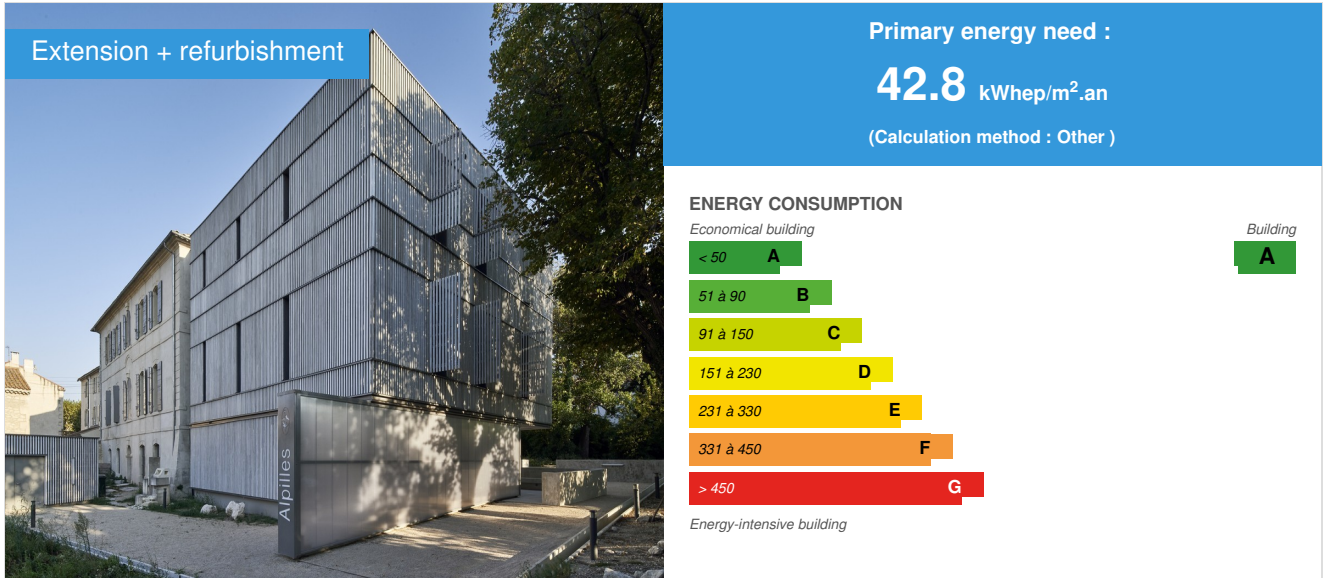


House of the regional natural park of the Alpilles

by Lo  Desvignes / 2021-03-23 16:10:28 / France / 2798 / FR



Building Type : Office building < 28m
Construction Year :
Delivery year : 2015
Address 1 - street : 2 Boulevard Marceau 13210 SAINT-R MY-DE-PROVENCE, France
Climate zone : [H] Highland Climate(mountainous terrain).

Net Floor Area : 1 056 m² SHON
Construction/refurbishment cost : 2 490 294  
Cost/m2 : 2358.23  /m²

Certifications :



General information

This former 18th century Saint-R moise bastide, acquired by the Regional Natural Park of the Alpilles in 2007, is home to the administrative headquarters of the Regional Natural Park, it is also a place to raise awareness among the general public. La Maison du Parc consists of a renovated building, to which is added a contemporary-style wooden extension.

The main building (R + 2) is created as an extension of the 18th century building, following the principles of compactness and simplicity of volume. It takes the alignment and the template of the existing building for the benefit of outdoor spaces and gardens, visual continuity and enhancement of the heritage building. A cantilever at the angle of the building opens the building to the south and west allowing a north-south visual continuity between the gardens and the inside / outside.

A skylight as an element of hook with the existing, allows to illuminate the vertical circulations of the 2 built entities and to organize all the circulations. It also makes it possible to create a night-time over-ventilation.

