In Situ

by Diego Harari / 2016-04-29 09:28:30 / France / 11013 / FR

Primary energy need :

79.14 kWhep/m².an

(Calculation method : RT 2005)

ENERGY CONSUMPTION

Economical building — *Building*

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

Energy-intensive building

Building Type : Office building < 28m
Construction Year : 2015
Delivery year : 2015
Address 1 - street : 92100 BOULOGNE-BILLANCOURT, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 12 734 m² Autre type de surface nette
Construction/refurbishment cost : 28 000 000 €
Cost/m2 : 2198.84 €/m²

Certifications :

Proposed by :

CERTIVEA

General information

In Situ is a 12.200m² office building, designed in openwork approach designed to create real estate value by increasing the well-being of the occupants and building performance.

One of the panels focuses on the welfare of occupants: triple exposure workspaces, from day one staircase, accessible vegetated patio, hall through room "silence" for work requiring high concentration, variety of workspaces, formal and informal, the air quality monitoring tags, business center on a dedicated floor, concierge service "4 pins".
In Situ is under HQE and BREEAM certification in construction, HQE Exploitation axis sustainable use.

Sustainable development approach of the project owner

The VINCI Immobilier's commitment is to be "value maximizers": we hope that the use value of every building out of the ground is as large as possible. Not everything is a question of energy performance. We must also consider flexibility, changeability, maintainability, rethink the quality of life in the building: comfort, health, design. Maximize the use of the buildings value, to commit to the development of a sustainable city. Welfare is a pillar of our approach to sustainable

development: design sustainable buildings is look at how well occupants will live there. Economic performance, rather than "just" energy, is on track we set for each project, dedicated to creating sustainable value.

Architectural description

IN SITU compose the tertiary center of the island A4 of the development zone (ZAC) Rives de Seine which includes homes, a school and a gym. In an urban and dense environment, SITU was designed as a stack of identical modules which respects the volumes of neighboring buildings by finding a more human scale.
A glass full height and through-fault allows breathing and a vertical break on Yves Kermen street and offers a perspective on the different garden levels located in the heart of the block. The theme of macro-lot, home of biodiversity, finds in this project offices a particular resonance in the creation of outdoor spaces planted at many levels which are extensions of workspaces open space or offices compartmentalised. Common outdoor relaxation spaces and accessible for everyone take place at each level in the fault, and individual balconies are accessible to all levels right from the fault. The landscape grows on the ground in the continuity of landscaped treatment in the whole island.
Designed as a bioclimatic building, solar gains are managed by the volume of the building: south, caps advance to protect from the sun workspaces, while in the North the windows bare module maximizes natural light. The bearings-through are lit naturally.
The building offers flexibility of use with a ground floor designed to welcome, depending on configuration, and without changing its verticality, either two halls for two different users or a hall for a single tenant or multi location. IN SITU offers to its occupants two huge terraces staggered in visual link with the garden terraces built houses and large school roof meadow and offers to pedestrians using the crossing intra block a view of the open garden and in the ground the DRC. Visible from the elevator landings, gateway to the balconies on the south, completely illuminated naturally, the wooden staircase of the fault is widely preferred to the elevator to travel between stages.

Building users opinion

Following the delivery of the building, VINCI Immobilier has made its headquarters. Employees of Ile-de-France are now very satisfied with the quality of work and feel of the building spaces. The building is now certified HQE Exploitation.

See more details about this project

Stakeholders

Stakeholders

Function : Construction company

CBC - Groupe VINCI

Rima BUDABA

http://www.cbconstruction.fr
general Enterprise

Function : Assistance to the Contracting Authority

GREEN AFFFAIR

MALLORY RENAUD

http://www.greenaffair.com
environmental amo

Function : Developer

VINCI Immobilier

Diego Harari

http://www.vinci-immobilier-entreprise-commercial.com/
co-promoter

Function : Developer

Nexity

co-promoter

Function : Certification company

CERTIVEA

01 40 50 29 09

http://www.certivea.fr

Contracting method

Other methods

Energy

Energy consumption

Primary energy need : 79,14 kWhep/m^2.an

Primary energy need for standard building : 165,71 kWhep/m^2.an

Calculation method : RT 2005

Breakdown for energy consumption : Final energy: heating: 10.96 Cooling: 9.86 Production ECS 3.04 Fan: 10.14 Ecliarage: 5.94 Auxiliary: 0.43

Real final energy consumption

Final Energy : 40,36 kWhef/m^2.an

Envelope performance

Envelope U-Value : 0,77 $W.m^{-2}.K^{-1}$

More information :

concrete wall 20 cm ep. / External insulation / insulation resistance: 5m².K / W- / metal window to break thermal bridge, double glazing iso. reinforced 16mm air space, store interior painting, exterior sliding shutter or brise soleil

Building Compactness Coefficient : 0,59

Air Tightness Value : 0,93

More information

actual consumption are monitored monthly as part of the HQE Exploitation.

