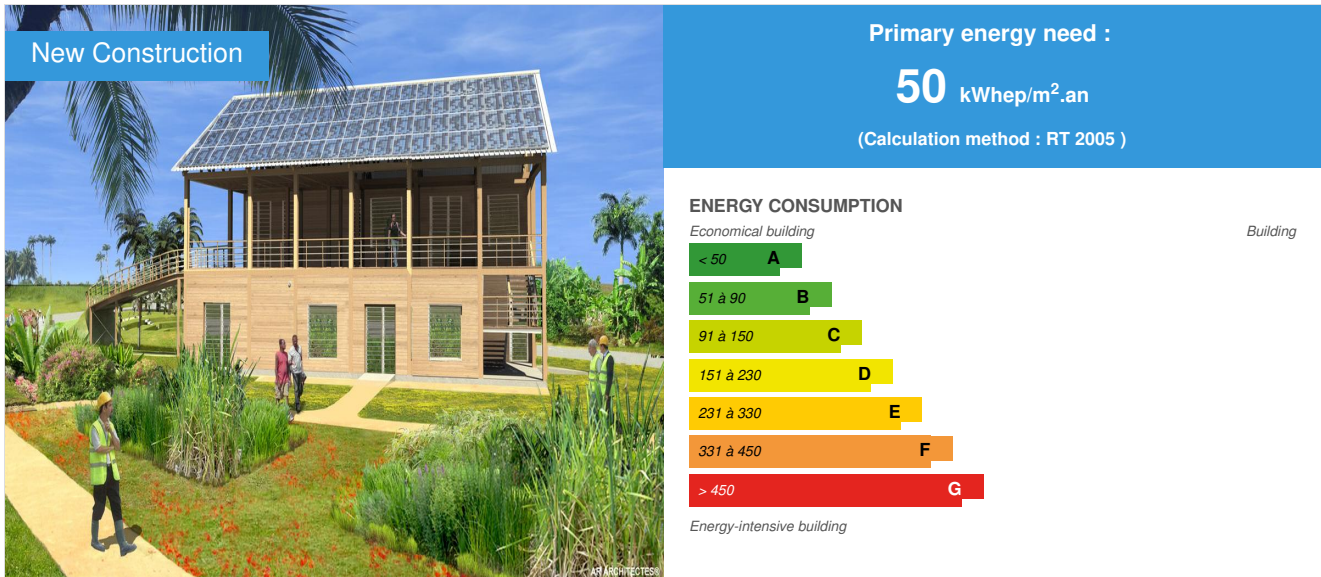


House of the Environment in Sainte-Rose

by AR ARCHITECTES / 2016-12-12 10:30:58 / France / 7807 / FR



Building Type : Other building
Construction Year : 2011
Delivery year : 2012
Address 1 - street : 97115 SAINTE ROSE (GUADELOUPE), France
Climate zone : [Af] Tropical Wet. No dry season.

Net Floor Area : 225 m²
Construction/refurbishment cost : 1 000 000 €
Number of none : 5 none
Cost/m2 : 4444.44 €/m²

Certifications :



General information

The Maison de l'Environnement is a bioclimatic administrative office (tropical architecture adapted to seismic and paraseismic standards), one floor accessible to the public with a teaching room and a large terrace opening onto the large landscape.

Sustainable development approach of the project owner

A group of services and industrial solutions specializing in sustainable resource management, SUEZ supports cities and industries in the circular economy to preserve, optimize and secure the resources essential to our future: <http://www.sita.fr/>

Architectural description

The land, bordered by the Salé River to the east and the Ramée to the West, serves for the cultivation of sugar cane and pineapple. The architectural part of the

project is based on a relatively low impact of the buildings integrated into the landfill center of 250,000m², and into the landscape. The architecture of the building is bioclimatic; It resembles that of the traditional buildings that can be found on the large agricultural or industrial farms of Guadeloupe. Thus, the House of the environment is in wooden frame, dressed of a wooden cladding and a galvanized steel roof. Landscapes, plant screens, reed beds and wetlands are local rustic species, in harmony with the surrounding crops. The project includes a private ground floor for the administration, and a level accessible to the public with a teaching room and a large terrace opening onto the large landscape. This bioclimatic building has been designed according to the HQE® approach, working on priority targets, including the harmonious integration of the building, water and energy management, choice of construction processes and products.

Building users opinion

The occupants are entirely satisfied with the thermal comfort inside the building, the sanitary quality of the interior spaces, the visual comfort, the indoor air quality, the quality of the natural light inside the spaces Working as well as acoustic comfort.

If you had to do it again?