The use of a local wood, the Aleppo pine for the cladding of the extensions seeks dialogue and a fair confrontation between the old material and its minerality and the contemporary material: the treatment based on white tinted vegetable oil of the cleats wood (extensions) responds to limewash (building) in a search for kinship.

Sustainable development approach of the project owner

The Maison du Parc project was carried out within the framework of the BDM (Mediterranean Sustainable Buildings) "TERTIARY ENERGY BUILDING: Thermal Regulations for Low Consumption Renovation Building" concerning heating, cooling, ventilation, domestic hot water and lighting. The objective of this renovation was to create a new headquarters for the regional natural park within the old bourgeois house.

Architectural description

General description

The Maison du Parc naturel régional des Alpilles is made up of two entities:

- The old house of La Cloutière rehabilitated and enhanced, intended to accommodate exhibition and discussion spaces on the ground floor and on the first floor, as well as offices on the second floor.
- A contemporary-style extension to the west of the house which aims to welcome the public on the ground floor and install offices upstairs.

It was an old 18th century bourgeois house and its garden, resulting from a larger property of agricultural land, located outside and on the edge of the old ramparts of the city.

The house is organized in a classic way with a ground floor which was devoted to services, domestic functions, kitchen, laundry room but which also consists of craft premises, linked to the activities of the previous owner.

Before the renovation the house was in poor condition, most of the rooms have been restored.

This building is a testimony of the architecture of the end of the XVIIIth century and its evolution during the XIXth and the beginning of the XXth century. This building shows the adaptations to uses and the search for comfort of the owners with, for example, the creation of a summer lounge on the ground floor of the building.

The walls : Stone masonry with lime plaster, and limewash on the molding elements or stone decorations for the exterior.

Windows : The 19th century wooden double-leaf joinery has been replaced by two-leaf wooden windows from the Naudon Mathé frères brand. Single glazing has been replaced by double glazing.

The roof : The aspect of the original roof with its canal tiles, its chimneys, its zinc flashings and small stone terrace is preserved, with the recovery of certain current tiles in roof tiles.

If you had to do it again?

Need to change the project team; project management and external contributors. Indeed, the insulation of the new building in wheat straw compressed in wooden boxes, as insulation was not considered as a common technique for a tertiary building and ERP in R + 2, during the design of the project (despite the publication of professional straw construction rules in 2012). This choice also necessitated a change of control office, in order to find a "Technical Controller" who recognized the professional rules of straw construction (released 1 year earlier) and who could validate the technical details.

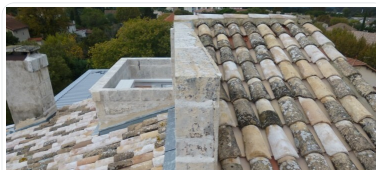
See more details about this project

<https://www.alpine-space.eu/projects/atlas/en/home>

<https://www.hiberatlas.com/fr/home-1.html>

Photo credit

Martine Bresson



Stakeholders

Contractor

Name : Syndicat Mixte de gestion du Parc Régional de Alpilles

<https://www.parc-alpilles.fr/>

Construction Manager

Name : Martine Bresson agence BressonSchindlebeck associées à Fabrica Traceorum

Contact : contact[a]bs-architecture.fr

<http://bs-architecture.fr/>

Stakeholders

Function : Designer

Martine Bresson agence BressonSchindlebeck associées à Fabrica Traceorum

contact[a]bs-architecture.fr

Function : Thermal consultancy agency

IGTECH Bet Fluides Thermique

Function : Environmental consultancy

CAUE 13: Conseil en architecture et en environnement et urbanisme

Energy

Energy consumption

Primary energy need : 42,80 kWhep/m².an

Calculation method : Other

Breakdown for energy consumption : heating: 9.6 kWhep / (m2.an) lighting: 24 kWhep / (m2.year) CMV: 8.6 kWhep / (m2.an) auxiliaries: 0.6 kWhep / (m2.an)

Envelope performance

Envelope U-Value : 0,66 W.m⁻².K⁻¹

Air Tightness Value : 1,70

Renewables & systems

Systems

Heating system :

- Wood boiler

Hot water system :

- Wood boiler

Cooling system :

- No cooling system

Ventilation system :

- Single flow

Environment

Urban environment

Saint Rémy de Provence is a French commune in the Bouches-du-Rhône department. A tourist and wine-growing city, it has an important built and natural heritage.