Renewables & systems

Systems

Heating system :

- Urban network
- Low temperature floor heating
- Fan coil

Hot water system :

- Individual electric boiler
- Solar Thermal

Cooling system :

- Urban network
- Fan coil
- Floor cooling

Ventilation system :

- Double flow heat exchanger

Renewable systems :

- Solar Thermal

Renewable energy production : 3,00 %

Other information on HVAC :

RAS

Edenkia a contract was soucrit to 25% renewable energy in the mix of electricity production.

Smart Building

BMS :

Management + centralized management blinds lightening via presence detectors and brightness (dimming) + Gestion of all technical equipment via the BMS (time program, control, alarms) + Oreport all counters av

Smartgrid :
RAS

Environment

Urban environment

Land plot area : 3 498,00 m^2

Built-up area : 2 204,00 %

Green space : 1 894,00

Ile Seguin Rives de Seine, 74 hectares of development operation, unfolds on the old grounds of the Renault factory at Boulogne-Billancourt, in the heart of Paris and Grand Valley Culture. On this magnificent site, in which the industrial past has marked the collective memory, a new district comes out of the ground. Thus, the island Seguin-Rives de Seine gives a second life to a unique territory in Île-de-France.
The operation is divided into three management areas with different challenges:
- Seguin Island (11.5 ha): designed to become an international center for innovation, dedicated to culture and creative economy; open to the public since 2010, it now hosts cultural foreshadowing facilities. The development work of the departmental musical city has already begun.
- The Pont de Sèvres neighborhood (15 + 10 ha): built in the 70s, in full urban renewal to contribute to its isolation and its embellishment.
-The “Trapèze” (37.5 hectares) this area of 37.5 hectares is designed as a diverse and lively neighborhood that eventually will have 12 000 employees and 15 000 inhabitants. The architectural and environmental ambition, the balance between social and free housing, public facilities, offices, shops, parks, etc.) help to create a special place to live. The “Trapèze” unfolds according to a quality public spaces frame: a 7ha park planted 2 great courses and crosswalks network enrich the green areas of the city. Nature and water are everywhere. The realization of the “Trapèze” was done in two phases; the western part, now completed, hosts 4,000 active and 5,500 inhabitants. 2 kindergartens, 1 school group, a media library and 20 shops; the eastern part, which is located on SITU is under completion. It welcomes the assets, people, shops (pharmacy, bakery, butcher, supermarkets, restaurants ...) sports halls, 1 nursery school, 1 church.

Products

Product

OPENWORK

VINCI IMMOBILIER ENTREPRISE

Diego HARARI

http://www.vinci-immobilier-entreprise-commercial.com/espace-bureaux/

Product category :

The Openwork approach implemented by VINCI Immobilier is for all users of office buildings whether tenants or owners. It is the DNA of new building projects led by VINCI Immobilier. It was applied for the first time on IN SITU. VINCI Estate is convinced that the intrinsic value of an office building is a successful blend of heritage value and use value. Imagine the city of tomorrow is speaking to Users and Investors and design sustainable real estate for scalable and real estate performant. Imagine and design buildings of the highest quality that give the investor the certainty that his property will be selected "for a long time" by the tenants because it meets the user's needs (welfare, technical performance), while offering high levels of environmental and energy certifications, are the foundations of the approach OpenWork. Apply Openwork is capitalize good practices but also listen to users, ask questions on the office floor which will require businesses in five years or more, think about the most suitable catering offer, anticipate traffic policies with different parking is seeking the modular surfaces, promote the integration of many services in buildings ... Specifically, Lead Openwork approach is to seek and work throughout the project design: 1) the well-being of the user:
HEALTH - Design buildings emphasizing natural light favoring triple orientation in space: SITU offers + 63% - Make triple orientation of office space the air quality by establishing a specification, by setting up a monitoring via dynamic tags and improving filtration systems: SITU has a system of tags spread over the busiest levels (business center , open space) 24/24 7/7 measuring the air quality - Promoting the use of stairs with particular attention to their positioning and layout: 3 stairs are lit naturally: 2nd tray middle of stairs by an overhead-each provided 4 ends without central wall lighting; light bounces down to the bottom in the main staircase, in front of elevator landing, accessible by full height glass doors, so visible to everyone, warm decor (wooden floor) -provide the precautionary measures for the development space of a sport / fitness in case a sports offer is far from the building: a municipal gymnasium is 20m, fitness center 200m, swimming pool and the municipal skating rink at 500m. This proximity removes any sense implementing measures conservatoires.
GREENING - Multiply natural inputs, both by treating green spaces and thoughtful location of planted terraces accessible: SITU offers 3 areas in which to get fresh air, a drink or just a break in the shade of a tree or in the sun, alone or with others. These 3 areas of 300 to 350 m² each, are all available to the lessee and vegetated: the 7th floor terrace is the natural outlet of the business center, that of the 5th that of the cafeteria, garden tables, parasols share space with large planters where grow flowers and trees. the garden of the DRC runs between pedestrian crossing and 2 halls and prolongs the crib and the RIE - Redefine the uses of outdoor spaces: meeting rooms, relaxation ... The 2 terraces have been designed to have a snack or take a meeting to the sun (south orientation) and away from the street noise. The balconies also located to the south, on each floor, accessible from the main staircase and the landing elevator welcome employees who want to take a break upstairs but outside
COMFORT - Favouring natural air intake, through opening ventilation for each office or improvement of nine airflows: other frame has a 90° opening. If you open the window, internal blinds that can be lowered, exterior shutters perforated rail can be operated to continue to protect the light. - Limit noise pollution with the creation of spaces the enhanced audio, allowing the installation of silence rooms or privacy - Designing the lobby areas as a place of life to offer multiple services- a positive image of the building from the parking access: in situ is characterized by its dichroic facade, offering a full range of color to blue pink. Each parking level

