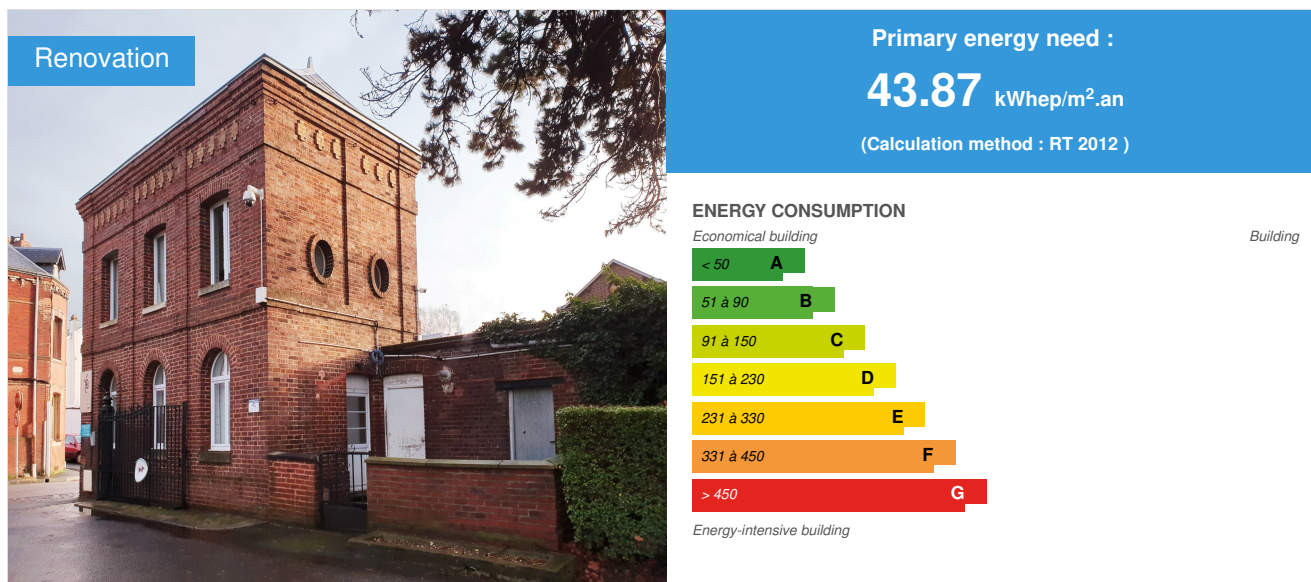


La Fruitière - Rehabilitation of a former caretaker's house into a business incubator

by Léa Credidio / 2021-06-09 00:00:00 / France / 2184 / FR



Building Type : Office building < 28m
Construction Year : 1890
Delivery year : 2021
Address 1 - street : 27, rue Lucien-Fromage 76160 DARNÉTAL, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 90 m²
Construction/refurbishment cost : 48 000 €
Cost/m² : 533.33 €/m²

General information

L'Atelier Infini, an eco-responsible architecture and interior design agency, was commissioned in January 2020 for the interior design of the offices and the choice of furniture for the future incubator. The objective being to design this space with a maximum of reuse.

4 principles are implemented by the architectural firm:

- A waste diagnosis and a photographic inventory within the building

A waste diagnosis and a photographic inventory were carried out by the **Backacia** company. They allowed to **give an idea of the elements to be reused**. They are essential for reuse in situ.

Following this diagnosis, several elements were reused as they are, such as the toilets but also the lights, suspensions, wall lights, according to the desire of the contracting authority wishing to keep elements that could appear to be "old-fashioned". As they were functional they were reused.

The other particularity of the project was to **reuse elements of other buildings that are part of the same structure**. The project is located within the grounds of a school of architecture which is divided into several buildings. The architect suggested to the contracting authority to look among the material present in the various buildings to determine if some could be reused. Indeed, the shelves installed previously in some offices had been stored and could be reused.

- A reasoned design: adapting these uses and its program to the building

The goal was to **transform the existing building as little as possible and to work with its constraints**, namely several cramped rooms. These small spaces have allowed us to create different types of offices: for 3 and 4 people and individual offices. Thus, the school will be able to offer several accommodation offers. Finally, the meeting room (former living room) has been designed to be flexible in terms of uses.

- The establishment of an inventory of constraints to find reused furniture

Once the elements have been identified within the caretaker's house, an inventory of the equipment has been carried out as well as a **list of technical constraints** :

Desks: 9 → The top must be removable because of the narrow staircase. The dimension of a tray must be between 1100 × 600 to 1300 × 800 mm.

