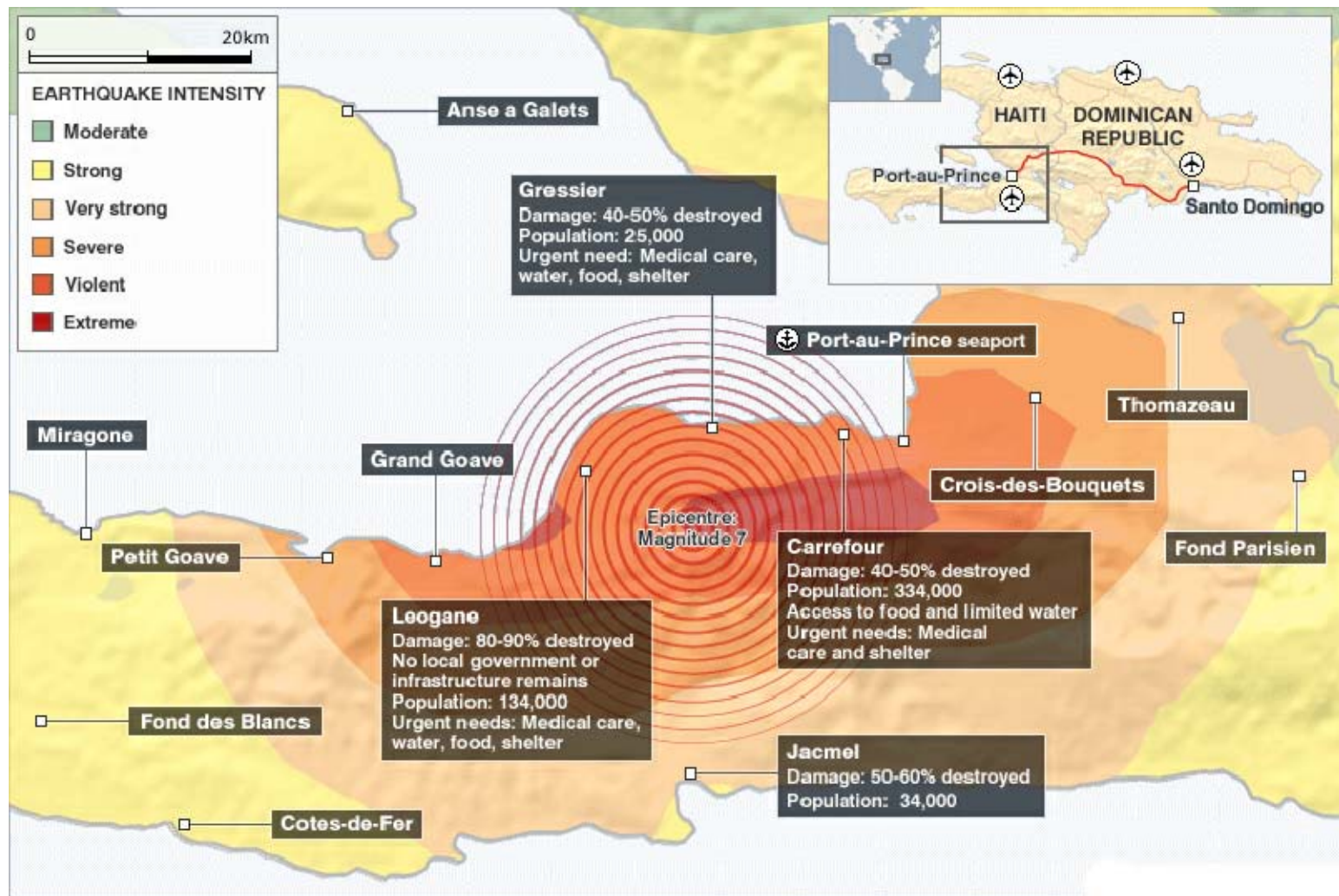


Location. Port-au-Price (Haiti)



The reason why the chosen place is Haiti is the earthquake that took place in the island on 2010. This situation shows us how much important is the architecture and a secure structure, how the future buildings and cities should be and behave on a natural disaster.



Port-au-Prince before.



