

Noche y Día



CASAS ITER
BIOCLIMÁTICAS

HOW DOES THE IDEA COME ABOUT?

The philosophy of the **Noche y Día** house is based on balancing the maximum cost optimization with the comfort of its inhabitants. Its name comes from the marked separation between day and night uses. The house has 2 well differentiated structures that interact by a gardened patio: the day space, and the semi underground night space. The whole complex is enclosed by a semicircular wall that protects it from the prevailing winds. The private courtyard protected from external views will be one of the preferred areas of the house. The materials used, including furniture, are deliberately simple and generally recycled.

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

Las principales estrategias bioclimáticas utilizadas en la vivienda **Noche y Día** son:

- Enterramiento parcial con el que se consigue suavizar las fluctuaciones de temperatura además de quedar protegida acústicamente del viento incidente.
- Patios que permiten la entrada de luz natural y la renovación del aire en las diferentes estancias.
- Cubierta ajardinada que mejora su inercia térmica.
- Lucernarios en el bloque semienterrado que permite la entrada de luz natural
- Ventilación inducida por estratificación; aperturas altas en los ventanales orientados hacia el Sur abiertos a la vez que los huecos en la parte baja en las zonas dispuestas a Norte.

HOW IS THIS BIOCLIMATIC HOUSE USED?

If it's warm

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

If it's cold

- Raise the blinds so that the heat of the sun may enter.
- Close the doors to prevent the accumulated heat from escaping the space.
- Close windows to prevent air circulation.
- Open the louvers.



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