

La Compacta



CASAS ITER
BIOCLIMÁTICAS

HOW DOES THE IDEA COME ABOUT?

The **Compacta** house seeks comfort through its relationship with the exterior space, the views and the landscape. It is characterized by a pyramid that crowns the structure symbolizing the sun, light and energy.

The house is a south-facing parallelepiped with a north patio. The Tufa stone, the basalt and the wood are everywhere. The house welcomes us among its strong walls and invites us to enjoy its freshness and silence. It has an interior courtyard with a sheet of water where you evade from the world, and also a front porch with a few steps to lie under the sun, read or relax watching 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 **Compacta** house are:

- Semi underground construction allows softer temperature fluctuations and acoustically protects the house from the incident wind.
- Patios that allow the entrance of natural light and the renovation of the air in the different rooms.
- Green roof that improves its thermal inertia.
- Facade to the South with a 15% area dedicated to the passive solar reception.
- Air vents with automatic sealing under the sill to the Tower of Winds.
- Thick stone and lime walls that provide high thermal inertia and deferred heat.

HOW IS THIS BIOCLIMATIC HOUSE USED?

If it's warm

- Open the doors and windows to help cross-ventilation.
- Lower the blinds to prevent direct sunlight.
- Shut the louvers.

If it's cold

- Raise the blinds to let the sun heat in.
- Close the doors and windows so that the accumulated heat doesn't escape.
- Open the louvers.

