

## Partenord Habitat Plot in Lille

### A Global, Innovative and Responsible Property Project

#### Project information:

**Client:** Partenord Habitat

**Architect:** Coldefy

**Partner architects:** TAG Architectes, Paindavoine Parmentier Architectes

**Design offices:** TPF.I Engineering, VS-A Envelope design and engineering

**Landscaper:** BASE Paysagistes

**Construction company:** Nord France Constructions Fayat

**Budget:** €29 million

**Floor area:** 14,650 m<sup>2</sup>, of which 9,807 m<sup>2</sup> offices, 3,970 m<sup>2</sup> housing, 956 m<sup>2</sup> shops, 232 parking spaces (30 spaces for the housing, 40 spaces for the offices, 162 spaces for the headquarters)

**Location:** Lille, France

**Delivery:** Delivered September 2020 (winner of 2017 competition)

**Project:** Construction of the new headquarters for Partenord Habitat, shops, offices and 50 rented housing units with a car park.

**Environmental process:** RT 2012, BEPOS Effinergie 2013, HQE, H&E Cerqual (housing), E2C1 (housing) certifications

#### Introduction

At the heart of a **dynamic neighbourhood** in the Porte de Valenciennes joint development zone (ZAC), the Partenord plot seeks to bring Lille into **the third industrial revolution** through a **mixed project**, including the headquarters of Partenord Habitat (Nord Department Public Housing Office), offices, housing and shops. The project is on a plot in a **strategic location**, at the entrance to the city of Lille, and at the corner of Rue de Cambrai and Boulevard de Belfort. The building emerges from the ground along both these two roads in three distinct sections: the offices, the headquarters and the housing, tied together with a shared foundation.

More specifically, the project includes:

- **50 rented housing units**
- **A collection of rented offices** divided into 7 office spaces
- **5 retail units** on either side of the headquarters
- **The Partenord Habitat headquarters**
- **A car park** with 232 underground parking spaces for the housing, rented offices and headquarters.

The Partenord headquarters are situated at the corner of the plot, **shining like a beacon** over the metropolitan area, ensuring it is visible throughout the Lille region.

# Coldefy

The project offers a **duality between the bold urban façades and** the centre of the block, which is sheltered from the city's hustle and bustle and the **ideal place for users to relax**. The multiple balanced outdoor spaces offer a pleasant setting for users, tenants, employees and retailers, **looking out onto a biodiverse environment**.

The building is adorned with various sizes and styles of terracotta cladding. A feature is created along Boulevard de Belfort, like **an urban window** with three sides of reflective glass. This mirror onto the city **amplifies the comings and goings of local residents**.

More than just architectural touches, the systems put in place offer functional qualities tailored to each project. The simple urban façade establishes structural and functional integrity to meet project requirements in the clearest possible way.

## Environmental process

On an environmental level, Partenord is fully aligned with the **requirements of the Third Industrial Revolution and the energy transition**, through the pragmatic implementation of suitable processes for the project: recovery and storage of grey water and excess energy, use of renewable energies like solar panels, optimised electricity consumption, notably through the use of digital radiators. 80% of the rental housing's winter heating requirements will be covered by recovery of the headquarters' surplus heat (this is known as **excess energy**).

Recovering this energy, building interconnectivity and performance objectives in terms of operation and maintenance (inclusion of BIM) are the challenges that were tackled to achieve a model for the future as part of the energy transition.

The project embodies a way of rethinking our means of development and the type of society in which we want to live to ensure each person's development and liberation.

## I - The Partenord Habitat headquarters

- Structure and façades

The general principle of the façade for the project is a cladding system unique to each project section: headquarters (and foundation), offices and housing (except the south façade). This distinction helps to mark out the projects whilst maintaining overall cohesion through the use of the same materials, glazed terracotta and aluminium used in different forms.

The urban window looking out onto Boulevard de Belfort is streamlined with the use of a VEC curtain wall system. It comprises two vertical planes (façades of the cafeteria and north rented offices) and a horizontal plane on the underside of the rented offices.

