

El Caminito



CASAS ITER
BIOCLIMÁTICAS

HOW DOES THE IDEA COME ABOUT?

The idea of the house **El Caminito** arises from a square in which the architect wanted to produce an oasis. This oasis creates its own microclimate in the south of Tenerife. If we create a path in which we build one square next to the other, adapting to the landscape, on the outside we will get a wind shaded path.

This house has been designed to achieve optimal indoor climatic conditions of temperature and relative humidity with the help of the user. Comfort conditions for temperature are assumed between 21oC and 26oC and between 20% and 80% for relative humidity. All the strategies proposed will be aimed to maintain the house within these parameters, especially thermal, without using energy consuming appliances, only through bioclimatic techniques. The climatic data of the house can be accessed through a screen in the interior.

BIOCLIMATIC STRATEGIES

The main bioclimatic strategies used in **El Caminito** are:

- Central gutter that runs from east to west on the longitudinal axis that divides the tiled gable roof, This gutter has a glazed vertical surface that also provides diffuse and direct light according to orientation throughout the day.
- Evacuation of overheated air by Venturi effect through the gutter.
- Extension of the roof on the East facade so that the only direct radiation they receive is that of the early hours of the morning.
- Awnings on the east side that minimize the wind speed that hits the facade.
- Versatile design (kitchen) so that it can belong indoors in winter or outdoors in summer in relation to its interaction with the contingent demands of the climate.
- The south facades openings represent 18% of the total wall surface, avoiding excess heat and maximizing the entrance of natural light.

HOW IS THIS BIOCLIMATIC HOUSE USED?

If it's warm

- Open doors and windows to encourage cross-ventilation
- Lower the blinds to prevent direct sunlight
- Open the gutter windows for overheated air to come out

If it's cold

- Raise the blinds to allow the sun radiation to enter
- Close the doors to prevent the accumulated heat from escaping the space
- Close the gutter windows so hot air doesn't come out

