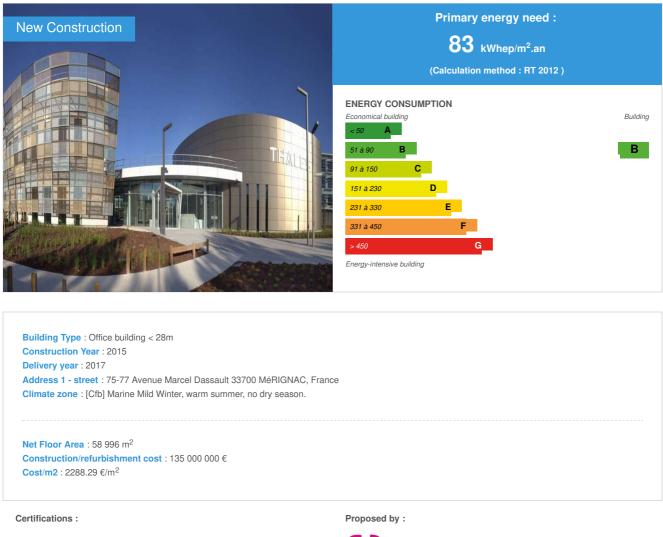
# CONSTRUCTION21, DEUTSCHLANE

# **Campus Thales**

by Amandine Guillaume / 🔿 2020-08-04 17:49:46 / Frankreich / 💿 18493 / 🍽 FR







# General information

When the electronics giant Thales chose GA for the creation of a new site in Bordeaux Mérignac, the Group brought the final stone to Campus Cristal, the new headquarters of Thales Communications & Security, in Gennevilliers. There is no doubt that strict compliance with the delivery deadlines for the first site as well as a similar technical background qualified GA for the construction of the new corporate building of the electronics giant in Bordeaux Mérignac.

The architect Jean-Philippe Le Covec imagined at the entrance of the site, an entire building dedicated to the reception and services with a restaurant, a business center, a space dedicated to the works council, a conciergerie, a showroom and many meeting rooms. Above all, the seven office buildings are connected by a "technological boulevard", a veritable interior street designed to encourage traffic and exchange between Thales employees. A place that combines many services, a computer, health, concierge, reprography, where employees of different departments are brought to meet and exchange.

Designed to improve the performance and well-being of its occupants, the campus is constructed in nine buildings in the heart of a landscaped park:

- At the entrance of the site, a whole building is dedicated to the reception and the services with a restaurant of company, a business center, a space dedicated to the works council, a conciergerie, a showroom as well as numerous rooms of meetings
- Seven office buildings are connected by a "technological boulevard", a real interior street designed to promote traffic and exchange between Thales

employees. Common ground floor where one can also find the production and final integration areas of Thales

- · The technical equipment of the site is gathered in another building
- The campus finally benefits from a vegetated park of 1,700 seats and 250 places for bicycles and two wheels.

Ultra-modern and of high environmental quality, the Thales Campus in Bordeaux is certified HQE® and BREEAM.

# Sustainable development approach of the project owner

For several years, the THALES project owner has been committed to an environmental policy, as evidenced by its annual environmental record, the ISO 14001 certification of several of its sites and its commitment to the "THALES Air'Innov Campus" operation to implement a HQE and BREEAM certification. The entrance buildings and the technical building and general services, although out of the perimeter of certification were verified during the audit and both meet the objectives of this one including thermal ones. The client has set up an operation management system. He is assisted for this by an AMO HQE: EGIS CONSEIL BUILDINGS since the beginning of the operation, presenting references in the field concerned. The QEB objectives translated into the program and targeted at the Design stage are justified and relevant to the operation and will, if met, achieve the minimum level of environmental quality required to achieve certification.

# Architectural description

Delivered in August 2016, the real estate complex designed by the architect Philippe le Covec and built by GA smart building for the Thales Group in Bordeaux is home to 60,000 m<sup>2</sup> of 2,500 employees of the electronics. Six office buildings, linked together by a common ground floor, form a real hub for circulation and exchange. The scale and color of the façades follow the inspiration of the highest regional places, like the Place de la Bourse in Bordeaux. On the service side, everything is planned to offer employees the perfect balance between well-being and quality of life at work. An entire building incorporates the corporate restaurant, a business center, the works council, a concierge, a showroom and many meeting rooms. All the technical equipment of the site is grouped in a separate building. And a vegetated parking lot includes 1850 seats including 150 places for two wheels.

## Building users opinion

"It's a campus where workplaces are designed for the comfort of users: patios, natural lighting, shared spaces with lots of windows" Jean-Philippe Le Covec, architect.

# If you had to do it again?

"Thales has already had the opportunity to work with the GA Group for different types of buildings, tertiary, industrial ... We know the range of its know-how. GA was chosen for the realization of our site of Gennevilliers, property of AG Real Estate. GA has reassured the realization of a project of this size (87,000 m<sup>2</sup>) in a short time (18 months). The site was well mastered, and the site delivered with the expected level of quality. Eric Supplisson - Thales Real Estate Director

# See more details about this project

the https://www.ga.fr/nos-realisations/le-campus-thales-bordeaux-limmobilier-dentreprise-xxl
The https://www.tekla.com/fr/r%C3%A9f%C3%A9rences/campus-thales-bordeaux-du-groupe-ga-le-bim-au-coeur-du-projet