From the outside, the headquarters are sleek, with proportional layers. From the inside, the office areas are easy to use due to the orthogonal spaces.

The block offers wide outdoor spaces and terraces on different levels (3rd floor and 6th floor in particular). The proportions and layouts of the gardens and terraces at the centre of the block on the ground floor, 1st floor and 2nd floor are optimised to encourage use by occupants, and to accommodate large trees.

- Project and functionality

The ground floor has an in-ground garden at the centre of the block, a bike shed, a print shop, support facilities and the atrium. The triple-height atrium is positioned at the corner of the crossroads to mark the entrance to the headquarters.

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The 1st floor is home to the shared meeting room area. This area can be divided into 6 rooms with mobile partitions. This floor also has a conference room (able to host 50 people) and a private dining room linked with a back door. These 3 strong parts of the building share a large 175 m<sup>2</sup> partially covered accessible terrace.

The headquarters' cafeteria is on the 2nd floor. With the atrium, it is the heart of the headquarters due to its community function and functional quality: double-height leading onto a coworking space on the 3rd floor, a bright dual-aspect area leading onto 2 separate terraces which are bright all day long.

On the standard office floors, the project addresses the "offices 2030" challenges set by the client: they are mostly shared and feature collaborative spaces.

- Ground floor: Trade union offices
- 1st floor: Logistics department
- 2nd floor: Rental management department, marketing and social development department
- 3rd floor: IT department
- 4th floor: Legal department
- 5th floor: Accounting department
- 6th floor: Communication department
- 8th floor: Housing technical appraisal department and portfolio department
- 7th and 8th floor: Development department

The headquarters' backbone is focused around a shared core, including a spiral staircase and lifts. It also contains the ducts for utilities, toilets and the plant rooms and rooms for cleaning supplies.

## **II. Rented offices**

- Structure and façades

The rented offices feature two terraces divided between the office spaces (2nd floor, 4th floor).

The envelope comprises aluminium sunshades which are directed depending on exposure. There is a harmonised rhythm across all the façades with a 90 cm pitch adapted to the framework of the offices.

- Project and functionality

The office spaces are functional and clear. Like the headquarters, the shared core for the rented offices has been condensed to contain all utilities (human, networks, fluids) but also the shared facilities (toilets, room for cleaning supplies), thus freeing up as much floor space as possible.

## **III. Housing**

- Structure and façades

The housing building has a simple structure, in line with the rest of the project.

Planted terraces are located on the 1st, 4th and 9th floors.

The one on the 9th floor is dedicated to the building's shared vegetable garden. This vegetable garden faces the centre of the block, protected from the wind. It can be accessed from the shared areas, and a ramp is

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provided to allow people with reduced mobility to enjoy it too. A sheltered inner space, separate from the shared corridor, is dedicated to the functioning of the vegetable garden.

A terrace on the 7th floor is available for the apartment users, in addition to their respective loggias.

A terrace on the 10th floor has solar panels and an AHU for the housing.

There are trumeaux on the north, west and east façades. The south façade facing towards the centre of the block has a special sunshade.

## - Functionality

The 50 apartments are distributed within the building as follows: 15 x 1-bedroom (1BR), 20 x 2-bedroom (2BR), 10 x 3-bedroom (3BR) and 5 x 4-bedroom (4BR) apartments.

- The 1st, 2nd and 3rd floor of the first level each include 3 x 1BR, 2 x 2BR, 2 x 3BR.
- The 4th, 5th and 6th floor of the second level each include 1 x 1BR, 2 x 2BR, 1 x 3BR, 1 x 4BR.
- The 7th and 8th floor of the final level each include 1 x 1BR, 3 x 2BR, 1 x 4BR.
- The 9th floor, with the vegetable garden, is divided into 1 x 1BR, 2 x 2BR, 1 x 3BR.

In terms of apartment layout, the balconies running along the south façade feature loggias.