


## Vestiaire des Papillons

by philippe-henri bertin / 2015-06-09 11:34:50 / Belgique / 9932 / FR

New Construction



Primary energy need :

# 86

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

**ENERGY CONSUMPTION**

*Economical building*

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

*Energy-intensive building*

*Building* **A**

**Building Type** : Nursing home or Retirement home  
**Construction Year** : 2014  
**Delivery year** : 2014  
**Address 1 - street** : 1420 BRAINE L'ALLEUD, Belgique  
**Climate zone** : [Cfc] Marine Cool Winter & summer- Mild with no dry season.

**Net Floor Area** : 592 m<sup>2</sup>  
**Construction/refurbishment cost** : 1 350 000 €  
**Cost/m2** : 2280.41 €/m<sup>2</sup>

Certifications :



Proposed by :



### General information

See more details about this project

[http://www.etermit-photos.be/realisaties\\_dak/Alterna/BraineAlleud1114\\_Alterna/](http://www.etermit-photos.be/realisaties_dak/Alterna/BraineAlleud1114_Alterna/)

### Data reliability

3rd part certified

### Stakeholders

Function : Contractor

Chrysalis a.s.b.l.

Edith Allaert , [larbresoleil@hotmail.com](mailto:larbresoleil@hotmail.com)

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Function : Designer

Archipel Atelier d'Architecture

Philippe Henri Bertin

<http://www.archipel-architecture.be>

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Function : Thermal consultancy agency

Responsible Young Architects sciv sprl

Benoit Vanden Breede

<http://www.rya.be>

### Contracting method

General Contractor

## Energy

### Energy consumption

Primary energy need : 86,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Primary energy need for standard building : 165,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Calculation method : Other

CEEB : 0.0001

Final Energy : 80,30 kWh<sub>ep</sub>/m<sup>2</sup>.an

### Envelope performance

Envelope U-Value : 0,17 W.m<sup>-2</sup>.K<sup>-1</sup>

Building Compactness Coefficient : 1,76

Indicator : EN 13829 - n50 » (en 1/h-1)

Air Tightness Value : 0,25

## Renewables & systems

### Systems

Heating system :

- Geothermal heat pump
- Low temperature floor heating
- Canadian well

Hot water system :

- Heat pump
- Solar Thermal

Cooling system :

- Radiant ceiling
- Canadian well

Ventilation system :

- Nocturnal ventilation
- Free-cooling

- Double flow

#### Renewable systems :

- Solar photovoltaic
- Solar Thermal
- Heat Pump on geothermal probes

Renewable energy production : 76,00 %

## Environment

### Urban environment

Land plot area : 9 130,00 m<sup>2</sup>

Built-up area : 330,00 %

Green space : 5 350,00

## Products

### Product

Buderus

Saverio Giordano sg@buderus.be

<http://www.buderus.be>

**Product category :** Table 'c21\_italy.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'

AGC

bhadresh.parbhoo@eu.agc.com

<http://www.agc-glass.eu/>

**Product category :** Table 'c21\_italy.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 = '10'



## Costs

### Construction and exploitation costs

Renewable energy systems cost : 90 000,00 €

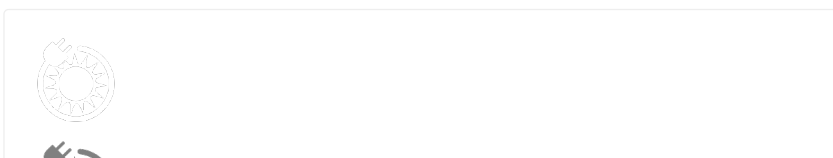
Cost of studies : 40 000 €

Total cost of the building : 1 350 000 €

Subsidies : 18 000 €

## Contest

### Building candidate in the category





Energies renouvelables

**Green Building**

**Solutions Awards 2015**

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Bâtiment zéro énergie



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