


## The Millénaire 4

by Alain Guisnel / 2017-11-14 00:00:00 / France / 14632 / FR



**Primary energy need :**  
63.52 kWhep/m<sup>2</sup>.an  
 (Calculation method : )

**ENERGY CONSUMPTION**

*Economical building* *Building*

< 50	<b>A</b>
51 à 90	<b>B</b>
91 à 150	<b>C</b>
151 à 230	<b>D</b>
231 à 330	<b>E</b>
331 à 450	<b>F</b>
> 450	<b>G</b>



*Energy-intensive building*

**Building Type** : Office building < 28m  
**Construction Year** : 2016  
**Delivery year** : 2016  
**Address 1 - street** : 75019 PARIS, France  
**Climate zone** : [Cfb] Marine Mild Winter, warm summer, no dry season.

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**Net Floor Area** : 24 500 m<sup>2</sup>  
**Construction/refurbishment cost** : 53 900 000 €  
**Number of Work station** : 1 880 Work station  
**Cost/m2** : 2200 €/m<sup>2</sup>

**Certifications :**

### General information

The "Millénaire 4" office building has completed the development of the Millénaire district, located between the Portes de la Villette and Aubervilliers. The different buildings of the Millennium Park now offer a unique working environment, already recognized by many private and public actors. This will eventually be close to 140,000 m<sup>2</sup> of offices, along the Canal Saint-Denis and the Paris ring road in an area offering multiple leisure and cultural facilities such as the Millénaire Shopping Center with its 140 shops and restaurants, the Parc de la Villette, the Philharmonie de Paris, the largest multiplex UGC Cinema town of France ....

The Millennium 4, with a surface area of almost 24,500 m<sup>2</sup> SUBL, distributed in R + 7 with a large central atrium was delivered in October 2016. The Millennium 4 offers many services (corporate restaurant, common areas, measures conservatories for concierge, fitness and business center) as well as two basement levels with 299 parking spaces, 40 two-wheeled parking spaces, filing spaces.

### Sustainable development approach of the project owner

The project is part of a voluntary environmental approach and certified according to a double certification:

- HQE Tertiaire-office
- BREEAM The group took into account the desire of energy and environmental performances from the first reflections by following:
  - The concerns of the control (ICADE Tertiaire)
  - The orientations of the Climate Plan of the city of Paris
  - Urban planning documents of the city of Paris
  - The Plan for Development and Sustainable Development of Paris (PADD)
  - The development of the district from the Parc des Portes de Paris

## Architectural description

The bioclimatic architectural design of the building was first expressed in terms of compactness since the building was studied and optimized (unhooked up to the maximum), which gives it a maximum density. In addition, the facades, largely glazed, let penetrate the solar radiation, allowing to limit the consumptions of artificial lighting and to participate in the heating in winter.

## See more details about this project

<http://www.icafe.fr/references/parcs-icafe/millenaire-4-paris-75019>

## Stakeholders

### Stakeholders

**Function :** Contractor

SCIA Le Parc du Millénaire

Responsible for the project's mission (planning, reports, constitution of administrative files ...)

**Function :** Contractor representative

Icade Promotion

<http://www.icafe.fr/>

**Function :** Other consultancy agency

Benefficiency (Groupe Elithis)

AMO HQE and BET HQE

**Function :** Designer

KPF - Kohn Pedersen Fox

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

**Function :** Construction company

Leon Grosse

<http://www.leongrosse.fr/>

General Enterprise

**Function :** Construction Manager

Arcoba

**Function :** Other consultancy agency

Botte sondages

BET Geotechnique

**Function :** Other consultancy agency

Burgeap

BET Decontamination

Function : Other consultancy agency

Arcoba

Construction Economist

## Energy

### Energy consumption

Primary energy need : 63,52 kWhep/m<sup>2</sup>.an

Primary energy need for standard building : 130,00 kWhep/m<sup>2</sup>.an

Calculation method :

### Envelope performance

More information :

The general structure of the building is made of concrete. The building envelope has been designed to optimize the energy consumption of different uses. Choice of low VOC and formaldehyde materials.

