Housing Gran Vía Jaume I

Renovation

Primary energy need : 15.2 kWh/m².year
(Calculation method : RD: 47/2007)

ENERGY CONSUMPTION
Economical building
< 50 A
51 à 90 B
91 à 150 C
151 à 250 D
231 à 350 E
331 à 450 F
> 450 G

Building Type : Collective housing > 50m
Construction Year : 2016
Delivery year : 2016
Address 1 - street : Gran Vía Jaume I, 67 17002 GIRONA, España
Climate zone : [Csa] Interior Mediterranean - Mild with dry, hot summer.

Net Floor Area : 532 m² Other
Construction/refurbishment cost : 566 500 €
Number of Dwelling : 4 Dwelling
Cost/m² : 1064.85 €/m²

Proposed by :

General information

Urban building rehabilitated with energy certification A, made according to the model of sustainable construction Eco8 and created with collaboration of end users of housing. A shared, sustainable, efficient and fully customized project, designed to improve the environment and happiness of users.

See more details about this project


Data reliability

Self-declared
Stakeholders

Function: Developer
INCOVI
Josep Maria Coll

Promoter, responsible for the whole process of the work (architecture and construction).

Function: Certification company
Associació Catalana de Construcció Sostenible
Esther Pereira Garcia

Certification under the model of sustainable construction Eco8

Contracting method

Other methods

Owner approach of sustainability

It aims to provide sustainable housing that promotes health and well-being of users, that are also environmentally friendly.

Architectural description

The architecture is based on an eminently energetic rehabilitation but also deals with general aspects of sustainability: water management, responsible materials, innovation, best practices in construction, local promotion, respect for the environment and health of people. The great input from this promotion has been the adaptability of housing and the involvement of end users in the process of design and construction of housing. The result: customized, healthy and sustainable housing.

Energy

Energy consumption

Primary energy need: 15.20 kWhpe/m².year
Primary energy need for standard building: 60.00 kWhpe/m².year
CEEB: 0.0001
Initial consumption: 45.30 kWhpe/m².year

Envelope performance

Envelope U-Value: 0.28 W.m⁻².K⁻¹
More information:
The building consists of different types of enclosure, adapting to the existing initial composition: Main Facade: 0.28 - Interior courtyard: 0.38 - Penthouse: 0.15
(made with wood panels with internal insulation)

Renewables & systems

Systems

Heating system:
- Heat pump
- Solar thermal

Hot water system:
- Heat pump
- Solar Thermal
Cooling system:
- Reversible heat pump

Ventilation system:
- Natural ventilation

Renewable systems:
- Solar Thermal

Environment

GHG emissions
GHG in use: 2,60 KgCO₂/m²/year
Methodology used:
Spanish Royal Decree: 47/2007

Products

Product
MINERAL WOOL ARENA BASIC
ISOVER
ISOVER
https://www.isover.es/
Product category:
Mineral wool with Environmental Product Declaration.
A type isolation is sought with some environmental input.

Ecological interior paint
MATERIS PAINTS ESPAÑA
MATERIS PAINTS ESPAÑA
http://www.materis-paints.com/
Product category:
green paint, with Ecolabel certified.
Direct purchase.

PARQUET HELVETMAR
HELVETMAR
HELVETMAR
http://www.marti1956.com
Product category:
Parquet made with FSC certified wood, low CO₂ emissions.
OK.

Costs
Urban environment

The building is located on Gran Via Jaume I, Girona. A downtown area, near the Barri Vell, an area of great interest. Thanks to this privileged location, the building has many nearby services (public transport within 100 m, the market Lleó, shopping malls, gym, bank, school, the University of Girona, the headquarters of the Generalitat de Catalunya Girona, etc.). And all of them less than 800 meters from the building. In addition, users have at their fingertips, various public spaces such as the Plaça de la Constitució or Plaça del Lleó.

Parking spaces

The building has no parking for cars. To this end, there is public parking very close (within 200 m). To promote sustainable transport, the building has reserved a space in the basement to store bicycles users and visitors.

Building Environmental Quality

Building Environmental Quality

- Building flexibility
- Indoor air quality and health
- Works (including waste management)
- Consultation - cooperation
- Acoustics
- Comfort (visual, olfactory, thermal)
- Energy efficiency
- Renewable energies
- Integration in the land
- Mobility
- Building process
- Products and materials

Contest

Reasons for participating in the competition(s)

1. Rehabilitación integral de la envolvente, respetando la fachada histórica. Aislamientos interiores continuos de 8 cm que evitan los puentes térmicos (0.28 W/m²K). Patios interiores con aislamiento exterior continuo y cajas de persiana exteriores (0.38 W/m²K). Cubiertas con 20 cm de aislamiento (0.13 W/m²K). Demandas de calefacción y refrigeración muy reducidas. Calificación energética A (Consumo de energía primaria no renovable: 15.2 KWh/m²año; Emisiones de dióxido de carbono: 2.6 KgCO₂/m²año).
2. Placas solares térmicas, con aportación de más del 50% del consumo energético de ACS y calefacción.
3. Sistema de calefacción de baja temperatura mediante suelo radiante.
4. Monitorización a disposición de los usuarios de los consumos de agua y de energía.
5. Uso de materiales responsables: pinturas de base mineral sin emisiones de COV, pavimentos de madera certificada FSC o aislamientos con EPD, entre otros. Priorización de materiales locales.
6. Gestión correcta de los residuos de construcción y demolición, reciclaje superior al 50% de los residuos generados.
7. Puesta en práctica de tecnologías innovadoras e industrializadas: realización del ático mediante paneles compuestos por un núcleo de 20 cm de aislamiento, recubierto por tableros de fibra de madera certificada, con la consecuente minimización de residuos y uso de materiales naturales de bajo impacto ambiental.

Building candidate in the category

Energía y Climas Templados
Premio de los usuarios