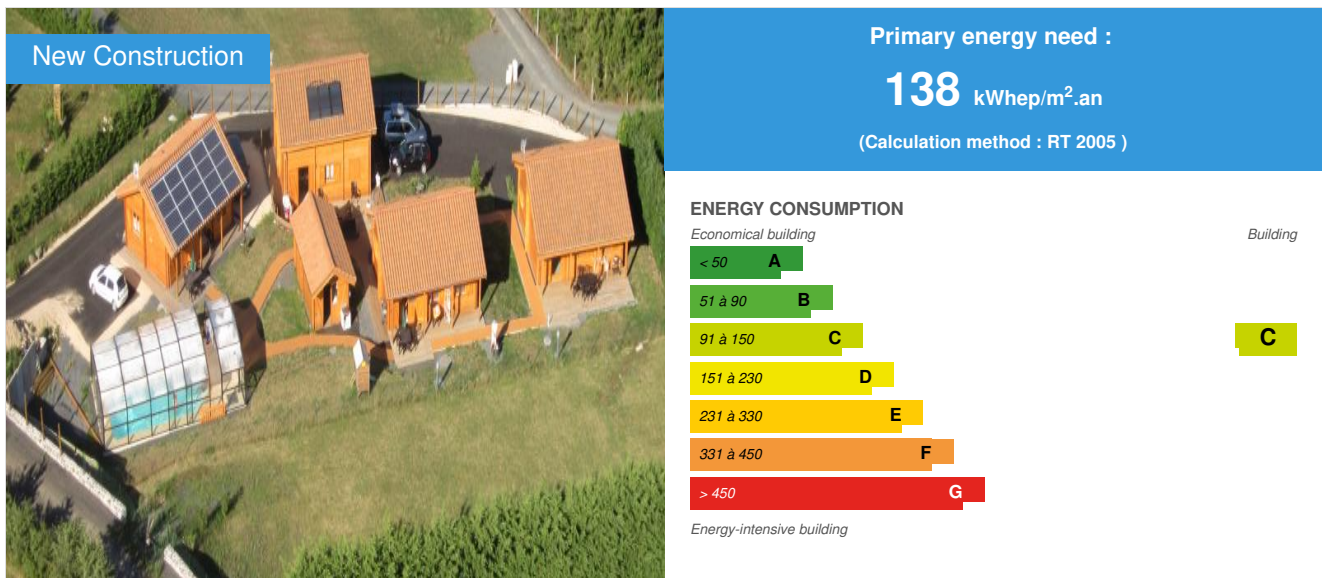


Village of 4 eco friendly rental houses

by Guy SALAT / 2013-02-07 19:43:03 / France / 12860 / FR



Building Type : Hotel, boarding house
Construction Year : 2010
Delivery year : 2013
Address 1 - street : Fraissinet 15100 SAINT FLOUR, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 210 m² SHON
Construction/refurbishment cost : 354 166 €
Cost/m2 : 1686.5 €/m²

General information

4 Rural biobased Bioclimatic at 1000m altitude, accessible, with successful applications of renewable energy (photovoltaics, solar water heaters, geothermal heating floors, Well "Auvergne").

Recovery of rainwater for toilets and washing machine, water source to 20m, light bulbs, electric hook for vehicles of the same name, solar pool shower ...

Sustainable development approach of the project owner

Photovoltaic, Geothermal, Solar Water Heater, Rainwater, Spring Water, Light Bulbs Low Conso, Wells Canadian Tri-selective, Compost, Recycling glass bottles reuse, Etc ...

The pool is covered by a transparent shelter that allows a heating supplement - month of the year from 23 to 32 °. In winter geothermal heating to 20 ° to 24 °.

