

# **Container House**

by stephane Robigeau / 🕓 2022-05-23 00:00:00 / France / 💿 1268 / 🍽 FR

### **New Construction**



Primary energy need : kWhep/m<sup>2</sup>.an (Calculation method : Other )

# ENERGY CONSUMPTION Economical building Building < 50A 51 à 90B 91 à 150 C 151 à 230 D 231 à 330 E

 331 à 450
 F

 > 450
 G

 Energy-intensive building

Building Type : Isolated or semi-detached house
Construction Year : 2021
Delivery year : 2021
Address 1 - street : 150 rue elisa 97438 SAINTE MARIE, France
Climate zone : [Aw] Tropical Wet & Dry with dry winter.

Net Floor Area : 120 m<sup>2</sup> SHON Construction/refurbishment cost : 97 500 € Number of Dwelling : 1 Dwelling

#### General information

The choice of a container house was made for its innovative style, but also for the ecological aspect of reusing and recycling the material.

The container house is based on a story that is both surprising and original. As owners of land wishing to build our house there, we went to meet a house construction company working with metal structures (which ultimately did not appeal to us) and on the way back, we noticed a container house construction company. We therefore took the initiative to inquire and this project immediately seemed more suited to our desires. Having the choice of containers, using recycled containers and being one of the pioneers in this field of construction, these are the reasons that led us to opt for this project. Result: a comfortable house built with several containers, accompanied by a swimming pool itself made thanks to the reuse of a container.

In addition, economically it is a very reliable project and product, easily adaptable and modular .

On the practical side, the house does not retain heat like concrete and its architecture allows ventilation when the bay windows are open.

Our house is located **in the heart of an eco-village project** which intends to replicate this housing model to house disadvantaged people.

### Building users opinion

Satisfied with our choice and our investment.

### Photo credit

Stephane Robigeau

#### Stakeholders

Contractor

# **Construction Manager**

Name : R-BOX Factory Contact : NASSER Idriss

### Stakeholders

Function : Company

SARL RGS

**PERRON** Laurent

Subcontracting company in charge of construction

# Contracting method

Lump-sum turnkey

Energy

# Energy consumption

Calculation method : Other

# Real final energy consumption

Real final energy consumption/m2 : 45,00 kWhef/m<sup>2</sup>.an

# More information

Data related to primary energy consumption is not in the owner's possession and therefore cannot be provided.

### Renewables & systems

# Systems

#### Heating system :

No heating system

#### Hot water system :

• Individual electric boiler

#### Cooling system :

• No cooling system

#### Ventilation system :

Natural ventilation

#### Renewable systems :

• No renewable energy systems

#### Solutions enhancing nature free gains :

Portail électrique, caméra de surveillance et chauffage piscine solaire (société Ecolobeau)

#### Environment

# Urban environment

#### Land plot area : 400,00 m<sup>2</sup>

The container house is the first stone of the Elisa eco-village, a sustainable neighborhood project located on the outskirts of the city of Sainte-Marie on Reunion Island. The district is in a rather rural environment, in the heights of the city.

Two pillars guide the design of this eco-village: circular economy and short circuit. The goal is to create a neighborhood of container houses for disadvantaged people (the houses will be less sophisticated than the one presented in this case study). Local craftsmen will be mobilized on the site. The "village" will also include an organic farming farm, an eco-market and various shops built in huts made of bamboo threads. Finally, a solar farm should cover all the consumption of the district, thus making it an autonomous site.

The project is ongoing, construction has started recently.

### Construction and exploitation costs

Renewable energy systems cost : 7 000,00 €

Cost of studies : 1 500 €

Total cost of the building : 97 500 €

Additional information on costs :

7000 corresponds to the installation of solar elements for swimming pool heating, gate and surveillance cameras.

# Circular Economy

### Reuse : same function or different function

#### Batches concerned by reuse :

Structural works

#### For each batch : Reused Materials / Products / Equipments :

Use of recycled containers for the structural work: structure of the house and swimming pool.

4 containers of 12 meters for the construction of the house and 1 container of 6 meters for the swimming pool.

#### Field of use and material origin :

These containers come from the Port of La Réunion and were used for the transport of goods. They are therefore reused.

### Environmental assessment

#### Impacts avoided : water, waste, CO2 :

Water savings compared to concrete, less waste in terms of scrap metal, bag of cement and transportation of materials.

# Economic assessment

Total cost of reuse : 9 000 €

# Building candidate in the category





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