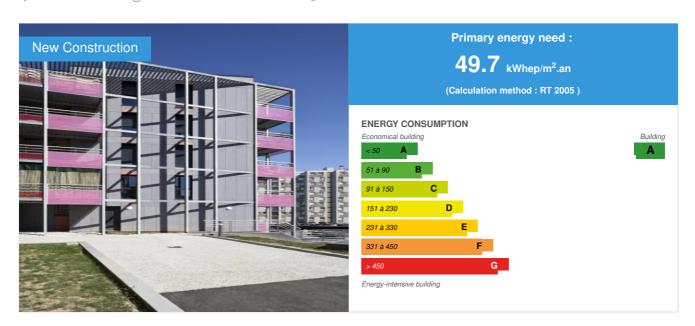


# Clair de Terre, Decines-Charpieu

by Mathieu LAURENT / (¹) 2012-12-13 17:41:08 / France / ⊚ 7000 / FR



**Building Type**: Collective housing > 50m

Construction Year: 2010

Delivery year :

Address 1 - street : 325, avenue Jean Jaurès 69150 DECINES-CHARPIEU, France

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

Net Floor Area: 2 910 m<sup>2</sup>

Construction/refurbishment cost : 5 477 427 €

Number of Dwelling: 34 Dwelling

 $\textbf{Cost/m2}: 1882.28 \; \textbf{€/m}^2$ 

#### Certifications :





## General information

Located in Decines-Charpieu, a town of 25,000 people in the outer suburbs of Lyon, the operation Clair de Terre is a residential housing, including architecture thoughtful answers to several constraints and achieves a high level of environmental performance. This property smooth, quiet and functional, is inserted into the neighborhood environment.

#### Sustainable development approach of the project owner

Habitat & Environment certification and Effinergie BBC label.

#### Architectural description

The residence is constituted of two buildings whose colors evolve from white to dark gray case. They are linked by the central area, formed through a transparent

hall in the ground floor. This hall then distributes systems two stair cages and vertical and horizontal circulation. The common areas are naturally lit. In an optical bioclimatic think the project was to take advantage of the favorable orientation of the plot, by developping the most south facades.

#### Stakeholders

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Function: Contractor
Opac du Grand Lyon

http://www.grandlyonhabitat.fr/

Function: Construction Manager

Atelier Arche

Function: Certification company

CERQUAL

http://www.qualite-logement.org/accueil.html

# Contracting method

Separate batches

## Type of market

Global performance contract

#### Energy

# **Energy consumption**

Primary energy need: 49,70 kWhep/m².an

Primary energy need for standard building :  $91,60 \text{ kWhep/m}^2.an$ 

Calculation method: RT 2005

Breakdown for energy consumption: Heating: EP 10.2 kWh /  $m^2$  /year. Annually - ECS: EP 17 kWh /  $m^2$  /year. Annually with 45% solar coverage - Auxiliary: 15.2 kWh EP/  $m^2$  /year. Annually, Lighting: 7.34 kWhEP /  $m^2$  /year

## Real final energy consumption

Final Energy: 35,86 kWhef/m².an

## Envelope performance

Envelope U-Value: 0,32 W.m<sup>-2</sup>.K<sup>-1</sup>

Indicator: 14

Air Tightness Value: 0,60

## Renewables & systems

# **Systems**

Heating system:

Condensing gas boiler

Renewable energy production : 28,60 %

# Urban environment

Located in Décines-Charpieu, Rhone, a town of 25,000 inhabitants of the second ring of the Lyon agglomeration. The goal is to regain the second crown has lost many people these last 15 years.

#### Carbon

#### **GHG** emissions

GHG in use :  $6,36 \text{ KgCO}_2/\text{m}^2/\text{an}$ 

Methodology used:

Calculation based on Heating and Cooling ECS



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