#Curve building

BNP Paribas Real Estate's Corporate Real Estate Development division has just delivered #Curve, its first timber frame building, in Saint-Denis. With a surface area of 24,000 m², #Curve is one of the largest wooden buildings ever made in France. The numerous carbon optimizations, integrated from the design stage, make it a particularly exemplary building, in line with the environmental commitments of BNP Paribas Real Estate.

#Curve is positioned, thanks to its wooden frame and its energy efficiency, as a response to the necessary reduction of carbon emissions in the real estate industry. The building, which is committed to being 40% below RT 2012 in terms of its energy needs, is aiming for HQE certification, the Effinergie + label as well as the E+ / C- label.

Certifications:

Primary energy need: 67 kWhep/m².an
(Calculation method: RT 2012)

Energy Consumption:
- Building Type: Office building < 28m
- Construction Year: 2017
- Delivery year: 2020
- Address 1 - street: 13 Rue du Landy 93200 SAINT DENIS, France
- Climate zone: [Cfb] Marine Mild Winter, warm summer, no dry season.
- Net Floor Area: 23 898 m²

About #Curve

#Curve offers around 24,000 m² of offices with 250 m² of retail space on the ground floor and 257 car parks. Spread over seven floors, this building, designed by Chartier Dalix Architectes and developed by BNP Paribas Immobilier Promotion Immobilier d'Entreprise, has 1,960 workstations on floors of around 3,000 m² and a capacity of approximately 260 workstations per platform. Leased mainly by the Regional Health Agency (ARS), #Curve was acquired by Générale Continentale Investissements (GCI) and Benson Elliot. #Curve benefits from a wide range of services (business center, co-working spaces, restaurant, fitness / wellness, bar, contemporary café, concierge, etc.) and quality services (landscaped gardens, accessible terraces, etc.) in premises whose layout was designed by RF Studio (Ramy Fischler) so that the work environment is a source of fulfillment. At 450 m. from the RER B "Stade de France" station, which will subsequently be reinforced.
by the entry into service of line 15 of the Grand Paris Express and of the T8 tramway. #Curve rises in a mixed environment on rue du Landy, at within the 30 hectares of the ZAC de la Montjoie, a new eco-district in the Plaine Saint-Denis, managed by Séquano Aménagement. The building also benefits from the proximity of metro line 12, Front Populaire station, leading directly to Saint-Lazare and Montparnasse stations. In the short term, the area will host Condorcet University, which will complete the transformation and revitalization of this promising district.

**Sustainable development approach of the project owner**

#Curve is one of the achievements testifying to BNP Paribas Real Estate’s commitment to providing sustainable products and services. This wooden frame construction, which is the first for BNP Paribas Real Estate for a building of this size, is a testament to the low-carbon commitment from the design of the building.

BNP Paribas Real Estate wishes to satisfy its customers and partners with innovative real estate products and services, creators of shared value (tangible and intangible) and contribute with them to the development of the sustainable city.

Find our sustainable development strategy: [https://bnppre.isivalue.com/reporting/fr/](https://bnppre.isivalue.com/reporting/fr/)

**Architectural description**

Located in the ZAC Montjoie, this "white" office operation is designed in a spirit of great compactness. The building stretches out in the diagonal of its base, avoiding any vis-à-vis. This arrangement releases two large gardens in the ground which offer an important wooded line on the street. One of the 2 gardens is bordered by a gallery - bioclimatic space - which enhances the catering area; the other more frequented, is a "place of representation", its landscaping is a real showcase for the hall.

The entire project is designed in a wooden structure allowing great flexibility in the layout of the trays. The wood, left visible inside, joins the strong identity of an innovative tertiary building that of an ecologically responsible construction.

