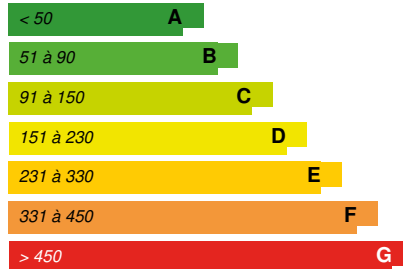


# Courcellor1

Last modified by the author on 27/06/2017 - 15:29

Extension + refurbishment

2



**Building Type** : High office tower > 28m

**Construction Year** : 2015

**Delivery year** : 2015

**Address 1 - street** : 28 rue d'Alsace 92300 LEVALLOIS-PERRET, France

**Climate zone** : [Cfc] Marine Cool Winter & summer- Mild with no dry season.

**Net Floor Area** : 45 327 m<sup>2</sup>

**Construction/refurbishment cost** : 106 127 586 €

**Number of Work station** : 3 600 Work station

**Cost/m2** : 2341.38 €/m<sup>2</sup>

## General information

After the demolition / cleaning, the project was aimed at the renovation / extension of an office high building built in the 1970s. Reinforcement of structures to match the tower's supporting systems with their new assignments. Elevation of the tower from the 11th to the 18th floor + technical terrace taking into account the constraints innate to this kind of high buildings. This complex operation transforms a 13-floor rectangular tower into a 18-level T-shaped tower, creating a basement with a movie theater complex and a parking. (Work from 2012 to 2015)

## Sustainable development approach of the project owner

To carry out a project of doubled scope certified BREEAM Excellent and HQE.

To participate in the rehabilitation of the tower by implementing environmental certifications to ensure the integration of the building in this new environment, but also high energy performance and comfort for future users. This project is part of the sustainable development policy carried out by the developer. To respond to the desire to combine profitability, social equity and respect for the environment in its development activities and projects.

## Architectural description

The design of 20,000m<sup>2</sup> of façade is a first in France, because each element of the 6.60m high curtain wall, covers two floors. They meet high fire safety requirements. The fabric of the façades promotes visual integration in a residential area. In order to offer open tray spaces with great brightness, the architect designed a load-bearing structure in front with pole every 6m.

See more details about this project

<https://youtu.be/tl1vYPIWJr0>

## Stakeholders

### Stakeholders

Function : Contractor  
UNIBAIL RODAMCO MANAGEMENT

Marc Abitbol / Daniel Malivoir

<http://www.unibail-rodamco.fr/W/do/centre/index.html>

Function : Designer  
BARTHELEMY et GRINO

<http://barthelemygrinoarchitectes.eu/>

Function : Other consultancy agency  
DAUCHEZ PAYET

Jérémie Pouponnot

<http://www.dauchepayet.fr/bienvenue-a-so-ouest-plaza/>  
Environmental Consulting

Function : Assistance to the Contracting Authority  
ALTO Ingénierie

Oriane Dugrosprez

<http://alto-ingenierie.fr/>  
Assiatance of the developer for environmental issues, for HQE and BREEAM certifications

### Contracting method

General Contractor

### Type of market

Table 'c21\_germany.rex\_market\_type' doesn't exist

## Energy

### Energy consumption

Primary energy need : 61,20 kWh/m<sup>2</sup>.an  
Primary energy need for standard building : 133,60 kWh/m<sup>2</sup>.an  
Calculation method :  
Initial consumption : 335,00 kWh/m<sup>2</sup>.an

### Envelope performance

Envelope U-Value : 0,93 W.m<sup>-2</sup>.K<sup>-1</sup>  
More information :  
A ventilated double skin curtain wall with  $U_w = 1.8 \text{ W / m}^2\text{K}$ ; FS without protection = 0.39; FS with protection = 0.06; TL 75%  
Opaque walls: curtain wall composite complex solid concrete, rock wool with  $U = 0.1797 \text{ W / m}^2\text{K}$   
Curtain wall: aluminum sheet + rockwool with  $U = 0.206 \text{ W / m}^2\text{K}$

Indicator : I4  
Air Tightness Value : 1,73

## Renewables & systems

### Systems

Heating system :

- Urban network
- Heat pump

Hot water system :

- Other hot water system

Cooling system :

- Urban network
- Chilled Beam

Ventilation system :

- Double flow heat exchanger

Renewable systems :

- Heat pump

## Smart Building

BMS :

GTB-controlled energy supervision

## Environment

### Urban environment

Land plot area : 5 951,00 m<sup>2</sup>

Built-up area : 5 951,00 %

This project is located in the Eiffel district of Levallois-Perret, a dense and rapidly changing area. Situated between the city center and the ring road, the Eiffel district is an area of 140,000m<sup>2</sup>. After this Pharaonic operation, the entrance to the city changed. The area now includes a 38,000m<sup>2</sup> shopping center, a Pathé multiplex, and public facilities.

## Products

### Product

COLD BEAM BDB 2004-RAL9016

HALTON

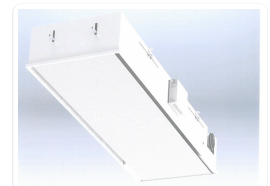
Agence Paris - IdF - Normandie 94-96, rue Victor Hugo 94200 Ivry-sur-Seine France Tél. + 33 (0)1 45 15 80 00  
Fax + 33 (0)1 45 15 80 27 [contacts.fr@halton.com](mailto:contacts.fr@halton.com)

<https://www.halton.com/>

Product category : Table 'c21\_germany.innov\_category' doesn't exist  
SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON  
one.parent\_id = two.idWHERE one.state=1AND one.id = '18'

The BDB beam is a passive beam assisted with a variable flow diffuser. This beam is equipped with a battery of 2 reversible tubes

- A comfortable, quiet and constant environment for users
- Recessed ceiling mounting with ventilation, heating and refreshment facilitated for installers
- High energy efficiency
- Easy installation in renovation



## Costs

## Contest

Date Export : 20231003180435