is characterized by a different ground color (bright pink to -1, the bright blue -2) but in the tones of the immeuble2) The effectiveness of surfaces.
ERGONOMY AND DESIGN - Offer upstream phase space successful schedules for a good understanding of the project for future users - establish multi levels can provide herbal tea, express meeting space, outdoor access, access to the stairs of the bearings are crossing in Situ. Their design allows a variety of facilities: eg R + 5: meeting room (ventilated refreshed), R + 6: seating and table football, R + 7: reception desk and business center waiting room. On each floor, to the noble staircase and balcon
MODULARITY-multiply the possibilities of use thanks to a modular floor: the DRC IN Situ can meet all tenant configurations (single tenant, multi-takers, or lessee who want a dedicated home) in either offering a hall, two halls: in both configurations, the elevators can be totally dedicated to each customer, while the emergency stairs open into the common areas ...) -Design as the RIE a multifunctional space: the EIR was designed to only part of the surface dedicated to the restoration to be used in individual meeting space or work: table wider, different seats, power outlets for PC, wifi connection, no views distributions areas in order to "forget" to users that they are in a RIE-Mastering spaces dedicated to meeting rooms: modularity, creating temporary spaces, these spaces can group on a dedicated level ...: the in situ design has transformed the last office use in a floor level dedicated to meeting rooms, without changing the design of fire escapes or height under ceiling-spinning Provide opportunities to pool spaces (auditoriums, business center ...) and open to outside users to create more value: this possibility has not been realized on INSITUL'EVOLUTIVITÉ-implement measures for further improvement of the energy performance (BEPOS Ready). IN situ fall under the RT2005. The MC for a BEPOS ready could be implemented Integrate-protective measures for subsequent implementation of an ERP or excessively densely populated trays ground floor or first floor, easily accessible from the Street (ERP ready) - the lot sheet imposes trade surfaces necessarily located on the Yves Kermen street, rendering inoperative the MC allowing easy access from the street to a ERP3) an operating optimale.
MAINTAINABILITY-integrate from the building design the need of an easy and efficient maintenance. Organize operating reviews during design and construction, with feedback and analysis of a Facility Manager. VINCI PM and VINCI FM have been associated with the realisation process
CONTROL EXPENSES – Estimate the operating expenses from the PC point and provide a commitment on the level of the latter-establish consumption profiles (peak power) for mastered an optimized design of fluids and energy contracts
PACK SERVICE - Proposition of service maintenance contracts – exploitation - VINCI Immobilier's proposal for the PM, FM, the manager of the RIE, the concierge were selected - Openwork, the new VINCI approach real estate for the real estate business

Openwork approach the implementation of in situ allowed the owner to have a building that can accommodate 1 "means taker" seeking 2 to 12.000m served by a hall of its own where it can deploy its image at will ., the remaining surfaces being assigned to another medium taker or multipreneurs which will have the second hall. in case of single taker, one of the halls is transformed into show rooom, sales area, desk, mini auditorium. side user, the openwork approach allowed to enjoy the benefits of an independent building (hall and dedicated asc) enhancing its brand image while retaining those for a shared building: better amortization of certain fixed charges (netretien contract .. .) for the joint RIE. Moreover, insofar as the surfaces are available, the average policyholder can increase the number of its employees without the need of having to move.

Costs

Construction and exploitation costs

Renewable energy systems cost : 56 000,00 €

Cost of studies : 3 300 000 €

Total cost of the building : 38 000 000 €

Health and comfort

Indoor Air quality

Products in contact with indoor air
Flooring: Carpet tiles in offices, GUT label, False ceilings: False ceilings in offices respecting VOCs defined in EN 13964. The selected paintings respect VOC emissions defined in Directive 2004/42 / EC. Air quality monitoring tags are installed in various places local representative, with a dynamic monitoring multiple indicators (VOC, CO2, ...).