**Building users opinion**

Material very well received by customers seeking to see structural wood inside the building. Feeling of well-being, warm material

See more details about this project

[https://www.curve-saintdenis.fr/](https://www.curve-saintdenis.fr/)

**Photo credit**

Romain Ruiz

---

**Stakeholders**

**Contractor**

Name : BNP Paribas Real Estate Promotion Immobilier d'Entreprise
Contact : julien.wortrai[at]realestate.bnpparibas
[https://www.realestate.bnpparibas.fr/](https://www.realestate.bnpparibas.fr/)

**Construction Manager**

Name : Chartier Dalix Architectes
Contact : contact[at]chartier-dalix.com
[https://www.chartier-dalix.com/](https://www.chartier-dalix.com/)

**Stakeholders**

Function : Manufacturer
BINDERHOLTZ
03.88.85.19.98
[https://www.binderholz.com/fr/](https://www.binderholz.com/fr/)
Manufacturer of CLT timber and glued laminated timber. Sanitary walls, partition walls and floors in CLT, glued laminated facade columns and beams

Function : Company
MATHIS
03 68 08 00 08
Structural Work Wood
**Energy**

**Energy consumption**

- **Primary energy need**: 67.00 kWhep/m².an
- **Primary energy need for standard building**: 113.00 kWhep/m².an
- **Calculation method**: RT 2012

**Renewables & systems**

**Systems**

- **Heating system**: Urban network
- **Hot water system**: Individual electric boiler, Solar Thermal
- **Cooling system**: Water chiller, Fan coil, VAV Syst. (Variable Air Volume system)
- **Ventilation system**: Double flow heat exchanger
- **Renewable systems**: Solar Thermal

**Environment**

**Urban environment**

#Curve benefits from a wide range of services (business center, co-working spaces, restaurant, fitness / wellness, bar, contemporary café, concierge, etc.) and quality services (landscaped gardens, accessible terraces, etc.) in premises whose layout was designed by RF Studio (Ramy Fischler) so that the work environment is a source of fulfillment.

At 450 m. from the RER B “Stade de France” station, which will subsequently be reinforced by the entry into service of line 15 of the Grand Paris Express and of the T8 tramway, #Curve rises in a mixed environment on rue du Landy, at within the 30 hectares of the ZAC de la Montjoie, a new eco-district in the Plaine Saint-Denis, managed by Séquano Aménagement. The building also benefits from the proximity of metro line 12, Front Populaire station, leading directly to Saint-Lazare and Montparnasse stations. In the short term, the area will host Condorcet University, which will complete the transformation and revitalization of this promising district.

**Products**
Product
CLT WOOD and Glued laminated timber
BINDERHOLTZ
03.88.85.19.98
https://www.binderholz.com/fr/
Product category : Structural work / Structure - Masonry - Facade
Sanitary walls, partition walls and floors in CLT, glued laminated facade columns and beams
Material very well received by customers, seeking to see structural wood inside the building. Feeling of well-being, warm material

Costs

Carbon

GHG emissions
Calculation in phase EXE being finalized

Contest

Reasons for participating in the competition(s)
L'utilisation de béton bas carbone pour l'infrastructure (4 niveaux partiels de parkings enterrés) permet un gain de 1 570 tonnes de CO2 (équivalent d'environ 220 aller-retour Paris-Sydney en avion). Concernant la superstructure de 7 niveaux, la construction mixte bois et béton (pour certains noyaux), ainsi que la mise en œuvre de la majorité de murs porteurs en CLT (préfabriqués), réduit l'impact carbone par rapport à une structure béton traditionnelle et assure du stockage de carbone à hauteur de 4 150 tonnes de CO2 (environ 580 aller-retour Paris-Sydney en avion).

Ce mode constructif, faisant largement appel à la préfabrication, offre par ailleurs, l’avantage de la rapidité de pose sur site permettant un gain en termes de planning d’exécution.

Autres exemples d’optimisations carbone :
- Sur les lots techniques : fluides frigorigènes de nouvelle génération permettent un gain de 1 085 tonnes de CO2 par rapport aux fluides standards (soit environ 150 aller-retour Paris-Sidney en avion) ;
- Sur les revêtements intérieurs : moquettes à sous-couche recyclées permettant un gain de 120 tonnes de CO2 par rapport aux valeurs de référence ;
- Travail avec des fabricants engagés pour la réduction de leurs impacts environnementaux et volontaires pour la réalisation de FDES ;
- Participation des entreprises locataires pour la proposition d’optimisation carbone sur leurs lots.

Building candidate in the category
Bas Carbone