



Torre del Marqués Hotel 5*

21st Masia

Cap a la Masia del segle XXI

Hacia la Masia del siglo XXI

Monroyo, Teruel, Spain, 2020

Edra arquitectura km0

Architects. Desing Studio

Edra arquitectura km0. Àngels Castellarnau Visús

Design Team

Àngels Castellarnau Visús (architecture, Edra arquitectura km0), José Miguel Sanz Lahoz Fernando de Marcos Calvo (quantity surveyors), Fernando Calavera Opi (Engineering), Sara Fernández (Interior Design)

Developer

Projectos e Inversiones del Matarraña SL

Contractor

Constructora Elecnor S.A & Ehis Construcciones y obras S.A

Start and Completion Year

2016 -2020

Gross Area

1978,70 m2

Sustainable and healthy materials or systems

Restoration, local materials

Photography

Àngels Castellarnau, Sergio Padura, Xavier d'Arquer

Contact and more information

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REPORT. Sustainable and Healthy Architecture

Hotel Brief Presentation

Sustainability is a transverse strategy in this hotel, led by the owners, and supported by all the team that forms Torre del Marqués. The hotel's operating manual includes certain initiatives in this regard. We have established some metrics during the rehabilitation of the hotel, as well as in the operational execution of the same (nearby Suppliers, own products, local employees) and work on incorporating in the medium term others such as the measurement of Emissions CO2, in order to implement measures that allow us to compensate these emissions to reach zero emissions in this year.

The building is designed to make limited use of energy resources, thanks to its north orientation, the use of natural thermoregulating materials and high quality insulators. In addition, our restaurant is located in a greenhouse space that allows you to collect solar heat in the cold months. Our commitment to the planet and the environment is also reflected in the responsible use of energy and the way of obtaining, using photovoltaic solar panels and biomass boilers, fed by splinters extracted from the surrounding forests.

We devote time and effort to reducing carbon footprint as much as possible, using proximity products, to removing plastic from our manufacturing and supply chain, constantly striving to improve our practices. As well as we conveniently recycle and reuse all generated waste.

In addition, we use organic waste to convert them into fertilizer for the organic orchard, vineyards and olive groves, directly in our composter, thus allowing to increase the production of them in a natural way. At the same time, the water used to water the orchard comes from natural rainfall, which is collected in a raft and then used efficiently. We also purify the water we use in the hotel and restaurant, and it is used to water the olive groves located on the farm. From these olive groves we extract our own olive oil.

Design studio Report Restoration

The intervention is presented with criteria aimed at reducing environmental impact on a farmhouse built in the 17th century. The functionality and energy self-sufficiency of the original building system are maintained, reintroducing the traditional construction methods. The main objective of the intervention is to recover the building and project it into a new phase of use, adapting it to current regulations according to hotel classification, while ensuring optimal energy efficiency, using the principles of contemporary vernacular architecture. This 21st-century vernacular building is achieved through the use of local materials to meet the comfort needs of the building without generating environmental impact.

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