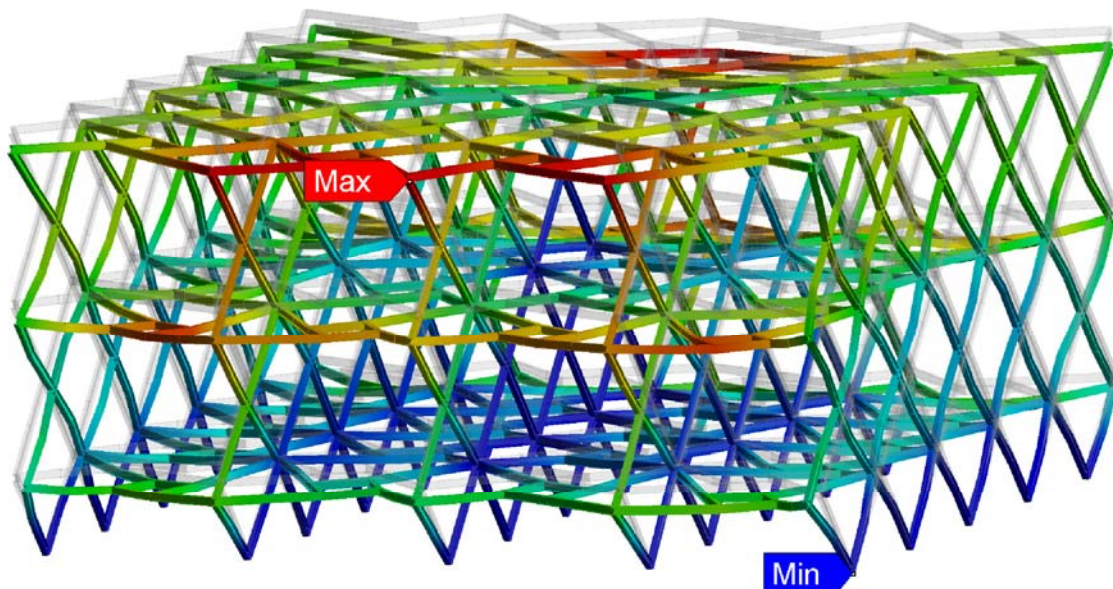
Port-au-Prince after.

The Haiti case opens a reflexion about the esence of architecture and the structure and the relationships with the ground and the environment. Is not possible to think about a kind of architecture that solves the current housing problem on this cities without thinking in this parameters.

With our model we really think that we can solve this problem, also we think we are able to create a **profitable industry** that is necessary for the people with less resources in the growing cities.

The option of creating a profitable industry is indispensable, no one gonna create a company with a negative cash flow, and that is the mean reason why now the architectural solution are failing, because is not attending the economy in the place. If we don't create an **industry that will be profitable** in the location, an industry where the main product is an affordable structure for the homes, all our efforts are useless.

