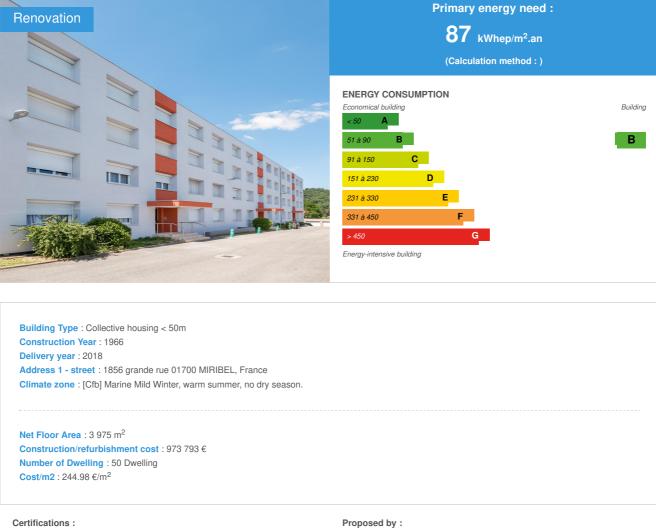
# **CONSTRUCTION2**

# **Rehabilitation and energy performance contract- "Les Balmes'' Condominium**

by chiara alice / (1) 2020-11-24 10:00:28 / France / (5) 5330 / 🍽 FR







# General information

One of the first BBC co-ownership renovations, guaranteed by a global energy performance contract. Beyond the high energy ambition of this project, this coownership contracted an energy performance contract to ensure the reality of energy savings. Another particularity of this project: the work was carried out by a group of local SMEs, organized around the company CHANEL, joint agent of the group and led by the company OPERENE - thus allowing to combine an ambitious global energy renovation and the development of local building SMEs.

#### Sustainable development approach of the project owner

The condo has set the goal of BBC renovation performance level. The client wanted to entrust the realization of the work to a group of local SMEs, organized around a representative (company CHANEL) and led by the company OPERENE. The companies of the group have committed themselves on the basis of an 8year performance contract. A process of accompaniment of co-owners was put in place upstream of the works, as well as information / awareness sessions.

# Architectural description

It is a set of three buildings R + 3 to R + 4 totaling 50 lots, on a ground in front of road of a commune of the belt of Lyon. The thermal insulation from the outside of all the facades, as well as the loggias, allowed to bring a new architectural look, which was expressed through the choice of colors.

# Building users opinion

Opinion of the president of the union council of the co-ownership:

- "- very great satisfaction of the occupants for the thermal comfort: regular temperature between the day and the night
- air quality: removal of wet areas on the walls, reduction of kitchen odors
- outdoor lighting: significantly better (see too much) and lower consumption
- double glazing: the noise of the street does not get along almost.

- environment: the new appearance of the facades is very popular: light gray and orange colors, basement and garages in dark gray, new guardrails of the smoked glass balconies. "

The testimony of a co-owner dated June 6, 2019:

"I wanted to give you a feedback on the quality of the renovation work carried out in our condominium and thank you and all those who have participated from near or far. My entourage is unanimous, it is a real success aesthetic question as well as from a comfort point of view inside. I myself am happy to go home and I find the buildings very "class" seen from the main street. "

#### If you had to do it again?

Better anticipate the assembly of the loan files.

#### Photo credit

Aurélien Vivier Photographer Architecture Lyon

#### Stakeholders

#### Contractor

# **Construction Manager**

### Stakeholders

Function : Other consultancy agency BEMOTECH

C https://www.bemotech.fr/ economist

Function : Company AVIPUR

Low pressure ventilation Hygro B

Function : Company Balthazar

lighting

Function : Company BPI

#### Function : Company

Chanel Rénovation

2400 m2 of thermal insulation from the outside

Function : Company

CURT

metalwork

Function : Company

GDI

870 m2 low floor insulation

Function : Company SES ÉTANCHÉITÉ

990 m2 insulation roof terrace

Function : Company SLET heating

Function : Other consultancy agency

Operene

coordination of the group

# Contracting method

Other methods

#### Energy

## **Energy consumption**

Primary energy need : 87,00 kWhep/m<sup>2</sup>.an Primary energy need for standard building : 96,00 kWhep/m<sup>2</sup>.an Calculation method : Breakdown for energy consumption : Heating 50% ECS 38% Lighting 8% Ventilation and auxiliaries 4% Initial consumption : 207,00 kWhep/m<sup>2</sup>.an

# Real final energy consumption

Final Energy : 81,00 kWhef/m<sup>2</sup>.an

# Envelope performance

Envelope U-Value : 0,77 W.m<sup>-2</sup>.K<sup>-1</sup> Indicator : n50 Air Tightness Value : 1,80

