THE GARDEN VIEW OF THE CLT HOUSE IN SAN NICOLAS

Source: Dovat Arquitectos; Credit: Carly Angenscheidt

CASE STUDY: CLT HOUSE, SAN NICOLAS

CLT HOUSE RECEIVES NATIONAL ENERGY EFFICIENCY AWARD

PROJECT OWNER: CAROLINA DOVAT

PROJECT LOCATION: LA HORQUETA 3270, MONTEVIDEO, URUGUAY, 13000

COMPLETION DATE: JULY 1, 2022

ARCHITECT/DESIGNER: DOVAT ARQUITECTOS

MASS TIMBER ENGINEER/MANUFACTURER: X LAM DOLOMITI

GENERAL CONTRACTOR: ENKEL, COXAR

STRUCTURAL ENGINEER: X LAM DOLOMITI

MECHANICAL, ELECTRICAL, AND PLUMBING: ESTUDIO HOFSTADTER, ESTUDIO PITTAMIGLIO

DURING THE COVID-19 pandemic, Carolina Dovat faced the stark reality that, as human activity slowed, nature responded dramatically. In this context, she questioned the role of architecture and construction in a world where buildings are major contributors to carbon emissions. This reflection sparked her drive to begin working with mass timber, leading Dovat Arquitectos to embrace the challenge of becoming agents of change in their country: Uruguay.

She and her team embarked on designing their own mass timber house, the first in the nation. Dovat Arquitectos conceived of this single-fam-

CLT HOUSE SAN NICOLAS UNDER CONSTRUCTION, WITH THE MASS TIMBER STRUCTURE EXPOSED

Source: Dovat Arquitectos
Credit: Carly Angenscheidt

CLT HOUSE SAN NICOLAS INCORPORATES A WILDLIFE-FRIENDLY GARDEN

Source: Dovat Arquitectos
Credit: Carly Angenscheidt

ily mass timber house as nestled in a coniferous forest. Aligned with the studio's philosophy emphasizing low environmental impact and people-centered design, they harnessed the benefits of biophilic design to create spaces that promote both physical and psychological well-being.

This residential project presented an opportunity to showcase a design where wood, in its various forms, becomes the central element, guiding the viewer on a visual journey from the living pine trees planted in the earth to the CLT walls and slabs, all crafted with fine architectural finishes.

The 500-square-meter house is developed over 2 floors, with reception areas and family spaces seamlessly connected and opening to the garden on the ground floor. Upstairs, the bedrooms offer an immersive experience with nature through large windows that connect to green rooftops and the lush canopies of the surrounding trees.

The entire structure was built using mass timber, in a conscious effort to avoid concrete, though some of the pillars and slabs were deliberately left exposed as a design feature. For the exterior finishes, materials were selected to require minimal maintenance, and a photovoltaic roof was incorporated to allow for the generation of a significant portion of the electricity needed for year-round use.

The design was completed with a wildlife-friendly garden aimed at enhancing the natural biodiversity of the area, where native species take center stage both on the ground and across the 2 green terraces on the upper floor.

In 2023, this project received the National Energy Efficiency Prize in the residential category by the Ministry of Industry and Energy of Uruguay.

This case study has not been fact-checked, but it has been edited for length, clarity, grammar, and style.