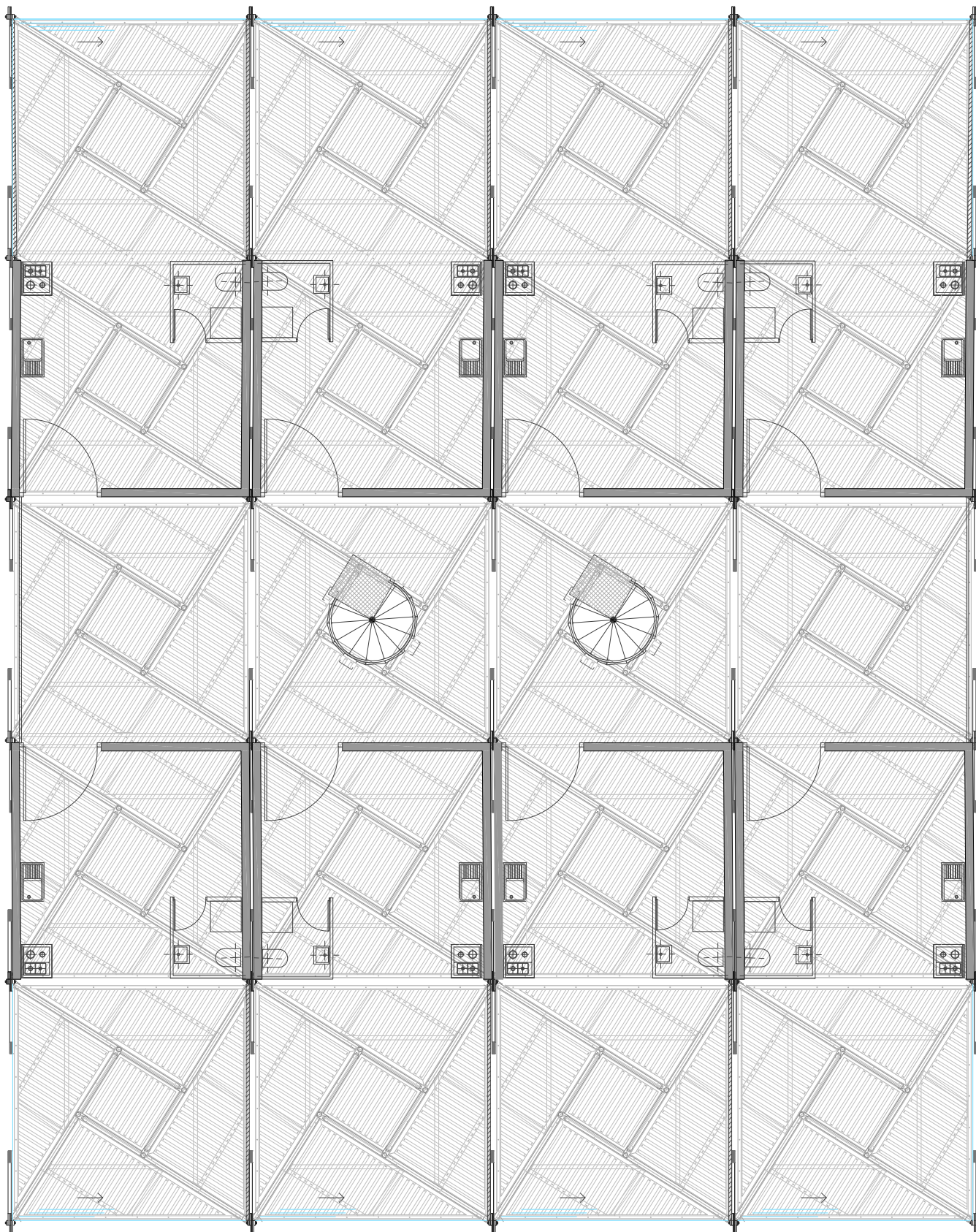
Our solution for that is sending the architecture to the assembly line production, creating a foldable, self supported, variable by needs system based on the technology advances and the mechanics of the structural systems.



Simple housing unit .

The model shows how is the behaviour of the structure, giving the Safety factor value in 3.5 by the spanish rules of a housing building.

This is the prove that our system works and is ready to be test in a real situation.



Basic Plant (x3).

Budget. And the business plan.

The target is 2500\$/home.

The median salary in Haiti is 580\$ per year. According to this the home cost a 4.33 year salary, far away the 12.5 year salary of the occidental countries.

The cost of the project by its characteristics is fragmented in 5 blocks.

Production costs
Installation costs
Partitions costs.
Facilities Costs.
Auxiliar Costs.

2/3 part of the budget

In here is where the most part of the budget can be reduced thanks to the assembly line production

Building for 24 families.

Production Costs.

Metal beams framework: $4 \times 85\$ = 340\$ \times 20 \times 3 = 20400\$$

Metal beams building roof: $4 \times 40\$ = 160 \times 20 = 3200\$$

Metal pillars: $2 \times 85\$ = 170\$ \times 15 \times 5 = 12750\$$

Joints: $65\$ \times 20 \times 6 = 7850\$$

Total = $44150\$ / 24 \text{ families} = 1839.6\$ \text{ per family}$

Installation Costs.

Transport: 350 \$

2 technicians: 425\$

Leasing joint foundation: 50\$

Total: 825\$

Partitions Costs.

Each family is free to choose the type of partitions and finishing layer. The structure to support the partitions are:

$12\$ / m^2 ; 1250m^2 \Rightarrow 15000\$$

Installation and Auxiliar cost are stimated by 10% of the total cost.

According by this.

Total.

$44150\$ + 825\$ + 15000\$ = 59975\$ * 1.1 = 65975\$ / 24 \text{ families} = 2748.96 \$$