


Territorial Unit for Prevention and Social Action

by Didier CONSTANT / 2017-09-08 15:18:54 / France / 7584 / FR

New Construction



Primary energy need :

36.83

 kWhep/m².an

(Calculation method : RT 2005)

ENERGY CONSUMPTION

Economical building *Building*

< 50	A	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 : Office building < 28m
Construction Year : 2014
Delivery year : 2014
Address 1 - street : 59287 GUESNAIN, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 2 217 m² SHON
Construction/refurbishment cost : 3 758 638 €
Cost/m2 : 1695.37 €/m²

Certifications :



General information

This new building is intended to accommodate a public service. It has been certified HQE tertiary buildings excellent level and has been labeled BBC 2005 Effinergie. It was built to provide new, larger and more functional premises. It will bring together in one place the PMI-maternal and child protection, ESA-social welfare for children, SSD-departmental social service, SPS-health prevention prevention and family planning services. The building of a surface outside net work of 2217 m2 and built on a plot of 2873 m2 consists of 3 levels and attic:

- A basement for parking staff vehicles and the boiler room.
- A ground floor reserved for public reception with a space dedicated to parents with young children and rooms for consultation and meeting.
- A floor dedicated to staff offices.
- Attic dedicated to the technical premises of ventilation.

Sustainable development approach of the project owner

Respect for the Agenda 21 of the community

- Willingness to develop the environmental approach. This building is one of 35 operations that have been certified in the North Department (including 27 colleges). The HQE certification and the BBC 2005 certification made it possible to obtain a more rigorous follow-up than a conventional operation.

Architectural description

Thermal insulation from the outside. Concrete walls with cladding. Vegetalized roof.

Stakeholders

Stakeholders

Function : Contractor

Département du Nord

Clément GEENENS 03 59 73 33 19 clement.geenens@lenord.fr

Function : Designer

ARCAsite

Dominique STROJWAS

Agent Architect

Function : Thermal consultancy agency

KHEOPS

Arnaud FOURMANOIT

Function : Structures calculist

ADI

Christopher KELLE

Function : Other consultancy agency

ACT Environnement

Ludivine BECQUET

BET HQE

Function : Other consultancy agency

ADI Environnement

Richard QUINET

BET VRD

Function : Environmental consultancy

ADI

Alain GERMAIN

OPC

Function : Environmental consultancy

DEKRA

Sébastien CREUZE

Technical Controller

Function : Environmental consultancy

COBAT COPREV

Philippe RECOLET

SPS Coordinator

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 36,83 kWhep/m².an

Primary energy need for standard building : 128,00 kWhep/m².an

Calculation method : RT 2005

Breakdown for energy consumption : Heating: 11.38 KWHEF / M2.year Ventilation: 3.52 KWHEF / M2.year Eclairage: 6.14 KWHEF / M2.year Auxiliaries: 0.17 KWHEF / M2.year

Real final energy consumption

Final Energy : 21,21 kWhep/m².an

Envelope performance

Envelope U-Value : 0,47 W.m⁻².K⁻¹

Indicator : I4

Air Tightness Value : 1,17

Renewables & systems

Systems

Heating system :

- Condensing gas boiler
- Water radiator

Hot water system :

- Individual electric boiler

Cooling system :

- No cooling system

Ventilation system :

- Nocturnal ventilation
- Double flow heat exchanger

Renewable systems :

- No renewable energy systems

Environment

Urban environment

Land plot area : 2 873,00 m²

This operation was carried out on land acquired from the city of Guesnain as part of an urban development operation near the city center in partnership with Partenord Habitat. This includes the creation of a public square, a public building parking spaces for users and residents and the establishment of townhouses, some of which are rental. This building in the heart of the district is well served by urban transport (inter-urban bus network).

Products

Product

ROCKFACADE

Rockwool

(+33) 1 40 77 82 82

<http://www.rockwool.fr/produits/>

Product category : Gros œuvre / Structure, maçonnerie, façade

Semi-rigid panel facade thickness 120mm

No observation



Costs

Construction and exploitation costs

Cost of studies : 539 662 €

Total cost of the building : 3 746 110 €

Carbon

GHG emissions

GHG in use : 3,00 KgCO₂/m²/an

Contest

Reasons for participating in the competition(s)

Building candidate in the category



Energie & Climats Tempérés



Coup de Cœur des Internautes





Prix des Etudiants



Date Export : 20230323091125