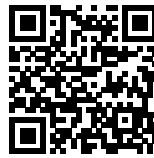




STGILAT AIGUABLAVA: A MEDITERRANEAN CASE STUDY

Posted on August 20, 2020 by martabuges



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The main goal of this project was not to build a villa but a case study house. What is a case study house? R. Neutra, who designed a case study house in Los Angeles in the 1940s, said:

You're all building with stone, when we should be building with prefabricated modules that can be easily manufactured and assembled in a week.

It was a revolution, cutting costs and providing a path to the middle class. That was R. Neutra's approach. (There are roughly 200 case study houses in the Los Angeles area.)



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Stgilat Aiguablava is a pilot project aimed to generate a “smart” version of Mediterranean architecture, using cutting-edge technology and digital fabrication, which is sustainable and integrated in the landscape. It brings innovation to the Empordà and the Costa Brava, looking at the territory as a landscape for adding value that consolidates culture.



We had a great client, a Swiss family looking to experience Mediterranean life. Their idea was to allocate their budget to quality of life as opposed to luxury, to quality architecture and to R+D+i. That meant: tile, warm Mediterranean materials, cool breezes, shade, sun, color, the curved terraces of the Empordà... Our design idea was an architecture rooted in local materials.

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The Catalan vault gives form to the main living area – a large space, like the typical farm houses in the Empordà, which shapes life inside. Here, innovation means continuing with the tradition of the Catalan vault, a technique with extraordinary advantages: it employs a Mediterranean material, it is a compression structure, it offers suitable energy performance, since it keeps the interior cool when exterior temperatures are high and provides thermal insulation in winter. The porous material also provides improved air quality for inhabitants. The arches use a minimum of materials; they are highly efficient and lightweight.

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Our reinvention of the Catalan vault was rooted in advanced engineering using fiberglass, whereas the challenge facing the ceramists involved creating a tile that would be in harmony with the natural conditions of the site, since the core of this design is its integration.

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The exterior profile of the vault connects with the landscape, following the curves of the surrounding mountains. The green tones of the tiles outside blend in with the natural colors of the environment. For the interior, a special ceramic piece was designed to ensure optimum acoustic conditions.

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With its temporary and entirely experimental architecture, the pavilion is fully given over to innovation. It was made possible through a relationship with Art Center in Pasadena (USA), a leading design school that has produced figures like the filmmaker Zack Snyder, as well as designers for Apple, BMW and Tesla.

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The pavilion structure, developed through the creation of prototypes, is derived from an inflatable framework, injected with lightweight and ecological smart concrete, resulting in an organic form inspired by the pine trees all around.

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The pavilion's lightweight structure and its windows with natural pine resin filters foster symbiotic relationships between technology and nature to generate a more profound emotional connection, creating a space that serves as an intimate hideaway.

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The natural garden of existing trees creates an aural landscape; the background sounds vary according to distance, as users approach and touch the plants, since design has to be a sensory, bodily experience, on all levels, from a holistic standpoint. Finally, the pool collects rainwater, filtering it using natural processes.

