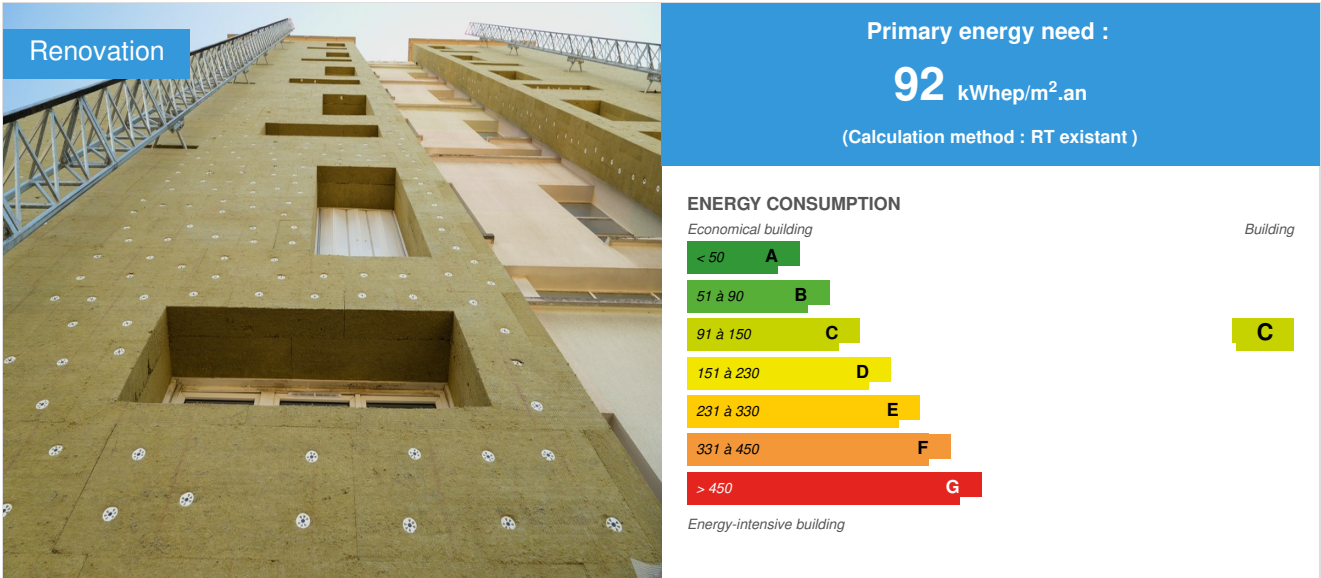


Domaine de l'Etang Residence - Lyon (France)

by ROCKWOOL France / 2022-09-01 08:25:49 / France / 1281 / FR



Building Type : Collective housing < 50m

Construction Year : 1960

Delivery year : 2022

Address 1 - street : 29 à 35, avenue de Ménival -3 à 19, avenue du Général Eisenhower 92 à 98, rue Joliot Curie 69006 LYON, France

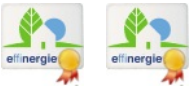
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 25 944 m²

Construction/refurbishment cost : 7 134 000 €

Cost/m² : 274.98 €/m²

Certifications :



General information

The project consists of the thermal renovation of the facade of 367 occupied dwellings of the Domaine de l'Etang in Lyon (5th district). It is 15000 m² of facade concerned.

- Year of construction of the building : 1965-1967
- Start of the works : 2009
- Surface area of the facade : 15000 m².
- Year of renovation of the facade : 2020-2022
- Total value of the project : 7,134 million (€)
- Product : Ecorock Duo (150 mm)

The challenge

Located in the 5th district of Lyon, this complex of 367 apartments spread over 8 buildings was designed in the mid-1960s by the architect Charles Delfante. The energy consumption of the residence represented 258 kWh/m²/year (E label). Asbestos was also present in the structure and there were waterproofing problems in several places.



The residence before work - photo credit: TerreEco

In order to enhance the value of its assets, to offer a better comfort to its tenants while respecting the environment, the SACVL (Société Anonyme de Construction de la Ville de Lyon) initiated a global energy rehabilitation process.

