New Construction

Primary energy need:
71.5 kWhp/m².an
(Calculation method: RGD du 30 novembre 2007 - bâtiment d’habitation)

ENERGY CONSUMPTION

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Energy Intensive Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50</td>
<td>A</td>
</tr>
<tr>
<td>51 à 90</td>
<td>B</td>
</tr>
<tr>
<td>91 à 150</td>
<td>C</td>
</tr>
<tr>
<td>151 à 250</td>
<td>D</td>
</tr>
<tr>
<td>231 à 350</td>
<td>E</td>
</tr>
<tr>
<td>331 à 450</td>
<td>F</td>
</tr>
<tr>
<td>&gt; 450</td>
<td>G</td>
</tr>
</tbody>
</table>

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 €/m²

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
http://www.rbarchitecte.lu/Bienvenue.html

Function : Designer
BENG Architectes Associés
http://www.beng.lu/fr/

Function : Developer
CLI SA

Function : Structures calculist
BETAVI SARL
http://www.betavi.lu/

Function : Other consultancy agency
SIT-LUX
specific technics office

Function : Other consultancy agency
INCA - Ingénieur Conseils Associés SA
http://www.inca-ing.lu/

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

Energy consumption
Primary energy need : 71.50 kWhep/m².an
Primary energy need for standard building : 75.00 kWhep/m².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⁻².K⁻¹

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 KgCO₂/m²/an
Methodology used :
environmental performance class

Products

Product

Aluminium sliding “Comfort 160”
SAPA Luxembourg
Stéphane Hardy
http://www.spapgroup.lu
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.
No difference of floor level between indoor and outdoor - Design For All
Costs

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 Environmental Quality

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

Contest

Building candidate in the category

Bas Carbone

Coup de Coeur des Internautes