Small tables: 10 → Must be light, easily movable and between 300 × 500 to 400 × 700 mm.

Chairs → Must include a backrest, easily movable.

Office chairs: 9 → Must be ergonomic.

Shelves or storage → Variables: Can be opened or closed.

A kitchenette → Maximum dimension length: 2m60.

After researching materials resale platforms, the school of architecture sourced from a local player: Burodoc, a supplier of office furniture selling second-hand furniture.

- Involve companies in the process and collaborate with pioneers

The company in charge of the site played the game and offered to supply OSB sheets from offcuts from various sites as well as offcuts of plasterboard. Wishing to create uniformity among all the OSB boards supplied and their color differences, the contracting authority proposed to apply a whitish finish in order to standardize the floor and enlarge the space.

Sustainable development approach of the project owner

The MOA wanted an eco-responsible approach and to move towards reuse for this development project.

Objective: to show that it is possible to design / rehabilitate with reused materials. Help a former student in architecture in the development of a company that carries values of eco-responsibility.

Objective set: all the furniture in reuse. First reuse project for the MOA.

Architectural description

In terms of design, the objective was to transform the space as little as possible and to work with the constraints of the building: several small rooms. These small rooms have allowed us to create several types of offices: collective offices for 3 and 4 people and individual offices. These typologies are suitable for new companies. The school will therefore be able to offer several accommodation offers.

Another approach taken by the contracting authority was to keep elements that may seem "old-fashioned", such as lighting, because they were functional.

If you had to do it again?

In the same way

Photo credit

Léa Credidio Managing Architect Atelier Infini

Stakeholders

Contractor

Name : École Nationale Supérieure d'Architecture de Normandie

Contact : Raphaël Labrunye : raphael.labrunye[a]rouen.archi.fr. Tél : 02 32 83 42 00

<http://www.rouen.archi.fr/>

Construction Manager

Name : Atelier Infini - Léa Credidio

Contact : Léa Credidio, lea.credidio[a]rouen.archi.fr, 06 34 98 73 08

<https://www.atelierinfini.fr/>

Stakeholders

Function : Environmental consultancy

Backacia

Lucile Hamon

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

Waste diagnosis and resource inventory

Function : Environmental consultancy

Burod'oc

Benjamin Semard

<http://www.burodoc.com/>

Sale of used furniture

Contracting method

Separate batches

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 43,87 kWh/m².an

Calculation method : RT 2012

Renewables & systems

Systems

Heating system :

- Condensing gas boiler

Hot water system :

- Condensing gas boiler

Cooling system :

- No cooling system

Ventilation system :

- Single flow

Renewable systems :

- No renewable energy systems

Environment

Urban environment

Integration on the site of the Normandy school of architecture. The objective was to involve architecture students into the process. Unfortunately this was not possible because of the COVID-19 pandemic.

To find reused materials, we looked around the school for items to recover such as shelves that were no longer needed. We then worked with an actor located only a few km away from the school: Burudoc.

Products

Product

Backacia

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

Product category : Outdoor facilities / Waste collection and treatment

Costs

Circular Economy

Reuse : same function or different function

Batches concerned by reuse :

- Floorings
- Plumbing
- others...

For each batch : Reused Materials / Products / Equipments :

Floor covering lot:

45m² of OSB plate reused for the ground of R + 1 and R + 2.

Sanitary package:

1 WC and 1 sink on the ground floor + 1 moved to the ground floor.

Furniture lot:

Ground floor: Meeting room: 10 chairs + 6 small tables. Office 1: 2 tables + 2 office chairs.

R + 1 Office 2: 4 tables + 4 office chairs + shelves. Office 3: 1 table + 1 office chair.

R + 2 Office 4: 4 tables + 4 office chairs + shelves.

Reused materials rate :

Floor: 45m² of recovered on a surface of 90m². Or 50% re-employment.

Sanitary facilities: 1 recovered WC + 1 recovered sink (existing, moved). 100%.

Furniture: All office furniture was recovered: 100%.

Field of use and material origin :

Sol: Company recovered it: Several OSB falls from construction sites in Normandy.

Sanitary: Reuse in situ.

Furniture: Reusable shelves in situ + other furniture: Burudoc: resells used office furniture.

Environmental assessment

Impacts avoided : water, waste, CO₂ :

The reuse of materials on this project made it possible to avoid:

- The emission of 4.6 tonnes eqCO₂.
- The use of 1365.4 m³ of water.
- The production of 3.1 tons of waste.

Calculation based on environmental data from the INIES database.

Contest

Reasons for participating in the competition(s)

L'ensemble des mobiliers bureaux ont été réemployés.

Building candidate in the category



Prix du public

