

K-Alzina, a sustainable home on the slopes of Montseny

K-Alzina is a 180 m² passive house built with a lightweight timber frame on the foothills of Montseny, designed so that a home demanding in comfort need not depend on energy costs.

This 2025 PAPIK Group has added K-Alzina to its completed projects section: a sustainable home of around 180 m² located on the foothills of Montseny. The house has been built with natural materials and a lightweight timber frame, arranged over two storeys that respond to the specific needs of its owners.

A design shaped by its setting

The architectural project was led by Arquítir, a practice specialised in passive houses, which resolved the brief with an L-shaped house. This geometry creates warm, sheltered spaces, minimises views towards the neighbouring homes and keeps the house protected from the wind. The compact form, close to a cube, reduces thermal losses, while the L-shaped wing uses the outdoor space to connect kitchen and dining room with the garden.

A pergola with movable awnings completes this connection between inside and outside, allowing the open area to be used in both summer and winter. On a site surrounded by nature such as this one, the direct relationship with the landscape adds real value to daily life in the house.

Materials and finishes

The building envelope combines two solutions depending on the storey. The lower floor features a ventilated facade clad in larch wood; the upper floor uses a maintenance-free white external insulation system (SATE). Inside, the finish follows the standard of white-painted plasterboard, with one deliberate exception: in the dining room a wall has been left in laminated timber, bringing to the living area the warmth and character characteristic of this material.

Measured sustainability

The owners, people with a strong ecological awareness, sought a home consistent with their values: sustainability, responsible building and care for the environment, without giving up comfort. The result is a house with no energy mortgage that, during the construction process, avoided the emission of 23.90 tonnes of CO₂ and absorbed 41.82. These figures illustrate the role of timber as a structural material in reducing a building's footprint.

Open doors and a masterclass

During the final phase of the works, PAPIK Group opened the doors of K-Alzina to everyone interested in learning first-hand what an Eskimohaus house is and how a home able to guarantee indoor comfort without energy costs is achieved. The visit was accompanied by an in-person masterclass devoted to explaining in detail the technical criteria that underpin this type of construction.

A well-resolved passive house asks you to give up nothing: comfort stops depending on the energy bill and becomes part of the building itself.