

El Patio



CASAS ITER
BIOCLIMÁTICAS

HOW DOES THE IDEA COME ABOUT?

The design of **El Patio** is develops the two level classical solution with living rooms in the ground floor and the bedrooms in the upper one. The house patio configuration enlarges under the bedrooms where the adjacent patio and totally cover the ground floor. The bedrooms in the upper floor have splendid views to the sea.

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 the **El Patio** are:

- Central patio that allows the entry of natural light and air renewal in the different rooms.
- Pond inside the courtyard to humidify the environment when temperatures are high.
- Additional solar control mechanism through wooden louvers in the rooms located on the upper floor.
- Minimization of heat input through the West and East facades through a very low percentage of exposed voids.

HOW IS THIS BIOCLIMATIC HOUSE USED?

If it's warm

- Open doors for cross ventilation.
- Lower blinds to prevent direct sunlight entry.
- Shut the louvers.

If it's cold

- Raise the blinds so that the heat of the sun may enter.
- Close the doors so that the accumulated heat does not escape.
- Open the louvers.

