El Cubo

CASAS ITER
BIOCLIMÁTICAS

HOW DOES THE IDEA COME ABOUT?

The Cube house nourishes from historical examples and adapts to a modern design. In order to create favorable micro climatic conditions the surface of the house is reduced to a very compact volume: the cube. Intimate, tight and welcoming are some of the adjectives that inspired this house. Wood and clay transmit the pure nature of this house. It´s articulated around a patio that can be opened to the exterior and refreshes the house.

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.

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Medio ambiente y eficiencia de los recursos

BIOCLIMATIC STRATEGIES

The main bioclimatic strategies used in **the Cubo** house are:

- Double skin façade made of wooden blinds with semi-orientable louvers.
- 30 cm thermo clay walls with plaster for greater thermal inertia.
- Wind collectors that put fresh air inside the house.
- Open patio protected from excess radiation in the summer.

HOW IS THIS BIOCLIMATIC HOUSE USED?

If it's warm

• Open the doors to help cross-ventilation.
• Lower the blinds to prevent direct sunlight.
• Open the patio windows for air circulation
• Shut the louvers of the patio´s double skin.

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
• Open the louvers.
• Open the louvers of the patio´s double skin.