School in Hareville sous Montfort (88)

by Marie-Laure Aubriot / 2014-06-17 00:00:00 / France / 5506 / FR

Primary energy need :

101 kWhep/m².an

(Calculation method : RT 2005)

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 : School, college, university
Construction Year : 2011
Delivery year : 2011
Address 1 - street : Impasse de la mairie 88800 HARéVILLE, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 1 047 m² SHON
Construction/refurbishment cost : 1 886 715 €
Cost/m2 : 1802.02 €/m²

Proposed by :

envirobat GRAND EST

General information

- Level BBC (winner PREBAT 2009)
- Self-declaration of HQE

The construction of a school in the town of Haréville combines several functions:

- a school (2 kindergarten and 3 elementary classes)
- a canteen
- a nursery
- a school care club.

The one-storey building is fully designed in wood-frame, wall and roof and rests on a masonry platform. The general volumetry describes four parallel band south-facing and covered by a one-slop roof which could to accomodate photovoltaic panels. They are separated by spaces housing the circulation (people and flow distribution) covered by a green roof. The building is in harmony with the immediate surrounding and the existing schoolyard that will be reused.

Sustainable development approach of the project owner

- Level BBC (winner PREBAT 2009)
- Self-declaration of HQE

The one-storey building is fully designed in wood-frame, wall and roof and rests on a masonry platform.

Acoustic comfort
- Ceilings encasing the sound
- Partition wall with mineral wool between every classroom

Visual comfort
- External blinds with adjustable slats
- Classrooms with view on the outside
- Natural lighting in all spaces

Lighting: energy-saving lamps

Architectural description

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Orientation South-North

See more details about this project

http://www.lqe.fr/home/upload/fiches/FicheGroupeScolaireHareville..pdf

Stakeholders

Stakeholders

Function : Contractor

Mairie d'Haréville sous Montfort (88)

Function : Structures calculist

Act'Bois

http://actbois.fr/

Function : Others

Veritas

http://www.bureauveritas.fr/wps/wcm/connect/bv_fr/local

Function : Company

Ecologgia

http://www.ecologgia.fr/

Function : Company

Maire

http://www.menuiserie-maire.com/

Function : Company

SNEE

http://www.snee-cloture.com/

Function : Company

Cunin

http://www.cunin.com/fr/accueil.html

Function : Designer

SCPA Siettel Votano

http://www.darchitectures.com/voir-siettel-votano-scpa-parmi-les-prescripteurs,p17957.html

Function : Other consultancy agency

Energico

Function : Company

Bonini

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 101,00 kWhep/m^2.an

Primary energy need for standard building : 309,00 kWhep/m^2.an

Calculation method : RT 2005

CEEB : 0.0001

Envelope performance

More information :

Insulation:

- Ceiling: 320mm cellulose wadding, 100mm mineral wool / walls: 60 mm high density wood fiber, mineral fiber 160mm and 100mm / Floor: 100mm polyurethane
- Facade: North, West: rain-proof metal cladding / South: terracotta cladding / East: larch cladding / interior wood cladding from the communal forest

Insulation: outdoor / indoor / distributed

- Glazing: triple

Renewables & systems

Systems

Heating system :

- Wood boiler

Hot water system :

- Solar Thermal

Cooling system :

- No cooling system

Ventilation system :

- Double flow heat exchanger

Renewable systems :

- Solar Thermal
- Wood boiler

Environment

Urban environment

Land plot area : 1 047,00 m^2

- Located in the heart of the village
- Building of an access road towards the end of the village (planned subdivision)

Costs

Construction and exploitation costs

Cost of studies : 179 271 €

Total cost of the building : 1 886 715 €

Subsidies : 1 098 124 €

Health and comfort

Water management

Water management
- Green roof (between the sheds)
- Selfclosing taps, dual flush toilet

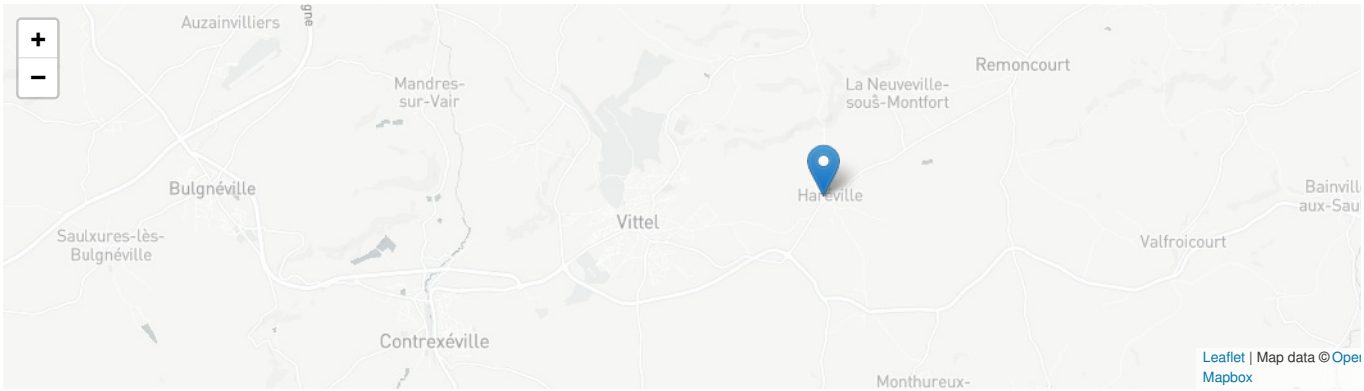
Indoor Air quality

- Natural Materials, water paint
- VOC-free furniture

Carbon

Life Cycle Analysis

Eco-design material : Cellulose wadding; mineral wool; wood fiber; mineral fiber; wood; terracotta



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