

# **Waldhorn Residence**

by Emeline GROSJEAN / (1) 2019-06-14 10:53:55 / France / ⊚ 4772 / № FR



**Building Type**: Collective housing < 50m

Construction Year : 2018 Delivery year : 2018

Address 1 - street : 26-28 rue Hatt 67200 STRASBOURG, France Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area: 3 498 m<sup>2</sup> SHON

Construction/refurbishment cost : 4 215 143 €

 $\textbf{Number of Dwelling}: 57 \ \mathsf{Dwelling}$ 

 $\textbf{Cost/m2}: 1205.02 \in /m^2$ 

#### Certifications :



### General information

For this program, Boulle has already won a national call for projects from ADEME "Towards responsible buildings by 2020." The building incorporates an innovative heat recovery solution on which BOULLE collaborates with a consortium of industrialists, a research laboratory and design offices.

The construction method of this project is as follows: exterior sails made of concrete and bricks, external thermal insulation, double glazing with reinforced insulation, single flow ventilation.

Air heat recuperators extracted from the ventilation system, as well as greywater, have been installed in addition to solar thermal panels. Thus, 100% of the hot water needs and 50% of the heating needs are covered by the system. The district heating network will be used.

#### Sustainable development approach of the project owner

Boulle is a pioneer in sustainable development, and always wants to be ahead of the national thermal regulations. BOULLE's desire was to make a BEPOS building without energy production by photovoltaic solar panels, the goal was to save and recover energy instead of producing it. We wanted to obtain an E + C

label with the Energy 3 and Carbon 2 levels. This is our first building under this label. But it's not our first green building. Indeed, we realized an eco-district, The Willerbuehl, with bioclimatic houses, and an ecobioresidence in Meistratzheim, "Au Vieux Ruisseau". This project is different from the others realized so far because it is a call for projects from ADEME, and because we worked directly with the manufacturer who implemented the technical solution. Indeed, to design a project directly with the industrialist is innovative. It is the first residential building in France to be at this level of energy performance without photovoltaic.

#### Architectural description

For this program, Boulle has already won a national call for projects from ADEME "Towards responsible buildings by 2020." The building incorporates an innovative heat recovery solution on which BOULLE collaborates with a consortium of industrialists, a research laboratory and design offices. The construction method of this project is as follows: concrete sails and bricks, external thermal insulation, double glazing with reinforced insulation, single flow ventilation. Air heat recovery units extracted from the VMC, as well as on greywater have been installed, in addition to solar thermal panels. Thus, 100% of the DHW needs and 50% of the heating needs are covered by the system. The district heating network will be used.

### See more details about this project

☑ https://www.lemoniteur.fr/article/un-projet-pionnier-du-bas-carbone-a-strasbourg.739819

#### Photo credit

Boulle

#### Stakeholders

#### Contractor

Name: BOULLE
Contact: 03 88 50 80 80

http://www.boulle.fr

### Construction Manager

Name: Service Technique Boulle Contact: 03 88 50 80 80 http://www.boulle.fr

#### Stakeholders

Function: Thermal consultancy agency

Tribu Energie

Function: Other consultancy agency

GLM Fluides

### Contracting method

Off-plan

### Energy

### **Energy consumption**

Primary energy need: 36,00 kWhep/m<sup>2</sup>.an

Primary energy need for standard building: 93,00 kWhep/m².an

Calculation method: RT 2012

### Renewables & systems

### **Systems**

#### Heating system:

- Urban network
- Solar thermal

### Hot water system :

- Urban network
- Solar Thermal

#### Cooling system:

No cooling system

#### Ventilation system:

Single flow

#### Renewable systems:

- Solar Thermal
- o Other, specify

#### Environment

### Urban environment

The project was implemented in the eco-district of La Brasserie, in the Cronenbourg district of Strasbourg. This is the former site of Kronenbourg breweries. The proximity of public transport allows quick access to Strasbourg city center (tram and bus), cycle routes favor the use of soft mobility.

#### **Products**

### **Product**

Myriad

France Air

Product category : Génie climatique, électricité / Chauffage, eau chaude

/

#### Costs

#### Contest

## Reasons for participating in the competition(s)

- Innovative heat recovery solution
- Heat recovery units on air extracted from the ventilation system, as well as on greywater
- Solar thermal panels
- Addition by district heating network

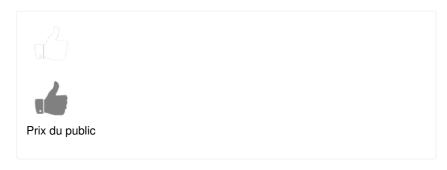
## **Building candidate in the category**

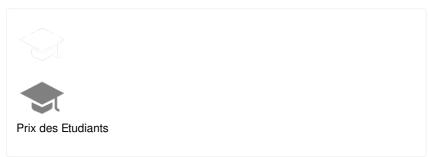




#### Bas Carbone









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