The 32 Paul Duez street in Lille

by Rodolphe Deborre / 2016-06-14 15:44:20 / France / 12230 / FR

**Extension + refurbishment**

**Primary energy need :**

88 kWhep/m².an

(Calculation method : RT 2012)

**ENERGY CONSUMPTION**

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

**Building Type** : Office building < 28m
**Construction Year** : 2014
**Delivery year** : 2015
**Address 1 - street** : 59100 LILLE, France
**Climate zone** : [Cfb] Marine Mild Winter, warm summer, no dry season.

**Net Floor Area** : 4 600 m²
**Construction/refurbishment cost** : 6 500 000 €
**Number of Work station** : 300 Work station
**Cost/m²** : 1413.04 €/m²

**Certifications** :

breeam

**Proposed by** :

Nacarat

**General information**

The 32 is a 3000 m² building, in the Paul Duez street in Lille. It was heavily renovated into a very efficient office from an energy point of view and an ecological perspective. In addition, the program has evolved from a former strictly commercial building on a joint project with offices and 15 apartments.

**Sustainable development approach of the project owner**

Priced based on the ISO 26000 standard, the Nacarat commitment to sustainable development is based on a structured eco-design tool, developed by the company on the basis of international work on sustainable city (LEED, BREEAM, HQE, Living Building Challenge, positive Economy). To progress and be successful in this field, Nacarat partners with experts in areas such as biodiversity, energy efficiency, renewable energy, education ...

These initiatives are developing many concrete solutions, on 15 specific topics, allowing especially favor urban intermingling, create links and add a dose of enthusiasm to the concept of living together.
Architectural description

The facade of the building of the old post office is cleaned to reveal the original stone. The roof is adorned with an extra level. A crowning glass which wants quiet day, reflecting the color of the sky, illuminated at night to catch the eye and be part of the dynamism of the Euralille district. The new office building follows the simple and classic aesthetics of the street front building. Their joint service is carried out by the rue Paul Duez.

The housing construction is constituted of a series of layers stacked one on the other in an offset manner. Facades, dressed in a gray-brown siding, assume the monolithic appearance of the building. Access to housing is made from Moulins street Garence after crossing a garden leading to the entrance hall. The proposed typologies are oriented southwest and east. They range from T1 to T4, promoting social mix.

If you had to do it again?

Energy rehabilitation and intensity of the city at the heart of the project and in the heart of Nacarat strategy. So yes, 100 times yes. As we probably pousserions the circular economy more dimension.

See more details about this project

Stakeholders

Function : Contractor
Nacarat
Manuel Laplace
http://immobilier-entreprise.nacarat.com/fr/immobilier-d-entreprise

Function : Designer
DeAlzua+
Jerôme De Alzua
http://www.dealzua.com/

Function : Other consultancy agency
Diagobat
Bertrand André
http://www.diagobat.fr/
BREEAM eco certification council

Contracting method

Off-plan

Energy

Energy consumption

Primary energy need : 88.00 kWhep/m².an
Primary energy need for standard building : 99.00 kWhep/m².an
Calculation method : RT 2012
Breakdown for energy consumption :
- Heating: 39.3
- Air conditioning: 12.4
- DHW: 2.3
- Lighting: 17.4
- Ventilation Auxiliary: 16.6

Initial consumption : 300.00 kWhep/m².an

Real final energy consumption
Final Energy: 88,00 kWhel/m².an

Envelope performance
Envelope U-Value: 0,78 W.m⁻².K⁻¹
More information: Existing facade conservation, inside insulation
Indicator: I4
Air Tightness Value: 2.20

Renewables & systems

Systems
Heating system:
- Heat pump
Hot water system:
- Individual electric boiler
Cooling system:
- Fan coil
Ventilation system:
- Double flow heat exchanger
Renewable systems:
- No renewable energy systems
Solutions enhancing nature free gains:
Récupération Double Flux; inertie forte des murs de l'époque

Environment

Urban environment
Land plot area: 1 500,00 m²
Built-up area: 80,00 %
Green space: 20,00
Lille downtown, located 500m of the Highspeed Railway Station Lille Flandres

Products

Product
Danvent DV, Danvent TIME
Systemair
Resp commercial
https://www.systemair.com/fr/France/
Product category: HVAC, électricité / ventilation, cooling
tertiary double flow ventilation

Costs

Construction and exploitation costs
**Cost of studies**: 430 000 €
**Total cost of the building**: 6 500 000 €

### Carbon

**GHG emissions**

**GHG in use**: 3,00 KgCO₂/m²/ann

**Methodology used**:

- Thermic Regulation calculation
- Rehabilitation

### Contest

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

Le projet prend place sur une parcelle jouxtant à la fois la rue Paul Duez et la rue Moulin de Garence. L’enjeu figure dans la création d’un programme mixte de 15 logements collectifs, de bureaux neufs ainsi qu’une réhabilitation notamment énergétique de bureaux : l’une des premières certifications BREEAM de la métropole lilloise.

Création de trois bâtiments contigus : les anciens bureaux de la Poste réhabilités rue Paul Duez, le nouveau bâtiment de bureau adjacent à la partie réhabilitée, et un bâtiment de logements donnant sur la rue Moulin de Garence. Une partie du bâtiment côté cour fait l’objet d’une démolition afin de créer une série de cour anglaises en coeur d’îlot, assurant l'éclairage du rez-de-chaussée bas du bâtiment existant et du parking souterrain.

**Building candidate in the category**

- **Bas Carbone**
- **Coup de Cœur des Internautes**