The work was carried out entirely on an occupied site, which encouraged the contractors to use rapid construction processes with minimal disruption.

A comprehensive renovation

To limit heat loss, initial renovation work had already been carried out in 2010, namely the thermal renovation of the roof terraces and the installation of double glazing.

The new phase of energy renovation has been entrusted to the architectural firm Jacky Suchail Architecte. The work is being carried out by the company Eiffage Construction Réhabilitation Centre-Est and includes the thermal renovation of the facades in an occupied site. These works have an ambitious objective: to reduce energy consumption from 258 kWh/m².an to 95 kWh/m².an and to reach the BBC Effinergie Renovation performance level, while dividing the energy bill by two. An environmental diagnosis was therefore carried out prior to the work before studying various work scenarios and choosing the one that would meet the energy ambitions, while respecting the budget.

The works concerned several items:

- Installation of a collective hot water network;
- Installation of VMC;
- Replacement of the gas boilers by a digital STIMERGY boiler;
- Installation of photovoltaic solar panels;
- Revision of the existing joineries and closing of the loggias by aluminium joineries with double glazing of thickness;
- Installation of shutters;
- Replacement of the lighting with LED with presence detection in the common areas

In addition, as part of this rehabilitation, the installation of a Rockwool Exterior Thermal Insulation system was chosen. The Ecorock Duo 150 mm solution has many advantages: it is easy and quick to install and offers excellent thermal performance, which is necessary to achieve a good level of insulation. Rockwool is a good sound insulator and offers greater acoustic comfort to residents. Finally, rock wool is a non-combustible material. In case of fire, it allows to contain the propagation of the fire in the building and to protect the occupants. This product is often recommended on building sites of old buildings in adobe or clinker like this one. The insulation offers good performances, while letting the support breathe, which reduces the problems of moisture often related to the old materials.

Recycling of site waste

Eiffage pays particular attention to the recycling of materials on its construction sites. The Domaine de l'Étang residence benefits from the Rockcycle site waste recycling service, which allows Eiffage to renovate in an environmentally responsible manner. This service, developed since 2012, offers the recovery of rock wool offcuts, PE packaging and wood pallets, as well as waste from other industries. They are returned to the factory and then reused or recycled to create new rock wool products. In some regions and production lines, 75% of the rockwool produced is recycled material! This creates a circular production chain. Applied to all energy renovation work, the impact of this service will be significant.

Photo credit

Photos 1, 4 & 5 : ROCKWOOL France S.A.S. / SACVL

Photos 2 & 3 : TERRE ECO

Contractor

Name : SACVL - Société Anonyme de Construction de la Ville de Lyon

Construction Manager

Name : EIFFAGE CONSTRUCTION - Réhabilitation Centre Est

Contact : Arab Hassaoui

Stakeholders

Function : Designer

Jacky SUCHAIL Architecte - JSA

Nicolas Mouterde

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

Function : Thermal consultancy agency

Betics

<https://betics.fr/>

Function :

COGECI

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

Function : Other consultancy agency

TERRE ECO

<https://www.terre-eco.com/>

BET HQE

Function : Thermal consultancy agency

ALTERECO

contact[a]altereco-edc.fr

Function : Company

ROCKWOOL

<https://www.rockwool.com/fr/>

Insulation supplier and waste recovery service

Type of market

Not applicable

Allocation of works contracts

Macro packages

Energy

Energy consumption

Primary energy need : 92,00 kWh_{ep}/m².an

Calculation method : RT existant

Initial consumption : 258,00 kWh_{ep}/m².an

Renewables & systems

Systems

Heating system :

- Condensing gas boiler

Hot water system :

- Condensing gas boiler

Cooling system :

- No cooling system

Ventilation system :

- compensated Air Handling Unit

Renewable systems :

- Solar photovoltaic

Environment

Urban environment

The "Domaine de l'Etang" residence is located in the Ménéval district in the 5th arrondissement of Lyon. Right in the city center, it benefits from privileged access to the public transport network.

