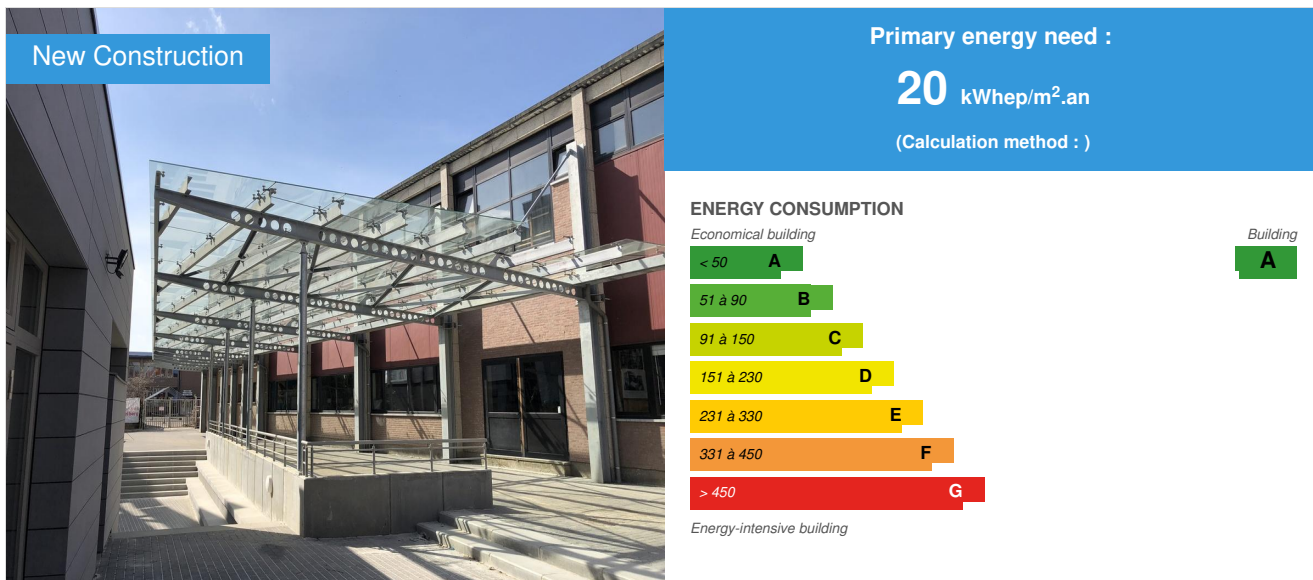


# Extension of the DON BOSCO Institute to Wolluwe Saint Pierre

by [Geoffrey Vermeulen](#) / 2019-06-24 15:38:27 / Belgique / 5653 / FR



**Building Type** : School, college, university  
**Construction Year** : 2017  
**Delivery year** : 2018  
**Address 1 - street** : avenue du val d'or, 90 1150 WOLLUWE SAINT PIERRE, Belgique  
**Climate zone** : [Cwb] Mild, dry winter, cool and wet summer.

**Net Floor Area** : 3 821 m<sup>2</sup> Other  
**Construction/refurbishment cost** : 6 703 720 €  
**Number of Pupil** : 684 Pupil  
**Cost/m<sup>2</sup>** : 1754.44 €/m<sup>2</sup>

**Certifications :**



General information

Extension of the Don Bosco Institute - Construction of a new school building comprising 29 classes and 1 Alu-Pvc workshop and their additional premises. Passive building with high energy performance certified passive (zero energy).

**Data reliability**

Self-declared

## Stakeholders

### Contractor

Name : A.S.B.L Institut DON BOSCO

Contact : Mr Marcel CROON

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

### Construction Manager

Name : Entreprises Koeckelberg

Contact : info@koeckelberg.be

<http://www.koeckelberg.be>

### Contracting method

General Contractor

### Owner approach of sustainability

This school, offering varied options in the industrial technical field and in the graphic arts, needed much more space to ensure a comfort worthy of the name to its students.

Since last September, this positive energy building has welcomed electricians, computer scientists and electronics engineers.

This concept, entirely prefabricated and with apparent structural elements, constitutes a real commitment for future generations with its green roofs and its rainwater recovery system.

### Architectural description

See Development steps.

