

# **Eden Green - Luxembourg**

by Prune Gautier / (1) 2016-06-20 14:40:18 / Luxembourg / ⊚ 13402 / ▶ FR



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

Construction Year : 2013 Delivery year : 2015

Address 1 - street: 19 Rue Michel Lentz 3251 BETTEMBOURG, Luxembourg Climate zone: [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area: 80 154 m² Useful area (lt)

Construction/refurbishment cost: 16 000 000 €

Cost/m2: 199.62 €/m<sup>2</sup>

### General information

The EDENGREEN-KLENSCHENHAFF project, assisted living facility building, offers 72 apartments with 1 to 3 bedrooms with private cellar and with access to a parking space in the basement. Among these apartments EDENGREEN-KLENSCHENHAFF offers 10 exceptional apartments, the Penthouses, with terraces and more than 110 m² area. For relaxation, it's in a cozy and familial atmosphere that you can benefit from the proposed activities, convivial moments in the restaurant and the private lounge ...

# See more details about this project

http://www.edengreen.lu/

## Data reliability

Self-declared

Stakeholders

#### Stakeholders

Function: Construction company

CLE SA

Patrick Van Craen

☐ http://www.cle.lu/

Function: Designer

Romain Bouschet Architectes

Function: Designer

BENG Architectes Associés

Function: Developer

CLI SA

Function: Structures calculist

BETAVI SARL

Function: Other consultancy agency

SIT-LUX

specific technics office

Function:

INCA - Ingénieur Conseils Associés SA

Function: Other consultancy agency

**GERI** Management

http://www.geri.lu/

health and security coordination office

Function: Other consultancy agency

LUXENVIRONNEMENT

commodo / incommodo application

### Contracting method

Other methods

# Owner approach of sustainability

The Green APPROACH Built respecting the environment and future generations, the EdenGreen building meets the eco-construction and eco-management standards. Control of flow and consumption (water, energy, waste), choice of products, systems and processes with low environmental impact construction, the building has been optimized for the comfort and health of occupants without damaging the nature. The EdenGreen project is an environmentally friendly building that integrates eco-construction, eco-management, and comfort and health of occupants. Low energy thermal insulation, double flow ventilation with energy recovery are some elements that have allowed the project to get BB energy certificates.

## Architectural description

The Eden Green proposes a sustainable, sober and contemporary architecture, offering "premium" services in the greatest respect for the environment.

Energy

Primary energy need: 71,50 kWhep/m<sup>2</sup>.an

Primary energy need for standard building: 75,00 kWhep/m<sup>2</sup>.an

Calculation method: RGD du 30 novembre 2007 - bâtiment d'habitation

Final Energy: 97,50 kWhef/m².an

Breakdown for energy consumption:
26 kWh / m² / heating needs
71.5 primary energy requirements

## Envelope performance

Envelope U-Value: 0,39 W.m<sup>-2</sup>.K<sup>-1</sup>

# Real final energy consumption

Real final energy consumption/m2: 57,70 kWhef/m².an

#### Renewables & systems

# **Systems**

### Heating system :

Condensing gas boiler

#### Hot water system :

Condensing gas boiler

#### Cooling system:

No cooling system

#### Ventilation system:

Double flow heat exchanger

### Renewable systems :

Solar Thermal

#### Environment

### **GHG** emissions

GHG in use : 15,90 KgCO $_2$ /m $^2$ /an

Methodology used :

environmental performance class

# Products

### **Product**

Aluminium sliding "Comfort 160"

SAPA Luxembourg

Stéphane Hardy

### 

Product category: Finishing work / Exterior joinery - Doors and Windows

The aluminum sliding "comfort" 160 are really easy to use by everybody. Given the challenge (terraces have to be accessible for wheelchairs), the rail has been fully integrated into the ground and the outer and inner levels are perfectly aligned. These adaptations have had no bad consequences on the excellent thermal performances in terms of Uw insulation and airtightness of these sliding openings.





### Urban environment

The residential and commercial building is located in an area of Bettembourg, close to the city center. This living facility, close to all commodities (shops and transport), easy to access (near the train station), is near a magnificent public park built by the municipality.

# **Building Environnemental Quality**

# **Building Environmental Quality**

- energy efficiency
- integration in the land
- mobility
- products and materials

#### Contest

## **Building candidate in the category**









