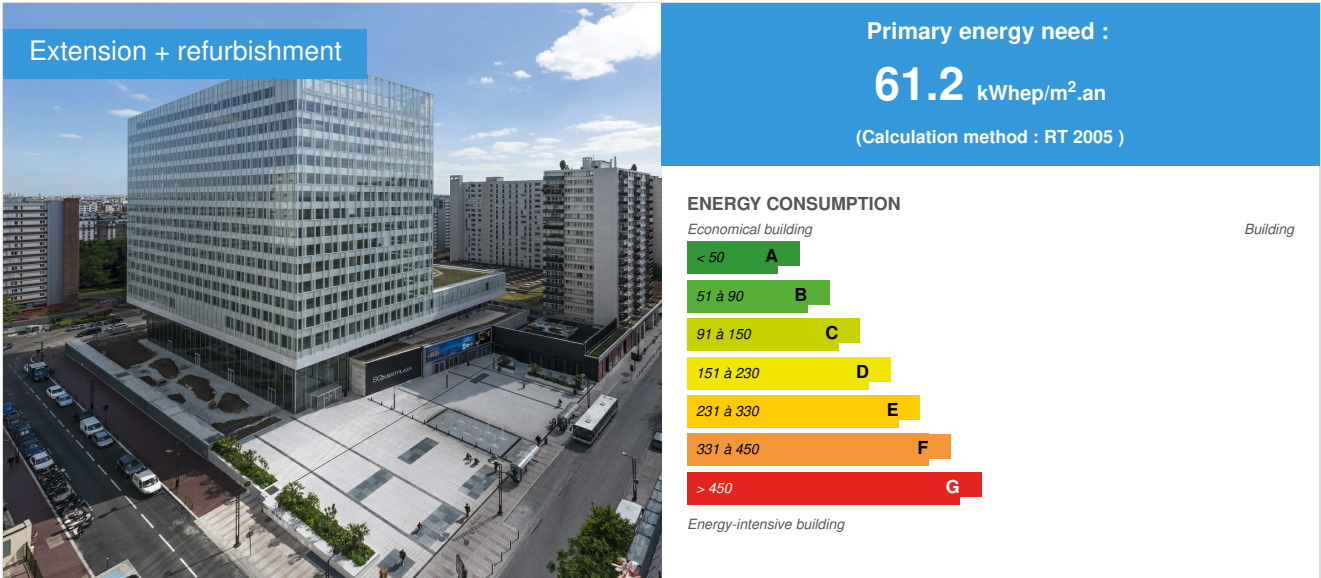


Courcellor1

by Stephanie Le Polès / 2016-06-16 11:14:01 / France / 10713 / FR



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 m²
Construction/refurbishment cost : 106 127 586 €
Number of Work station : 3 600 Work station
Cost/m2 : 2341.38 €/m²

Certifications :



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 20,000m² 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/tI1vYPIWJr0>

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

Realization

Energy

Energy consumption

Primary energy need : 61,20 kWhep/m².an

Primary energy need for standard building : 133,60 kWhep/m².an

Calculation method : RT 2005

Initial consumption : 335,00 kWhep/m².an

Envelope performance

Envelope U-Value : 0,93 W.m⁻².K⁻¹

More information :

A ventilated double skin curtain wall with $U_w = 1.8W / m^2K$; FS without protection = 0.39; FS with protection = 0.06; TL 75%

Opaque walls: curtain wall composite complex solid concrete, rock wool with $U = 0.1797W / m^2.K$
Curtain wall: aluminum sheet + rockwool with $U = 0.206W / m^2K$

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 m²

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 140,000m². After this Pharaonic operation, the entrance to the city changed. The area now includes a 38,000m² shopping center, a Pathé multiplex, and public facilities.

Products

Product

COLD BEAM BDB 2004-RAL9016

HALTON

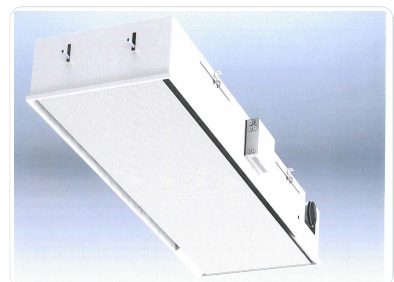
Agence Paris - IdF - Normandie 94-96, rue Victor Hugo 94200 Ivry-sur-Seine France Tél. + 33 (0)1 45 15 80 00
Fax + 33 (0)1 45 15 80 27 contacts.fr@halton.com

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

Product category : HVAC, électricité / heating, hot water

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



Reasons for participating in the competition(s)

COURCELLOR 1 répond à une ambition environnementale multi critères de haut niveau poussée par les certifications environnementales BREEAM niveaux Excellent et NF HQE Bâtiments Tertiaires.

De plus, l'accent est mis sur la performance énergétique et l'impact carbone notamment grâce à l'obtention du label BBC Neuf Effinergie.

Ce bâtiment dispose d'une conception innovante et d'un choix de production / distribution énergétique performant. En effet, la production frigorifique et calorifique est assurée par le réseau urbain de Levallois-Perret, la distribution se fait par poutres froides et la ventilation est à double flux avec récupération. L'ensemble de ces installations, la qualité de l'enveloppe ainsi que la bonne inertie du bâtiment permettent l'atteinte des niveaux exigés par le programme.

Une démarche de commissionnement a été déployée sur cette opération pour assurer le respect des objectifs du maître d'ouvrage et livrer le bâtiment avec la performance intrinsèque attendue.