### Stakeholders

# Contractor

Name : Thalès Direction Immobilière

### Construction Manager

Name : Jean-Philippe Le Covec Architecture

# **Stakeholders**

Function : Assistance to the Contracting Authority Objectim

C http://www.objectim.fr/index.html General AMO

Function : Assistance to the Contracting Authority Egis

http://www.egis.fr/

#### AMO HQE

Function : Assistance to the Contracting Authority

Gerea

AMO Environment

Function : Structures calculist CETAB

C http://cetab.fr/ Office VRD study and structure

Function : Company Groupe GA

C https://www.ga.fr General Enterprise

Function : Other consultancy agency Barbanel

C https://www.barbanel.fr/ Fluid studies office

Function : Structures calculist

AVLS

http://avls-fr.com/

# Energy

# Energy consumption

Primary energy need : 83,00 kWhep/m<sup>2</sup>.an Primary energy need for standard building : 136,00 kWhep/m<sup>2</sup>.an Calculation method : RT 2012 Breakdown for energy consumption : Annual breakdown of conventional energy consumption stations for the factory building Auxiliary ventilation: 36% - 30.5 kWhep / m<sup>2</sup> Heating: 31% - 29,1 kWhep / m<sup>2</sup> Lighting: 25% - 21.5 kWhep / m<sup>2</sup> ECS: 5% - 6.6 kWhep / m<sup>2</sup> Cooling: 3% - 3.6 kWhep / m<sup>2</sup>

# Envelope performance

Envelope U-Value : 0,36 W.m<sup>-2</sup>.K<sup>-1</sup> More information : Metal frame Thermal insulation to the outside Glass curtain facade

# Renewables & systems

# Systems

- Heating system :
  - Urban network

Hot water system :

• Individual electric boiler

Cooling system :

• Water chiller

Ventilation system :

• Double flow heat exchanger

No renewable energy systems

# Smart Building

### BMS :

The building design offers great adaptability over time by allowing space planning, thanks to the GTB connected to addressable luminaires and fan convectors.

#### Environment

# Urban environment

The architect endeavored in the general design of the project to respect this heavily wooded site of heathland character and subject to the presence of a water table flush while taking into account the specificity of the industrial program (complexity of internal circulation with a very important management of the safety for example), as evidenced by the following developments: an integrated management of rainwater (valleys, dry basins, water basin in the heart of the project), a neat entrance with its vineyard garden, a parking planted (600 trees) with hedges and specific wooded environments (oaks, pines, beeches, elms, hornbeams, ash trees, etc.), a careful work on the green fence that overlooks the new avenue Marcel Dassault with a path sports, patios and green roofs and a central convivial space (restaurant terrace, water basin, clearing, mail, etc.).

### Products

### Product

FullBIM, the 3D digital mockup that covers the entire project, from design to operation

#### GA

#### ga@ga.fr

#### http://www.ga.fr/nos-technologies/fullbim

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 = '27'

the site was built using GA's proprietary FullBIM process, which offers a 3D digital model that provides a unique level of building knowledge at each stage of the project. The model, in which all the information related to the buildings and their operation is compiled, must be handed to the Thales teams at the end of the project. This digital avatar of the Campus will allow them to make the best use of the site, in terms of maintenance, space planning, GTC, indoor geolocation, eco-performance ...

The precious and detailed GA BIM software saves time and efficiency throughout the project. Because it is a unique repository between all stakeholders, the FullBIM model changes management methods and ensures collaborative and efficient work at every stage of construction.

Thanks to the training provided by GA on the FullBIM model, partners and subcontractors can develop skills on BIM, an asset for the entire profession.

At the end of the project, the BIM model is handed over to the client, who thus has access to all the information relating to the buildings and their operation. In phase of BIM exploitation, this digital avatar facilitates the adaptability of the site according to the needs of the customer.

"The FullBIM digital mockup allows you to cover a whole project, from its design to its exploitation through production. BIM solves complex problems in the design phase and not on construction sites during the construction phase. Rémi Visière, Research and Development Research Director, GA Group.

https://www.youtube.com/watch?v=1MvgkOxH-kY

The Thales campus in Bordeaux voted best BIM project of the year 2016, world level, all categories combined

In 2016, the 73 winners of the BIM Awards from around the world competed to win the Tekla International Prize. The Tekla Global BIM Awards showcase bold projects in terms of designing and building impressive structures.

A jury made up of industry experts was to designate the winners in each category of real estate projects (commercial project, public project, industrial project, infrastructure, sports and recreation, student project). Each award recognizes innovative use of BIM technologies.



# Water management

Establishment of storage tanks and valleys to avoid saturation of the urban water network

# Comfort

### Health & comfort :

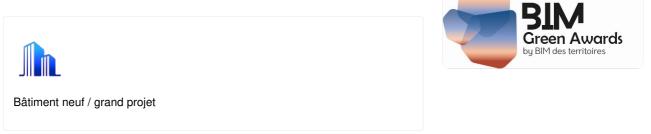
Thales wanted to make well-being a key performance issue by facilitating employees' daily lives and encouraging a healthy work / life balance. The Campus is constructed in 9 buildings in the heart of a landscaped park - At the entrance of the site, an entire building is dedicated to the reception and services with a restaurant business a business center, a space dedicated to the business, a concierge, a showroom and many meeting rooms - Seven office buildings are connected by a " *technology boulevard* ", a real indoor street designed to promote traffic and exchange between Thales employees. Common ground floor where we also find the areas of production and final integration of Thales.

Contest

# Reasons for participating in the competition(s)

A contemporary, rational and technological campus

# Building candidate in the category





Date Export : 20230320190214