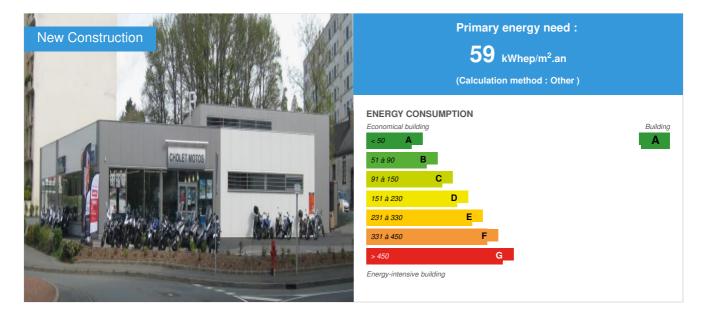
# **Cholet Motorcycles**

by Tugdual ALLAIN / (\*) 2014-04-22 20:14:12 / France / (\*) 7966 / 🍽 FR



 Building Type : Store in a shopping mall

 Construction Year : 2013

 Delivery year : 2014

 Address 1 - street : 49300 CHOLET, France

 Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 750 m<sup>2</sup> Other Construction/refurbishment cost : 403 000 € Number of Visitor : 100 Visitor Cost/m2 : 537.33 €/m<sup>2</sup>

Certifications :



### General information

Construction of a motorcycle passive store with a construction cost of 570  $\in$  HT/m².

Since the delivery in mid-January 2014 the heating has not been put into operation for an internal temperature never lower than 16 ° C.

### Sustainable development approach of the project owner

The goal was to build a passive building at the same price as a RT2012 (French thermal regulation for buildings) building. The construction budget is 570 € HT per m2. It should be noted that the client did not know what a passive building was when the prime contractor was chosen.

### Architectural description

Metal structure, sandwich panels in front, joinery type stabalux triple glazing, waterproofing cover, n50 = 0.15

### Building users opinion

Perfect thermal comfort due to the absence of cold walls and the absence of parasitic air currents. A very pleasant acoustic comfort due to the very good air tightness and triple glazing.

# If you had to do it again?

Particular attention should be paid to summer comfort. The customer found the installation of external blinds superfluous, which will certainly be realized before the summer

### See more details about this project

C http://www.equipe-ingenierie.fr/nos-realisations/

Stakeholders

# Stakeholders

Function : Construction Manager EQUIPE INGENIERIE

M Tugdual ALLAIN 02 41 55 35 21

http://www.equipe-ingenierie.fr

Function : Designer

Mme Marie CHAPPAT 06 83 26 55 02

C http://www.inso.pro

Function : Contractor SCI YAPA CHOLET MOTO

M Patrick BOSSARD 02 41 62 24 19

http://kawasaki.cholet-motos.fr/

### Contracting method

Separate batches

### Type of market

Global performance contract

Energy

# **Energy consumption**

Primary energy need : 59,00 kWhep/m<sup>2</sup>.an Primary energy need for standard building : 110,00 kWhep/m<sup>2</sup>.an Calculation method : Other CEEB : 0.0001 Breakdown for energy consumption : According to PHPP calculation: - Heating: 18% - DHW: 25% - Lighting and technical equipment: 48% - Auxiliary: 9%

### Real final energy consumption

Final Energy : 110,00 kWhef/m<sup>2</sup>.an

Real final energy consumption/m2 : 25,60 kWhef/m<sup>2</sup>.an Year of the real energy consumption : 2 014

Real final energy consumption/m2 : 21,00 kWhef/m<sup>2</sup>.an Year of the real energy consumption : 2 015

Real final energy consumption/m2 : 21,70 kWhef/m<sup>2</sup>.an Year of the real energy consumption : 2 016

### Envelope performance

More information : Outer walls: U = 0.103 W.m2.K-1 Roofs: U = 0.143 W.m2.K-1 Floors: U = 0.172 W.m2.K-1 Aluminum joinery: Uw = 0.76 W.m2.K- 1.

Building Compactness Coefficient : 0,55 Indicator : n50 Air Tightness Value : 0,15

### More information

Calculation of energy Primary calculated according to the certified PHPP sheet (passive construction). Actual measured consumption The building at the time of the building permit was submitted only to RT2005.

### Renewables & systems

# **Systems**

#### Heating system :

• Electric radiator

#### Hot water system :

Individual electric boiler

#### Cooling system :

No cooling system

#### Ventilation system :

Double flow heat exchanger

#### Renewable systems :

• No renewable energy systems

#### Solutions enhancing nature free gains :

Les façades sud et Ouest ont été très vitrées pour l'exposition client et bénéficier des apprts solaires

# Smart Building

### BMS : none

#### Environment

# Urban environment

Built-up area : 725,00 % Downtown Construction

# Product

Dual flow ventilation KWL EC 1400 D

HELIOS

01 48 65 75 61

### https://www.helios-fr.com/

Product category : HVAC, électricité / ventilation, cooling High efficiency dual flow ventilation

The unit is certified by Passivhaus Institute, 82% efficiency

# Costs

### Construction and exploitation costs

Cost of studies : 35 000 € Total cost of the building : 403 000 €

# Energy bill

Forecasted energy bill/year : 1 600,00 € Real energy cost/m2 : 2.13 Real energy cost/Visitor : 16

# Health and comfort

# Indoor Air quality

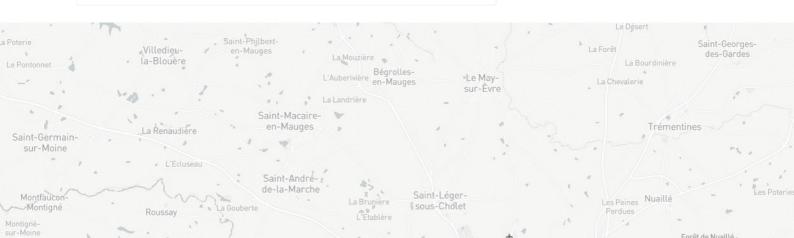
Dual-flow central unit controlled by the CO2 rate of the sales area: CO2 content less than 650ppm / m3

### Contest

# Building candidate in the category











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