This real estate complex of 367 apartments was built between 1965 and 1967 by the urban architect Charles Delfante. It includes 8 buildings. The typology of the 367 accommodations extends from T2 to T5.

Products

Product

Rockcycle Recycling Service

ROCKWOOL

<https://www.rockwool.com/fr/>

Product category : Outdoor facilities / Waste collection and treatment

Developed by ROCKWOOL, this service recovers site waste related to rock wool insulation. Rock wool offcuts, PE packaging and wooden pallets are thus recovered, sent back to the factory and reused to create new products. The service has also been extended to waste from other industries. Thus, rock wool, wood and plastics can be recycled endlessly.

Ranges concerned by Rockcycle:

- Sealing
- Cladding
- Coated facade - Ecorock Mono - Ecorock Duo - Rockbay
- Ventilated facade - Rockfaçade - Rockfaçade Premium - Rockvet

Rockcycle has been awarded 3 times in competitions organized by building experts:

- Construction Trophies 2019
- Trading Trophies 2019
- 2020 Brand Social Responsibility Grand Prize

Developed since 2012, this service is now adopted by many customers working regularly with the company.

"We launched Rockcycle on the French market in 2012. At the time, we were one of the first players in the sector to offer this type of service.

Today, waste has become a critical issue in the construction industry and we are seen as a leader in this area, paving the way for others. Architects and designers are now keen to include this service as a "must" on every building site."

Matthieu Biens - ROCKWOOL Marketing and Development Director for Southern Europe

Product category :



Costs

Construction and exploitation costs

Total cost of the building : 7 134 000 €

Contest

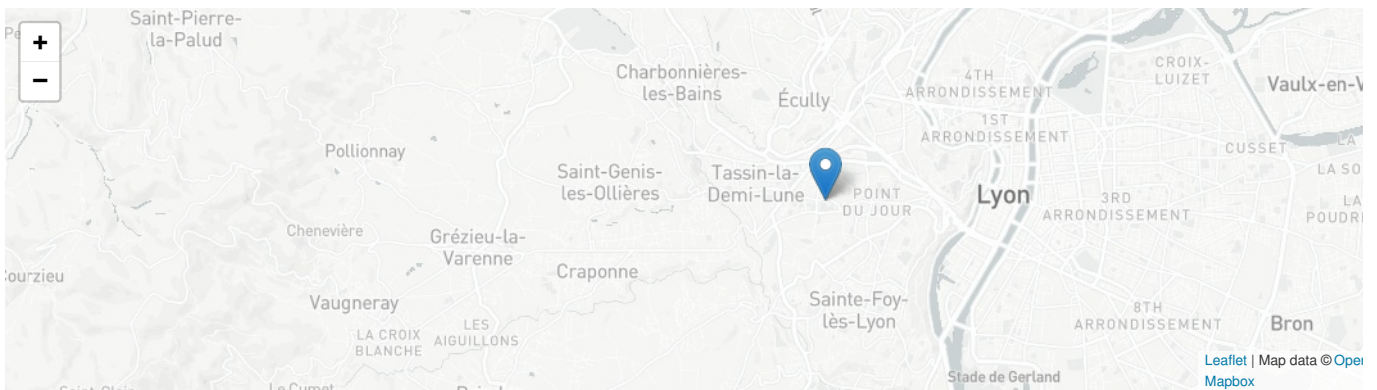
Reasons for participating in the competition(s)

- Une rénovation globale Pour limiter les déperditions thermiques ;
- La mise en place d'un système d'Isolation thermique par l'extérieur en laine de roche, ce qui offre d'excellentes performances thermiques, nécessaires pour atteindre un bon niveau d'isolation ;
- L'isolant offre de bonnes performances thermique et acoustique, tout en laissant respirer le support, ce qui réduit les problèmes d'humidité ;
- Sur le chantier, une attention toute particulière a été portée au recyclage des matériaux.

Building candidate in the category



Prix du public



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