### More information

Energy management, with the achievement of a BBC / HQE performance level, is a priority (60% gain compared to the reference primary energy consumption). Beyond the exemplary energy sought, this will remind us that the construction of a new building is a bet on the future, where the reduction of consumption and preservation of the environment are no longer concepts but a major challenge .

## Renewables & systems

### Systems

Heating system :

- Heat pump

Hot water system :

- Solar Thermal

Cooling system :

- Others

Ventilation system :

- Double flow heat exchanger

Renewable systems :

- Solar photovoltaic

Other information on HVAC :

High-performance energy management (RT 2005-60%):

- bioclimatic envelope.
- renewable energies: 170 m<sup>2</sup> of photovoltaic panels, thermal solar panels covering 50% of domestic hot water needs.
- LED lighting on all office surfaces.
- energy recovery elevators.

### Smart Building

BMS :

Meters and system design are sectorized to easily identify problems, excessive consumption, leakage and intervene only in the area that requires intervention. The GTB set up facilitates the management of energy and water systems and consumptions by lessees.

## Environment

### Urban environment

The various flows of the site (pedestrians, bicycles, light vehicles, deliveries, waste, etc.) were studied, and the planned project entries accordingly. Thus, the entrance and the main exit of pedestrians will be side Darse. Access to the car park, delivery and waste will be through a differentiated access to the rear of the building to facilitate access while maintaining a safety of all pedestrians. Thus, each stream will be differentiated day and night increasing the safety of all users. The design and the form of the signage are intended for the valid persons, the handicapped people and the persons with reduced mobility by respecting the regulation in force. The signage put in place allows a minimum crossover between pedestrian flows and vehicles and therefore a maximum level of security. Finally, disabled places are included in this project. Access for persons with disabilities or reduced mobility will be effective throughout the building and its car parks to facilitate access for all visitors and staff (lifts, bungalow, ramps, ...) . The project design takes into account current and future public transport (evolutions and connections to future lines).

## Products

### Product

Double breathable skin

Icade

icade@icade.fr

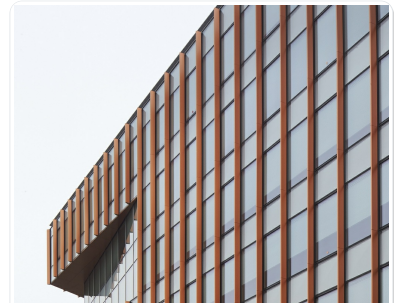
<http://www.icade.fr>

**Product category :** Gros œuvre / Structure, maçonnerie, façade

An environmental asset and aesthetic key to architecture, the facade plays with the eyes

- Indoors, it brings clarity and natural energy

- Outside, the brick and ocher sunscreens create a real kinetic effect



## Costs

## Health and comfort

### Water management

Hydro-efficient sanitary equipment. Recovery of rainwater for sanitary purposes and watering gardens.

### Comfort

**Acoustic comfort :**

In order to optimize the thermal and acoustic comfort of the project, the insulation is optimized in every respect. In addition, the properties of glazing are in line with the energy performance objective.

## Carbon

### Life Cycle Analysis

**Eco-design material :**

Accepted non-traditional materials, elements or assemblies have been the subject of a technical opinion by the Scientific and Technical Center for Building, including no reservations or adverse opinions, and will be used in accordance with the directives and recommendations contained in the technical opinion. In addition, the materials used are neither pollutants, nor allergens, nor toxic or carcinogenic (fibrous materials, formaldehyde, ...)

## Contest

## Reasons for participating in the competition(s)

### Building candidate in the category



Santé & Confort



Coup de Cœur des Internautes



Prix des Etudiants

