

LOW ENERGY CONSUMPTION HOUSE IN CABRILS



A residential house with a photography studio on one of the hillsides of Cabrils.

The Low Energy House of Cabrils is located on top of an uneven surface, a type of surface characteristic of El Maresme. Residential houses in this area are often positioned excessively close to each other without considering the relationship between them or the surrounding environment. This house seeks to overcome the challenge of creating a residential space where one can work. A space that takes advantage of its privileged location and minimizes its ecological and visual impact, as well as its impact on neighboring properties.

Designed to conform to the ideologies of Passive Housing (low energy demand levels, zero consumption building), the house embraces the uneven surface of the site to position itself facing south, creating an angled linear form that does not overpower the surrounding pine trees. The natural appearance of the materiality allows for the house to blend in with the environment to minimize its presence, and make the trees stand out when looked at from a distance. The ancestral Japanese technique called '*shou sugi ban*' used to protect the wood from external factors darkens the material, in this way contrasting the bright internal spaces.

Prefabrication was used to achieve a fast, neat, respectful and relatively quiet construction process. All elements of the light wooden frame panels were assembled off site (including interior finishes and outer coatings). The panels were then brought to site and lifted on top of the concrete structure that cuts into the terrain.

A fluid interior is achieved by overlapping the geometric internal spaces that generate foreshortenings, offering a more enjoyable experience and spaces that appear to be larger than they actually are. Those geometric internal spaces also form a multinuclear interior that preserves the intimacy and independence of the private and work spaces, and forms corners for a library, a

desk or simply a chair to gaze off into the distance. The positioning of the windows further enhances the inhabitants' experience by framing different views towards the outside from each internal space.



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