Comfort

Health & comfort : All offices are located along the building facades. 100% of the office spaces have access to daylight. Blinds acrylic textile motorized internal occlusions were implemented on the South facades, R + 1 to R + 7, at each of the inner joinery requiring dimming facility; on the east and west facades, all the offices in the floors RIE ground floor. Sliding shutters were used on the east and west facades, R + 1 to R + 7. The minimum level of illumination in offices is 300 lux. The offices are equipped with recessed luminaires equipped with fluorescent broadcasters and high-frequency electronic ballast providing direct lighting with low luminance. The luminaires in offices are selected so as to avoid glare. Their UGR index is less than 19. The color temperatures of the lamps are between 3000 K and 4000 K in the offices. The color rendition indices are greater than 85 in the offices. The very first day qualitative staircase encourages its use to the detriment of elevators. Balconies and terraces, usable workspace are available to employees, and a “silent” room dedicated to high concentration activities.

Acoustic comfort : The field of the project have been classified according to their sensitivity and their aggressiveness. The sensitive and very sensitive areas have been grouped together. The sensitive and very sensitive areas are remoted from aggressive and very agressive areas. The sensitive and very sensitive areas are protected by powerful walls and / or intermediate distribution doors. Acoustic measurements were taken receipt of developer work and work-takers, with corrective actions.

Carbon

GHG emissions

GHG in use : 8,00 $KgCO_2/m^2/an$

Methodology used :
RT calculation

GHG before use : 132,00 $KgCO_2$ $/m^2$

Building lifetime : 50,00 année(s)

, ie xx in use years : 16.5

GHG Cradle to Grave : 532,00 $KgCO_2$ $/m^2$

Emissions before use correspond to the calculation of lifecycle analysis calculated on the following families: structure / external / roof carpentry. calculation on the entire building was not réalsié. Calculation made from the e ELODIE software

Life Cycle Analysis

https://www.construction21.org/france/data/sources/users/449/insitugreenawardsrevugrf-acv.docx
Material impact on GHG emissions :
132

Material impact on energy consumption : 460,00 kWhEP

Eco-design material : RAS

Contest

Reasons for participating in the competition(s)

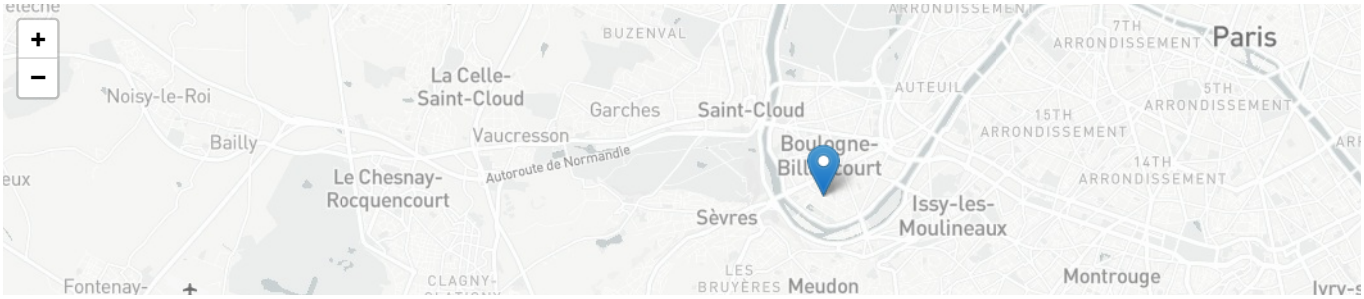
The In Situ building is the fruit of Openwork approach, which combines research energy and environmental performance with broader concerns in two areas: welfare at work of future users and the overall performance of the building as real estate assets. This broader vision of sustainable development aimed at reconciling the three pillars, environmental, social and economic, to reduce the borrowing of the project while providing more value to all stakeholders of the real estate chain: the employee at work, the business tenant and building owner.

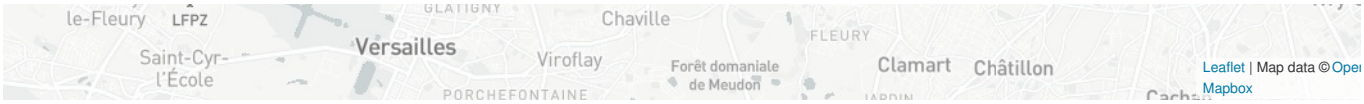
Building candidate in the category

Energie & Climats Tempérés

Green Building Solutions Awards 2016
powered by Construction21.org

Coup de Coeur des Internautes





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