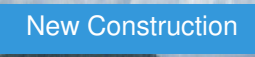



Residence Les Universiades

by Laurent CLAUDOT / 2017-03-11 01:13:59 / France / 9450 / FR

Primary energy need :

86 kWh/m².an

(Calculation method : RTAA DOM 2012)

ENERGY CONSUMPTION

Economical building *Building*

< 50	A
51 à 90	B
91 à 150	C
151 à 230	D
231 à 330	E
331 à 450	F
> 450	G

Energy-intensive building

Building Type : Collective housing < 50m
Construction Year : 2013
Delivery year : 2014
Address 1 - street : 97300 CAYENNE, GUYANE, France
Climate zone : [Aw] Tropical Wet & Dry with dry winter.

Net Floor Area : 4 963 m²
Construction/refurbishment cost : 8 500 000 €
Number of Dwelling : 148 Dwelling
Cost/m² : 1712.67 €/m²

General information

RESIDENCE LES UNIVERSIADES - Set of 5 buildings R + 2 for a total of 148 collective dwellings located close to the university campus in the Hibiscus ZAC, in the commune of Cayenne

Sustainable development approach of the project owner

Quality approach, respect of the RTAA DOM, use of solar energy (hot water and lighting)

Architectural description

Construction pole beam reinforced concrete, masonry filling, roofing roofing bituminous waterproofing and steel battens, aluminum joinery, structural elements and wooden cladding Parking and road traffic in concrete and / or vegetated slabs to reduce the impermeability of the site (by constraint of the ZAC regulation and voluntarism of OCEANIC IMMOBILIER) Elements compatible with DOM thermal regulations: clear cover with 6cm thermal insulation of expanded polystyrene or ventilated roof, solar protection by large roof edges, loggias or corridors, ventilated wood cladding, natural ventilation through slatted blinds with clear glass Delivered without air conditioning, autonomous solar lighting outside, solar hot water by centralized installation or individual solar water heater, automatic laundromat fed with solar hot water, lighting of gangways on presence detection Sports facilities, closed outdoor bike room

Building users opinion

Good to very good opinions (study AQUAA 2015) although some evoke the problems of acoustics related to natural ventilation and heat in some rooms (according to exhibitions)

If you had to do it again?

Operation globally successful despite density. Passage to the bank. Constraint of the solar DHW which led to the creation of technical rooms in roofing.

Stakeholders

Stakeholders

Function : Contractor

OCEANIC PROMOTION

Pierre Lagillier pierre.lagillier@groupeoceanic.com

<http://www.groupeoceanic.fr>

Administrative and technical coordination of the project

Function : Designer

JPL

Jean-Pierre Lasalarié

Architect

Function : Thermal consultancy agency

MDE Conseil

Laurent Claudot

Solar hot water supplier

Contracting method

Off-plan

Energy

Energy consumption

Primary energy need : 86,00 kWh_{ep}/m².an

Primary energy need for standard building : 94,00 kWh_{ep}/m².an

Calculation method : RTAA DOM 2012

Breakdown for energy consumption : Household and common consumption (lighting, solar hot water, laundry)

Real final energy consumption

Final Energy : 48,00 kWh_{ef}/m².an

Real final energy consumption/m² : 48,00 kWh_{ef}/m².an

Real final energy consumption/functional unit : 1 610,00 kWh_{ef}/m².an

Year of the real energy consumption : 2 015

More information

Data measured during the AQUAA 2015 study

Renewables & systems

Systems

Heating system :

- No heating system

Hot water system :

- Other hot water system

Cooling system :

- No cooling system

Ventilation system :

- Natural ventilation

Renewable systems :

- Solar Thermal

Renewable energy production : 25,00 %

83 MWh / year thermal energy produced by solar thermal

Environment

Urban environment

Land plot area : 7 080,00 m²

Built-up area : 70,00 %

In the immediate vicinity of the university campus, the bus network, green areas of the Hibiscus Zac including a sports course, on the outskirts of the city center of Cayenne