We would have done the same project perfectly in harmony with its environment.

See more details about this project

http://www.ar-architectes.com/eco_fiche.php?id=sainte-rose&int

Stakeholders

Stakeholders

Function : Contractor

SITA ESPERANCE, filiale de SITA France en Guadeloupe

cindy.loques@sita.fr

<http://www.sita.fr>

Function : Construction Manager

AR ARCHITECTES

contact@ar-architectes.com

<http://www.ar-architectes.com>

Project management architecture, environment and landscape

Function : Other consultancy agency

CCET

l.bride@ccet-outremer.com

<http://www.ccet-ingenierie-btp-antilles.com>

Office of studies all bodies of state

Function : Company

G.3.C Sarl

gerantgccc@orange.fr

<http://www.g3c-charpentes-guadeloupe.fr>

Company lots Carpentry Wood, Roofing, Cladding and insulation

Function : Company

ICM SAS

contact@icm-guadeloupe.com

<http://www.icm-guadeloupe.com>

Entreprise Générale - Lots Gros Work, Partition, Electricity, Plumbing, Flooring, Air-conditioning / Ventilation, Landscaping

Function : Company

ALU Antilles

stephane.aluantilles@wanadoo.fr

<http://www.alu-antilles-menuiserie.fr>

Company lot aluminum joinery

Contracting method

Separate batches

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 50,00 kWhep/m².an

Primary energy need for standard building : 200,00 kWhep/m².an

Calculation method : RT 2005

CEEB : 0.0002

Renewables & systems

Systems

Heating system :

- No heating system

Hot water system :

- Solar Thermal

Cooling system :

- No cooling system

Ventilation system :

- compensated Air Handling Unit

Renewable systems :

- Solar Thermal

Solutions enhancing nature free gains :

Le bâtiment est conçu suivant les principes bioclimatiques spécifiques au climat guadeloupéen, selon l'ensoleillement et les apports de chaleur ou fraîcheur possibles : la Maison de l'Environnement est orientée Est Ouest pour capter la lumière et le soleil

Environment

Urban environment

Land plot area : 638 300,00 m²

Green space : 3 090,00

The project site is located in the commune of Sainte-Rose, in the south / west of the town center, on the plateau of l'Espérance. The commune of Sainte Rose is a very large municipality, located on the edge of the Atlantic Ocean, mainly pavilion. The ancient habitat is located at the edge of the ocean. This plateau, which will house the House of Environment, is bordered by the Salée River to the East and the Ramée to the West. The plot is accessible via a communal road from the RN2. The first dense dwellings area is located in the North East (Sainte-Marie subdivision), at a distance of more than 400m from the boundaries of the parcel. The site was occupied by a gross discharge in its central part of 3ha, which was rehabilitated as part of this project. The rest of the land did not include forest cover, and was used for sugarcane and pineapple crops. The fauna and flora were not very diverse on the plateau, only a few scattered trees of the evergreen forest were counted.

Products

Product

Frame in treated pine treated wood

Durapin

Piveteau-Bois

<http://www.piveteaubois.com/fr/>

Product category :

Frame of treated pine wood class 4, resulting from permanently managed European forests, ensuring dimensional stability, strength, mechanical strength, suitable for a hot and humid environment, and resistant to insects, termites and rot.

This product was very well accepted by all the project's stakeholders, and allowed a clean and rapid site for the assembly of the whole structure.



Costs

Carbon

GHG emissions

GHG in use : 1 700,00 KgCO₂/m²/an

Contest

Reasons for participating in the competition(s)

La Maison de l'Environnement de Sainte-Rose en Guadeloupe a été conçue suivant la démarche HQE® et surtout en adaptation totale avec les conditions climatiques locales. Ainsi, le bâtiment en ossature bois propose à l'étage une terrasse couverte mais ouverte, pour le public, permettant une circulation de l'air et une ventilation naturelle bienvenue en climat chaud. Le bâtiment a été conçu bioclimatique et passif, selon l'ensoleillement et les apports de chaleur ou de fraîcheur possibles. Ainsi, son orientation Est-Ouest permet de capter la lumière et le soleil, tout en se protégeant des surchauffes; des capteurs solaires thermiques permettent de produire de l'eau chaude sanitaire. La configuration du bâtiment sur deux niveaux permet une circulation optimum de l'air : terrasse de l'étage couverte mais ouverte, pièces principales traversantes, à double orientation. Les fenêtres sont équipées de jalousies, pour dissiper la chaleur, et de volets coulissants à claire voie pour briser le soleil, et éviter les surchauffes lorsque les températures sont très élevées.

Building candidate in the category



Energie & Climats Chauds





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