

El Gavión



CASAS ITER
BIOCLIMÁTICAS

HOW DOES THE IDEA COME ABOUT?

The **Gabión** house, robust and with distinct identity that balances land integration and the need to create its own spaces uses dynamic lightweight construction techniques based on a minimal environmental impact architecture. The walls are conformed by a wire basket "Gabion" system of construction filled with basaltic volcanic rock. This gives the house a special atmosphere by integrating it in the dry desert-like surroundings and protecting it from the sun and the wind. The house is surrounded by a wooden terrace shaded by the wide deck, which can be accessed from all rooms. The views and the surrounding gardens soften its character, allowing a direct connection with nature.

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 Gabión** house are:

- Light solar protection roof that protect the interior spaces
- Cross-ventilation of all rooms including potholed gaps in the predominant wind direction.
- Perimeter walls filled with basaltic stone that protect the house from the wind and transmit heat when solar radiation is low or none.

HOW IS THIS BIOCLIMATIC HOUSE USED?

If it's warm

- Open the doors 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 to prevent the accumulated heat from escaping the space.
- Open the louvers.



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