Products

Product

Parking lot

GIGABLOC

ZI COLLERY 4 97300 CAYENNE Tel 0594312700

<https://www.pagesjaunes.fr/pros/06868663>

Product category : Table 'c21_china.innov_category' doesn't exist SELECT one.innov_category AS current,two.innov_category AS parentFROM innov_category AS oneINNER JOIN innov_category AS two ON one.parent_id = two.idWHERE one.state=1AND one.id = '23'

The product is a concrete profile that allows the lawn to be integrated into the car parks without risk of erosion. It reduces soil waterproofing in urban areas.



Good grassing, good behavior, however, a relatively intermittent parking is required to maintain optimal vegetation (need in light and water).

[Ce produit existe en mtropole sous la forme de profile en PEHD.](#)

Laundromat powered by solar hot water

electrolux

ELECTROLUX FRANCE 60300 SENLIS

<http://www.electrolux.com>

Product category : Table 'c21_china.innov_category' doesn't exist SELECT one.innov_category AS current,two.innov_category AS parentFROM innov_category AS oneINNER JOIN innov_category AS two ON one.parent_id = two.idWHERE one.state=1AND one.id = '18'

The laundry is powered by solar hot water produced by a centralized roof installation. The washing machines are double entry EF / EC.



Satisfactory but the economy has not been evaluated.

Stand-alone solar lamps

Energie Douce

ZAC des Bois Rochefort, Bâtiment C5, 21 rue Georges Méliès à Corneilles-en-Parisis 95240

<http://www.energie douce.com>

Product category : Table 'c21_china.innov_category' doesn't exist SELECT one.innov_category AS current,two.innov_category AS parentFROM innov_category AS oneINNER JOIN innov_category AS two ON one.parent_id = two.idWHERE one.state=1AND one.id = '17'

Independent solar lamps (batteries and LED lighting): no other parking lights.

Satisfactory in terms of service but evaluation will have to be confirmed in the long term according to the life of the product.



Costs

Health and comfort

Water management

Consumption from water network : 5 460,00 m³

Water Consumption/m² : 1.1

Water Consumption/Dwelling : 36.89

Indoor Air quality

Not applicable (natural ventilation)

Carbon

GHG emissions

GHG in use : 41,00 KgCO₂/m²/an

Life Cycle Analysis

Eco-design material : WOOD OF GUYANA

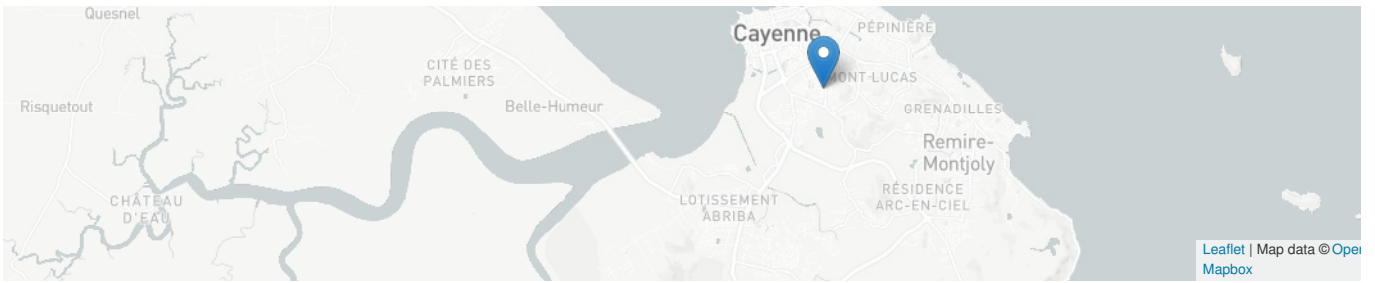
Contest

Building candidate in the category



Coup de Cœur des Internautes





Date Export : 20230629025449