Architectural description

4 Chalets made of wood / spruce.
 Bioclimatic, Floors Geothermal heating by vertical 2 X 100m, Wall Insulation and Air 20cm foam under roof tiles Omega10 ...
 No air conditioning: altitude 1000m

Building users opinion

See assessments on the ad type into Google: "660876 ABRITEL" heading assessments and also says "ABRITEL 868572"

A tourist told me one day in 2011: "Sir with your exemplary achievement you should be recognized of public utility."

If you had to do it again?

Choose by tenders more skilled craftsmen while limiting their number (+ plumber + electrician + heating renewables)

Look for examples of local authorities (unfortunately. .. Examples are scarce ...)

Stakeholders

Stakeholders

Function : Contractor

SALAT Guy et Grégory

SALAT Guy 15100 SAINT FLOUR

<http://gite.bon.air.stflour.free.fr/>

Function : Construction Manager

TARDIEU Joel Plombier Electricien Chauffagiste Energies Renouvelables

Tardieu joel et Salat Guy

<http://gite.bon.air.stflour.free.fr/>

Type of market

Global performance contract

Energy

Energy consumption

CEEB : 0.0001

Primary energy need : 138,00 kWh/m².an

Primary energy need for standard building : 187,00 kWh/m².an

Calculation method : RT 2005

Breakdown for energy consumption : 25,576 Kw to 220 m2 of floor heating + heating of 44m3 pool water

85 kW/m2 = ECD (Class B at 1000m altitude)

Real final energy consumption

Final Energy : 85,00 kWh/m².an

Envelope performance

More information :

Double wall wood is spruce 40mm, 100mm and 40mm air spruce is a wall of 180mm

More information

Only the result countsDPE Estimate in February 2009 = 197 kw / m2 D85 kW/m2 reality in 2012 ===== Class B

Renewables & systems

Systems

Heating system :

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

Hot water system :

- Individual electric boiler
- Solar Thermal

Cooling system :

- Geothermal heat pump

Ventilation system :

- Natural ventilation

Renewable systems :

- Solar photovoltaic
- Solar Thermal
- Heat pump (geothermal)
- Heat Pump on geothermal probes

Renewable energy production : 40,00 %

Environment

Urban environment

Land plot area : 2 074,00 m²

Built-up area : 310,00 %

Green space : 200,00

Near a footpath on the one hand and the traffic route linking St flour C 44 (7000 inhab.). In the village Paulhac, 400 inhabitants.

Of the remaining 2 sides, 2 residential area of 1500m2 each.

GPS N 45.03020 E 3.04150

Products

Product

BOIS SIPOC Belgique

SIPOC

Chrystelle COUCHOT

<http://www.sipoc.net/>

Product category : Gros œuvre / Charpente, couverture, étanchéité

Construction wood planks 40mm spruce

Very competent company in construction of 40mm wood planks. Remarkable accuracy in measurements favoring the limitation of raw material waste (wood).

Costs

Construction and exploitation costs

Global cost/Bedroom : 14558.82

Global cost : 495 000,00 €

Renewable energy systems cost : 80 000,00 €

Energy bill

Real energy cost/m² : 17.14

Real energy cost/Bedroom : 105.88

Forecasted energy bill/year : 3 600,00 €

Health and comfort

Water management

Water Self Sufficiency Index : 0.7

Water Consumption/m2 : 0.43

Water Consumption/Bedroom : 2.65

Consumption from water network : 90,00 m³

Consumption of grey water : 150,00 m³

Consumption of harvested rainwater : 60,00 m³

Currently water network called "drinking" the city of SAINT FLOUR Soon networking groundwater to 20m bacteriological quality and an exceptionalexceptionally low mineral values between Volvic and Evian (especially recommended for pregnant women and infants ...

Indoor Air quality

No Radon following DiagnosisSpruce wood coated with a clear glaze with a hint of "wood construction"

Carbon

GHG emissions

Building lifetime : 100,00 année(s)

Life Cycle Analysis

Eco-design material : EPICEA WOOD

Contest

Building candidate in the category



Energies renouvelables



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