The Maison du Parc is a building located on the edge of the old town of Saint-Rémy-de-Provence within the perimeter of many historic buildings classified as Historic Monuments (less than 500 meters). The Domaine de la Cloutière also bears witness to the city's urban development, which grew after the demolition of the ramparts.

Costs

Construction and exploitation costs

Total cost of the building : 2 490 294 €

Additional information on costs :

Funding is shared between the Provence-Alpes-Côte d'Azur Regional Council, the Bouches-du-Rhône General Council, the State, European Fund, the Alpilles Regional Park and the municipalities.

Health and comfort

Water management

Recovery of rainwater by an underground cistern and by the installation of a network of "waterways" pipes which allow the educational garden to be watered by gravity flow.

Comfort

Health & comfort :

In agreement with the city of Saint Remy de Provence, an electric charging station has been set up by the municipality on the edge of the Maison du Parc, rue Frédéric Mistral.

The Mixed Syndicate encourages visitors, users and employees to use carpooling.

Carbon

Life Cycle Analysis

Eco-design material :

The eco-rehabilitation and eco-construction approach (extension of the existing building) makes it possible to limit the emission of greenhouse gases.

Reuse of existing materials and devices on site, reuse, rehabilitation of existing structures (floors, coatings, frame.)

Use of bio-sourced materials. (plant fiber-based insulation, straw insulation for the wooden extension, etc. coverings from the site or natural such as Linoleum.)

Use of local wood for covering the extensions: in Aleppo pine allowing the development of a local sector.

Contest

Reasons for participating in the competition(s)

BDM GOLD labeled project: Mediterranean sustainable building approach; in the design, construction and operation phases, the project responded to a desire for exemplary eco-construction (as well as eco-rehabilitation for the existing part, an old 18th century building) on the part of the client.

Technical choices and prefabrication :

Envelope and wooden structure (glued slat and solid wood) with insulation distributed in compressed straw in wooden boxes, a technique that allowed the prefabrication in the workshop of panels / facade walls over a double storey height.

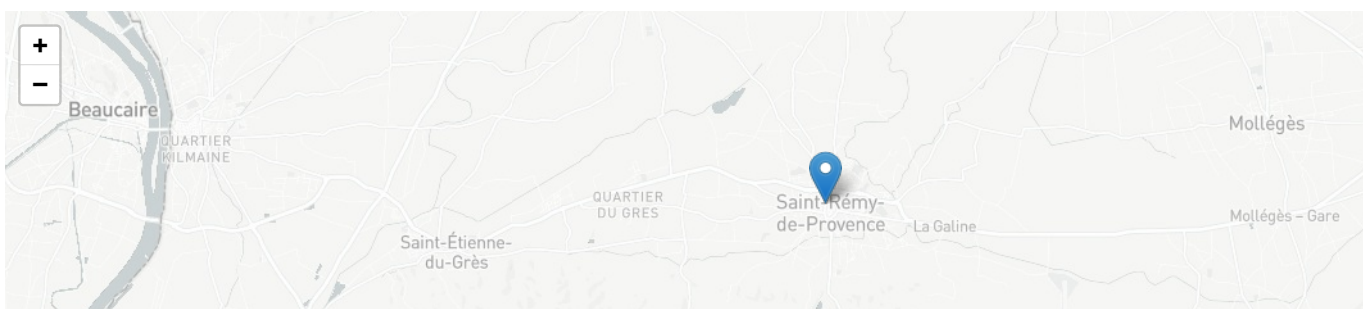
Constructive system allowing:

- to develop straw insulation as an example.
- to promote the Aleppo pine and the Alpilles forest

Building candidate in the category



Bas Carbone





Date Export : 20230506142936