# More information

48% energy savings on the heating station compared to the initial state

## **Systems**

#### Heating system :

Condensing gas boiler

# Hot water system :

Condensing gas boiler

#### Cooling system :

No cooling system

#### Ventilation system :

• Humidity sensitive Air Handling Unit (Hygro B

#### Renewable systems :

• No renewable energy systems

NC

Products

#### **Product**

CPE

#### Product category : Management / Mode contractuel

The novelty of this project lies in the establishment of a global performance contract within a private condominium. The commitment is carried by a group of companies, with an agent of solidarity, the company CHANEL, and led by the company OPERENE. This group of companies responded to a consultation for a REM (construction-operation-maintenance) contract after the renovation project was drafted by a project management team.

The management, the union council and the co-owners are reassured at the time of the start of the work because they can count on a commitment of results which concerns all the companies of the group. This contractual mode is indeed very reassuring: if the savings are not up to the expectations, a system of penalties is activated.

STO THERM CLASSIC 1 Studded and Anchored Cladding System

STO

 ${\bf C}^{\bullet}\ https://www.sto.fr/fr/entreprise/entreprise.html$ 

Product category : Second œuvre / Cloisons, isolation

classic product for the external insulation of facades

PROMASPRAY T

PROMAT

Product category : Second œuvre / Cloisons, isolation

Fibrous coating projected on the underside of raw concrete slabs for thermal insulation

Product offered by the company that has put in place

DHW storage tank with a capacity of 1000 liters - STG1000

STG

Product category : Génie climatique, électricité / Chauffage, eau chaude

The increase of the sanitary hot water storage capacity of the installation aims at a reduction of the boiler cycles-cycles, in order to reduce the energy consumption related to the production of domestic hot water and to increase the operating time of the equipment (generator, exchanger and peripheral equipment).

# Costs

#### Construction and exploitation costs

Total cost of the building : 973 793 € Subsidies : 236 360 € Additional information on costs : Cost of all expenses included: 973 793 € All tax included Collective aid: Region Aura: 172 210 € EEC: € 64,150 Eco-PTZ collective Cost of works / housing aid deducted: € 14,749 TTC

# Health and comfort

# Indoor Air quality

The indoor air quality is ensured by the installation of a controlled humidity-controlled mechanical ventilation type B

### Comfort

#### Health & comfort :

The performance contract put in place is based on a comfort temperature commitment in winter of 21 ° C during the day and reduced to 19 ° C at night. Temperature sensors were installed in a sample of dwellings.

#### Acoustic comfort :

Not concerned

Daylight factor : Non concerné, pas de modifications sur les ouvertures

#### Carbon

#### **GHG** emissions

GHG in use : 18,00 KgCO<sub>2</sub>/m<sup>2</sup>/an Methodology used : not calculated

#### Contest

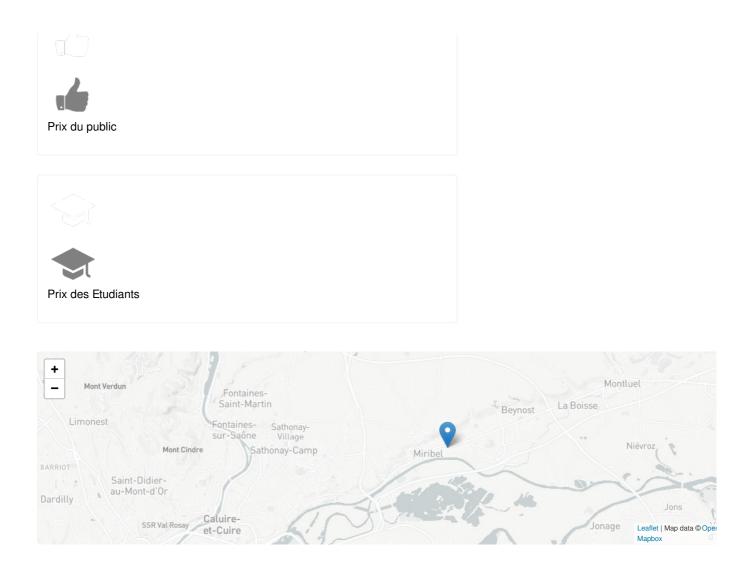
### Reasons for participating in the competition(s)

- comprehensive and efficient renovation in a co-ownership
- objective of reaching the BBC Renovation level
- a commitment of result via an energy performance contract
- Works, supervision and coordination carried out by a group of local SMEs (piloted by OPERENE with the company CHANEL mandataire)
- An energy saving of 48% on the heating station, guaranteed for 8 years.

#### Building candidate in the category







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