## Energy

### Energy consumption

Primary energy need : 20,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Primary energy need for standard building : 50,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Calculation method :

## Renewables & systems

### Systems

Heating system :

- Condensing gas boiler

Hot water system :

- No domestic hot water system

Cooling system :

- No cooling system

Ventilation system :

- Nocturnal Over ventilation
- Free-cooling
- Double flow heat exchanger

Renewable systems :

- Solar photovoltaic

## Urban environment

Building located in the city, close to public transport. Maintain existing trees for building integration and minimize visual impact for neighbors.

## Products

### Product

insulating wood box

Jonckheere projects

<https://www.jonckheereprojects.be/>

Product category : Structural work / Passive system

Prefabricated structure in insulated wood box

Fast system integrating thermal insulation and airtightness. Lets you really "pack" the building and avoid thermal bridges and weak spots for airtightness.



## Costs

## Contest

### Reasons for participating in the competition(s)

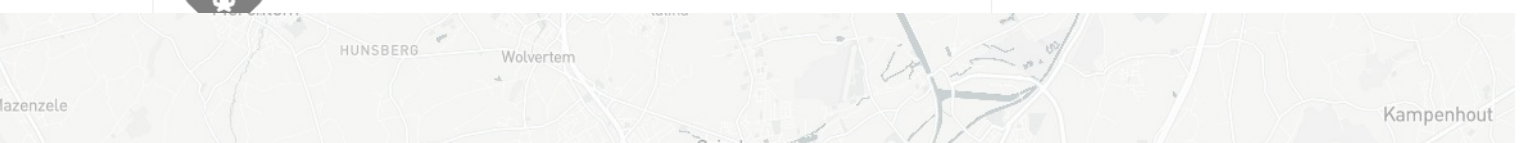
BATIMENT PASSIF

- le besoin en chauffage est de maximum 15 kWh/(m<sup>2</sup>.an)
- le besoin en refroidissement est de maximum 15 kWh/(m<sup>2</sup>.an)
- la fréquence de surchauffe du bâtiment au-delà de 25°C est de maximum 5% du temps d'occupation du bâtiment (critère de confort vérifié par une simulation thermique dynamique)
- l'étanchéité à l'air du bâtiment assure un taux de fuite au travers de l'enveloppe de maximum 0,6 renouvellement d'air par heure sous 50 Pa (critère vérifié selon rapport)
- la consommation en énergie primaire est inférieure ou égale à 90 - 2,5 x compacité (exprimée en kWh primaire/(m<sup>2</sup>.an))

### Building candidate in the category



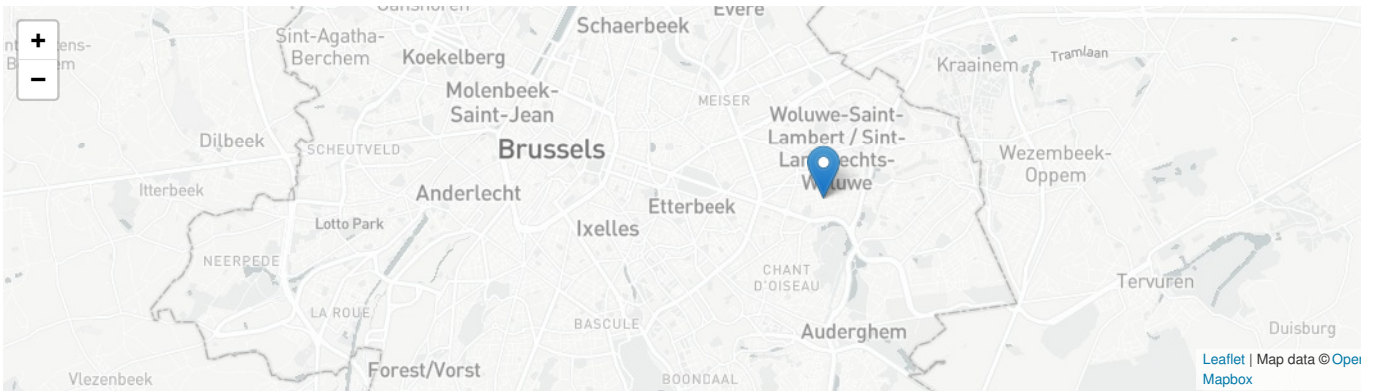
Energie & Climats Tempérés



Santé & Confort



Prix du public



Date Export : 20230428184751